

EXHIBIT 1

the same manner and at the same time as the ad valorem State taxes for other purposes are assessed and collected.

How
expended.

SEC. 19. The money collected from the special tax herein provided shall be expended in establishing a new asylum according to the provisions of this Act; *provided*, if it be opened before the meeting of the next Legislature, the maintenance thereof shall be temporarily paid out of this special fund until other provisions shall be made by law for its support.

Duty of
Controller.

SEC. 20. The Controller of State is hereby authorized and directed to draw his warrants on the Treasury of State in favor of the respective Directors, on their requisition upon the fund hereby created in accordance with the provisions of this Act; *provided*, not more than fifteen thousand dollars shall be drawn at any one time for building purposes; *and*, *provided further*, that a detailed account of the expenditures of the sum previously drawn shall be filed with the State Board of Examiners by said Directors before the approval of any other requisition from the same Board of Directors for money for the purposes aforesaid.

Accounts to
be filed with
Board of
Examiners.

SEC. 21. This Act shall take effect from and after its passage.

CHAPTER XXIV.

An Act to encourage and provide for a general vaccination in the State of California.

[Approved February 20, 1889.]

The People of the State of California, represented in Senate and Assembly, do enact as follows:

Exclusion of
children
from schools
unless vac-
cinated.

SECTION 1. The Trustees of the several common school districts in this State, and Boards of common school government in the several cities and towns, are directed to exclude from the benefits of the common schools therein any child or any person who has not been vaccinated, until such time when said child or person shall be successfully vaccinated; *provided*, that any practicing and licensed physician may certify that the child or person has used due diligence and cannot be vaccinated so as to produce a successful vaccination, whereupon such child or person shall be excepted from the operation of this Act.

Notice by
School
Trustees.

SEC. 2. The Trustees or local Boards, annually, or at such special times to be stated by the State Board of Health, must give at least ten days' notice, by posting a notice in two or more public or conspicuous places within their jurisdiction, that provision has been made for the vaccination of any child of suitable age who may desire to attend the common schools, and whose parents or guardians are pecuniarily or otherwise unable to procure vaccination for such child.

List of chil-
dren not
vaccinated.

SEC. 3. The said Trustees or Board must within sixty days after the passage of this Act, and every year thereafter, ascertain the number of children or persons in their respective

School Districts or subdivision of the City School Government being of an age suitable to attend common schools, who have not been already vaccinated, and make a list of the names of all such children or persons. It also shall be duty of said Trustees or Board to provide, for the vaccination of all such children or persons in their respective school districts, a good and reliable vaccine virus wherewith to vaccinate such children or persons who have not been vaccinated. And when so vaccinated to give a certificate of vaccination, which certificate shall be evidence thereof for the purpose of complying with section one.

Vaccine virus to be supplied.

SEC. 4. The necessary expenses incurred by the provisions of this Act shall be paid out of the common school moneys apportioned to the district, city, or town. And if there be not sufficient money, the Trustees must notify the Board of Supervisors of the amount of money necessary, and the Board must, at the time of levying the county tax, levy a tax upon the taxable property in the district sufficient to raise the amount needed. The rate of taxation is ascertained by deducting fifteen per cent for delinquencies from the assessment, and the rate must be based upon the remainder. The tax so levied must be computed and entered upon the assessment roll by the County Auditor, and collected at the same time and in the same manner as State and county taxes, and when collected shall be paid into the county treasury for the use of the district.

Expenses for, how paid.

Rate of taxation, how ascertained.

SEC. 5. The Trustees of the several school districts of this State are hereby required to include in their annual report, and report to the Secretary of the State Board of Health, the number in their several districts between the ages of five and seventeen years who are vaccinated and the number unvaccinated.

Annual report of Trustees.

SEC. 6. This Act shall take effect immediately.

CHAPTER XXV.

An Act to amend section seven hundred and thirty-seven of the Political Code, fixing and providing for the salaries of the Judges of the Superior Courts of the City and County of San Francisco, and of the Counties of Alameda, San Joaquin, Los Angeles, Santa Clara, Santa Cruz, San Mateo, Yuba and Sutter combined, Sacramento, Butte, Nevada, Sonoma, Colusa, Monterey, Santa Barbara, San Diego, Tulare, Fresno, Solano, Amador, San Bernardino, Kern, Placer, Humboldt, Marin, Mendocino, Tehama, El Dorado, Alpine, Stanislaus, and Calaveras.

[Approved February 21, 1889.]

The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. Section seven hundred and thirty-seven of the Political Code of the State of California is hereby amended so as to read as follows:

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pair the completed part of the program and further will wholly eliminate in the future a continuance of such expanded program because of lack of continuing finances available from such excess tax revenues. In order to remove at the earliest possible time this serious obstacle to the formation of a junior college district which includes all of the identical territory comprising a single existing high school district and to continue the policy of this Legislature in encouraging the formation of such districts and in order to prevent the hardships resulting from the termination of the excess tax rate previously authorized by the identical electorate and to insure the continuous orderly administration of the entire high school and junior college program in operation and effect under such excess tax rate so authorized by the electorate, and all without interruption or loss of tax income essential to the purposes of both districts, it is necessary that this act take effect immediately.

CHAPTER 837

An act to add Chapter 7 (commencing with Section 3380) to Division 4 of the Health and Safety Code, relating to the immunization of pupils of schools.

[Approved by Governor June 13, 1961. Filled with Secretary of State June 14, 1961.]

In effect
September
15, 1961

The people of the State of California do enact as follows:

SECTION 1. Chapter 7 (commencing with Section 3380) is added to Division 4 of the Health and Safety Code, to read:

CHAPTER 7. IMMUNIZATION AGAINST POLIOMYELITIS

3380. No minor or adult shall be admitted to any public or private elementary or secondary school as a pupil unless such person has, prior to admission, been immunized against poliomyelitis in the manner and with immunizing agents approved by the State Department of Public Health.

Immunization against poliomyelitis

3381. Such immunization shall be evidenced by a written record made on a form prescribed by the department. A copy of the record shall be given to the parent or guardian of the child, or if the person receiving immunization is an adult, the copy shall be given to him.

Same: Written record

3382. The county health officer of each county shall organize and have in operation by January 1, 1962, an immunization program so that immunization is made available to all persons required by this chapter to be immunized. He shall also determine how the cost of such a program is to be recovered. To the extent that the cost to the county is in excess of that sum recovered from persons immunized, funds made available by the school districts may be used to pay the cost of

Immunization program

the immunization of any persons seeking admission to the public schools. The remainder of the cost shall be paid by the county in the same manner as other expenses of the county are paid.

Immunization performed by a private physician shall be acceptable for admission to school if the immunization is performed and records are made in accordance with rules established by the State Department of Public Health.

Co-operation
with county
health officer

3383. The governing board of each school district and the governing authority of each private school shall co-operate with the county health officer in carrying out the program for immunization of persons applying for admission to any school under its jurisdiction. The governing board of any school district may use any funds, property, and personnel of the district for that purpose. The governing board of any school district and the governing authority of any private school may permit any person licensed as a physician and surgeon to administer immunization agents to the children and adults seeking admission to any school under its jurisdiction.

Exemption
on account of
beliefs

3384. Immunization of a person shall not be required for admission to a public or private elementary or secondary school if the parent or guardian (in the case of a minor), or the person seeking admission (if an adult), files with the governing board of the school district or the governing authority of the private school, as the case may be, a letter stating that such immunization is contrary to his or her beliefs. However, whenever there is good cause to believe that a person is suffering from poliomyelitis, the person may be temporarily excluded from the school until the governing board of the school district or the governing authority of the private school is satisfied that the disease does not exist.

Exemption
on account of
medical cir-
cumstances

3385. If the parent or guardian (in the case of a minor) or the person seeking admission (if an adult) files with the governing board of the school district or the governing authority of the private school a written statement by a licensed physician to the effect that the physical condition of the child or adult is such, or medical circumstances relating to the child or adult are such that immunization is not considered safe, indicating the specific nature and probable duration of the medical condition or circumstances which contraindicate immunization, such person shall be exempt from the requirements of this chapter to the extent indicated by the physician's statement.

Rules and
regulations

3386. The department shall adopt and enforce all rules and regulations necessary to carry out the provisions of this chapter.

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1967 REGULAR SESSION

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CHAPTER 1020

*An act to amend Section 10651 of the Education Code,
relating to readers for blind students.*

[Approved by Governor August 10, 1967. Filed with
Secretary of State August 11, 1967.]

The people of the State of California do enact as follows:

SECTION 1. Section 10651 of the Education Code is amended to read:

10651. Whenever any blind person with the proper educational qualifications regularly matriculates, enters, and works for a degree, or for a diploma of graduation, in any university, college, or state college in this state, the Director of Education may provide, from any funds appropriated for the purpose or appropriated for the support of the California School for the Blind, a reader to assist him in his studies. Any reader whose services are provided pursuant to this section shall be deemed an independent contractor whose services shall have been contracted by the Director of Education for the benefit of such blind person, and not an employee of the Department of Education. Compensation for readers shall be established at a rate high enough to obtain competent readers, but in no event shall such compensation be less than the basic federal minimum wage. No more than 1,100 hours of service by a reader per annum shall be allowed for the instruction of any one student, except that for graduate students no more than 1,300 hours of service by a reader shall be allowed for the instruction of any one student; provided that a greater amount may be expended if the Superintendent of the California School for the Blind finds that the instruction of a student will be facilitated by such additional expenditure.

CHAPTER 1021

*An act to add Chapter 8 (commencing with Section 3400) to
Division 4 of the Health and Safety Code, relating to the
immunization of school pupils against measles.*

[Approved by Governor August 10, 1967. Filed with
Secretary of State August 11, 1967.]

The people of the State of California do enact as follows:

SECTION 1. Chapter 8 (commencing with Section 3400) is added to Division 4 of the Health and Safety Code, to read:

CHAPTER 8. IMMUNIZATION AGAINST MEASLES

3400. No person may be unconditionally admitted as a pupil of a private elementary or secondary school or as a pupil

of any school district unless prior to his first admission to school in California he has been immunized against measles (rubeola) in the manner and with immunizing agents approved by the State Department of Public Health.

A person who has not received an immunizing dose of measles (rubeola) vaccine may be admitted on condition that within two weeks of the date of his admission he shall present evidence that he has been fully immunized against measles (rubeola).

This chapter does not apply to:

(a) Any person who is seeking admission to a public secondary school as an "adult" as that word is defined in Section 5756 of the Education Code.

(b) Any person who is seeking admission to a private secondary school for enrollment in a course consisting of less than 10 hours of instruction a week who attains his 21st birthday prior to the first day of the semester or other period of instruction for which he is seeking enrollment.

(c) Any person who is seeking admission to a junior college who has graduated from a high school located in this state.

(d) Students 18 years of age or older seeking enrollment in an adult school or a class for adults.

3400.5. Requirements for immunization as specified in this chapter shall be considered to be fulfilled if any person seeking admission possesses a physician's certificate which shows that the person has had measles (rubeola) or has been immunized against measles (rubeola).

3401. Such immunization shall be evidenced by a written record made on a form prescribed by the department. A copy of the record shall be given to the parent or guardian of the child, or if the person receiving immunization is an adult, the copy shall be given to him.

3402. The county health officer of each county shall organize and have in operation by January 1, 1968, an immunization program so that immunization is made available to all persons required by this chapter to be immunized. He shall also determine how the cost of such a program is to be recovered. To the extent that the cost to the county is in excess of that sum recovered from persons immunized, the cost shall be paid by the county in the same manner as other expenses of the county are paid.

Immunization performed by a private physician shall be acceptable for admission to school if the immunization is performed and records are made in accordance with rules established by the State Department of Public Health.

3403. The governing board of each school district and the governing authority of each private school shall cooperate with the county health officer in carrying out the program for immunization of persons applying for admission to any school under its jurisdiction. The governing board of any school district may use any funds, property, and personnel of the district for that purpose. The governing board of any school dis-

trict and the governing authority of any private school may permit any person licensed as a physician and surgeon to administer immunization agents to the children and adults seeking admission to any school under its jurisdiction.

3404. Immunization of a person shall not be required for admission to a public or private elementary or secondary school if the parent or guardian or responsible relative or adult who has assumed responsibility for his care and custody (in the case of a minor), or the person seeking admission (if an adult), files with the governing board of the school district or the governing authority of the private school, as the case may be, a letter or affidavit provided by the district or authority, stating that such immunization is contrary to his or her beliefs. However, whenever there is good cause to believe that a person is suffering from measles (rubeola), the person may be temporarily excluded from the school until the governing board of the school district or the governing authority of the private school is satisfied that the disease does not exist.

3405. If the parent or guardian (in the case of a minor) or the person seeking admission (if an adult) files with the governing board of the school district or the governing authority of the private school a written statement by a licensed physician to the effect that the physical condition of the child or adult is such, or medical circumstances relating to the child or adult are such that immunization is not considered safe, or reasonably beneficial to the individual, indicating the specific nature and probable duration of the medical condition or circumstances which contraindicate immunization, such person shall be exempt from the requirements of this chapter to the extent indicated by the physician's statement.

3406. The department shall adopt and enforce all rules and regulations necessary to carry out the provisions of this chapter.

3407. In enacting this chapter, it is the intent of the Legislature to provide a means for the eventual achievement of total immunization against measles (rubeola). This chapter is intended to provide exemptions from immunization under specified conditions. It is also designed to provide for the keeping of adequate records of immunization so that appropriate public agencies and the persons immunized will be able to ascertain that a person is immunized. It is also the intent of the Legislature that the persons required to be immunized by this chapter be allowed to obtain immunization from whatever medical source they so desire, subject only to the condition that the immunization be performed in accordance with the regulations of the State Department of Public Health and that a record of the immunization is made in accordance with such regulations.

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CHAPTER 832

An act to add Sections 1628.5 and 1740.5 to the Business and Professions Code, relating to healing arts.

[Approved by Governor October 1, 1971. Filed with Secretary of State October 1, 1971.]

The people of the State of California do enact as follows:

SECTION 1. Section 1628.5 is added to the Business and Professions Code, to read:

1628.5. The board may deny an application to take an examination for licensure as a dentist or an application for registration as a dental corporation if the applicant has done any of the following:

(a) Committed any act which would be grounds for the suspension or revocation of a license under this chapter.

(b) While unlicensed, committed, or aided and abetted the commission of, any act for which a license is required by this chapter.

(c) Knowingly made any false statement in the application.

The proceedings under this section shall be conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code, and the board shall have all the powers granted therein.

SEC. 2. Section 1740.5 is added to the Business and Professions Code, to read:

1740.5. The board may deny an application to take an examination for licensure as a dental hygienist if the applicant has done any of the following:

(a) Committed any act which would be grounds for the suspension or revocation of a license under this chapter.

(b) While unlicensed, committed, or aided and abetted the commission of, any act for which a license is required by this chapter.

(c) Knowingly made any false statement in the application.

The proceedings under this section shall be conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code, and the board shall have all the powers granted therein.

CHAPTER 833

An act to add Chapter 10 (commencing with Section 3480) to Division 4 of the Health and Safety Code, relating to immunization against communicable diseases.

[Approved by Governor October 1, 1971. Filed with Secretary of State October 1, 1971.]

The people of the State of California do enact as follows:

SECTION 1. Chapter 10 (commencing with Section 3480) is added to Division 4 of the Health and Safety Code, to read:

CHAPTER 10. IMMUNIZATION AGAINST
COMMUNICABLE DISEASES

3480. In enacting this chapter, it is the intent of the Legislature to provide:

(a) A means for the eventual achievement of total immunization in appropriate age groups against diphtheria, pertussis (whooping cough), and tetanus.

(b) That the persons required to be immunized be allowed to obtain immunization from whatever medical source they so desire.

(c) Exemptions from immunizations under specified conditions.

(d) For the keeping of adequate records of immunization so that appropriate public agencies and the persons immunized will be able to ascertain that a person is fully or only partially immunized.

3481. No person 18 years of age or under or, in the case of pertussis (whooping cough), six years of age or under, may be unconditionally admitted as a pupil of a private or public child care center, day nursery, nursery school, or elementary or secondary school unless prior to his first admission to school in California he has been immunized against such communicable diseases listed in subdivision (a) of Section 3480.

3482. A person who has not received any of the required immunizations may be admitted on condition that within two weeks of the date of his admission he shall present evidence that he has begun the required immunizations and shall thereafter within a period designated by regulation of the board present evidence that he has been fully immunized against those communicable diseases for which immunization is required.

3483. Such immunization shall be evidenced by a written record made on a form prescribed by the board. A copy of the record shall be given to the parent or guardian of the child, or if the person receiving immunization is an adult, the copy shall be given to him.

3484. Immunization performed by a private physician shall be acceptable for admission to school if the immunization is performed and records are made in accordance with rules established by the board.

3485. If the parent or guardian (in the case of a minor) or the person seeking admission (if an adult) files with the governing board of the school district or the governing authority of the private school a written statement by a licensed physician to the effect that the physical condition of the child or adult is such, or medical circumstances relating to the child or adult are such that immunization is not considered safe, indicating the specific nature and probable duration of the

medical condition or circumstances which contraindicate immunization, such person shall be exempt from the requirements of this chapter to the extent indicated by the physician's statement.

3486. Immunization of a person shall not be required for admission to a private or public child care center, day nursery, nursery school, or elementary or secondary school if the parent or guardian or responsible relative or adult who has assumed responsibility for his care and custody (in the case of a minor), files with the governing board of the school district or the governing authority of the private school, or the governing authority of the private or public child care center, day nursery, or nursery school, as the case may be, a letter or affidavit provided by the district or authority, stating that such immunization is contrary to his or her beliefs. However, whenever there is good cause to believe that a person is suffering from the communicable diseases listed in subdivision (a) of Section 3480, the person may be temporarily excluded from the school, child care center, day nursery, or nursery school, until the governing board of the school district or the governing authority of the private school, or the governing authority of the private or public child care center, day nursery, or nursery school, is satisfied that the disease does not exist.

3487. The county health officer of each county shall organize and maintain an immunization program so that immunizations are made available to all persons required by this chapter to be immunized. He shall also determine how the cost of such a program is to be recovered. To the extent that the cost to the county is in excess of that sum recovered from persons immunized, the remainder of the cost shall be paid by the county in the same manner as other expenses of the county are paid.

3488. The governing board of each school district and the governing authority of each private school, or the governing authority of the private or public child care center, day nursery, or nursery school shall cooperate with the county health officer in carrying out the program for immunization of persons applying for admission to any school, child care center, day nursery, or nursery school, under its jurisdiction. The governing board of any school district may use any funds, property, and personnel of the district for that purpose. The governing board of any school district and the governing authority of any private school, or the governing authority of any private or public child care center, day nursery, or nursery school, may permit any person licensed as a physician and surgeon to administer immunization agents to the children and adults seeking admission to any school under its jurisdiction.

3489. The board shall adopt and enforce all rules and regulations necessary to carry out the provisions of this chapter.

EXHIBIT 5

CHAPTER 1176

An act to repeal and add Chapter 7 (commencing with Section 3380) of Division 4 of, and to repeal Chapters 8 (commencing with Section 3400) and 10 (commencing with Section 3480) of Division 4 of, the Health and Safety Code, relating to immunizations, and declaring the urgency thereof, to take effect immediately.

[Approved by Governor September 30, 1977. Filed with Secretary of State September 30, 1977.]

The people of the State of California do enact as follows:

SECTION 1. Chapter 7 (commencing with Section 3380) of Division 4 of the Health and Safety Code is repealed.

SEC. 2. Chapter 7 (commencing with Section 3380) is added to Division 4 of the Health and Safety Code, to read:

CHAPTER 7. IMMUNIZATION AGAINST COMMUNICABLE DISEASES

3380. In enacting this chapter, it is the intent of the Legislature to provide:

(a) A means for the eventual achievement of total immunization of appropriate age groups against diphtheria, pertussis, tetanus, poliomyelitis, and measles.

(b) That the persons required to be immunized be allowed to obtain immunizations from whatever medical source they so desire, subject only to the condition that the immunization be performed in accordance with the regulations of the State Department of Health and that a record of the immunization is made in accordance with such regulations.

(c) Exemptions from immunization for medical reasons or because of personal beliefs.

(d) For the keeping of adequate records of immunization so that health departments, schools, and other institutions, parents or guardians, and the persons immunized will be able to ascertain that a child is fully or only partially immunized, and so that appropriate public agencies will be able to ascertain the immunization needs of groups of children in schools or other institutions.

3381. (a) As used in this chapter, the term "governing authority" means the governing board of each school district or the authority of each other private or public institution responsible for the operation and control of the institution or the principal or administrator of each school or institution.

The governing authority shall not unconditionally admit any person as a pupil of any private or public elementary or secondary school, child care center, day nursery, nursery school, or development center, unless prior to his or her first admission to that institution he or she has been fully immunized against diphtheria,

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pertussis (whooping cough), tetanus, poliomyelitis, and measles in the manner and with immunizing agents approved by the state department.

3382. A person who has not been fully immunized against one or more of the diseases listed in Section 3381 may be admitted by the governing authority on condition that within time periods designated by regulation of the state department he or she presents evidence that he or she has been fully immunized against all of these diseases.

3383. The immunizations required by this chapter may be obtained from any private or public source desired, providing that the immunization is administered and records are made in accordance with regulations of the state department.

3384. The requirements of this chapter shall not apply to any person 18 years of age or older, or to any person seeking admission to a community college.

3385. Immunization of a person shall not be required for admission to a school or other institution listed in Section 3381 if the parent or guardian or adult who has assumed responsibility for his or her care and custody in the case of a minor, or the person seeking admission if an emancipated minor, files with the governing authority a letter or affidavit stating that such immunization is contrary to his or her beliefs. However, whenever there is good cause to believe that such person has been exposed to one of the communicable diseases listed in subdivision (a) of Section 3380, that person may be temporarily excluded from the school or institution until the local health officer is satisfied that the person is no longer at risk of developing the disease.

3386. If the parent or guardian files with the governing authority a written statement by a licensed physician to the effect that the physical condition of the child is such, or medical circumstances relating to the child are such, that immunization is not considered safe, indicating the specific nature and probable duration of the medical condition or circumstances which contraindicate immunization, such person shall be exempt from the requirements of this chapter to the extent indicated by the physician's statement.

3387. Any person or organization administering immunizations shall furnish each person immunized, or his or her parent or guardian, with a written record of immunization given in a form prescribed by the state department.

3388. The county health officer of each county shall organize and maintain a program to make immunizations available to all persons required by this chapter to be immunized. The county health officer shall also determine how the cost of such a program is to be recovered. To the extent that the cost to the county is in excess of that sum recovered from persons immunized, the cost shall be paid by the county in the same manner as other expenses of the county are paid.

3389. (a) The governing authority of each school or institution

included in Section 3381 shall require documentary proof of each entrant's immunization status. The governing authority shall record the immunizations of each new entrant in the entrant's permanent enrollment and scholarship record on a form provided by the state department. The immunization record of each new entrant admitted conditionally shall be reviewed periodically by the governing authority to ensure that within the time periods designated by regulation of the state department he or she has been fully immunized against all of the diseases listed in Section 3381, and such immunizations received subsequent to entry shall be added to the pupil's immunization record.

(b) The governing authority of each school or institution included in Section 3381 shall prohibit from further attendance any pupil admitted conditionally who failed to obtain the required immunizations within the time limits allowed in the regulations of the state department, unless the pupil is exempted under Section 3385 or 3386, until that pupil has been fully immunized against all of the diseases listed in Section 3381.

(c) The governing authority shall file a written report on the immunization status of new entrants to the school or institution under their jurisdiction with the state department and the local health department at times and on forms prescribed by the state department. As provided in paragraph (4) of subdivision (a) of Section 49076 of the Education Code, the local health department shall have access to the complete health information as it relates to immunization of each student in the schools or other institutions listed in Section 3381 in order to determine immunization deficiencies.

(d) The governing authority shall cooperate with the county health officer in carrying out programs for the immunization of persons applying for admission to any school or institution under its jurisdiction. The governing board of any school district may use funds, property, and personnel of the district for that purpose. The governing authority of any school or other institution may permit any licensed physician or any qualified registered nurse as provided in Section 2727.3 of the Business and Professions Code to administer immunizing agents to any person seeking admission to any school or institution under its jurisdiction.

3390. The state department, in consultation with the Department of Education, shall adopt and enforce all rules and regulations necessary to carry out the provisions of this chapter.

SEC. 3. Chapter 8 (commencing with Section 3400) of Division 4 of the Health and Safety Code is repealed.

SEC. 4. Chapter 10 (commencing with Section 3480) of Division 4 of the Health and Safety Code is repealed.

SEC. 5. Notwithstanding Section 2231 of the Revenue and Taxation Code, there shall be no reimbursement pursuant to this section nor shall there be any appropriation made by this act because of duties, obligations, or responsibilities imposed on local

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governmental entities by this act are such that related costs are incurred as a part of their normal operating procedures.

SFC. 6. This act is an urgency statute necessary for the immediate preservation of public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting such necessity are:

In order to carry out an effective program of immunization against communicable diseases that will protect the public health and safety, it is essential that this act take effect immediately.

CHAPTER 1177

An act to add Chapter 3.5 (commencing with Section 41185) and Chapter 3.5 (commencing with Section 50530) to Part 2 of Division 31 of the Health and Safety Code, relating to housing, and making an appropriation therefor.

[Approved by Governor September 30, 1977. Filed with
Secretary of State September 30, 1977.]

The people of the State of California do enact as follows:

SECTION 1. Chapter 3.5 (commencing with Section 41185) is added to Part 2 of Division 31 of the Health and Safety Code, to read:

CHAPTER 3.5. URBAN HOUSING DEVELOPMENT LOAN FUND LAW

41185. As used in this chapter:

(a) "Loan" means a loan for required expenses, other than administrative and construction, which are incurred by local agencies and nonprofit corporations in the process of, and prior to, securing long-term financing for construction or rehabilitation of assisted housing, and which are recoverable once long-term financing is obtained. Purposes for which loans may be made include, but are not limited to, costs of, or associated with, land purchase or options to buy land, professional services such as architectural, engineering, or legal services, permit or application fees, and bonding, site preparation, and related water or sewer development. In addition, such loans may be made for an extension of an option or advance previously obtained. Such loan funds may be deposited in banks as compensating balances to establish lines of credit for participating nonprofit corporations.

(b) "Loan fund" means the Urban Housing Development Loan Fund.

(c) "Nonprofit corporation" means an entity incorporated pursuant to Part 1 (commencing with Section 9000) of Division 2 of Title 1 of the Corporations Code or a cooperative housing

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enforcement agency may require vacation and demolition or may itself vacate the building, repair, demolish, or institute any other appropriate action or proceeding, if repair work is not done as scheduled or if the owner does not make a timely choice of repair or demolition.

(c) Notwithstanding the provisions of subdivision (b) of this section and notwithstanding local ordinances, tenants in a residential building shall be provided notice of an order to demolish, of the enforcement agency's decision to demolish, or of the issuance of a demolition permit following upon abatement order of an enforcement agency.

SEC. 5. Notwithstanding Section 2231 or 2234 of the Revenue and Taxation Code, no appropriation is made by this act pursuant to these sections because the duties, obligations, or responsibilities imposed on local government by this act are minor in nature and will not cause any financial burden to local government. It is recognized, however, that a local agency or school district may pursue any remedies to obtain reimbursement available to it under Chapter 3 (commencing with Section 2201) of Part 4 of Division 1 of that code.

SEC. 6. It is the intent of the Legislature, if this bill and Senate Bill 811 are both chaptered and become effective January 1, 1980, both bills amend Section 17920 of the Health and Safety Code, and this bill is chaptered after Senate Bill 811, that the amendments to Section 17920 proposed by both bills be given effect and incorporated in Section 17920 in the form set forth in Section 1.5 of this act. Therefore, Section 1.5 of this act shall become operative only if this bill and Senate Bill 811 are both chaptered and become effective January 1, 1980, both amend Section 17920, and this bill is chaptered after Senate Bill 811, in which case Section 1 of this act shall not become operative.

CHAPTER 435

An act to amend Sections 3380 and 3381 of the Health and Safety Code, relating to child immunizations.

[Approved by Governor September 5, 1979. Filed with
Secretary of State September 5, 1979.]

The people of the State of California do enact as follows:

SECTION 1. Section 3380 of the Health and Safety Code is amended to read:

3380. In enacting this chapter, it is the intent of the Legislature to provide:

(a) A means for the eventual achievement of total immunization of appropriate age groups against diphtheria, pertussis, tetanus, poliomyelitis, measles, mumps, and rubella.

(b) That the persons required to be immunized be allowed to obtain immunizations from whatever medical source they so desire, subject only to the condition that the immunization be performed in accordance with the regulations of the State Department of Health Services and that a record of the immunization is made in accordance with such regulations.

(c) Exemptions from immunization for medical reasons or because of personal beliefs.

(d) For the keeping of adequate records of immunization so that health departments, schools, and other institutions, parents or guardians, and the persons immunized will be able to ascertain that a child is fully or only partially immunized, and so that appropriate public agencies will be able to ascertain the immunization needs of groups of children in schools or other institutions.

SEC. 2. Section 3381 of the Health and Safety Code is amended to read:

3381. As used in this chapter, the term "governing authority" means the governing board of each school district or the authority of each other private or public institution responsible for the operation and control of the institution or the principal or administrator of each school or institution.

The governing authority shall not unconditionally admit any person as a pupil of any private or public elementary or secondary school, child care center, day nursery, nursery school, or development center, unless prior to his or her first admission to that institution he or she has been fully immunized against diphtheria, pertussis (whooping cough), tetanus, poliomyelitis, measles, mumps, and rubella in the manner and with immunizing agents approved by the state department.

Persons already enrolled in California public or private schools at the kindergarten level or above as of January 1, 1980, shall be exempt from the rubella and mumps immunization requirement for school entry.

SEC. 3. Notwithstanding Section 2231 or 2234 of the Revenue and Taxation Code, no appropriation is made by this act pursuant to these sections because the duties, obligations, or responsibilities imposed on local agencies or school districts by this act are such that related costs are incurred as part of their normal operating procedures. It is recognized, however, that a local agency or school district may pursue any remedies to obtain reimbursement available to it under Chapter 3 (commencing with Section 2201) of Part 4 of Division 1 of that code.

EXHIBIT 7

CHAPTER 1320

An act to amend Section 3381 of, and to add Section 1596.813 to, the Health and Safety Code, relating to immunization.

[Approved by Governor September 30, 1992. Filed with Secretary of State September 30, 1992.]

The people of the State of California do enact as follows:

SECTION 1. Section 1596.813 is added to the Health and Safety Code, to read:

1596.813. The department shall adopt regulations regarding immunization requirements for children enrolled in family day care homes in accordance with Chapter 7 (commencing with Section 3380) of Division 4.

SEC. 2. Section 3381 of the Health and Safety Code is amended to read:

3381. (a) As used in this chapter, the term "governing authority" means the governing board of each school district or the authority of each other private or public institution responsible for the operation and control of the institution or the principal or administrator of each school or institution.

(b) The governing authority shall not unconditionally admit any person as a pupil of any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center, unless prior to his or her first admission to that institution he or she has been fully immunized. The following are the diseases for which immunizations shall be documented:

(1) Diphtheria.

(2) Haemophilus influenzae type b, except for children who have reached the age of four years, six months.

(3) Measles.

(4) Mumps, except for children who have reached the age of seven years.

(5) Pertussis (whooping cough), except for children who have reached the age of seven years.

(6) Poliomyelitis.

(7) Rubella.

(8) Tetanus.

(9) Any other disease deemed appropriate by the state department, taking into consideration the recommendations of the United States Public Health Services' Centers for Disease Control Immunization Practices Advisory Committee and the American Academy of Pediatrics Committee of Infectious Diseases.

(c) The state department may specify the immunizing agents which may be utilized and the manner in which immunizations are administered.

SEC. 3. Notwithstanding Section 17610 of the Government Code, if the Commission on State Mandates determines that this act contains costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code. If the statewide cost of the claim for reimbursement does not exceed one million dollars (\$1,000,000), reimbursement shall be made from the State Mandates Claims Fund. Notwithstanding Section 17580 of the Government Code, unless otherwise specified in this act, the provisions of this act shall become operative on the same date that the act takes effect pursuant to the California Constitution.

CHAPTER 1321

An act to add Sections 20633, 20634, and 20635 to the Government Code, relating to the Public Employees' Retirement System.

[Approved by Governor September 30, 1992. Filed with
Secretary of State September 30, 1992.]

The people of the State of California do enact as follows:

SECTION 1. Section 20633 is added to the Government Code, to read:

20633. (a) Notwithstanding Section 20632, this article shall apply to state peace officer-firefighter members employed by the Department of Corrections, the Youth Authority, the Board of Prison Terms, or the Youthful Offender Parole Board, on and after the operative date of this section, solely at the option and expense of the member.

(b) The additional contributions made by a member pursuant to Section 20630, in excess of normal contributions shall not be refunded to the member unless he or she ceases to be a member pursuant to Section 20390 or, upon retirement for service, the member elects a refund in lieu of an annuity based on his or her accumulated contributions in excess of normal contributions. No employer shall make, with respect to a member who elects to participate pursuant to this section, any employer contributions therefor or any additional employer contributions therefor. The cost of participation and the administrative costs shall be paid solely by additional member contributions. This subdivision shall apply only to state peace officer/firefighter members employed by the Department of Corrections, the Department of the Youth Authority, the Board of Prison Terms, or the Youthful Offender Parole Board.

SEC. 2. Section 20634 is added to the Government Code, to read:

20634. The board, after deducting the costs of administering Section 20633, shall credit all contributions made pursuant to Section

EXHIBIT 8

SEC. 3. This act provides for a tax levy within the meaning of Article IV of the Constitution and shall go into immediate effect.

CHAPTER 291

An act to amend Section 3381 of the Health and Safety Code, relating to communicable disease.

[Approved by Governor August 2, 1995. Filed with
Secretary of State August 3, 1995.]

The people of the State of California do enact as follows:

SECTION 1. Section 3381 of the Health and Safety Code is amended to read:

3381. (a) As used in this chapter, the term "governing authority" means the governing board of each school district or the authority of each other private or public institution responsible for the operation and control of the institution or the principal or administrator of each school or institution.

(b) The governing authority shall not unconditionally admit any person as a pupil of any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center, unless prior to his or her first admission to that institution he or she has been fully immunized. The following are the diseases for which immunizations shall be documented:

- (1) Diphtheria.
- (2) Haemophilus influenzae type b, except for children who have reached the age of four years, six months.
- (3) Measles.
- (4) Mumps, except for children who have reached the age of seven years.
- (5) Pertussis (whooping cough), except for children who have reached the age of seven years.
- (6) Poliomyelitis.
- (7) Rubella.
- (8) Tetanus.
- (9) Hepatitis B for all children entering the institutions listed in subdivision (b) at the kindergarten level or below on or after August 1, 1997.
- (10) Any other disease deemed appropriate by the state department, taking into consideration the recommendations of the United States Public Health Services' Centers for Disease Control Immunization Practices Advisory Committee and the American Academy of Pediatrics Committee of Infectious Diseases.

(c) The state department may specify the immunizing agents which may be utilized and the manner in which immunizations are administered.

SEC. 2. Notwithstanding Section 17610 of the Government Code, if the Commission on State Mandates determines that this act contains costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code. If the statewide cost of the claim for reimbursement does not exceed one million dollars (\$1,000,000), reimbursement shall be made from the State Mandates Claims Fund.

Notwithstanding Section 17580 of the Government Code, unless otherwise specified, the provisions of this act shall become operative on the same date that the act takes effect pursuant to the California Constitution.

CHAPTER 292

An act to amend Section 4000.1 of the Vehicle Code, relating to vehicles.

[Approved by Governor August 2, 1995. Filed with
Secretary of State August 3, 1995.]

The people of the State of California do enact as follows:

SECTION 1. Section 4000.1 of the Vehicle Code is amended to read:

4000.1. (a) Except as otherwise provided in subdivision (b), (c), or (d) of this section, or subdivision (b) of Section 43654 of the Health and Safety Code, the department shall require upon initial registration, and upon transfer of ownership and registration, of any motor vehicle subject to Part 5 (commencing with Section 43000) of Division 26 of the Health and Safety Code, and upon registration of a motor vehicle previously registered outside this state which is subject to those provisions of the Health and Safety Code, a valid certificate of compliance or a certificate of noncompliance, as appropriate, issued in accordance with Section 44015 of the Health and Safety Code.

(b) With respect to new vehicles certified pursuant to Chapter 2 (commencing with Section 43100) of Part 5 of Division 26 of the Health and Safety Code, the department shall accept a statement completed pursuant to subdivision (b) of Section 24007 in lieu of the certificate of compliance.

(c) For purposes of determining the validity of a certificate of compliance or noncompliance submitted in compliance with the requirements of this section, the definitions of new and used motor

EXHIBIT 9

insured employers be considered a premium for computation of a gross premium tax or agents' commission.

CHAPTER 747

An act to amend Sections 120325 and 120335 of the Health and Safety Code, relating to health.

[Approved by Governor October 7, 1999. Filed with
Secretary of State October 10, 1999.]

The people of the State of California do enact as follows:

SECTION 1. Section 120325 of the Health and Safety Code is amended to read:

120325. In enacting Chapter 1 (commencing with Section 120325, but excluding Section 120380) and in enacting Sections 120400, 120405, 120410, and 120415, it is the intent of the Legislature to provide:

(a) A means for the eventual achievement of total immunization of appropriate age groups against the following childhood diseases:

- (1) Diphtheria.
- (2) Hepatitis B.
- (3) Haemophilus influenzae type b.
- (4) Measles.
- (5) Mumps.
- (6) Pertussis (whooping cough).
- (7) Poliomyelitis.
- (8) Rubella.
- (9) Tetanus.

(10) Varicella (chickenpox). This paragraph shall be operative only to the extent that funds for this purpose are appropriated in the annual Budget Act.

(11) Any other disease that is consistent with the most current recommendations of the United States Public Health Services' Centers for Disease Control Immunization Practices Advisory Committee and the American Academy of Pediatrics Committee of Infectious Diseases, and deemed appropriate by the department.

(b) That the persons required to be immunized be allowed to obtain immunizations from whatever medical source they so desire, subject only to the condition that the immunization be performed in accordance with the regulations of the department and that a record of the immunization is made in accordance with the regulations.

(c) Exemptions from immunization for medical reasons or because of personal beliefs.

(d) For the keeping of adequate records of immunization so that health departments, schools, and other institutions, parents or

guardians, and the persons immunized will be able to ascertain that a child is fully or only partially immunized, and so that appropriate public agencies will be able to ascertain the immunization needs of groups of children in schools or other institutions.

(e) Incentives to public health authorities to design innovative and creative programs that will promote and achieve full and timely immunization of children.

SEC. 2. Section 120335 of the Health and Safety Code is amended to read:

120335. (a) As used in Chapter 1 (commencing with Section 120325, but excluding Section 120380), and as used in Sections 120400, 120405, 120410, and 120415, the term “governing authority” means the governing board of each school district or the authority of each other private or public institution responsible for the operation and control of the institution or the principal or administrator of each school or institution.

(b) The governing authority shall not unconditionally admit any person as a pupil of any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center, unless prior to his or her first admission to that institution he or she has been fully immunized. The following are the diseases for which immunizations shall be documented:

(1) Diphtheria.

(2) Haemophilus influenzae type b, except for children who have reached the age of four years and six months.

(3) Measles.

(4) Mumps, except for children who have reached the age of seven years.

(5) Pertussis (whooping cough), except for children who have reached the age of seven years.

(6) Poliomyelitis.

(7) Rubella.

(8) Tetanus.

(9) Hepatitis B for all children entering the institutions listed in this subdivision at the kindergarten level or below on or after August 1, 1997.

(10) Varicella (chickenpox), effective July 1, 2001. Persons already admitted into California public or private schools at the kindergarten level or above before July 1, 2001, shall be exempt from the varicella immunization requirement for school entry. This paragraph shall be operative only to the extent that funds for this purpose are appropriated in the annual Budget Act.

The department may adopt emergency regulations to implement this paragraph including, but not limited to, requirements for documentation and immunization status reports, in accordance with the rulemaking provisions of the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division

3 of Title 2 of the Government Code). The initial adoption of emergency regulations shall be deemed to be an emergency and considered by the Office of Administrative Law as necessary for the immediate preservation of the public peace, health and safety, or general welfare. Emergency regulations adopted pursuant to this paragraph shall remain in effect for no more than 180 days.

(11) Any other disease deemed appropriate by the department, taking into consideration the recommendations of the United States Public Health Services' Centers for Disease Control Immunization Practices Advisory Committee and the American Academy of Pediatrics Committee of Infectious Diseases.

(c) On and after July 1, 1999, the governing authority shall not unconditionally admit any pupil to the 7th grade level, nor unconditionally advance any pupil to the 7th grade level, of any of the institutions listed in subdivision (b) unless the pupil has been fully immunized against hepatitis B.

(d) The department may specify the immunizing agents which may be utilized and the manner in which immunizations are administered.

SEC. 3. Notwithstanding Section 17610 of the Government Code, if the Commission on State Mandates determines that this act contains costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code. If the statewide cost of the claim for reimbursement does not exceed one million dollars (\$1,000,000), reimbursement shall be made from the State Mandates Claims Fund.

CHAPTER 748

An act to add Sections 681, 1220.5, and 1288.3 to the Business and Professions Code, relating to biological specimens.

[Approved by Governor October 7, 1999. Filed with
Secretary of State October 10, 1999.]

The people of the State of California do enact as follows:

SECTION 1. Section 681 is added to the Business and Professions Code, to read:

681. (a) Commencing July 1, 2000, every person licensed pursuant to this division who collects human biological specimens for clinical testing or examination, shall secure, or ensure that his or her employees, agents, or contractors secure, those specimens in a locked container when those specimens are placed in a public location outside of the custodial control of the licensee, or his or her employees, agents, or contractors.

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(c) The amendments made to this section by the act ¹ that added this subdivision apply for the 2007–08 fiscal year and for each fiscal year thereafter.

SEC. 4. Section 756 of the Revenue and Taxation Code is amended to read:

756. (a) On or before July 31, the board shall transmit to each county auditor a roll showing the unitary and operating nonunitary assessments made by the board in the county and the nonoperating nonunitary assessments made by the board in each city and revenue district in the county; provided, however, that the roll need not show the assessments made by the board in a revenue district which did not levy a tax or assessment during the preceding year. The roll is at all times, during office hours, open to the inspection of any person representing any taxing agency or revenue district, or any district described in Section 2131. If the roll does not show the assessments in a revenue district as herein provided and a notice of a proposed levy is furnished to the board in writing, on or before January 1 preceding the fiscal year for which the levy is to be made, the board shall furnish an estimate of the total assessed value of nonoperating nonunitary state-assessed property in the district and shall transmit thereafter to the county auditor a statement of roll change showing the nonoperating nonunitary assessments made by the board in the district.

(b) Notwithstanding subdivision (a), in making the roll referred to in subdivision (a), the value of property described in paragraph (1) of subdivision (a) of Section 100.1 and the nonunitary value of the property of regulated railway companies, property subject to subdivisions (i), (j), * * * (k), and (l) of Section 100, and property subject to Section 100.9 shall be enrolled by revenue district.

(c) The amendments made to this section by the act ¹ that added this subdivision apply for the 2007–08 fiscal year and for each fiscal year thereafter.

SEC. 5. The Legislature finds and declares that a special law is necessary, and that a general law cannot be made applicable within the meaning of Section 16 of Article IV of the California Constitution, in order to ensure that the Inland Valley Development Agency receives sufficient tax increment funding to repay loans, or moneys advance to, or indebtedness incurred by, the redevelopment agency to finance or refinance redevelopment projects.

SEC. 6. Section 1.5 of this bill incorporates amendments to Section 100 of the Revenue and Taxation Code proposed by both this bill and SB 1398. It shall only become operative if (1) both bills are enacted and become effective on or before January 1, 2011, but this bill becomes operative first, (2) each bill amends Section 100 of the Revenue and Taxation Code, and (3) this bill is enacted after SB 1398, in which case Section 100 of the Revenue and Taxation Code, as amended by Section 1 of this bill, shall remain operative only until the operative date of SB 1398, at which time Section 1.5 of this bill shall become operative.

SEC. 7. If the Commission on State Mandates determines that this act contains costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code.

SEC. 8. This act is an urgency statute necessary for the immediate preservation of the public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are:

In order to ensure that the Inland Valley Development Agency receives sufficient tax increment funding to repay loans, or moneys advanced to, or indebtedness incurred by, the redevelopment agency to finance or refinance redevelopment projects, it is necessary that this act take effect immediately.

SOCIAL SERVICES—HEALTH—IMMUNIZATION

CHAPTER 434

A.B. No. 354

¹ Stats.2006, c. 791 (A.B.2670).

¹ Stats.2006, c. 791 (A.B.2670).

AN ACT to amend Section 120325 of, and to amend, repeal, and add Section 120335 of, the Health and Safety Code, relating to vaccinations.

[Filed with Secretary of State September 29, 2010.]

LEGISLATIVE COUNSEL'S DIGEST

AB 354, Arambula. Health: immunizations.

Existing law prohibits the governing authority of a school or other institution from unconditionally admitting any person as a pupil of any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center, unless prior to his or her first admission to that institution he or she has been fully immunized against various diseases, including hepatitis B, pertussis (whooping cough), and varicella (chickenpox), and any other disease deemed appropriate by the State Department of Public Health, taking into consideration the recommendations of specified entities.

This bill would add to these entities the American Academy of Family Physicians.

This bill would also, in part, remove certain of the age and date restrictions.

Existing law makes these provisions, as they relate to varicella (chickenpox), operative only to the extent that funds are appropriated in the annual Budget Act, and authorizes the department to adopt emergency regulations, as specified.

This bill would, regarding the varicella (chickenpox) provisions, delete the requirement that it be operative only to the extent that funds are appropriated in the annual Budget Act, and delete the department's authorization to adopt emergency regulations.

Existing law prohibits the governing authority from unconditionally admitting, or advancing, a pupil into the 7th grade unless the pupil has been fully immunized against hepatitis B.

This bill would delete immunizations against hepatitis B as a 7th grade admission or advancement requirement and would, instead, prohibit the governing authority from unconditionally admitting, or advancing, a pupil into the 7th and, for one year, the 8th through 12th grades unless the pupil has been fully immunized, as prescribed, including, but not limited to, having received all pertussis boosters appropriate for that age.

By requiring school districts to comply with these requirements, this bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to these statutory provisions.

The people of the State of California do enact as follows:

SECTION 1. Section 120325 of the Health and Safety Code is amended to read:

120325. In enacting this chapter * * *, but excluding Section 120380, and in enacting Sections 120400, 120405, 120410, and 120415, it is the intent of the Legislature to provide:

(a) A means for the eventual achievement of total immunization of appropriate age groups against the following childhood diseases:

- (1) Diphtheria.
- (2) Hepatitis B.
- (3) Haemophilus influenzae type b.
- (4) Measles.
- (5) Mumps.
- (6) Pertussis (whooping cough).
- (7) Poliomyelitis.

- (8) Rubella.
- (9) Tetanus.
- (10) Varicella (chickenpox). * * *

(11) Any other disease * * * deemed appropriate by the department, taking into consideration the recommendations of the Advisory Committee on Immunization Practices of the United States * * * Department of Health and * * * Human Services, the American Academy of Pediatrics, and the American Academy of Family Physicians.

(b) That the persons required to be immunized be allowed to obtain immunizations from whatever medical source they so desire, subject only to the condition that the immunization be performed in accordance with the regulations of the department and that a record of the immunization is made in accordance with the regulations.

(c) Exemptions from immunization for medical reasons or because of personal beliefs.

(d) For the keeping of adequate records of immunization so that health departments, schools, and other institutions, parents or guardians, and the persons immunized will be able to ascertain that a child is fully or only partially immunized, and so that appropriate public agencies will be able to ascertain the immunization needs of groups of children in schools or other institutions.

(e) Incentives to public health authorities to design innovative and creative programs that will promote and achieve full and timely immunization of children.

SEC. 2. Section 120335 of the Health and Safety Code is amended to read:

120335. (a) As used in this chapter * * *, but excluding Section 120380 * * *, and as used in Sections 120400, 120405, 120410, and 120415, the term “governing authority” means the governing board of each school district or the authority of each other private or public institution responsible for the operation and control of the institution or the principal or administrator of each school or institution.

(b) The governing authority shall not unconditionally admit any person as a pupil of any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center, unless prior to his or her first admission to that institution he or she has been fully immunized. The following are the diseases for which immunizations shall be documented:

- (1) Diphtheria.
- (2) Haemophilus influenzae type b * * *.
- (3) Measles.
- (4) Mumps * * *.
- (5) Pertussis (whooping cough) * * *.
- (6) Poliomyelitis.
- (7) Rubella.
- (8) Tetanus.
- (9) Hepatitis B * * *.
- (10) Varicella (chickenpox) * * *.

(11) Any other disease deemed appropriate by the department, taking into consideration the recommendations of the Advisory Committee on Immunization Practices of the United States Department of Health and Human Services, the American Academy of Pediatrics, and the American Academy of Family Physicians.

(c) Commencing July 1, 2011, notwithstanding subdivision (b), full immunization against hepatitis B shall not be a condition by which the governing authority admits or advances any pupil to the 7th grade level of any private or public elementary or secondary school.

(d) Commencing July 1, 2011, the governing authority shall not unconditionally admit or advance any pupil to the 7th through 12th grade levels, inclusive, of any private or public elementary or secondary school unless the pupil has been fully immunized against pertussis, including all pertussis boosters appropriate for the pupil’s age.

(e) The department may specify the immunizing agents which may be utilized and the manner in which immunizations are administered.

(f) This section shall become inoperative on June 30, 2012, and as of January 1, 2013, is repealed, unless a later enacted statute, that is enacted before January 1, 2013, deletes or extends that date.

(g) The department may adopt emergency regulations to implement * * * subdivisions (c) and (d) including, but not limited to, requirements for documentation and immunization status reports, in accordance with the rulemaking provisions of the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code). The initial adoption of emergency regulations shall be deemed to be an emergency and considered by the Office of Administrative Law as necessary for the immediate preservation of the public peace, health and safety, or general welfare. Emergency regulations adopted pursuant to this subdivision shall remain in effect for no more than 180 days.

* * *

SEC. 3. Section 120335 is added to the Health and Safety Code, to read:

120335. (a) As used in this chapter, but excluding Section 120380, and as used in Sections 120400, 120405, 120410, and 120415, the term "governing authority" means the governing board of each school district or the authority of each other private or public institution responsible for the operation and control of the institution or the principal or administrator of each school or institution.

(b) The governing authority shall not unconditionally admit any person as a pupil of any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center, unless prior to his or her first admission to that institution he or she has been fully immunized. The following are the diseases for which immunizations shall be documented:

- (1) Diphtheria.
- (2) Haemophilus influenzae type b.
- (3) Measles.
- (4) Mumps.
- (5) Pertussis (whooping cough).
- (6) Poliomyelitis.
- (7) Rubella.
- (8) Tetanus.
- (9) Hepatitis B.
- (10) Varicella (chickenpox).

(11) Any other disease deemed appropriate by the department, taking into consideration the recommendations of the Advisory Committee on Immunization Practices of the United States Department of Health and Human Services, the American Academy of Pediatrics, and the American Academy of Family Physicians.

(c) Notwithstanding subdivision (b), full immunization against hepatitis B shall not be a condition by which the governing authority shall admit or advance any pupil to the 7th grade level of any private or public elementary or secondary school.

(d) The governing authority shall not unconditionally admit or advance any pupil to the 7th grade level of any private or public elementary or secondary school unless the pupil has been fully immunized against pertussis, including all pertussis boosters appropriate for the pupil's age.

(e) The department may specify the immunizing agents which may be utilized and the manner in which immunizations are administered.

(f) This section shall become operative on July 1, 2012.

SEC. 4. If the Commission on State Mandates determines that this act contains costs mandated by the state, reimbursement to local agencies and school districts for those costs

shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code.

**SOCIAL SERVICES—ELECTRONIC BENEFIT
TRANSFERS—FARMERS’ MARKETS**

CHAPTER 435

A.B. No. 537

AN ACT to add Section 10072.1 to the Welfare and Institutions Code, relating to public benefits.

[Filed with Secretary of State September 29, 2010.]

LEGISLATIVE COUNSEL’S DIGEST

AB 537, Arambula. Farmers’ markets: electronic benefit transfers.

Existing law, administered by the State Department of Social Services, provides for the establishment of a statewide electronic benefit transfer (EBT) system for the purpose of providing financial and food assistance benefits to needy Californians.

This bill would allow an interested collective group or association of produce sellers that is Food and Nutrition Service (FNS) authorized and in a flea market, farmers’ market, or certified farmers’ market to initiate and operate an EBT acceptance system in the market, as specified. The bill would provide that an individual produce seller in a market is not prohibited from operating his or her own individual EBT acceptance activity as part of that seller’s personal business customer transaction offering.

The people of the State of California do enact as follows:

SECTION 1. Section 10072.1 is added to the Welfare and Institutions Code, to read:

10072.1. (a) The Legislature finds and declares that flea markets, farmers’ markets, and certified farmers’ markets are important sources of low-cost produce for Californians in need of food assistance.

(b)(1) An interested collective group or association of produce sellers that is Food and Nutrition Service (FNS) authorized and actively participating in produce sales in a market described in subdivision (a) may initiate and operate an electronic benefit transfer (EBT) acceptance system on behalf of its members, to the extent and manner allowed by federal law and regulation. The market operator shall allow and accommodate the FNS–authorized group or association in a reasonable manner that aids in the creation, implementation, and operation of its EBT acceptance system. The allowance and accommodation by the market operator mandated by this section is limited solely to the activity of the operation of the EBT acceptance system by the group or association. No other activities are authorized without the express permission of the market operator.

(2) This subdivision shall not apply to a market described in subdivision (a) that currently or subsequently operates an EBT acceptance system.

(c) Nothing in this section or any other provision of law shall prohibit an individually FNS–authorized produce seller in a market described in subdivision (a) from operating his or her own individual EBT acceptance activity as part of that seller’s personal business customer transaction offering.

(d) Nothing in this section shall be interpreted to require a market described in subdivision (a) to itself create, operate, or maintain an EBT acceptance system on behalf of its produce sellers.

EXHIBIT 11

Senate Bill No. 277

CHAPTER 35

An act to amend Sections 120325, 120335, 120370, and 120375 of, to add Section 120338 to, and to repeal Section 120365 of, the Health and Safety Code, relating to public health.

[Approved by Governor June 30, 2015. Filed with
Secretary of State June 30, 2015.]

LEGISLATIVE COUNSEL'S DIGEST

SB 277, Pan. Public health: vaccinations.

Existing law prohibits the governing authority of a school or other institution from unconditionally admitting any person as a pupil of any public or private elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center, unless prior to his or her admission to that institution he or she has been fully immunized against various diseases, including measles, mumps, and pertussis, subject to any specific age criteria. Existing law authorizes an exemption from those provisions for medical reasons or because of personal beliefs, if specified forms are submitted to the governing authority. Existing law requires the governing authority of a school or other institution to require documentary proof of each entrant's immunization status. Existing law authorizes the governing authority of a school or other institution to temporarily exclude a child from the school or institution if the authority has good cause to believe that the child has been exposed to one of those diseases, as specified.

This bill would eliminate the exemption from existing specified immunization requirements based upon personal beliefs, but would allow exemption from future immunization requirements deemed appropriate by the State Department of Public Health for either medical reasons or personal beliefs. The bill would exempt pupils in a home-based private school and students enrolled in an independent study program and who do not receive classroom-based instruction, pursuant to specified law from the prohibition described above. The bill would allow pupils who, prior to January 1, 2016, have a letter or affidavit on file at a private or public elementary or secondary school, child day care center, day nursery, nursery school, family day care home, or development center stating beliefs opposed to immunization, to be enrolled in any private or public elementary or secondary school, child day care center, day nursery, nursery school, family day care home, or development center within the state until the pupil enrolls in the next grade span, as defined. Except as under the circumstances described above, on and after July 1, 2016, the bill would prohibit a governing authority from unconditionally admitting to any of those institutions for the first time or

admitting or advancing any pupil to the 7th grade level, unless the pupil has been immunized as required by the bill. The bill would specify that its provisions do not prohibit a pupil who qualifies for an individualized education program, pursuant to specified laws, from accessing any special education and related services required by his or her individualized education program. The bill would narrow the authorization for temporary exclusion from a school or other institution to make it applicable only to a child who has been exposed to a specified disease and whose documentary proof of immunization status does not show proof of immunization against one of the diseases described above. The bill would make conforming changes to related provisions.

The people of the State of California do enact as follows:

SECTION 1. Section 120325 of the Health and Safety Code is amended to read:

120325. In enacting this chapter, but excluding Section 120380, and in enacting Sections 120400, 120405, 120410, and 120415, it is the intent of the Legislature to provide:

(a) A means for the eventual achievement of total immunization of appropriate age groups against the following childhood diseases:

- (1) Diphtheria.
- (2) Hepatitis B.
- (3) Haemophilus influenzae type b.
- (4) Measles.
- (5) Mumps.
- (6) Pertussis (whooping cough).
- (7) Poliomyelitis.
- (8) Rubella.
- (9) Tetanus.
- (10) Varicella (chickenpox).

(11) Any other disease deemed appropriate by the department, taking into consideration the recommendations of the Advisory Committee on Immunization Practices of the United States Department of Health and Human Services, the American Academy of Pediatrics, and the American Academy of Family Physicians.

(b) That the persons required to be immunized be allowed to obtain immunizations from whatever medical source they so desire, subject only to the condition that the immunization be performed in accordance with the regulations of the department and that a record of the immunization is made in accordance with the regulations.

(c) Exemptions from immunization for medical reasons.

(d) For the keeping of adequate records of immunization so that health departments, schools, and other institutions, parents or guardians, and the persons immunized will be able to ascertain that a child is fully or only partially immunized, and so that appropriate public agencies will be able

to ascertain the immunization needs of groups of children in schools or other institutions.

(e) Incentives to public health authorities to design innovative and creative programs that will promote and achieve full and timely immunization of children.

SEC. 2. Section 120335 of the Health and Safety Code is amended to read:

120335. (a) As used in this chapter, “governing authority” means the governing board of each school district or the authority of each other private or public institution responsible for the operation and control of the institution or the principal or administrator of each school or institution.

(b) The governing authority shall not unconditionally admit any person as a pupil of any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center, unless, prior to his or her first admission to that institution, he or she has been fully immunized. The following are the diseases for which immunizations shall be documented:

- (1) Diphtheria.
- (2) Haemophilus influenzae type b.
- (3) Measles.
- (4) Mumps.
- (5) Pertussis (whooping cough).
- (6) Poliomyelitis.
- (7) Rubella.
- (8) Tetanus.
- (9) Hepatitis B.
- (10) Varicella (chickenpox).

(11) Any other disease deemed appropriate by the department, taking into consideration the recommendations of the Advisory Committee on Immunization Practices of the United States Department of Health and Human Services, the American Academy of Pediatrics, and the American Academy of Family Physicians.

(c) Notwithstanding subdivision (b), full immunization against hepatitis B shall not be a condition by which the governing authority shall admit or advance any pupil to the 7th grade level of any private or public elementary or secondary school.

(d) The governing authority shall not unconditionally admit or advance any pupil to the 7th grade level of any private or public elementary or secondary school unless the pupil has been fully immunized against pertussis, including all pertussis boosters appropriate for the pupil’s age.

(e) The department may specify the immunizing agents that may be utilized and the manner in which immunizations are administered.

(f) This section does not apply to a pupil in a home-based private school or a pupil who is enrolled in an independent study program pursuant to Article 5.5 (commencing with Section 51745) of Chapter 5 of Part 28 of the Education Code and does not receive classroom-based instruction.

(g) (1) A pupil who, prior to January 1, 2016, submitted a letter or affidavit on file at a private or public elementary or secondary school, child day care center, day nursery, nursery school, family day care home, or development center stating beliefs opposed to immunization shall be allowed enrollment to any private or public elementary or secondary school, child day care center, day nursery, nursery school, family day care home, or development center within the state until the pupil enrolls in the next grade span.

(2) For purposes of this subdivision, “grade span” means each of the following:

(A) Birth to preschool.

(B) Kindergarten and grades 1 to 6, inclusive, including transitional kindergarten.

(C) Grades 7 to 12, inclusive.

(3) Except as provided in this subdivision, on and after July 1, 2016, the governing authority shall not unconditionally admit to any of those institutions specified in this subdivision for the first time, or admit or advance any pupil to 7th grade level, unless the pupil has been immunized for his or her age as required by this section.

(h) This section does not prohibit a pupil who qualifies for an individualized education program, pursuant to federal law and Section 56026 of the Education Code, from accessing any special education and related services required by his or her individualized education program.

SEC. 3. Section 120338 is added to the Health and Safety Code, to read:

120338. Notwithstanding Sections 120325 and 120335, any immunizations deemed appropriate by the department pursuant to paragraph (11) of subdivision (a) of Section 120325 or paragraph (11) of subdivision (b) of Section 120335, may be mandated before a pupil’s first admission to any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center, only if exemptions are allowed for both medical reasons and personal beliefs.

SEC. 4. Section 120365 of the Health and Safety Code is repealed.

SEC. 5. Section 120370 of the Health and Safety Code is amended to read:

120370. (a) If the parent or guardian files with the governing authority a written statement by a licensed physician to the effect that the physical condition of the child is such, or medical circumstances relating to the child are such, that immunization is not considered safe, indicating the specific nature and probable duration of the medical condition or circumstances, including, but not limited to, family medical history, for which the physician does not recommend immunization, that child shall be exempt from the requirements of Chapter 1 (commencing with Section 120325, but excluding Section 120380) and Sections 120400, 120405, 120410, and 120415 to the extent indicated by the physician’s statement.

(b) If there is good cause to believe that a child has been exposed to a disease listed in subdivision (b) of Section 120335 and his or her documentary proof of immunization status does not show proof of

immunization against that disease, that child may be temporarily excluded from the school or institution until the local health officer is satisfied that the child is no longer at risk of developing or transmitting the disease.

SEC. 6. Section 120375 of the Health and Safety Code is amended to read:

120375. (a) The governing authority of each school or institution included in Section 120335 shall require documentary proof of each entrant's immunization status. The governing authority shall record the immunizations of each new entrant in the entrant's permanent enrollment and scholarship record on a form provided by the department. The immunization record of each new entrant admitted conditionally shall be reviewed periodically by the governing authority to ensure that within the time periods designated by regulation of the department he or she has been fully immunized against all of the diseases listed in Section 120335, and immunizations received subsequent to entry shall be added to the pupil's immunization record.

(b) The governing authority of each school or institution included in Section 120335 shall prohibit from further attendance any pupil admitted conditionally who failed to obtain the required immunizations within the time limits allowed in the regulations of the department, unless the pupil is exempted under Section 120370, until that pupil has been fully immunized against all of the diseases listed in Section 120335.

(c) The governing authority shall file a written report on the immunization status of new entrants to the school or institution under their jurisdiction with the department and the local health department at times and on forms prescribed by the department. As provided in paragraph (4) of subdivision (a) of Section 49076 of the Education Code, the local health department shall have access to the complete health information as it relates to immunization of each student in the schools or other institutions listed in Section 120335 in order to determine immunization deficiencies.

(d) The governing authority shall cooperate with the county health officer in carrying out programs for the immunization of persons applying for admission to any school or institution under its jurisdiction. The governing board of any school district may use funds, property, and personnel of the district for that purpose. The governing authority of any school or other institution may permit any licensed physician or any qualified registered nurse as provided in Section 2727.3 of the Business and Professions Code to administer immunizing agents to any person seeking admission to any school or institution under its jurisdiction.

EXHIBIT 12

Senate Bill No. 276

CHAPTER 278

An act to amend Sections 120370, 120375, and 120440 of, and to add Sections 120372 and 120372.05 to, the Health and Safety Code, relating to public health.

[Approved by Governor September 9, 2019. Filed with Secretary of State September 9, 2019.]

LEGISLATIVE COUNSEL'S DIGEST

SB 276, Pan. Immunizations: medical exemptions.

Existing law prohibits the governing authority of a school or other institution from admitting for attendance any pupil who fails to obtain required immunizations within the time limits prescribed by the State Department of Public Health. Existing law exempts from those requirements a pupil whose parents have filed with the governing authority a written statement by a licensed physician to the effect that immunization is not considered safe for that child, indicating the specific nature and probable duration of their medical condition or circumstances, including, but not limited to, family medical history.

This bill would instead require the State Department of Public Health, by January 1, 2021, to develop and make available for use by licensed physicians and surgeons an electronic, standardized, statewide medical exemption request that would be transmitted using the California Immunization Registry (CAIR), and which, commencing January 1, 2021, would be the only documentation of a medical exemption that a governing authority may accept. The bill would specify the information to be included in the medical exemption form, including a certification under penalty of perjury that the statements and information contained in the form are true, accurate, and complete. The bill would, commencing January 1, 2021, require a physician and surgeon to inform a parent or guardian of the bill's requirements and to examine the child and submit a completed medical exemption request form to the department, as specified. By expanding the crime of perjury, the bill would impose a state-mandated local program.

This bill would require a parent or guardian, by January 1, 2021, to submit to the department a copy of a medical exemption granted prior to that date for inclusion in a state database in order for the medical exemption to remain valid. The bill would require the department to annually review immunization reports from schools and institutions to identify schools with an overall immunization rate of less than 95%, physicians and surgeons who submitted 5 or more medical exemption forms in a calendar year, and schools and institutions that do not report immunization rates to the department. The bill would require a clinically trained department staff member who is a

physician and surgeon or a registered nurse to review all medical exemption forms submitted meeting those conditions. The bill would authorize the medical exemptions determined by that staff member to be inappropriate or otherwise invalid to be reviewed by the State Public Health Officer or a physician and surgeon designated by the State Public Health Officer, and revoked by the State Public Health Officer or physician and surgeon designee, under prescribed circumstances.

The bill would authorize a parent or guardian to appeal a medical exemption denial or revocation to the Secretary of California Health and Human Services. The appeal would be conducted by an independent expert review panel of licensed physicians and surgeons established by the secretary. The bill would require the independent expert review panel to evaluate appeals consistent with specified guidelines and to submit its decision to the secretary. The bill would require the secretary to adopt the determination of the independent expert review panel and promptly issue a written decision to the child's parent or guardian. The final decision of the secretary would not be subject to further administrative review. The bill would allow a child whose medical exemption revocation is appealed to continue in attendance at the school or institution without being required to commence the immunization schedule required for conditional admittance, provided that the appeal is filed within 30 calendar days of revocation of the medical exemption.

The bill would require the department and the independent expert review panel to comply with all applicable state and federal privacy and confidentiality laws and would authorize disclosure of information submitted in the medical exemption form in accordance with requirements set forth in the bill. The bill would make related conforming changes. The bill would authorize the department to implement and administer the medical exemption provisions through provider bulletins, or similar instructions, without taking regulatory action.

Existing law requires the governing authority of a school or other institution to file a written report on the immunization status of new entrants to the school or institution under their jurisdiction with the department and the local health department at times and on forms prescribed by the department.

This bill would instead require these reports to be filed on at least an annual basis.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:

(a) Immunizations are public health measures to ensure protection against debilitating and sometimes fatal diseases.

(b) Immunization requirements have led to greatly diminished or eliminated debilitating childhood diseases, such as measles.

(c) According to the State Department of Public Health immunization assessment for the 2018–19 school year:

(1) The immunization rate, or the rate at which children attending school are fully vaccinated on schedule, for kindergarten-aged children was 94.8 percent, which is 0.3 percent less than the previous school year.

(2) Of the schools reporting, 16 percent of California counties had kindergarten immunization rates below 90 percent.

(d) By May 2019, the federal Centers for Disease Control and Prevention reported 1,022 cases of the measles nationwide. Fifty-one of those incidences were in California.

(e) For all but a small number of individuals, immunizations are safe and effective.

(f) Effective immunizations not only protect immunized individuals from disease, but have the ability to provide indirect protection for which immunizations are not effective or safe. This indirect protection is called herd or community immunity.

(g) Herd immunity successfully occurs if and when a sufficient portion of the community is immune. Herd immunity prevents sustained transmission of disease even when immunization coverage is below 100 percent.

SEC. 2. Section 120370 of the Health and Safety Code is amended to read:

120370. (a) (1) Prior to January 1, 2021, if the parent or guardian files with the governing authority a written statement by a licensed physician and surgeon to the effect that the physical condition of the child is such, or medical circumstances relating to the child are such, that immunization is not considered safe, indicating the specific nature and probable duration of the medical condition or circumstances, including, but not limited to, family medical history, for which the physician and surgeon does not recommend immunization, that child shall be exempt from the requirements of this chapter, except for Section 120380, and exempt from Sections 120400, 120405, 120410, and 120415 to the extent indicated by the physician and surgeon's statement.

(2) Commencing January 1, 2021, an exemption issued before January 1, 2021, pursuant to this subdivision is valid only if the parent or guardian has complied with paragraph (2) of subdivision (c) of Section 120372.

(b) If there is good cause to believe that a child has been exposed to a disease listed in subdivision (b) of Section 120335 and the child's documentary proof of immunization status does not show proof of immunization against that disease, that child may be temporarily excluded from the school or institution until the local health officer is satisfied that the child is no longer at risk of developing or transmitting the disease.

SEC. 3. Section 120372 is added to the Health and Safety Code, to read:

120372. (a) (1) By January 1, 2021, the department shall develop and make available for use by licensed physicians and surgeons an electronic, standardized, statewide medical exemption certification form that shall be transmitted directly to the department's California Immunization Registry (CAIR) established pursuant to Section 120440. Pursuant to Section 120375, the form shall be printed, signed, and submitted directly to the school or institution at which the child will attend, submitted directly to the governing authority of the school or institution, or submitted to that governing authority through the CAIR where applicable. Notwithstanding Section 120370, commencing January 1, 2021, the standardized form shall be the only documentation of a medical exemption that the governing authority may accept, except as provided in paragraph (2) of subdivision (c).

(2) At a minimum, the form shall require all of the following information:

(A) The name, California medical license number, business address, and telephone number of the physician and surgeon who issued the medical exemption, and of the primary care physician of the child, if different from the physician and surgeon who issued the medical exemption.

(B) The name of the child for whom the exemption is sought, the name and address of the child's parent or guardian, and the name and address of the child's school or other institution.

(C) A statement certifying that the physician and surgeon has conducted a physical examination and evaluation of the child consistent with the relevant standard of care and complied with all applicable requirements of this section.

(D) Whether the physician and surgeon who issued the medical exemption is the child's primary care physician. If the issuing physician and surgeon is not the child's primary care physician, the issuing physician and surgeon shall also provide an explanation as to why the issuing physician and not the primary care physician is filling out the medical exemption form.

(E) How long the physician and surgeon has been treating the child.

(F) A description of the medical basis for which the exemption for each individual immunization is sought. Each specific immunization shall be listed separately and space on the form shall be provided to allow for the inclusion of descriptive information for each immunization for which the exemption is sought.

(G) Whether the medical exemption is permanent or temporary, including the date upon which a temporary medical exemption will expire. A temporary exemption shall not exceed one year.

(H) An authorization for the department to contact the issuing physician and surgeon for purposes of this section and for the release of records related to the medical exemption to the department, the Medical Board of California, and the Osteopathic Medical Board of California.

(I) A certification by the issuing physician and surgeon, under penalty of perjury, that the statements and information contained in the form are true, accurate, and complete.

(3) An issuing physician and surgeon shall not charge for either of the following:

(A) Filling out a medical exemption form pursuant to this section.

(B) A physical examination related to the renewal of a temporary medical exemption.

(b) Commencing January 1, 2021, if a parent or guardian requests a licensed physician and surgeon to submit a medical exemption for the parent's or guardian's child, the physician and surgeon shall inform the parent or guardian of the requirements of this section. If the parent or guardian consents, the physician and surgeon shall examine the child and submit a completed medical exemption certification form to the department. A medical exemption certification form may be submitted to the department at any time.

(c) (1) By January 1, 2021, the department shall create a standardized system to monitor immunization levels in schools and institutions as specified in Sections 120375 and 120440, and to monitor patterns of unusually high exemption form submissions by a particular physician and surgeon.

(2) If a medical exemption has been authorized pursuant to Section 120370 prior to the adoption of the statewide standardized form, a parent or guardian shall submit, by January 1, 2021, a copy of the medical exemption to the department for inclusion in a state database in order for the medical exemption to remain valid.

(d) (1) The department, at a minimum, shall annually review immunization reports from all schools and institutions in order to identify medical exemption forms submitted to the department pursuant to Section 120370 and under this section that will be subject to paragraph (2).

(2) A clinically trained immunization department staff member, who is either a physician and surgeon or a registered nurse, shall review all medical exemptions from any of the following:

(A) Schools or institutions subject to Section 120375 with an overall immunization rate of less than 95 percent.

(B) Physicians and surgeons who have submitted five or more medical exemptions in a calendar year.

(C) Schools or institutions subject to Section 120375 that do not provide reports of vaccination rates to the department.

(3) (A) The department shall identify those medical exemption forms that do not meet applicable CDC, ACIP, or AAP criteria for appropriate medical exemptions. The department may contact the primary care physician and surgeon or issuing physician and surgeon to request additional information to support the medical exemption.

(B) Notwithstanding subparagraph (A), the department, based on the medical discretion of the clinically trained immunization staff member, may accept a medical exemption that is based on other contraindications or precautions, including consideration of family medical history, if the issuing physician and surgeon provides written documentation to support the medical exemption that is consistent with the relevant standard of care.

(C) A medical exemption that the reviewing immunization department staff member determines to be inappropriate or otherwise invalid under

subparagraphs (A) and (B) shall also be reviewed by the State Public Health Officer or a physician and surgeon from the department's immunization program designated by the State Public Health Officer. Pursuant to this review, the State Public Health Officer or physician and surgeon designee may revoke the medical exemption.

(4) The department shall notify the parent or guardian, issuing physician and surgeon, the school or institution, and the local public health officer with jurisdiction over the school or institution of a denial or revocation under this subdivision.

(5) If a medical exemption is revoked pursuant to this subdivision, the child shall continue in attendance. However, within 30 calendar days of the revocation, the child shall commence the immunization schedule required for conditional admittance under Chapter 4 (commencing with Section 6000) of Division 1 of Title 17 of the California Code of Regulations in order to remain in attendance, unless an appeal is filed pursuant to Section 120372.05 within that 30-day time period, in which case the child shall continue in attendance and shall not be required to otherwise comply with immunization requirements unless and until the revocation is upheld on appeal.

(6) (A) If the department determines that a physician's and surgeon's practice is contributing to a public health risk in one or more communities, the department shall report the physician and surgeon to the Medical Board of California or the Osteopathic Medical Board of California, as appropriate. The department shall not accept a medical exemption form from the physician and surgeon until the physician and surgeon demonstrates to the department that the public health risk no longer exists, but in no event shall the physician and surgeon be barred from submitting these forms for less than two years.

(B) If there is a pending accusation against a physician and surgeon with the Medical Board of California or the Osteopathic Medical Board of California relating to immunization standards of care, the department shall not accept a medical exemption form from the physician and surgeon unless and until the accusation is resolved in favor of the physician and surgeon.

(7) The department shall notify the Medical Board of California or the Osteopathic Medical Board of California, as appropriate, of any physician and surgeon who has five or more medical exemption forms in a calendar year that are revoked pursuant to this subdivision.

(8) Notwithstanding any other provision of this section, a clinically trained immunization program staff member who is a physician and surgeon or a registered nurse may review any exemption in the CAIR or other state database as necessary to protect public health.

(e) The department, the Medical Board of California, and the Osteopathic Medical Board of California shall enter into a memorandum of understanding or similar agreement to ensure compliance with the requirements of this section.

(f) In administering this section, the department and the independent expert review panel created pursuant to Section 120372.05 shall comply with all applicable state and federal privacy and confidentiality laws, and

may disclose information submitted in the medical exemption form in accordance with Section 120440.

(g) The department shall establish the process and guidelines for review of medical exemptions pursuant to this section. The department shall communicate the process to providers and post this information on the department's website.

(h) If the department or the California Health and Human Services Agency determines that contracts are required to implement this section, the department may award these contracts on a single-source or sole-source basis. The contracts are not subject to Part 2 (commencing with Section 10100) of Division 2 of the Public Contract Code.

(i) Notwithstanding the rulemaking provisions of the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code), the department may implement and administer this section through provider bulletins, or similar instructions, without taking regulatory action.

(j) For purposes of administering this section, the department and the California Health and Human Services Agency appeals process shall be exempt from the rulemaking and administrative adjudication provisions in the Administrative Procedure Act Chapter 3.5 (commencing with Section 11340), and Chapter 4 (commencing with Section 11370), Chapter 4.5 (commencing with 11400), and Chapter 5 (commencing with Section 11500) of, Part 1 of Division 3 of Title 2 of the Government Code.

SEC. 4. Section 120372.05 is added to the Health and Safety Code, to read:

120372.05. (a) A medical exemption revoked pursuant to Section 120372 may be appealed by a parent or guardian to the Secretary of California Health and Human Services. Parents or guardians may provide necessary information for purposes of the appeal.

(b) The secretary shall establish an independent expert review panel, consisting of three licensed physicians and surgeons who have relevant knowledge, training, and experience relating to primary care or immunization to review appeals. The agency shall establish the process and guidelines for the appeals process pursuant to this section. The agency shall post this information on the agency's internet website. The agency shall also establish requirements, including conflict-of-interest standards, consistent with the purposes of this chapter, that a physician and surgeon shall meet in order to qualify to serve on the panel.

(c) The independent expert review panel shall evaluate appeals consistent with the federal Centers for Disease Control and Prevention, federal Advisory Committee on Immunization Practices, or American Academy of Pediatrics guidelines or the relevant standard of care, as applicable.

(d) The independent expert review panel shall submit its determination to the secretary. The secretary shall adopt the determination of the independent expert review panel and shall promptly issue a written decision to the child's parent or guardian. The decision shall not be subject to further administrative review.

(e) A child whose medical exemption revocation pursuant to subdivision (d) of Section 120372 is appealed under this section shall continue in attendance and shall not be required to commence the immunization required for conditional admittance under Chapter 4 (commencing with Section 6000) of Division 1 of Title 17 of the California Code of Regulations, provided that the appeal is filed within 30 calendar days of revocation of the medical exemption.

(f) For purposes for administering this section, the department and the California Health and Human Services Agency appeals process shall be exempt from the rulemaking and administrative adjudication provisions in the Administrative Procedure Act Chapter 3.5 (commencing with Section 11340), and Chapter 4 (commencing with Section 11370), Chapter 4.5 (commencing with 11400), and Chapter 5 (commencing with Section 11500) of, Part 1 of Division 3 of Title 2 of the Government Code.

SEC. 5. Section 120375 of the Health and Safety Code is amended to read:

120375. (a) The governing authority of each school or institution included in Section 120335 shall require documentary proof of each entrant's immunization status. The governing authority shall record the immunizations of each new entrant in the entrant's permanent enrollment and scholarship record on a form provided by the department. The immunization record of each new entrant admitted conditionally shall be reviewed periodically by the governing authority to ensure that within the time periods designated by regulation of the department the entrant has been fully immunized against all of the diseases listed in Section 120335, and immunizations received after entry shall be added to the pupil's immunization record.

(b) The governing authority of each school or institution included in Section 120335 shall prohibit from further attendance any pupil admitted conditionally who failed to obtain the required immunizations within the time limits allowed in the regulations of the department until that pupil has been fully immunized against all of the diseases listed in Section 120335, unless the pupil is exempted under Section 120370 or 120372.

(c) The governing authority shall file a written report, on at least an annual basis, on the immunization status of new entrants to the school or institution under their jurisdiction with the department and the local health department on forms prescribed by the department. As provided in paragraph (4) of subdivision (a) of Section 49076 of the Education Code, the local health department shall have access to the complete health information as it relates to immunization of each student in the schools or other institutions listed in Section 120335 in order to determine immunization deficiencies.

(d) The governing authority shall cooperate with the county health officer in carrying out programs for the immunization of persons applying for admission to any school or institution under its jurisdiction. The governing board of any school district may use funds, property, and personnel of the district for that purpose. The governing authority of any school or other institution may permit any licensed physician or any qualified registered

nurse to administer immunizing agents to any person seeking admission to any school or institution under its jurisdiction.

SEC. 6. Section 120440 of the Health and Safety Code is amended to read:

120440. (a) For the purposes of this chapter, the following definitions shall apply:

(1) “Health care provider” means any person licensed pursuant to Division 2 (commencing with Section 500) of the Business and Professions Code or a clinic or health facility licensed pursuant to Division 2 (commencing with Section 1200).

(2) “Schools, child care facilities, and family child care homes” means those institutions referred to in subdivision (b) of Section 120335, regardless of whether they directly provide immunizations to patients or clients.

(3) “WIC service provider” means any public or private nonprofit agency contracting with the department to provide services under the California Special Supplemental Food Program for Women, Infants, and Children, as provided for in Article 2 (commencing with Section 123275) of Chapter 1 of Part 2 of Division 106.

(4) “Health care plan” means a health care service plan as defined in subdivision (f) of Section 1345, a government-funded program the purpose of which is paying the costs of health care, or an insurer as described in Sections 10123.5 and 10123.55 of the Insurance Code, regardless of whether the plan directly provides immunizations to patients or clients.

(5) “County welfare department” means a county welfare agency administering the California Work Opportunity and Responsibility to Kids (CalWORKs) program, pursuant to Chapter 2 (commencing with Section 11200.5) of Part 3 of Division 9 of the Welfare and Institutions Code.

(6) “Foster care agency” means any of the county and state social services agencies providing foster care services in California.

(7) “Tuberculosis screening” means an approved intradermal tuberculin test or any other test for tuberculosis infection that is recommended by the federal Centers for Disease Control and Prevention and licensed by the federal Food and Drug Administration.

(b) (1) Local health officers may operate immunization information systems pursuant to their authority under Section 120175, in conjunction with the Immunization Branch of the State Department of Public Health. Local health officers and the State Department of Public Health may operate these systems in either or both of the following manners:

(A) Separately within their individual jurisdictions.

(B) Jointly among more than one jurisdiction.

(2) This subdivision does not preclude local health officers from sharing the information set forth in paragraphs (1) to (11), inclusive, of subdivision (c) with other health officers jointly operating the system.

(c) Notwithstanding Sections 49075 and 49076 of the Education Code, Chapter 5 (commencing with Section 10850) of Part 2 of Division 9 of the Welfare and Institutions Code, or any other provision of law, unless a refusal to permit recordsharing is made pursuant to subdivision (e), health care

providers, and other agencies, including, but not limited to, schools, child care facilities, service providers for the California Special Supplemental Food Program for Women, Infants, and Children (WIC), health care plans, foster care agencies, and county welfare departments, may disclose the information set forth in paragraphs (1) to (11), inclusive, from the patient's medical record, or the client's record, to local health departments operating countywide or regional immunization information and reminder systems and the State Department of Public Health. Local health departments and the State Department of Public Health may disclose the information set forth in paragraphs (1) to (11), inclusive, to each other and, upon a request for information pertaining to a specific person, to health care providers taking care of the patient and to the Medical Board of California and the Osteopathic Medical Board of California. Local health departments and the State Department of Public Health may disclose the information in paragraphs (1) to (7), inclusive, and paragraphs (9) to (11), inclusive, to schools, child care facilities, county welfare departments, and family child care homes to which the person is being admitted or in attendance, foster care agencies in assessing and providing medical care for children in foster care, and WIC service providers providing services to the person, health care plans arranging for immunization services for the patient, and county welfare departments assessing immunization histories of dependents of CalWORKs participants, upon request for information pertaining to a specific person. Determination of benefits based upon immunization of a dependent CalWORKs participant shall be made pursuant to Section 11265.8 of the Welfare and Institutions Code. The following information shall be subject to this subdivision:

- (1) The name of the patient or client and names of the parents or guardians of the patient or client.
- (2) Date of birth of the patient or client.
- (3) Types and dates of immunizations received by the patient or client.
- (4) Manufacturer and lot number for each immunization received.
- (5) Adverse reaction to immunizations received.
- (6) Other nonmedical information necessary to establish the patient's or client's unique identity and record.
- (7) Results of tuberculosis screening.
- (8) Current address and telephone number of the patient or client and the parents or guardians of the patient or client.
- (9) Patient's or client's gender.
- (10) Patient's or client's place of birth.
- (11) Patient's or client's information needed to comply with Chapter 1 (commencing with Section 120325), but excluding Section 120380.

(d) (1) Health care providers, local health departments, and the State Department of Public Health shall maintain the confidentiality of information listed in subdivision (c) in the same manner as other medical record information with patient identification that they possess. These providers, departments, and contracting agencies are subject to civil action and criminal penalties for the wrongful disclosure of the information listed in subdivision

(c), in accordance with existing law. They shall use the information listed in subdivision (c) only for the following purposes:

(A) To provide immunization services to the patient or client, including issuing reminder notifications to patients or clients or their parents or guardians when immunizations are due.

(B) To provide or facilitate provision of third-party payer payments for immunizations.

(C) To compile and disseminate statistical information of immunization status on groups of patients or clients or populations in California, without identifying information for these patients or clients included in these groups or populations.

(D) In the case of health care providers only, as authorized by Part 2.6 (commencing with Section 56) of Division 1 of the Civil Code.

(2) Schools, child care facilities, family child care homes, WIC service providers, foster care agencies, county welfare departments, and health care plans shall maintain the confidentiality of information listed in subdivision (c) in the same manner as other client, patient, and pupil information that they possess. These institutions and providers are subject to civil action and criminal penalties for the wrongful disclosure of the information listed in subdivision (c), in accordance with existing law. They shall use the information listed in subdivision (c) only for those purposes provided in subparagraphs (A) to (D), inclusive, of paragraph (1) and as follows:

(A) In the case of schools, child care facilities, family child care homes, and county welfare departments, to carry out their responsibilities regarding required immunization for attendance or participation benefits, or both, as described in Chapter 1 (commencing with Section 120325), and in Section 11265.8 of the Welfare and Institutions Code.

(B) In the case of WIC service providers, to perform immunization status assessments of clients and to refer those clients found to be due or overdue for immunizations to health care providers.

(C) In the case of health care plans, to facilitate payments to health care providers, to assess the immunization status of their clients, and to tabulate statistical information on the immunization status of groups of patients, without including patient-identifying information in these tabulations.

(D) In the case of foster care agencies, to perform immunization status assessments of foster children and to assist those foster children found to be due or overdue for immunization in obtaining immunizations from health care providers.

(e) A patient or a patient's parent or guardian may refuse to permit recordsharing. The health care provider administering immunization and any other agency possessing any patient or client information listed in subdivision (c), if planning to provide patient or client information to an immunization system, as described in subdivision (b), shall inform the patient or client, or the parent or guardian of the patient or client, of the following:

(1) The information listed in subdivision (c) may be shared with local health departments and the State Department of Public Health. The health

care provider or other agency shall provide the name and address of the State Department of Public Health or of the immunization registry with which the provider or other agency will share the information.

(2) Any of the information shared with local health departments and the State Department of Public Health shall be treated as confidential medical information and shall be used only to share with each other, and, upon request, with health care providers, schools, child care facilities, family child care homes, WIC service providers, county welfare departments, foster care agencies, and health care plans. These providers, agencies, and institutions shall, in turn, treat the shared information as confidential, and shall use it only as described in subdivision (d).

(3) The patient or client, or parent or guardian of the patient or client, has the right to examine any immunization-related information or tuberculosis screening results shared pursuant to this section and to correct any errors in it.

(4) The patient or client, or the parent or guardian of the patient or client, may refuse to allow this information to be shared pursuant to this section or to receive immunization reminder notifications at any time, or both. After refusal, the patient's or client's physician may maintain access to this information for the purposes of patient care or protecting the public health. After refusal, the local health department and the State Department of Public Health may maintain access to this information for the purpose of protecting the public health pursuant to Sections 100325, 120140, and 120175, as well as Sections 2500 to 2643.20, inclusive, of Title 17 of the California Code of Regulations.

(f) (1) The health care provider administering the immunization or tuberculosis screening and any other agency possessing any patient or client information listed in subdivision (c), may inform the patient or client, or the parent or guardian of the patient or client, by ordinary mail, of the information in paragraphs (1) to (4), inclusive, of subdivision (e). The mailing shall include a reasonable means for refusal, such as a return form or contact telephone number.

(2) The information in paragraphs (1) to (4), inclusive, of subdivision (e) may also be presented to the parent or guardian of the patient or client during any hospitalization of the patient or client.

(g) If the patient or client, or parent or guardian of the patient or client, refuses to allow the information to be shared, pursuant to paragraph (4) of subdivision (e), the health care provider or other agency may not share this information in the manner described in subdivision (c), except as provided in subparagraph (D) of paragraph (1) of subdivision (d).

(h) (1) Upon request of the patient or client, or the parent or guardian of the patient or client, in writing or by other means acceptable to the recipient, a local health department or the State Department of Public Health that has received information about a person pursuant to subdivision (c) shall do all of the following:

(A) Provide the name and address of other persons or agencies with whom the recipient has shared the information.

(B) Stop sharing the information in its possession after the date of the receipt of the request.

(2) After refusal, the patient's or client's physician may maintain access to this information for the purposes of patient care or protecting the public health. After refusal, the local health department and the State Department of Public Health may maintain access to this information for the purpose of protecting the public health pursuant to Sections 100325, 120140, and 120175, as well as Sections 2500 to 2643.20, inclusive, of Title 17 of the California Code of Regulations.

(i) Upon notification, in writing or by other means acceptable to the recipient, of an error in the information, a local health department or the State Department of Public Health that has information about a person pursuant to subdivision (c) shall correct the error. If the recipient is aware of a disagreement about whether an error exists, information to that effect may be included.

(j) (1) Any party authorized to make medical decisions for a patient or client, including, but not limited to, those authorized by Section 6922, 6926, or 6927 of, Part 1.5 (commencing with Section 6550), Chapter 2 (commencing with Section 6910) of Part 4, or Chapter 1 (commencing with Section 7000) of Part 6, of Division 11 of, the Family Code, Section 1530.6 of the Health and Safety Code, or Sections 727 and 1755.3 of, and Article 6 (commencing with Section 300) of Chapter 2 of Part 1 of Division 2 of, the Welfare and Institutions Code, may permit sharing of the patient's or client's record with any of the immunization information systems authorized by this section.

(2) For a patient or client who is a dependent of a juvenile court, the court or a person or agency designated by the court may permit this recordsharing.

(3) For a patient or client receiving foster care, a person or persons licensed to provide residential foster care, or having legal custody, may permit this recordsharing.

(k) For purposes of supporting immunization information systems, the State Department of Public Health shall assist the Immunization Branch of the State Department of Public Health in both of the following:

(1) Providing department records containing information about publicly funded immunizations.

(2) Supporting efforts for the reporting of publicly funded immunizations into immunization information systems by health care providers and health care plans.

(l) Subject to any other provisions of state and federal law or regulation that limit the disclosure of health information and protect the privacy and confidentiality of personal information, local health departments and the State Department of Public Health may share the information listed in subdivision (c) with a state, local health departments, health care providers, immunization information systems, or any representative of an entity designated by federal or state law or regulation to receive this information. The State Department of Public Health may enter into written agreements

to exchange confidential immunization information with other states for the purposes of patient care, protecting the public health, entrance into school, child care and other institutions requiring immunization prior to entry, and the other purposes described in subdivision (d). The written agreement shall provide that the state that receives confidential immunization information must maintain its confidentiality and may only use it for purposes of patient care, protecting the public health, entrance into school, child care and other institutions requiring immunization prior to entry, and the other purposes described in subdivision (d). Information may not be shared pursuant to this subdivision if a patient or client, or parent or guardian of a patient or client, refuses to allow the sharing of immunization information pursuant to subdivision (e).

SEC. 7. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

EXHIBIT 13

Date of Hearing: June 9, 2015

ASSEMBLY COMMITTEE ON HEALTH

Rob Bonta, Chair

SB 277 (Pan and Allen) – As Amended May 7, 2015

SENATE VOTE: 25-11

SUBJECT: Public health: vaccinations.

SUMMARY: Eliminates non-medical exemptions from the requirement that children receive vaccines for certain infectious diseases prior to being admitted to any public or private elementary or secondary school, or day care center. Specifically, **this bill:**

- 1) Deletes the exemption based on personal beliefs from the existing immunization requirement for children in child care and public and private schools. Deletes related law requiring a form to accompany a personal belief exemption (PBE).
- 2) Exempts students enrolled in home-based private schools or in an independent study program from the existing immunization requirement.
- 3) Permits the California Department of Public Health (DPH) to add diseases to the immunization requirements only if exemptions are allowed for both medical reasons and personal beliefs.

EXISTING LAW:

- 1) Prohibits the governing authority of a school or other institution from unconditionally admitting any person as a pupil of any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center, unless, prior to his or her first admission to that institution, he or she has been fully immunized against diphtheria, *Haemophilus influenzae* type b (Hib meningitis), measles, mumps, pertussis (whooping cough), poliomyelitis, rubella (German measles), tetanus, hepatitis B, and varicella (chickenpox).
- 2) Permits DPH to add to this list any other disease deemed appropriate, taking into consideration the recommendations of the Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP) and the American Academy of Pediatrics Committee on Infectious Diseases.
- 3) Waives immunization requirements in 1) above, if the parent or guardian files with the governing authority a written statement by a licensed physician to the effect that the physical condition of the child is such, or medical circumstances relating to the child are such, that immunization is not considered safe, indicating the specific nature and probable duration of the medical condition or circumstances that contraindicate immunization.
- 4) Waives the above immunization requirements if the parent, guardian, or an emancipated minor, files a letter with the governing authority stating that the immunization is contrary to his or her beliefs.

- 5) Requires a separate form prescribed by DPH to accompany a letter or affidavit to exempt a child from immunization requirements on the basis that an immunization is contrary to beliefs of the child's parent or guardian. Requires the form to include:
 - a) A signed attestation from the health care practitioner that indicates that the parent, guardian, or emancipated minor, was provided with information regarding the benefits and risks of the immunization and the health risks of the specified diseases to the person and to the community. Requires the attestation to be signed not more than six months before the date when the person first becomes subject to the immunization requirement for which exemption is being sought.
 - b) A written statement signed by the parent, guardian, or emancipated minor, that indicates that the signer has received the information provided by the health care practitioner pursuant a) above. Requires the statement to be signed not more than six months before the date when the person first becomes subject to the immunization requirements as a condition of admittance.
- 6) Permits a local health officer to temporarily exclude from the school or institution a child for whom the requirement has been waived, whenever there is good cause to believe that he or she has been exposed to one of the specified communicable diseases, until the local health officer is satisfied that the child is no longer at risk of developing the disease.

FISCAL EFFECT: None.

COMMENTS:

- 1) **PURPOSE OF THIS BILL.** According to the author, in early 2015, California became the epicenter of a measles outbreak, which spread in large part because of communities with large numbers of unvaccinated people. According to the CDC, there have been more cases of measles in January 2015 than in any one month in the past 20 years. Between 2000 and 2012, the number of PBEs from vaccinations required for school entry that were filed rose by 337%. In 2000, the PBE rate for kindergartners entering California schools was under 1%. However, by 2013, that number rose to 3.15%. In certain geographic pockets of California, exemption rates are 21% or more, placing our communities at risk for the rapid spread of entirely preventable diseases, according to the author. Given the highly contagious nature of diseases such as measles, vaccination rates of up to 95% are necessary to protect the public health of the community and prevent future outbreaks.
- 2) **BACKGROUND.** The diseases that vaccines prevent can be dangerous, or even deadly. According to the CDC, vaccines reduce the risk of infection by working with the body's natural defenses to help it safely develop immunity to disease. When bacteria or viruses invade the body, they attack and multiply, creating an infection. The immune system then has to fight the illness. Once it fights off the infection, the body is left with a supply of cells that help recognize and fight that disease in the future. Vaccines contain the same antigens or parts of antigens that cause diseases, but the antigens in vaccines are either killed or greatly weakened. This exposure to the antigens teaches the immune system to develop the same response as it does to the real infection so the body can recognize and fight the disease in the future.

Public health experts agree that vaccines represent one of the greatest achievements of science and medicine in the battle against disease. Vaccines are responsible for the control of many infectious diseases that were once common around the world, including polio, measles, diphtheria, pertussis, rubella, mumps, tetanus, and Hib meningitis. Vaccine helped to eradicate smallpox, one of the most devastating diseases in history. Over the years, vaccines have prevented countless cases of infectious diseases and saved literally millions of lives.

Vaccine-preventable diseases have a costly impact, resulting in doctor's visits, hospitalizations, and premature deaths. Sick children can also cause parents to lose time from work. CDC recommends routine vaccination to prevent 17 vaccine-preventable diseases that occur in infants, children, adolescents, or adults.

In the U.S., the high vaccination rate for routinely recommended immunizations for infant and childhood diseases has brought about dramatic declines in the incidence of polio, measles, mumps, rubella, *Haemophilus influenzae* type b, hepatitis, and chickenpox. In the past decade, recommendations for annual influenza vaccination have been expanded to encompass all children six months to eighteen years of age, and new vaccines have been added to the immunization schedule to help protect infants from rotavirus disease and adolescents from meningitis. As a result of the advances in developing vaccines and including them as standard of care, most diseases that are preventable by vaccination are at record low levels in the U.S.

For years many of these diseases were thought to be ordinary childhood experiences and many older adults had these diseases as children. Nevertheless, they are serious deadly diseases for some. For example, measles in children has a mortality rate as high as about one in 500 among healthy children, higher if there are complicating health factors.

In the past couple of decades, controversy has arisen about vaccines and autism, the best number of injections to be administered during a single visit or over the course of the first years of life, and vaccine ingredients which has prompted parents, the media, policy makers, and others to raise concerns about the safety of recommended immunizations as well as the vaccination schedule. Despite their positive impact on health and well-being, vaccines have had a long history of arousing anxiety. The rapid growth of the Internet and social media has made it easier to find and disseminate immunization-related concerns and misperceptions. According to a 2011 study published in the journal *Health Affairs*, results indicate that although the overwhelming majority of parents surveyed intended to vaccinate their children fully, a majority of parents still had questions or concerns about vaccines.

- 3) **SCHOOL IMMUNIZATION REQUIREMENTS.** States enact laws or regulations that require children to receive certain vaccines before they enter childcare facilities and school, but with some exceptions, including medical, religious, and philosophical objections. School vaccination requirements are thought to serve an important public health function, but can also face resistance.

An article published in the 2001-02 *Kentucky Law Journal* reviewed historical and modern legal, political, philosophical, and social struggles surrounding vaccination requirements. The authors stated that though school vaccination has been an important component of public health practice for decades, it has had a controversial history in the U.S. and abroad. Historical and modern examples of the real, perceived, and potential harms of vaccination,

governmental abuses underlying its widespread practice and strongly held religious beliefs have led to fervent objections among parents and other persons who object to vaccines on legal, ethical, social, and epidemiological grounds. The article states that public health authorities argue that school vaccination requirements have led to a drastic decrease in the incidence of once common childhood diseases. Those who object to vaccines tend to view the consequences of mass vaccination on an individualistic basis, focusing on alleged or actual harms to children from vaccinations. As part of their research, the authors compared childhood immunization rates and rates of vaccine-preventable childhood diseases before and after the introduction of school vaccination requirements. The data suggest that school vaccination requirements have succeeded in increasing vaccination rates and reducing the incidence of childhood disease.

Current state law mandates immunization of school-aged children against 10 specific diseases. Each of the 10 diseases was added to California code through legislative action, after careful consideration of the public health risks of these diseases, cost to the state and health system, communicability, and rates of transmission. The Legislature has a long history of thoughtful consideration for which diseases pose the most serious health risks to the public. Following is a brief summary of activity related to mandated immunizations for children enrolling in school:

- 1889: School districts first allowed to exclude a student who is not vaccinated against smallpox, and schools were required to maintain a list of unvaccinated children (SB 92, Briceland, Chapter 24).
- 1961: Polio immunization added as a requirement, as well as the first appearance of a philosophical exemption (AB 1940, DeLotto and Rumford, Chapter 837).
- 1977: Diphtheria, pertussis, tetanus, and measles were added to immunization requirements for children entering school (SB 942, Rains, Chapter 1176).
- 1979: Mumps and rubella were added to the list (AB 805, Mangers, Chapter 435).
- 1992: *Haemophilus influenzae* type b was added (AB 2798, Floyd, Chapter 1300, and AB 2294, Alpert, Chapter 1320).
- 1995 and 1997: Hepatitis B was added (AB 1194, Takasugi, Chapter 291, Statutes of 1995 and AB 381, Takasugi, Chapter 882, Statutes of 1997).
- 1999: The Legislature voted to add Hepatitis A to the list, but it was vetoed by Governor Davis (AB 1594, Florez).
- 1999: Varicella was added to the list (SB 741, Alpert, Chapter 747).
- 2007: The Legislature voted to add pneumococcus to the list, but it was vetoed by Governor Schwarzenegger (SB 533, Yee).
- 2010: Tetanus, diphtheria and pertussis (TDaP) booster was required for 7th graders (AB 354, Arambula, Chapter 434).

All of the diseases for which California requires school vaccinations are very serious conditions that pose very real health risks to children. Most of the diseases can be spread by contact with other infected children. Tetanus does not spread from student to student but because it is such a serious potentially fatal disease, and it is easily preventable by vaccine, the vaccination of children is required prior to enrollment in school.

- 4) **COMMUNITY IMMUNITY.** Herd immunity occurs when a significant proportion of the population (or the herd) has been vaccinated, and this provides protection for unprotected individuals. The larger the number of people who are vaccinated in a population, the lower

the likelihood that a susceptible (unvaccinated) person will physically come into contact with the infection. It is more difficult for diseases to spread between individuals if large numbers of people are already immune, and the chain of infection is broken. The reduction of herd immunity places unvaccinated persons at risk, including those who cannot receive vaccinations for medical reasons. Those who cannot receive vaccines include those with compromised immune systems, older adults, small children and babies, all depending on the vaccine.

There the protective effect of herd immunity wanes as large numbers of children do not receive some or all of the required vaccinations, resulting in the reemergence of vaccine preventable diseases in the U.S. Statewide statistics indicate that in 2014-15 school year, 90.4% of kindergartens received all required immunizations. The widespread reporting of statewide numbers, however, potentially mask a better understanding of more relevant data, such as town, city, or county vaccination rates. Because students are not interacting with every individual in the entire state, the local vaccination rate is more relevant to the discussion of community immunity.

The vaccination rate in various communities varies widely across the state. Those areas become more susceptible to an outbreak than the state's overall vaccination levels may suggest. These communities make it difficult to control the spread of disease and make us vulnerable to having the virus re-establish itself.

Studies find that when belief exemptions to vaccination guidelines are permitted, vaccination rates decrease. An analysis by the *New York Times* found that more than a quarter of schools in California have measles-immunization rates below the 92-94% recommended by the CDC. Research shows that people with lower vaccine acceptance tend to group together in communities. A study recently published in the journal *Pediatrics* found that schools with high PBE rates are clustered in suburbs in the peripheral areas of California cities. The same analysis found that schools with low proportion of white students, or a high proportion of students receiving free or reduced lunch, were more likely to have high vaccination rates (less PBEs).

- 5) **CALIFORNIA MEASLES OUTBREAK.** The authors point to an outbreak of measles linked to Disneyland in in December 2014 as one of the reasons for the introduction of this bill. This outbreak led to 131 confirmed measles cases reported in California as part of this outbreak. The outbreak, now declared over by DPH, led to 19% of those infected requiring hospitalization. The outbreak likely started from a traveler who became infected overseas with measles, then visited the amusement park while infectious; however, no source was identified. Analysis by CDC scientists showed that the measles virus type in this outbreak (B3) was identical to the virus type that caused the large measles outbreak in the Philippines in 2014.

According to the CDC, measles is one of the first diseases to reappear when vaccination coverage rates fall. In 2014, there were over 600 cases reported to the CDC, the highest in many years. Between 2000 and 2007, the average number of cases was 63 per year, less than half the number of the Disney outbreak, which is one of five outbreaks so far this year reported by the CDC.

Of the confirmed cases, DPH reported:

- Forty-two cases visited Disneyland during December 17-20, 2014 where they are presumed to have been exposed to measles;
- Thirty-one are household or close contacts to a confirmed case;
- Fourteen were exposed in a community setting (e.g., emergency room) where a confirmed case was known to be present;
- Forty-four have unknown exposure source but are presumed to be linked to the outbreak based on a combination of descriptive epidemiology or strain type;
- Five cases are known to have a different genotype from the outbreak strain; and,
- Among measles cases for whom DPH has vaccination documentation, 57 were unvaccinated and 25 had 1 or more doses of measles, mumps, and rubella (MMR) vaccine. A number of those unvaccinated had a personal belief exemption and also include many infants too young to be vaccinated.

6) NATIONAL CHILDHOOD VACCINE INJURY ACT. During the mid-1970s, there was an increased focus on personal health and more people became concerned about vaccine safety. Several lawsuits were filed against vaccine manufacturers and healthcare providers by people who believed they had been injured by the Tdap vaccine. Damages were awarded despite the lack of scientific evidence to support vaccine injury claims. In 1976, a preemptive attempt to conduct a nationwide influenza vaccination campaign for the swine flu stoked peoples' fears. The predicted epidemic did not occur and there were some who argued this particular influenza vaccine resulted in serious side effects.

As a result, potential liability costs and vaccine prices soared, and several vaccine manufacturers halted production. A vaccine shortage resulted and public health officials became concerned about the return of epidemic disease.

To reduce liability and respond to public health concerns, Congress passed the National Childhood Vaccine Injury Act (NCVIA) in 1986. The NCVIA established the National Vaccine Program Office (NVPO) to coordinate immunization related activities among various federal agencies and requires health care providers who give vaccines to provide an information statement to the patient or guardian that contains a brief description of the disease as well as the risks and benefits of the vaccine. Additionally, the NCVIA requires health care providers to report certain adverse health events following vaccination to the Vaccine Adverse Event Reporting System (VAERS). The VAERS system remains an important source of information for the CDC and others to monitor the vaccine program, but the system allows self-reporting by any citizen or healthcare provider what they believe to be an adverse vaccine-related event, but the event numbers publicly available have not necessarily been medically verified or scientifically studied. The National Vaccine Injury Compensation Program (NVICP) was created to compensate those injured by vaccines on a "no fault" basis. The NVICP has been loudly criticized by some for inefficient operations, and for providing legal immunity to the pharmaceutical industry.

The NCVIA established a committee from the Institute of Medicine (IOM) to review the literature on vaccine reactions. This group concluded that there are limitations in our knowledge of the risks associated with vaccines. The group looked at 76 health problems to see if they were caused by vaccines. Of those, 50 (66%) had no or inadequate research to form a conclusion. The IOM identified several specific problems, such as a limited understanding of biological processes that underlie adverse events, incomplete and inconsistent information from individual reports, poorly constructed research studies (not enough people enrolled for the period of time), inadequate systems to track vaccine side effects, and few experimental studies were published in the medical literature. The CDC states that in the time since the publication of the IOM reports in the 1990s, significant progress has been made to monitor side effects and conduct research relevant to vaccine safety. In 2011 the IOM published *Adverse Effects of Vaccines: Evidence and Causality*, representing an extensive study of peer-reviewed vaccine related research to date. The IOM Committee reviewed eight vaccines given to children or adults (MMR, varicella, influenza, hepatitis A, hepatitis B, human papillomavirus, meningococcal, and DTP) and again found that vaccines are generally very safe and that serious adverse events are quite rare.

- 7) **VACCINES AND AUTISM.** The idea that autism is caused by vaccination is influencing public policy, even though rigorous studies do not support this hypothesis. The hypothesis is based on the observation that the number of autism cases increased in the 1980s, coinciding with a push for greater childhood vaccinations, which increased above recommended levels children's exposure to mercury in the vaccine preservative thimerosal. However, autism diagnosis continued to rise even after thimerosal was removed from US childhood vaccines in 2001. A review by the IOM of over 200 studies concluded that that there was no causal link between thimerosal-containing vaccines and autism. Other studies have found that autism is no more common among vaccinated than unvaccinated children.
- 8) **EXEMPTIONS TO VACCINE REQUIREMENTS.** There are currently three types of exemptions to the requirement that children be vaccinated before entering school: medical; religious; and, philosophical.
 - a) A medical exemption letter can be written by a licensed physician that believes that vaccination is not safe for the medical conditions of the patient, such as those whose immune systems are compromised, who are allergic to vaccines, are ill at the time of vaccination, or have other medical contraindications to vaccines for that individual patient. Every state allows medical exemptions from school vaccination requirements. This determination is entirely up to the professional clinical judgment of the physician. There are no required medical criteria for diagnosing circumstances that contraindicate vaccination. A physician must base that decision on their professional judgment and the standard of practice for their field. According to the Medical Board of California, the "standard of care" (or "standard of practice") for general practitioners is defined as that level of skill, knowledge and care in diagnosis and treatment ordinarily possessed and exercised by other reasonably careful and prudent physicians in the same or similar circumstances at the time in question. Specialists are held to the standard of skill, knowledge and care ordinarily possessed and exercised by other reasonably careful and prudent specialist in the same or similar circumstances.
 - b) Religious exemptions allow parents to exempt their children from vaccination if it contradicts their sincere religious beliefs. Many states allow religious exemptions from

school vaccination requirements, although states interpret the enforcement of them differently. In some states, a parent may simply attest that vaccinations are against their religious beliefs, while in other states the parent must show membership in a church, and that the church's official policy is opposed to vaccination. According to the National Conference of State Legislatures (NCSL), as of June 2014, 48 states allow religious exemptions (all but Mississippi and West Virginia).

- c) Philosophical exemption, which is defined differently in different states, generally means that the statutory language does not restrict the exemption to purely religious or spiritual beliefs. For example, Maine allows restrictions based on "moral, philosophical or other personal beliefs," and California allows objections based on simply the parent(s) beliefs. According to NCSL, 20 states (Arizona, California, Colorado, Idaho, Louisiana, Maine, Michigan, Minnesota, Missouri (limited to childcare enrollees), New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania, Texas, Utah, Vermont, Washington, West Virginia, and Wisconsin) permit philosophic exemptions.

As of February, several state legislatures had introduced bills that would address non-medical exemptions. In addition to California, legislators in Oregon, Vermont, and Washington proposed to remove philosophical/personal belief exemption this year. The bills were tabled in Oregon and Washington. On May 25, 2015, the Governor of Vermont signed legislation removing philosophical exemptions, but not religious ones, in that state.

- 9) SPECIAL EDUCATION.** Pursuant to the federal Individuals with Disabilities Education Act (IDEA), children with disabilities are guaranteed the right to a free, appropriate public education, including necessary services for a child to benefit from his or her education. Between 1976 and 1984, to meet this federal mandate, California schools provided mental health services to special education students who needed the services pursuant to an Individualized Education Program (IEP). An IEP is a legally binding document that determines what special education services a child will receive and why. IEPs include a child's classification, placement, specialized services, academic and behavioral goals, a behavior plan if needed, percentage of time in regular education, and progress reports from teachers and therapists. A child may require any related services in order to benefit from special education, including (but not limited to): speech-language pathology and audiology services, early identification and assessment of disabilities in children, medical services, physical and occupational therapy, orientation and mobility services; and psychological services.

According to the California Department of Education (CDE), over 700,000, or approximately 11% of, California students received Special Education services in the 2013-14 academic year.

- 10) INDEPENDENT STUDY.** April 22, 2015 amendments to this bill exclude pupils who are enrolled in an independent study program from the immunization requirements of the bill. Independent study is an optional educational alternative, available to students from kindergarten through high school that is meant to respond to the student's specific educational needs, interests, aptitudes, and abilities. Independent study is an alternative to classroom instruction consistent with a school district's regular course of study and is expected to be equal or superior in quality to classroom instruction. Each school district can develop Independent Study options in its own way. Parents and students may also develop

alternative forms of independent study and propose them to the school board. The options are based on the kinds of students being served. The following are some of the ways in which independent study is organized:

- a) School-within-a-school;
- b) District or county alternative in a community location;
- c) School-based independent study offered part-time and full-time;
- d) Countywide home-based independent study offered by the county superintendent of schools;
- e) District dropout prevention centers at selected community sites;
- f) Curricular enrichment options offered to high school students with special abilities and interests, scheduling problems, or individual needs that cannot be met in the regular program;
- g) Alternative school-based independent study, on-or off-site; and,
- h) Some combination of the above.

Independent study can be operated on a traditional school calendar, with a summer school option for eligible students, or on a year-round calendar within a year-round school. Students must have the option of a classroom setting for a full program at the time independent study is made available. This option must be continuously available the student decide to transfer from independent study. The classroom setting option can be offered by the county office of education if the district and county have a formal agreement that has the effect of providing the student with a program that is equivalent to what is offered in the school of residence.

- a) **Seat Time / Average Daily Attendance.** Participation in independent study must be voluntary. For students participating in independent study, a contractual agreement is drawn among the certificated teacher, the student, and his or her parent, guardian, or caregiver. Attendance records are based on a student's work within the terms and conditions of his or her written agreement and not on traditional "seat-time." In independent study, the student's performance, measured by the terms in the agreement, is converted by the supervising teacher into school days. The computed school days are reported as if the student were physically in attendance.
- b) **Legal Enrollment Restrictions.** California education law mandates the following for the administration of independent study programs:
 - i) No pupil shall be required to participate in independent study;
 - ii) Not more than 10% of the students enrolled in an opportunity school or program, or a continuation high school, shall be eligible for independent study. A student who is pregnant or is a parent and primary caregiver for one or more of his or her children shall not be counted within the 10% cap;
 - iii) No individual with exceptional needs may participate in independent study unless his or her IEP specifically provides for that participation; and,
 - iv) No temporarily disabled pupil may receive individual instruction. However, if the temporarily disabled pupil's parents and the district(s) agree, the pupil may receive instruction through independent study instead of the "home and hospital" instruction.
- c) **Enrollment History.** According to CDE, in 2013-14 there were approximately 122,000 independent study students reported by charter schools and 34,000 reported by school

districts. Independent study enrollment was not collected for the 2009–10 and 2010–11 school years. In October 2008, data collected from schools reported that 128,000 students in kindergarten through grade twelve were enrolled in independent study.

11) LEGAL CONSIDERATIONS. Courts have determined that the family itself is not beyond regulation in the public interest and neither rights of religion nor rights of parenthood are beyond limitation. As discussed at length in the Senate Judiciary Committee analysis, extensive case law establishes that the police powers of the state may restrict the parent's control in many ways, such as requiring school attendance and regulating or prohibiting the child's labor. This authority is not nullified because the parent grounds his claim to control the child's course of conduct on religion or conscience. Thus, a parent cannot claim freedom from compulsory vaccination for their child more than for himself on religious grounds. The right to practice religion freely does not include liberty to expose the community or the child to communicable disease or the latter to ill health or death. For a further discussion of the legal rights and ramifications of this bill, please see the Senate Judiciary Committee Analysis as published on April 28, 2015.

12) SUPPORT. The Superintendent of Public Instruction (SPI), Tom Torlakson, supports this bill, stating that school and child care immunization requirements have proven effective in increasing immunization rates, limiting the spread of disease, and providing an overall public health benefit. He further states that California has seen a dramatic increase in the PBE rate for students entering kindergarten over the past fifteen years, placing other children, and the overall public health of our citizens, at risk of illness or death from preventable diseases. The SPI concludes that education is a fundamental right in California, and this bill provides education choices for families opting not to vaccinate their children.

The California Medical Association, a cosponsor of this bill, states that in 2000, the CDC determined that measles had been eradicated in the U.S. However, since December 2014, California has had 136 confirmed cases of measles across fourteen counties. Almost 20% of those cases have required hospitalization. Efforts to contain the outbreak have resulted in mandatory quarantines and the redirection of public health resources to investigations into exposure. The California Immunization Coalition, writing in support of this bill, notes that in the 2013-14 school year more than 16,800 kindergarteners in California started school with either no vaccinations or only some of their required vaccinations because their parent had chosen to exempt them from vaccinations, representing a 25% increase over the previous two school years.

March of Dimes Foundation and the Medical Oncology Association of Southern California, Inc. state that public participation in immunization programs is critical to their effectiveness. Protection is greatly affected by rates of immunization: the more people immunized, the less the risk of exposure to, and illness from, vaccine-preventable infections.

The Medical Board of California states that vaccines have been scientifically proven to be effective in preventing illnesses. Ensuring that children receive the ACIP recommended vaccination schedule is the standard of care, unless there is a medical reason that the child should not receive the vaccine; this bill would still allow for a medical exemption to address these concerns. The Children's Specialty Care Coalition notes that high vaccine coverage, particularly at the community level, is extremely important for people who cannot be vaccinated, including people who have medical contraindications to vaccinations and those

who are too young to be vaccinated. Protecting the individual and the community from communicable diseases such as measles, mumps, and pertussis, is important to the public's health.

The Committee notes it has received hundreds of letters in support of this bill. Many letters from individuals in support write to raise similar points regarding reductions in vaccination rates for school children, recent dangerous measles and pertussis outbreaks, concerns for the health of children and medically fragile individuals, and concerns for the safety of communities at large.

- 13) OPPOSITION.** Opponents state that this bill is an extreme measure that is not necessary at this time. The California Chiropractic Association states that this bill proffers the notion that health officials will be given the power to nullify the doctor-patient relationship, and veto the judgment of any physician who questions the status quo and believes that a patient should not receive a particular vaccine. A Voice for Choice states that the Legislature should look to alternative approaches that will stop the transmission of disease and continue to allow parents to work with their doctors for the best vaccination schedule for their individual children, and allow their children their constitutional right to a free and public education.

The Committee also notes that it received hundreds of letters in opposition to this bill. A letter from Our Kids Our Choice and many other similar letters argue that the bill removes federally mandated rights of services to students with disabilities under the federal IDEA. This group, like many others, points to the NVIC and the fact that the U.S. government "has paid out more than \$3 billion to the victims of vaccine injury" as support for why medical choice is appropriate. "If there is risk of injury or death there must be a choice." In contrast, they argue that "vaccination rates of California schoolchildren are high at 98.64%" and cite the success of recent legislation, AB 2109 (Pan), Chapter 821, Statutes of 2012, which they say has resulted in a 19% decrease in exemptions amongst kindergarteners in just one year. They argue the public health concerns are already adequately addressed with current California laws. Many letters from individuals write to raise relatively similar points regarding various constitutional rights, informed consent, vaccine safety/injuries, absence of a health crisis, lack of educational choice, difficulty in obtaining medical exemptions, and the like.

ParentalRights.Org states that "...while we appreciate the intent of the amendment to exempt homeschoolers from the vaccination requirement, it is not sufficient to protect the rights of parents and children in California. While there are many parents with strong convictions that the risks of vaccines to their child (as reflected in lengthy disclaimers which accompany these products) outweigh the potential benefits, many of these same parents are also deeply convinced that the best educational opportunity they can provide their child is in the public schools. These parents should not be forced to give up their rights in one area to exercise their rights in another. No child should have to forego the best available education for the sake of his best health, nor give up his best health for the sake of a better education."

- 14) CONCERNS.** American Civil Liberties Union of California (ACLU-CA) states that "while we appreciate that vaccination against childhood diseases is a prudent step that should be promoted for the general welfare, we do not believe there has been a sufficient showing of need at present to warrant conditioning access to education on mandatory vaccination for each of the diseases covered by this bill for every school district in the state." ACLU-CA

further states that unlike other states where a vaccination mandate may be more permissible, public education is a fundamental right under the California Constitution. Equal access to education must therefore not be limited or denied unless the State demonstrates that its actions are “necessary to achieve a compelling state interest.” The California Association of Private School Organizations states that that association has taken no formal position on the measure, and does not oppose the elimination of the PBEs, they are concerned about the increased administrative burden to which schools will be subjected should this bill become law. The association urges amendments that would create a phase-in period, lengthen the time horizon for compliance as per the existing regulations, or enact such other provisions as may produce a combination of increased compliance and a decreased possibility of mandatory exclusion.

15) RELATED LEGISLATION. SB 792 (Mendoza) prohibits a person from being employed at a day care center or day care home unless he or she has been immunized against influenza, pertussis, and measles. SB 792 was approved by the Senate on May 22, 2015 by a vote of 34-3 and is currently pending committee referral in the Assembly.

16) PREVIOUS LEGISLATION.

- a) AB 2109 requires, on and after January 1, 2014, a separate form prescribed by DPH to accompany a letter or affidavit to exempt a child from immunization requirements under existing law on the basis that an immunization is contrary to beliefs of the child's parent or guardian. Required the form to include:
- i) A signed attestation from the health care practitioner that indicates that the parent or guardian of the person who is subject to the immunization requirements, the adult who has assumed responsibility for the care and custody of the person, or the person if an emancipated minor, was provided with information regarding the benefits and risks of the immunization and the health risks of the communicable diseases listed above to the person and to the community.
 - ii) A written statement signed by the parent or guardian of the person who is subject to the immunization requirements, the adult who has assumed responsibility for the care and custody of the person, or the person if an emancipated minor, that indicates that the signer has received the information provided by the health care practitioner pursuant to i) above.

The Governor included a message with his signature on this bill, which stated, in part: “I will direct (DPH) to allow for a separate religious exemption on the form. In this way, people whose religious beliefs preclude vaccinations will not be required to seek a health care practitioner's signature.”

- b) SB 614 (Kehoe, Chapter 123, Statutes of 2011) allows a pupil in grades seven through 12, to conditionally attend school for up to 30 calendar days beyond the pupil's first day of attendance, if that pupil has not been fully immunized with all pertussis boosters appropriate for the pupil's age if specified conditions are met.
- c) AB 354 (Arambula, Chapter 434, Statutes of 2010) allowed DPH to update vaccination requirements for children entering schools and child care facilities and added the

American Academy of Family Physicians to the list of entities whose recommendations DPH must consider when updating the list of required vaccinations. Requires children entering grades seven through 12 receive a TDaP booster prior to admittance to school.

- d) SB 1179 (Aanestad, 2008) would have deleted DPH's authority to add diseases to the list of those requiring immunizations prior to entry to any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center. SB 1179 died in Senate Health Committee.

17) POLICY COMMENTS.

- a) **Collecting complete data will provide an accurate picture of partial vaccination rates throughout the state.** To date, we do not have an exact picture of the vaccination status of every student in California. For the 2014-15 school year, less than 95% of schools reported their vaccination numbers to DPH. Of the schools reporting, DPH found that 90.4% of enrolled kindergarteners had received the complete vaccination schedule. Additionally 6.9% of students were conditionally enrolled because they were lacking some immunizations, and were in the process of completing the required vaccination schedule. For the 2014-15 school year, DPH calculated individual antigen vaccination status (such as DTP, Polio, MMR, etc) based only on the number of fully vaccinated students and vaccinations completed by conditionally enrolled students. DPH did not include in this calculation the individual antigen status for partially vaccinated students with PBEs. Therefore, it is likely that individual antigen immunization coverage may be underestimated. Anecdotal evidence suggests that some percentage of students have some, but not all, required immunizations.

DPH is currently developing new regulations that will implement complete data collection for partially vaccinated students holding PBEs and medical exemptions. This will ensure that reported data are a more accurate reflection of the vaccination rate for each immunization.

- b) **Identification of partially and non-vaccinated students.** Current law requires that parents filing a PBE must provide the school with documentation for "which immunizations have been given and which immunizations have not been given on the basis that they are contrary to his or her beliefs" for the purposes of immediate identification in case of disease outbreak in the community. As drafted, this requirement would be deleted by SB 277. If SB 277 is enacted, schools will still need to know which specific immunizations have or have not been received by all students, including those that are enrolled in independent study. The author may wish to take an amendment to clarify that schools will collect information for all enrolled students, regardless of immunization status.

18) SUGGESTED AMENDMENTS.

- a) **A physician's professional judgment.** As previously discussed, it is entirely within the professional judgment of a physician to determine if vaccination is not recommended due to the medical history of the patient. Opponents of this bill have raised concerns that current law regarding the letter of medical exemption does not adequately make clear that

the letter may be written based on the best medical judgment of the physician. To that end, the author may wish to consider amending this bill.

Section 120370. (a) If the parent or guardian files with the governing authority a written statement by a licensed physician to the effect that the physical condition of the child is such, or medical circumstances relating to the child are such, that immunization is not considered safe, indicating the specific nature and probable duration of the medical condition or circumstances ~~that contraindicate~~ **for which the physician does not recommend** immunization, that child shall be exempt from the requirements of Chapter 1 (commencing with Section 120325, but excluding Section 120380) and Sections 120400, 120405, 120410, and 120415 to the extent indicated by the physician's statement.

- b) **Implementation clarification clause.** As discussed in the Senate Judiciary Committee analysis, clarification is needed to address the status of students currently enrolled with an existing PBE upon the operative date of this bill.

Section 120335 (g) The governing authority shall allow continued enrollment to pupils who, prior to January 1, 2016, have a letter or affidavit on file in that institution stating beliefs opposed to immunization. On and after July 1, 2016, the governing authority shall not unconditionally admit to that institution for the first time or admit or advance any pupil to the 7th grade level unless the pupil has been immunized as required by this section.

- c) **Special education students must have access to services.** As previously discussed, under federal and state law disabled children are guaranteed the right to a free, appropriate public education, including necessary services for a child to benefit from his or her education. An amendment should be taken to clarify that students with an IEP will still have access to special education related services as directed by their IEP.

Section 120335 (h) Nothing in this section shall prohibit a pupil that qualifies for an individualized education program, pursuant to federal law and Section 56026 of the Education Code, from accessing any special education and related services required by their individualized education program.

- d) **Independent study programs are highly variable.** As previously discussed, students enrolled in an independent study program are excluded from the provisions of this bill requiring them to be vaccinated. Independent study courses take many forms and in many places, including both on and off school sites. As currently drafted, there is nothing differentiating classroom based versus non-classroom based independent study instruction. An amendment should be taken to specify that students enrolled in off-campus independent study are not subject to vaccination requirements.

Section 120335 (f): This section does not apply to a pupil in a home-based private school or a pupil who is enrolled in an independent study program pursuant to Article 5.5 (commencing with Section 51745) of Chapter 5 of Part 28 of the Education Code **and does not receive classroom-based instruction.**

REGISTERED SUPPORT / OPPOSITION:

Support

California Immunization Coalition (cosponsor)	Carlsbad High School Parent-Teacher-Student Association
California Medical Association (cosponsor)	Child Care Law Center
Vaccinate California (cosponsor)	Children Now
Dave Jones, California Insurance Commissioner	Children's Defense Fund California
Katie Rice, Supervisor, Marin County	Children's Healthcare Is a Legal Duty, Inc.
Sheila Kuehl, Los Angeles County Supervisor and former State Senator	Children's Hospital Oakland
Tom Torlakson, California Superintendent of Public Instruction	Children's Specialty Care Coalition
AIDS Healthcare Foundation	City and County of San Francisco Board of Supervisors
Alameda County Board of Supervisors	City of Berkeley
Albany Unified School District	City of Beverly Hills
American Academy of Pediatrics - California	City of Pasadena
American College of Emergency Physicians California Chapter	Contra Costa County
American Federation of State, County and Municipal Employees, AFL-CIO	County Health Executives Association of California
American Lung Association	County of Marin
American Nurses Association\California Association of California School Administrators	County of Tehachapi
Association of Northern California Oncologists	Democratic Women's Club of Santa Cruz County
BIOCOM	Donate Life California
California Academy of Family Physicians	First 5 California
California Academy of Physician Assistants	Foundation for Pediatric Health
California Association for Nurse Practitioners	Gilroy Unified School District
California Association of Physician Groups	Health Officers Association of California
California Black Health Network	Jay Hansen, Sacramento County School Board Member
California Children's Hospital Association	Junior Leagues of California
California Coverage and Health Initiatives	Kaiser Permanente
California Department of Insurance	Los Angeles Community College District
California Disability Rights, Inc.	Los Angeles County Board of Supervisors
California Healthcare Institute	Los Angeles County Supervisor Sheila Kuehl
California Hepatitis Alliance	Los Angeles Unified School District
California Hospital Association	March of Dimes California Chapter
California Immunization Coalition	Medical Board of California
California Optometric Association	Medical Oncology Association of Southern California
California Pharmacists Association	MemorialCare Health System Physician Society
California Primary Care Association	National Coalition of 100 Black Women Sacramento Chapter
California Public Health Association-North	Osteopathic Physicians and Surgeons of California
California School Boards Association	Pasadena Public Health Department
California School Employees Association	Project Inform
California School Nurses Organization	Providence Health and Services, Southern California
California State Association of Counties	
California State PTA	

Reed Union School District
San Dieguito Union High School District
San Francisco Democratic County Central
Committee
San Francisco Unified School District
Santa Clara County Board of Supervisors
Santa Cruz County
Santa Cruz County Democratic Party
Santa Monica Malibu Union Unified School
District
School for Integrated Academics and
Technologies, California
Secular Coalition for California
Silicon Valley Leadership Group
Solano Beach School District
Sonoma County Board of Supervisors

The Children's Partnership
UAW Local 5810, University of California
Postdoctoral Researchers
University of California Hastings College of
the Law
University of California, Irvine Center for
Virus Research
University of California, Irvine School of
Medicine
Yolo County Board of Supervisors
Numerous Medical Doctors
Numerous Osteopathic Doctors
Numerous health care professionals, including
RNs, PAs and NPs
Hundreds of individuals

Opposition

A Voice for Choice
Alliance of California Autism Organizations
Association of American Physicians and
Surgeons (Tucson, AZ)
APLUS+ Network Association
Autism Society
AWAKE California
California Chiropractic Association
California Coalition for Health Choice
California Naturopathic Doctors Association
California Nurses for Ethical Standards
California Nurses for Ethical Standards
California ProLife Council
California Right to Life Committee, Inc.
Canary Party
Capitol Resource Institute
Educate. Advocate.
Educate. Advocate.
Faith and Public Policy
Families for Early Autism Treatment
Foundation for Pediatric Health
Gold Mine Natural Food Co.

Homeschool Association of California
HSC Homeschool Association of California
National Autism Association California
National Vaccine Information Center
Our Kids, Our Choice
Pacific Justice Institute
Pacific Justice Institute Center for Public
Policy
ParentalRights.Org
Pediatric Alternatives
SafeMinds
Saint Andrew Orthodox Christian Church
Standing Tall Chiropractic: A Creating
Wellness Center
Unblind My Mind
Vaccine Choice Canada (Winlaw, British
Columbia)
Vaccine-Injury Awareness League
Weston A. Price Foundation
Numerous Chiropractors
Numerous Medical and Osteopathic Doctors
Hundreds of individuals

EXHIBIT 14

SENATE JUDICIARY COMMITTEE

Senator Hannah-Beth Jackson, Chair

2015 - 2016 Regular Session

SB 277 (Pan and Allen)

Version: April 22, 2015

Hearing Date: April 28, 2015

Fiscal: Yes

Urgency: No

RD

SUBJECT

Public health: vaccinations

DESCRIPTION

This bill would eliminate the personal belief exemption from the requirement that children receive specified vaccines for certain infectious diseases (including diphtheria, hepatitis B, haemophilus influenzae type b, measles, mumps, pertussis, poliomyelitis, rubella, tetanus, and chicken pox) prior to being admitted to any public or private elementary or secondary school, child care center, day nursery, nursery schools, family day care home, or developmental centers, and would make other conforming changes. This bill would specify that this mandatory vaccination requirement (for which the bill would only leave a medical exemption) does not apply to a home-based private school or a student enrolled in an independent study program.

This bill would, in certain circumstances, permit a child to be temporarily excluded from the school or institution until the local health officer is satisfied that the child is no longer at risk of developing or transmitting a communicable disease for which immunization is otherwise required by law.

This bill would add to existing notifications that school districts must give to parents, the immunization rates for the school in which a pupil is enrolled for each of the immunizations required.

BACKGROUND

According to the Center for Disease Control and Prevention (CDC), it is always better to prevent a disease than to treat it after it occurs. Immunity is the body's way of preventing disease. The immune system recognizes germs that enter the body as "foreign invaders" (called antigens) and produces proteins called antibodies to fight them. Vaccines contain the same antigens, or parts thereof, that cause diseases, but the antigens in vaccines are either killed or greatly weakened. As such, vaccine antigens are not strong enough to cause disease but they are strong enough to make the immune system produce antibodies against them. Memory cells prevent re-infection when they

encounter that disease again in the future. According to the CDC, “a vaccine is a safer substitute for a child’s first exposure to a disease.” (CDC, *Why are Childhood Diseases so Important?* <<http://www.cdc.gov/vaccines/vac-gen/howvvpd.htm>> [as of Apr. 19, 2015].) Vaccines are responsible for the control of many infectious diseases that were once common around the world, including polio, measles, diphtheria, pertussis (whooping cough), rubella (German measles), mumps, tetanus, and Hib. In fact, vaccine eradicated smallpox, one of the most devastating diseases in history. Over the years, vaccines have prevented countless cases of infectious diseases and saved literally millions of lives. (*Id.*) According to the California Department of Public Health (CDPH), implementation of statewide immunization requirements has been effective in maintaining a 92 percent immunization rate among children in child care facilities and kindergartens. (CDPH, *2011-2012 Child Care and School Fact Sheet* (Jul. 2012) <<http://www.cdph.ca.gov/programs/immunize/Documents/ChildCareAndSchoolFactSheet2011-2012.pdf>> [as of Apr. 19, 2015].)

Recently, California witnessed an outbreak of measles, a vaccine-preventable disease. According to CDPH, “[i]n December 2014, a large outbreak of measles started in California when at least 40 people who visited or worked at Disneyland theme park in Orange County contracted measles; the outbreak also spread to at least half a dozen other states. On April 17, 2015, the outbreak was declared over, since at least two 21-day incubation periods (42 days) have elapsed from the end of the infectious period of the last known outbreak-related measles case.” (CDPH, *Measles* <<http://www.cdph.ca.gov/HealthInfo/discond/Pages/Measles.aspx>> [as of Apr. 19, 2015].)

Under California law, before being admitted to any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or developmental center, a child must be vaccinated for 10 separate diseases (diphtheria, hepatitis B, haemophilus influenzae type b, measles, mumps, pertussis, poliomyelitis, rubella, tetanus, and chicken pox), as well as any other disease deemed appropriate by the California Department of Public Health, as specified. (Health & Saf. Code Sec. 120335(b).) California law also, however, currently recognizes exemptions from the mandatory immunization law for both medical reasons and because of personal beliefs (personal belief exemptions or PBEs). (*See* Health & Saf. Code Sec. 120325(c).) In order to exercise a medical reason exemption, the parent or guardian must obtain a written statement by a licensed physician to the effect that the physical condition of the child is such, or medical circumstances relating to the child are such, that immunization is not considered safe, and indicating the specific nature and probable duration of the medical condition or circumstances that contraindicate immunization. Once the physician statement is filed with the governing authority, that person (i.e. child) shall be exempt from specified requirements to the extent indicated by the physician’s statement. (*See* Health & Saf. Code Sec. 120370.)

In 2012, in response to concerns of increased PBEs, the Legislature passed AB 2109 (Pan, Ch. 821, Stats. 2012) to modify the process for obtaining exemptions to one or more

immunizations required for child care or school based on personal beliefs. Under that law, PBEs now require documentation that health care practitioners have informed the parents about vaccines and diseases. Notably, that form requires that the parent check one of two boxes: (1) that he or she has received information from an authorized health care practitioner regarding the benefits and risks of immunizations, as well as the health risks to the student and to the community of the communicable diseases for which immunization is required in California; or (2) that he or she is a member of a religion which prohibits seeking medical advice or treatment from authorized health care practitioners.

This bill would now remove the personal belief exemption, thus, requiring all children entering into private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or developmental center to be vaccinated as a condition of entry into those institutions, unless a medical reason exemption applies. This bill would also exempt from mandatory immunization a home-based private school or student enrolled in independent study, as specified.

This bill was triple-referred, with the Senate Health Committee and Senate Education Committee hearing the bill prior to this Committee. Those committees passed out the bill on a vote of 6-2 and 7-2, respectively.

CHANGES TO EXISTING LAW

1. Existing law, the Education Code, requires that certain notifications be made by school districts to parents. (Educ. Code Sec. 48980.)

This bill would require such notification to include immunization rates for the school in which a pupil is enrolled for each of the immunizations mandated by law.

2. Existing law provides that each person between the ages of 6 and 18 years not exempted, as specified, is subject to compulsory full-time education. Existing law provides that each person subject to compulsory full-time education and each person subject to compulsory continuation education not exempted, as specified, must attend the public full-time day school or continuation school or classes and for the full time designated as the length of the schoolday by the governing board of the school district in which the residency of either the parent or legal guardian is located. Existing law requires that each parent, guardian, or other person having control or charge of the pupil send the pupil to the public full-time day school or continuation school or classes and for the full time designated as the length of the schoolday by the governing board of the school district in which the residence of either the parent or legal guardian is located. (Educ. Code Sec. 48200.)

Existing law authorizes the governing board of a school district or a county office of education to offer independent study to meet the educational needs of pupils in accordance with specified requirements. (Educ. Code Sec. 51745 et seq.) Existing

law provides that the independent study by each pupil shall be coordinated, evaluated, and, notwithstanding specified law, shall be under the general supervision of an employee of the school district, charter school, or county office of education who possesses a valid certification document or an emergency credential as required by law. (Educ. Code Sec. 51745.7(a).)

Existing law prohibits the unconditional admission of a student to any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center, unless, prior to the child's first admission to that institution, the child has been fully immunized against: diphtheria; haemophilus influenzae type b; measles; mumps; pertussis; poliomyelitis; rubella; tetanus; hepatitis B; varicella; and any other disease deemed appropriate by the California Department of Public Health, taking into consideration the recommendations of the Advisory Committee on Immunization Practices of the U.S. DHHS, the American Academy of Pediatrics, and the American Academy of Family Physicians. (Health & Saf. Code Sec. 120335(b).)

Existing law provides the intent of the Legislature to provide exemptions from immunization for medical reasons or because of personal beliefs. (Health & Saf. Code Sec. 120325(b).)

Existing law provides that if a parent or guardian files with the governing authority a written statement by a licensed physician to the effect that the physical condition of the child is such, or medical circumstances relating to the child are such, that immunization is not considered safe, indicating the specific nature and probable duration of the medical condition or circumstances that contraindicate immunization, that child shall be exempt from the immunization requirements to the extent indicated by the physician's statement. (Health & Saf. Code Sec. 120370.)

Existing law requires, on and after January 1, 2014, that a separate form prescribed by the California Department of Public Health accompany a letter or affidavit to exempt a child from immunization requirements on the basis that an immunization is contrary to beliefs of the child's parent or guardian. The form must include:

- A signed attestation from a health care practitioner that indicates that the parent or guardian of the person who is subject to the immunization requirements, the adult who has assumed responsibility for the care and custody of the person, or the person if an emancipated minor, was provided with information regarding the benefits and risks of the immunization and the health risks of the communicable diseases listed above to the person and to the community.
- A written statement signed by the parent or guardian of the person who is subject to the immunization requirements, the adult who has assumed responsibility for the care and custody of the person, or the person if an emancipated minor, that indicates that the signer has received the information provided by the health care practitioner pursuant to the provision above. (Health & Saf. Code Sec. 120365(b).)

Existing law provides, in relation to children exempted from immunization under the personal belief exemption, when there is good cause to believe that the person (i.e. child) has been exposed to one of the specified communicable diseases, that person may be temporarily excluded from the school or institution until the local health officer is satisfied that the person is no longer at risk of developing the disease. (Health & Saf. Code Sec. 120365(e).)

This bill would repeal the personal belief exemption and provisions relating to the exercise of the personal belief exemption above, leaving only a medical exemption to the immunization requirements above.

This bill would provide that the mandatory immunization provisions above do not apply to a home-based private school or to a student who is enrolled in an independent study program pursuant to the Education Code, as specified.

This bill would provide that when there is good cause to believe that a child whose documentary proof of immunization status does not show proof of immunization against the communicable diseases required has been exposed to one of those diseases, that child may be temporarily excluded from the school or institution until the local health officer is satisfied that the child is no longer at risk of developing or transmitting the disease.

COMMENT

1. Stated need for the bill

According to the authors:

In early 2015, California became the epicenter of a measles outbreak which was the result of unvaccinated individuals infecting vulnerable individuals including children who are unable to receive vaccinations due to health conditions or age requirements. According to the Centers for Disease Control and Prevention, there were more cases of measles in January 2015 in the United States than in any one month in the past 20 years. Measles has spread through California and the United States, in large part, because of communities with large numbers of unvaccinated people. Between 2000 and 2012, the number of Personal Belief Exemptions (PBE) from vaccinations required for school entry that were filed rose by 337 [percent]. In 2000, the PBE rate for Kindergartners entering California schools was under 1 [percent]. However, as of 2012, that number rose to 2.6 [percent]. From 2012 to 2014, the number of children entering Kindergarten without receiving some or all of their required vaccinations due to their parent's personal beliefs increased to 3.15 [percent]. In certain pockets of California, exemption rates are as high as 21 [percent] which places our communities at risk for preventable diseases. Given the highly contagious nature of diseases such as measles, vaccination rates of up to 95 [percent] are necessary to preserve herd immunity and prevent future outbreaks.

This bill removes the ability for parents to file a personal belief exemption from the requirement that children receive vaccines for specific communicable diseases prior to being admitted to any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center. It further provides a home school exemption for students who are of a single household or family.

The sponsor of this bill, Vaccinate California, writes that they believe it is “unfair and unreasonable for a small minority to put the rest of us at risk [. . .] Those who can vaccinate their children but refuse are jeopardizing their own children as well as the rest of us. [. . .] We ought to be able to send our kids to daycare and school without fear they will come home with measles or whooping cough.”

In support, an individual law professor, writes that “[w]hile California’s courts found that education is a fundamental interest under our constitution, that finding has been used in the wealth and race contexts; it has never been applied to prevent the state from regulating to make schools safer, as SB 277 tries to do. Safe schools are a precondition to education; and it’s well established that the state can act to obtain that goal: there are few interests more compelling than the health and safety of the students entrusted to our system. SB 277 helps protect this compelling interest, and by increasing herd immunity, would also protect the vaccine-deprived children themselves from disease.” This professor adds that the bill does not prevent children from getting an education: the bill “exempts a variety of homeschooling options, some with support from our private schools. If the parents are unwilling to protect children from disease, they have choices – even if those would not be their first choice.” Additionally, she adds that school immunization requirements have been upheld as constitutional, even without religious exemptions, “by every court – federal and state – that ruled on the issue, since the seminal case of *Prince v. Massachusetts*, 321 U.S. 158, 170 (1944). Most recently, two circuit courts upheld them [in the 4th and 2nd Circuits] [citations omitted]. That’s because religious freedom do[es] not justify putting other states at risk of disease. [. . .]”

Multiple supporters, including the California State Association of Counties (CSAC), write that “California has seen an increase in the number of personal belief exemptions (PBE) from vaccinations. In fact, from 2010 to 2012, the number of children entering Kindergarten without receiving some or all of their required vaccinations rose by 25 percent. Vaccine coverage at the community level is vitally important for people too young to receive immunizations and those unable to receive immunizations due to medical reasons. States that easily permit personal belief exemptions from immunizations have significantly higher rates of exemptions and consequently a larger unimmunized population than states with more complex exemption approvals. However, school and child care immunization requirements have been shown to effectively increase immunization coverage, limit the spread of disease, and provide an overall public health benefit.” California Hepatitis Alliance (CalHEP) shares similar statistics, adding that “[s]ince 2000, the number of California families requesting a [PBE] from vaccinations required for school entry has risen by 337 [percent]. In 2000, the PBE

rate for Kindergarteners entering California Schools was under 1 [percent] (0.77 [percent]).” CalHEP writes that “[p]rotecting the individual and the community from communicable diseases such as measles, mumps, and pertussis, is a core function of public health.”

The American Academy of Pediatrics argues that “[i]f there is a single place that children must be kept safe as humanly possible it is at school/ child care.” California Academy of Family Physicians writes in support that while AB 2109 (Pan, Ch. 821, Stats 2012) “resulted last year in the first decrease in PBE use in a decade, the recent measles outbreak underscored the need to do more. In 2000, the Centers for Disease Control determined that measles had been eradicated in the United States. However, since December 2014, California has had 134 confirmed cases of measles across [13] counties. Twenty percent of those cases have required hospitalization. Efforts to contain the outbreak have resulted in mandatory quarantines and the redirection of public health resources to investigations into exposure. [. . .] Removing the PBE will protect the most vulnerable, babies too young to be immunized, and people who are immunocompromised, from the risks associated with contracting these diseases. It will also protect the community at large from increased outbreaks of vaccine-preventable disease.” The California School Nurses Association also writes in support that they know “certain schools and school districts have high rates of unvaccinated children [. . .] Having ‘community immunity’ varies by vaccine but it provides protection for those students and staff who for medical reasons are unable to be vaccinated or are immunocompromised.” [Footnote omitted.]

In support, the California Immunization Coalition adds that while AB 2109 “helped to tighten up the [PBE] process – it is not enough. We do not want to see a child die from measles before we take this important step to prevent additional outbreaks and spread of diseases. California needs to take stronger measures to protect children in our schools and in our communities.”

2. Liberty rights and parental rights balanced against the police powers of the state

According to the National Conference of State Legislatures (NCSL), California is one of 20 states that currently provides for a philosophical or personal belief exemption. Almost all states provide a religious exemption. There are also two states, Mississippi and West Virginia, that provide neither a religious, nor a philosophical, exemption. (NCSL, *States with Religious and Philosophical Exemptions from School Immunization Requirements* (Mar. 3, 2015) <<http://www.ncsl.org/research/health/school-immunization-exemption-state-laws.aspx>> [as of Apr. 19, 2015].)

This bill seeks to repeal California’s personal belief exemption to the state’s mandatory vaccination law as a condition upon entrance into public and private schools, as well as child care centers, and like institutions, leaving only a medical exemption to the existing immunization requirements. For parents electing to not vaccinate their children, the bill would provide that the mandatory immunization requirement does not apply to a

home-based private school or to a student enrolled in an independent study program, as specified. Additionally, where there is good cause to believe that a child whose documentary proof of immunization status does not show proof of immunization against a communicable disease for which immunization is otherwise required by law and that the child has been exposed to the disease, this bill would allow for the child to be temporarily excluded from the school or institution until the local health officer is satisfied that the child is no longer at risk of developing or transmitting that disease.

Committee staff recognizes that there has been significant public debate over the propriety of mandating vaccinations. That debate has been reflected in both the support and opposition to this bill. Moving beyond the health arguments, and into the legal arguments, on the one hand, many people feel very strongly that they have the right, as parents, to make these medical decisions for their children with their children's doctor, and that any effort to limit their authority to do so would infringe not only upon that right, but the right to education for their children, and potentially even their religious beliefs. On the other hand, many other people believe that parents do not have the right to make choices that place other children and the larger public at risk, particularly when it comes to sending their children to schools where other children are placed at greater risk. This side also tends to believe that the state has both the authority and obligation to ensure the public health and safety against communicable diseases so that their children can safely go to school, as they are required to do. Each side, notably, relies heavily on "rights" and "liberties" in making their arguments against the other side.

As a matter of constitutional law, rights do not exist in a vacuum; in fact, they often clash with other rights, if not the rights of others around them. As such, when assessing whether certain actions are protected as a valid exercise of one's rights – or alternatively, when assessing the validity of limitations inherent to or placed upon that right by the government – the issue is, in actuality, trifold: does a constitutionally or statutorily cognizable right exist, either under federal or state law? Where does the right begin? And where does it end? Further, if the state does have the authority to place limits upon the exercise of that right, how extensive can those limits be? At what point does the state interest outweigh the right?

At the outset, the rights implicated by this bill include the right of the individual (or his or her parent, in the case of minors) to refuse a specific treatment or to exercise religious beliefs against the treatment – namely, vaccinations. Inversely, the bill also implicates the liberty interests of other students and members of the public to be free of harm that could be avoided by way of vaccination. It also implicates the right to education for all involved. With those issues in mind, this bill arguably seeks to exercise the police power authority of the state, and the state's *parens patriae* authority to step in to protect persons legally unable to act on their own behalf in order to prevent the spread of communicable diseases.

- a. Supreme Court has recognized that states' police powers include the power to stop the spread of communicable diseases

In 1905 the U.S. Supreme Court, in the case of *Jacobson v. Massachusetts* (197 U.S. 11), upheld a Massachusetts law mandating vaccinations for adults, holding that the police power of a state must be held to embrace, at least, such reasonable regulations established directly by legislative enactment as will protect the public health and safety (such as by stopping the spread of communicable diseases). In that case, the state required in the inhabitants of a city or town to be vaccinated only when, in the opinion of the Board of Health, vaccination was necessary for the public health or safety. There, the Court upheld the Massachusetts compulsory vaccination law despite arguments that such laws violate personal liberty rights protected under the 14th Amendment to the U.S. Constitution and that vaccines can cause injuries or dangerous effects. As expressed by the Court, it is within the police power of a State to enact a compulsory vaccination law, and it is for the legislature, not for the courts, to determine in the first instance whether vaccination is or is not the best mode for the prevention of smallpox and the protection of the public health. "The possibility that the belief may be wrong, and that science may yet show it to be wrong, is not conclusive; for the legislature has the right to pass laws which, according to the common belief of the people, are adapted to prevent the spread of contagious diseases." (*Id.* at 35.)

In rendering its decision, the Court recognized the legitimate police power of the state to enact reasonable regulations to protect the public health and public safety in this fashion, but also acknowledged that the regulations cannot contravene the federal Constitution or infringe on rights granted or secured by the Constitution:

The authority of the State to enact this statute is to be referred to what is commonly called the police power – a power which the State did not surrender when becoming a member of the Union under the Constitution. [. . .] According to settled principles the police power of a State must be held to embrace, at least, such reasonable regulations established directly by legislative enactment as will protect the public health and the public safety. [. . .] The mode or manner in which those results are to be accomplished within the discretion of the State, subject, of course, so far as Federal power is concerned, only to the condition that no rule prescribed by a State, nor any regulation adopted by a local governmental agency acting under the sanction of state legislation, shall contravene the Constitution of the United States or infringe any right granted or secured by that instrument. (*Id.* at 24-25.)

In *Jacobson*, the defendant argued that the Massachusetts compulsory vaccination law invaded his liberty rights by subjecting him "to fine or imprisonment for neglecting or refusing to submit to vaccination; that a compulsory vaccination law is unreasonable, arbitrary and oppressive, and, therefore, hostile to the inherent right of every freeman to care for his own body and health in such way as to him seems

best; and that the execution of such a law against one who objects to vaccination, no matter for what reason, is nothing short of an assault upon his person.” (*Id.* at 26.) The Court, however, disagreed, writing that:

The liberty secured by the Constitution of the United States does not import an absolute right to each person to be at all times, and in all circumstances wholly freed from restraint. There are manifold restraints to which every person is necessarily subject for the common good. . . . In *Crowley v. Christenson*, 137 U.S. 86, 89, we said: “The possession and enjoyment of all rights are subject to such reasonable conditions as may be deemed by the governing authority of the country essential to the safety, health, peace, good order and morals of the community. Even liberty itself, the greatest of all rights, is not unrestricted license to act according to one’s own will. It is only freedom from restraint under conditions essential to the equal enjoyment of the same right by others. It is then liberty regulated by law.” (*Id.* at 26-27.)

While the Court recognized that there is, of course, “a sphere within which the individual may assert the supremacy of his own will and rightfully dispute the authority of any human government, especially of any free government existing under a written constitution, to interfere with the exercise of that will,” the Court also recognized it is “equally true that in every well-ordered society charged with the duty of serving the safety of its members the rights of the individual in respect of his liberty may at times, under the pressure of great dangers, be subjected to such restraint, to be enforced by reasonable regulations, as the safety of the general public may demand.” (*Id.* at 29.)

The Court expressed that the power of the judiciary in reviewing legislative action in respect of a matter affecting the general welfare arises when “a statute purporting to have been enacted to protect the public health, the public morals or the public safety, has no real or substantial relation to those objects, or is, beyond all question, a plain, palpable invasion of rights secured by the fundamental law.” (*Id.* at 31 (internal citations omitted).) The Court held that this was not such a situation where there was no real or substantial relation between the law to the protection of public health and safety, or that the law was, beyond question, in palpable conflict with the Constitution. (*Id.* at 31-32.) Additionally, the Court declined to hold that “liberty” as secured by the U.S. Constitution dictated that the concerns of one, or of a minority (regarding vaccine safety), could override laws seeking to protect the public health and safety of all others. (*Id.* at 38.)

b. Liberty interests of the individual to refuse treatment post-Jacobson

While there is a general right to refuse medical treatment for adults encompassed in the liberty interests protected by the 14th Amendment, that right as noted above, is not absolute and can be regulated by the State. (*See Jacobson v. Massachusetts* (1905) 197 U.S. 11; *see also Cruzan v. Director, Missouri Dept. of Health* (1990) 497 U.S. 261,

where the Court held that a competent adult has a fundamental right to accept or reject medical treatment, including the right to withdraw or withhold life-sustaining treatment that may cause or hasten death; *and Washington v. Harper* 494 U.S. 210 (1990) 221-222, 229, recognizing that prisoners have a significant liberty interest under the Due Process Clause of the Fourteenth Amendment to be free of unwanted administration of anti-psychotic medications, but also recognizing that such interests are adequately protected if the inmate has been provided notice and a hearing before a tribunal of medical and prison personnel at which the inmate could challenge the decision to administer the drugs.) Unlike in *Jacobson*, however, the question implicated by this bill involves not the right of the individual to refuse certain medical treatment, but the right of the parent(s) to refuse that treatment on behalf of the child. Whereas competent adults can make even the most reckless of decisions when it comes to their own health care, the same cannot be said of parents or guardians making health care decisions for children. Accordingly, in many instances, the Supreme Court has recognized the authority of the state to step into the family sphere, under the states' inherent *parens patriae* power to protect the health of children and other vulnerable members of society who are legally unable to act on their own behalf. (See discussion below for more.)

c. Parental rights

It is well established by U.S. Supreme Court precedent that the federal Constitution prohibits any state or local government from “depriving any person of life, liberty, or property without due process of the law.” (U.S. Const., 14th Amend., Sec. 1.) The Supreme Court has interpreted the due process clause as “a promise of the Constitution that there is a realm of personal liberty which the government may not enter,” including the right of parents to direct the upbringing of their children. (*Planned Parenthood v. Casey* (1992) 505 U.S. 833, 847; see also *Truxel v. Granville* (2000) 530 U.S. 57, 65: “We have long recognized that the Amendment’s Due Process Clause . . . ‘guarantees more than fair process.’ [Citation omitted.] The Clause also includes a substantive component that ‘provides heightened protection against government interference with certain fundamental rights and liberty interests.’”) As stated by the Court, “the interest of parents in the care, custody, and control of their children . . . is perhaps the oldest of the fundamental liberty interests.” (*Truxel*, 530 U.S. at 65).)

The Supreme Court first recognized family autonomy and the right of parents to control the upbringing of their children using substantive due process in the 1923 case of *Meyer v. Nebraska* (1923) 262 U.S. 390. That case declared unconstitutional a state law that prohibited teaching in any language other than English in public schools. Two years later, the Court reaffirmed this principle, holding unconstitutional a state law that required children to attend public schools. (*Pierce v. Society of Sisters* (1925) 268 U.S. 510; see also Chemerinsky, *Constitutional Law Principles and Policies* (2011) 4th Edition, p. 829.) And while the Court has given great deference to parents in weighing the competing claims of parents and of the

state on behalf of children in other cases such as *Wisconsin v. Yoder* (1972) 406 U.S. 205 (holding that Amish parents had a constitutional right based on their right to control the upbringing of their children and based on free exercise of religion, to exempt their 14- and 15-year old children from compulsory school attendance law), such deference is not limitless. In fact, some scholars believe that in both *Yoder* and another case involving the procedural due process rights of children when parents seek to have them committed, the Court undervalued the importance of ensuring the children's education and protecting against unneeded institutionalism (which is a massive curtailment of liberty). (See Chemerinsky at pp. 830-831.)

Of specific relevance to this bill, in *Prince v. Massachusetts* (1944) 321 U.S. 158, 166, the Court recognized that this right to make parental decisions regarding the care and upbringing of the child is not absolute, and can be interfered with if necessary to protect a child:

It is cardinal with us that the custody, care and nurture of the child reside first in the parents, whose primary function and freedom include preparation for obligations the state can neither supply nor hinder. *Pierce v. Society of Sisters* [(1925) 268 U.S. 510]. And it is in recognition of this that these decisions have respected the private realm of family life which the state cannot enter.

But the family itself is not beyond regulation in the public interest, as against a claim of religious liberty. *Reynolds v. United States*, 98 U.S. 145; *Davis v. Beason*, 133 U.S. 333. And neither rights of religion nor rights of parenthood are beyond limitation. Acting to guard the general interest in youth's well being, the state as *parens patriae* may restrict the parent's control by requiring school attendance, regulating or prohibiting the child's labor, and in many other ways. Its authority is not nullified merely because the parent grounds his claim to control the child's course of conduct on religion or conscience. Thus, he cannot claim freedom from compulsory vaccination for the child more than for himself on religious grounds. The right to practice religion freely does not include liberty to expose the community or the child to communicable disease or the latter to ill health or death. *People v. Pierson*, 176 N. Y. 201, 68 N. E. 243. (*Id.* at 166-167, (internal footnotes omitted).) (See Comment 3 below for more discussion on the issue of religious exemptions.)

As reflected in *Prince*, states have already encroached upon the family sphere by creating compulsory education laws, and child labor laws, which are largely accepted today, despite objections about the rights of parents to make these choices for their children regarding their schooling and work when those laws were first enacted.

Similarly, while this bill may be viewed as an unconstitutional encroachment of parental rights by some, it could arguably be viewed as a valid exercise of its police powers and the power of the state to intervene, under the *parens patriae* doctrine, on

behalf of children to ensure that all children in public and private schools (and similar institutions, such as child care centers) maintain adequately high levels of immunization. Staff notes that without the recent broadening of the homeschooling exemption and the addition of the independent study option, many parents might not have been able to feasibly exercise any choice, due to the combination of financial constraints and compulsory education laws.

Thus, stated in another way, insofar as police powers must still be “reasonable” regulations, in order to be constitutional, this bill must strike a reasonable balance that furthers public health and safety without unduly encroaching on the private family sphere. Again, such balancing is important because even fundamental rights are not absolute; they do not, in other words, operate as “on/off” switches. Nor do state interests, for that matter. Instead, as one slides up, the other slides down; at some point, the right outweighs the state interest and at another point the state interest outweighs the right. Further, if the courts were to apply strict scrutiny to the bill (as it generally does with laws that impinge upon fundamental rights), the bill would survive if it is found to serve a compelling state interest (to ensure that the school and community vaccination levels overall remain sufficiently high) but at the same time is narrowly tailored to that purpose (it neither requires compulsory vaccination where children might have a medical condition that makes vaccination unsafe for that child, nor when children would otherwise be homeschooled or enrolled in independent study programs).

d. Fundamental interest in education under state law

While under the federal constitution, the U.S. Supreme Court has declined to find a fundamental right in education (*see San Antonio Independent School District v. Rodriguez* (1973) 411 U.S. 1), pursuant to a state Supreme Court decision, education is recognized as a fundamental right in California, fully protected and guaranteed under the California Constitution. Accordingly, the state must therefore provide children equal access to education subject to the equal protection clause of the state constitution. That being said, as much as education is a fundamental right under California law, it is also a requirement. California’s compulsory education laws require that children between six and 18 years of age to attend school, with a limited number of specified exceptions. (*See* Educ. Code Sec. 48200 et seq.; exceptions exist, for example, for children attending private schools; child being tutored by person with state credential for grade being taught; children holding work permits (subject to compulsory part-time classes); among other things).

For individuals on both sides of this larger debate, the bill implicates questions as to the fundamental interests of children, both vaccinated and unvaccinated alike, in education. While parents against vaccination would be forced to choose whether to vaccinate their child and send them to public or private school, or not vaccinate their child and exercise the home school or independent study option, parents who fear their child might be placed at an increased risk of harm as a result of being

surrounded by unvaccinated children in a fairly confined environment, five days a week, must make a similar choice under existing law.

The American Civil Liberties Union (ACLU) writes a letter of concern, indicating that while it understands “the legitimate concerns that underlie the bill, and the potential harms of highly contagious diseases that present serious public health risks if ‘herd immunity’ levels are not reached or sustained” and appreciates “that vaccination against childhood diseases is a prudent step that should be promoted for the general welfare,” the ACLU “does not believe there has been a sufficient showing of need at present to warrant conditioning access to education on mandatory vaccination for each of the diseases covered by this bill for every school district in the state.” The ACLU further cautions that “[u]nlike other states, public education is a fundamental right under the California Constitution. (*Serrano v. Priest*, 5 Cal.3d 584 (1971)[“*Serrano I*”]; *Serrano v. Priest*, 18 Cal.3d 728 (1976)[“*Serrano II*”].) Equal access to education must therefore not be limited or denied unless the State demonstrates that its actions are ‘necessary to achieve a compelling state interest.’ [*Serrano*, 18 Cal.3d at 768.]” To this end, ACLU recommends that if there is, in fact, a compelling governmental interest in mandating that students in every school be vaccinated against each of the enumerated diseases except for medical reasons, “the bill should be amended to explain specifically what that interest is, where it exists, and under what conditions and circumstances it exists.”

Staff notes, first, that this letter pre-dates the most recent amendments to expand the homeschooling exemption and add an exemption for children enrolled in independent study programs. Second, assuming that the ACLU maintains its concerns with respect to the current version of the bill, while education is indeed recognized as a fundamental interest in California fully protected and guaranteed under the state Constitution pursuant to *Serrano*,¹ and the state must therefore provide access to children equally to education subject to the equal protection clause of the federal and state constitutions, the bill does not facially discriminate against a suspect class. As stated by the *Serrano* court, in the case of legislation involving “suspect classifications,” or touching on “fundamental interests,” judicial review under the equal protection clause “requires active and critical analysis, subjecting the classification to strict scrutiny.” (*Id.* at 597.) Specifically, “[u]nder the strict

¹ As stated by the *Serrano I* court: “We are convinced that the distinctive and priceless function of education in our society warrants, indeed compels, our treating it as a ‘fundamental interest.’ In dicta, the court relied in part on the recognition of the California Constitution, which states in Article IX, section 1: “A general diffusion of knowledge and intelligence being essential to the preservation of the rights and liberties of the people, the Legislature shall encourage by all suitable means the promotion of intellectual, scientific, moral, and agricultural improvement.” (*Id.* at 608.) Note that the Court in “*Serrano I*” recognized that the majority of the U.S. Supreme Court in cases subsequent to *Serrano I*, did not find a fundamental right to education protected, either implicitly or explicitly, under the Equal Protection Clause of the 14th Amendment to the U.S. Constitution; instead the “interest of children in education was explicitly and implicitly protected and guaranteed by the terms of California Constitution” – the state constitution’s equal protection provisions under Article IV, sec. 16, and Article I, sec. 7. See *Serrano v. Priest* 18 Cal.3d. 768, 749-750 (including footnotes 19, 20), citing *San Antonio School District v. Rodriguez* (1973) 411 U.S. 1.

standard applied in such cases, the state bears the burden of establishing not only that it has a *compelling* interest that justifies the law but also that the distinctions drawn by the law are *necessary* to further its purpose.” (*Id.* at 597 (internal citations omitted, emphases in original).)

The intent of the bill for all intents and purposes appears to be to protect the health and safety of the public by preventing the spread of communicable diseases that can have devastating, if not potentially fatal effects. At the same time, the bill seeks to provide children with access to education even if their parents elect to not vaccinate them, by way of homeschooling or independent study programs. Opponents argue (*see* Comment 5 for more) that most parents neither have the economic resources to leave gainful employment, nor the academic acumen to teach in the home, “rendering the application of SB 277 particularly punitive for all those not in the highest income brackets.” Many of the opponents raise concerns regarding the lack of options that are appropriate for children with exceptional needs or disabilities. To block unvaccinated children from a free, adequate, public education from the viewpoint of the opposition, is discriminatory and in violation of their rights.

As argued by the author, “California public school students have a right to education in California, but also that their schools be clean, safe, and functional. A safe school for many children is a school with a high level of community immunity which would protect them from known diseases. This legislation provides the most comprehensive measure to ensure high vaccination rates- by limiting the presence of those who are not vaccinated from a campus where children mingle and may be at risk of exposure to vaccine-preventable diseases. The students however are not barred from enrolling in a public education, they may do so, with the curriculum and assistance of the school, which allows them this option but strikes the balance of minimizing the exposure of unvaccinated students to a school campus.”

As currently drafted, it should be also noted that this bill raises a question as to what happens come January 1, 2016, to the unvaccinated students who are currently enrolled in a private or public elementary or secondary school or other covered institutions pursuant to an existing PBE, if this bill is signed into law. Potentially, these students can be brought into compliance pursuant to existing law, Section 120340 of the Health and Safety Code, which provides that a person who has not been fully immunized against one or more of the diseases may be admitted by the governing authority on condition that within time periods designated by regulation of the department he or she presents evidence that he or she has been fully immunized against all of these diseases. The author states:

Vaccination requirements under SB 277 should apply to students whose first enrollment in one of the mandated settings or whose 7th grade enrollment is after January 1, 2016. The bill will require some additional clarification, which we are committed to including.

3. Repeal of statutory personal belief exemption effectively repeals any possible religious exemptions

As noted in Comment 2 above, California is one of 20 states that provide a “philosophical” exemption to its mandatory vaccination law for school age children. All but two states also provide a religious exemption. Most of those states do so separately from the philosophical exemption, whereas some, including California, Minnesota and Louisiana, do not explicitly recognize religion as a reason for claiming an exemption, though it is recognized that, as a practical matter, the non-medical exemption may encompass religious beliefs. (See NCSL, *States with Religious and Philosophical Exemptions from School Immunization Requirements* (Mar. 3, 2015) <<http://www.ncsl.org/research/health/school-immunization-exemption-state-laws.aspx>> [as of Apr. 19, 2015].) Accordingly, while California law does not expressly provide for a religious exemption, any possible claim of religious exemption that might be encompassed within the “personal belief” exemption would hereinafter be eliminated by the repeal of the statutory personal belief exemption. While *Jacobson v. Massachusetts* (see Comment 2a) suggests that it is a valid exercise of police powers to prevent the spread of communicable diseases, that case was decided prior to the application of the First Amendment’s Free Exercise Clause to the states. (See *Cantwell v. Connecticut*, 310 U.S. 296, 303, 60 S. Ct. 900, 84 L. Ed. 1213 (1940).)

An objection has been raised by many of the opponents to this bill that this bill violates the constitutional right to freedom of religion, relying in part on cases such as *Wisconsin v. Yoder*. (See Comment 2c above.) The authors point to the case of *Phillips v. City of New York* (2012) 775 F.3d 538 to illustrate why compulsory vaccination laws are valid, even without a religious exemption. In that case, the Second Circuit Court of Appeal held that New York could constitutionally require that all children be vaccinated to attend public school and that the New York law actually “goes beyond what the Constitution requires by allowing an exemption for parents with genuine and sincere religious beliefs,” citing the U.S. Supreme Court decision in *Prince v. Massachusetts*, where the Supreme Court held that “the right to practice religion freely does not include liberty to expose the community or the child to communicable disease or the latter to ill health or death.” (*Id.* at 533.)

Additionally, whereas under pre-1990 Supreme Court precedents, government actions burdening religions would only be upheld if they were necessary to achieve a compelling governmental purpose, in 1990, the Court held in *Employment Div., Dept. of Human Resources of Oregon v. Smith* (1990) 474 U.S. 772, that the free exercise clause cannot be used to challenge neutral laws of general applicability. In that case, the Oregon law prohibiting the consumption of peyote, a hallucinogenic substance, was deemed neutral because it was not motivated by a desire to interfere with religion and it was a law of general applicability because it applied to everyone. Thus, as interpreted in more recent Supreme Court cases, *Smith* “largely repudiated the method of analysis used in prior free exercise cases like *Wisconsin v. Yoder* [internal citation omitted] and *Sherbert v. Verner* [(1963) 374 U.S. 398]” where the Court “employed a balancing test that

considered whether a challenged government action that substantially burdened the exercise of religion was necessary to further a compelling state interest.” (*Holt v. Hobbs* (2015) 135 S. Ct. 853, 859; *see also Burwell v. Hobby Lobby Inc.* (2014) 134 S.Ct. 2751, 2760.) While Congress has taken actions to supersede *Smith*, as reflected in cases such as *Hobby Lobby*, and thereby ensure that strict scrutiny is applied when the law substantially burdens religion, those later decisions appear based on federal law, the Religious Freedom Restoration Act, to which California has no counterpart.

Staff notes that in Mississippi, one of the two states that does not provide for either a philosophical or religious exemption to its compulsory vaccine law, the Supreme Court of that state has held that, “requiring immunization against certain crippling and deadly diseases particularly dangerous to children before they may be admitted to school serves an override and compelling public interest, and that such interest extends to the exclusion of a child until such immunization has been effected, not only as a protection of that child but as a protection of the large number of other children comprising the school community and with whom he will be in daily close contact in the school room.” (*Brown v. Stone* (1979) 378 So.2d 218, 222.) In discussing parental rights and duties, the court warned that “[i]t must not be forgotten that a child is indeed himself an individual, although under certain disabilities until majority, with rights in his own person which must be respected and may be enforced. Where its safety, morals, and health are involved, it becomes a legitimate concern of the state. [. . .] To the extent that [the compelling public purpose of the state law] may conflict with the religious beliefs of a parent, however sincerely, entertained, the interests of the school children must prevail.” (*Id.* at 222-223.) Accordingly, the court upheld Mississippi’s statute mandating vaccination before entry into school as a reasonable and constitutional exercise of its police power, but struck down the statute’s religious exemption. The court wrote that to give effect to the religious exception, “which would provide for the exemption of children of parents whose religious beliefs conflict with the immunization requirements, would discriminate against the great majority of children who have no such religious conviction” in violation of the 14th Amendment’s Equal Protection Clause, “in that it would require the great body of school children to be vaccinated and at the same time expose them to the hazard of associating in school with children exempted under the religious exemption who had not been immunized as required by the statute” (*Id.* at 223.)

4. Amendment to further narrow the bill to the compelling state interest

As noted above, given the above constitutional issues, it is important that the bill be narrowly tailored to a compelling state interest in the event that reviewing courts apply strict scrutiny in light of the rights that could be potentially impinged upon by this bill. Despite the recent amendments, there is an argument that the bill is too broad with respect to the “catch all” type provision (“paragraph 11”) that would require that the child be immunized against “any other disease deemed appropriate by the California Department of Public Health, taking into consideration the recommendations of the Advisory Committee on Immunization Practices of the U.S. DHHS, the American

Academy of Pediatrics, and the American Academy of Family Physicians” before being granted unconditional entry into schools, day care centers, or developmental centers. (Health & Saf. Code Sec. 120335(b)(11).) In other words, paragraph 11 has the potential to dramatically expand the scope of the bill and disrupts the careful balancing of the various rights involved, as discussed above. Accordingly, the following amendment would be suggested to maintain the status quo policy decision made in allowing for this 11th category of vaccines, but limit the bill to only those 10 listed vaccines currently reflected in the Health and Safety Code.

Suggested amendment:

Add a new provision to the Health and Safety Code, following Section 120335, that provides: “Notwithstanding Section 120325 and Section 120335, any immunizations required for diseases added pursuant to paragraph 11 of subdivision (a) of Section 120325 or paragraph 11 of subdivision (b) of Section 120335, may only be mandated prior to a pupil’s first admission to any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center, if exemptions are allowed for both medical reasons and personal beliefs.

Some opponents have raised questions as to whether the bill is actually “narrowly tailored” if the issue of public health could be addressed by mandating vaccines on a community by community or school district or school district basis. (See Comment 7 for example). In response, the authors assert that a statewide approach is the correct approach because:

[t]his legislation aims to prevent outbreaks, and pockets of unimmunized individuals may appear at any district at any time. To provide a statewide standard, allows for a consistent policy that can be publicized in a uniform manner, so districts and educational efforts may be enacted with best practices for each district. While pockets cluster in regionalized area, districts may have one school which does not reach community immunity, and therefore should have a policy which they can easily implement. Further in consultation with various health officers, they believe a statewide policy provides them the tools to protect all children equally from an outbreak.

5. Opposition

Staff notes that the Committee received thousands of letters on this bill. To the extent possible, the following summary seeks to summarize the arguments made in the letters.

Families for Early Autism Treatment (FEAT) writes that “the denial of an effective, appropriate education is damage that cannot be mitigated. The denial of childcare to families will result in economic hardship that will not be overcome by most, and will create segregation based upon a characteristic of an individual’s private health record.”

FEAT urges this Committee to consider that: a free public education is a fundamental right provided in the State Constitution; the equal protection clause further upholds a fundamental right to freedom from the threat of bias or discriminatory consequence imposed by government; the right to exercise the free expression of religion and core beliefs is protected by both the State and U.S. Constitutions. FEAT believes that because of these issues, “California Parents are soundly protected to make personal beliefs decisions for vaccinations.”

FEAT argues (and other opponents similarly assert) that the majority of parents do not have economic resources to leave gainful employment nor do they possess the academic acumen to teach in the home rendering the application of SB 277 particularly punitive for all those not in the highest income brackets. FEAT also argues, among other things, that independent study under the direction of the public school is voluntary. Specifically, individuals with exceptional needs (as defined under the Education Code to mean a child with a disability as defined under federal law whose impairment requires instruction and services which cannot be provided with modification of the regular school program in order to ensure that the individual is provided a free appropriate public education, as specified, and who comes within one of specified age categories, including between the ages of five and 18 years, inclusive) may only participate when indicated in the student’s individualized education program.

FEAT raises a host of other arguments that relate to: informed consent and the availability of medical exemptions; religious discrimination; least restrictive environments for those with special needs required under the Education Code and the Federal I.D.E.A. [Individuals with Disabilities Education Act]; the Developmental Disabilities Assistance and Bill of Rights Act of 2000; Welfare and Institutions Code, the Lanterman Act’s maximal participation and choice requirements for medical, community, and education services from agencies receiving state funds; home based education misconceptions; absence of public funding of education for student who is excluded or dis-enrolled from school; and issues surrounding necessary approvals to access home-based education.

Homeschool Association of California (HSC) opposes this bill because it “would negatively impact the freedom to homeschool in the state of California and would *make it impossible for many families to choose to homeschool legally.*” (Emphasis in original.) HSC comments that while private tutoring is a third legal option, the tutor must hold a currently valid state teaching credential for the grades and subjects taught under California law and hiring such tutors would be very expensive and most parents do not hold such credentials. Thus, “telling families whose children have not been fully vaccinated on schedule that they can homeschool using the tutoring option is not meaningful or realistic.” Additionally, HSC contends that the choice of “vaccinate or homeschool” is not true because the bill “prohibits children from attending any private or public school, even if the child spends most education time in the family home.” Innumerable letters from individuals write to raise relatively similar points regarding various constitutional rights, informed consent, vaccine safety/injuries, absence of a

health crisis, lack of real choice for parents/inadequacy of the current exemptions in the bill, and the like. One such letter reflects the following:

- AB 2109 from 2012 is working and that there has already been a 20 percent decline in PBEs, thereby eliminating the need for sweeping legislation that removes a parent's right to informed consent.
- The California Constitution states that a free public education is a right for all children. Even children who are positive for HIV or Hepatitis B are allowed to attend public school. Denying a child this right based upon vaccination status is discriminatory and unconstitutional, adding that there will be social ramifications if vaccinated and under/unvaccinated children are forced to be segregated.
- This bill removes freedom of religion as well as parental rights as they cannot afford to homeschool their children and would otherwise be forced to submit their child to medical procedures with risks or leave the state.
- California vaccination rates are high – higher than the national average for each disease listed on the CDC schedule.
- The U.S. Supreme Court has recognized that vaccines are “unavoidably unsafe,” citing the case of *Bruesewitz v. Wyeth LLC* (2011) 131 S.Ct. 1068.
- Parents should have the right to determine for themselves what substances are injected into their child's body without giving up their children's right to a free public education.
- Any law that compels the public “to use a pharmaceutical product which carries an unpredictable risk of injury/ death for a minority of vulnerable individuals is not humane.”

Californians for Medical Freedom – Tahoe, raises similar points, also arguing that the bill removes federally mandated rights of services to students with disabilities under the federal IDEA. This group, like many others, points to the National Childhood Vaccine Injury Act (NVIC) and the fact that the U.S. government “has paid out more than \$3 billion to the victims of vaccine injury” as support for why medical choice is appropriate. “If there is risk of injury or death there must be a choice.” In contrast, they argue that “[v]accination rates of California schoolchildren are high at 98.64 [percent]” and cite the success of recent legislation, AB 2109, which they write has resulted “in a 19 [percent] decrease in exemptions amongst kindergarteners in just one year. The public health concern,” they write, “is already adequately addressed with current California laws.” In other words, as stated by the California Chiropractic Association, “SB 277 is a solution in search of a problem.”

Educate.Advocate. raises many similar points and adds that PBEs “DO NOT represent the number of unvaccinated individuals in the state. A PBE must be obtained for any child who misses one dose of a vaccine or is on a staggered vaccine schedule. The state does not keep track of this information; it treats all PBE's equally.” Educate.Advocate. writes that the children served by their organization are all in special education and on an individualized education plan. “Many of these children also have pre-existing medical conditions (mitochondrial dysfunction, compromised immune system) making it impossible to vaccinate them without hurting them further. Obtaining a medical

exemption is very difficult to receive as the CDC's pink book guidelines are incredibly narrow and trump patient and doctor reasons. [. . .] The only option for these children has been the personal belief exemption. Stripping families such as these of the right to get a personal belief exemption is discriminatory and in violation of the Americans with Disabilities Act."

ParentalRights.Org writes in opposition that "[w]hile we appreciate the intent of the amendment to exempt homeschoolers from the vaccination requirement, it is not sufficient to protect the rights of parents and children in California. While there are many parents with strong convictions that the risks of vaccines to their child (as reflected in lengthy disclaimers which accompany these products) outweigh the potential benefits, many of these same parents are also deeply convinced that the best educational opportunity they can provide their child is in the public schools. These parents should not be forced to give up their rights in one area to exercise their rights in another. No child should have to forego the best available education for the sake of his best health, nor give up his best health for the sake of a better education."

6. Oppose unless amended

The California Naturopathic Doctors Association (CNDA) states that it supports immunization for the prevention of disease and the public health objective of achieving high rates of immunity to infectious disease but opposes this bill unless it is amended to include Naturopathic Doctors as providers who can sign medical waivers for vaccination. CNDA argues that as licensed primary care doctors who can diagnose medical conditions such as anaphylaxis and immunodeficiency, reasons outlined in the CDC's list of contraindications to common pediatric vaccinations, naturopathic doctors must also be able to sign medical waivers for vaccination, when such medical conditions exist.

7. Concerns

A San Lorenzo Valley Unified School District (SLVUSD) superintendent writes a letter of concerns, based in large part on points raised in the Senate Health Committee hearing. Noting both the ACLU's letter of concern and recent successes of AB 2109 (*see* Background), SLVUSD comments that "[t]here are some geographic pockets in the state where PBE rates are higher than average. We understand the concerns this raises, but alternatives to SB 277, including 'educate and encourage' efforts could address those concerns." These efforts, they note, are the focus of the federal government's National Adult Immunization Plan, as opposed to mandate. SLVUSD also questions what public health risk these PBE rates represent given that only 0.7 percent of children nationwide are fully vaccinated and that most parents request a PBE to "selectively" vaccinate (for example, choosing to vaccinate against pertussis, tetanus, and measles but opting out of those they consider unnecessary like Hepatitis B.) "PBE rates," it writes, "do not equate to a public health risk for a specific disease. SLVUSD believes the "educate and encourage" efforts used in conjunction with better data on actual vaccination opt-out by

disease in each area would be a better legislative solution than statewide mandates. SLVUSD is concerned about the education options left for children under SB 277 and the fact that the bill allows parents to homeschool on their own (private school affidavit) – not through public or private school satellite programs.

8. Author's technical and clarifying amendments

This bill currently provides that when there is good cause to believe that a child whose documentary proof of immunization status does not show proof of immunization against a disease listed in subdivision (b) of Section 120335 has been exposed to one of those diseases, that child may be temporarily excluded from the school or institution until the local health officer is satisfied that the child is no longer at risk of developing or transmitting the disease. The first amendment would clarify that this temporary exclusion authority applies only if there is good cause to believe that a student has been exposed to a disease listed under the mandatory vaccination law and his or her documentary proof of immunization status does not show proof of immunization against that specific disease.

The author is also making a second, technical amendment that would place the homeschooling and independent study exemption within a separate subdivision to ensure that the exemption also applies to seventh grade level checks for pertussis.

Author's amendments:

- (1) On page 5, strike lines 26-29, inclusive and on line 30 strike "disease," and insert:
"(b) When there is good cause to believe that a child has been exposed to a disease listed in subdivision (b) of Section 120335 and the child's documentary proof of immunization status does not show proof of immunization against that disease,"
- (2) On page 4, strike lines 16-20 and on page 5 after line 10, insert: "(f) This section does not apply to a home-based private school or a pupil who is enrolled in an independent study program pursuant to Article 5.5 (commencing with Section 51745) of Chapter 5 of Part 28 of the Education Code."

Support: Alameda County Board of Supervisors; American Federation of State, County and Municipal Employees (AFSCME) AFL-CIO; American Academy of Pediatrics; American Lung Association; American Nurses Association\California; Biocom; California Academy of Family Physicians (CAFP); California Association of Nurse Practitioners (CANP); CAPG; California Chapter of the American College of Emergency Physicians (California ACEP); California Children's Hospital Association; California Coverage and Health Initiatives; California Health Care Institute; California Health Executives Association of California (CHEAC); California Hepatitis Alliance (CalHEP); California Immunization Coalition; California Hospital Association; California Medical

Association; California School Nurses Association; California Pharmacists Association; California Optometric Association; California Primary Care Association; California School Boards Association (CSBA); California School Employees Association (CSEA); California School Nurses Organization; California State Association of Counties (CSAC); California State PTA; Child Care Law Center; Children Now; Children's Defense Fund-California; Children's Specialty Care Coalition; City of Beverly Hills; City of Pasadena; County Health Executives Association of California; County of Los Angeles; County of Santa Clara Board of Supervisors; County of Santa Cruz Board of Supervisors; County of Yolo Board of Supervisors; First 5 Association of California; Health Officers Association of California; Kaiser Permanente; Insurance Commissioner Dave Jones; Kaiser Permanente; Los Angeles County Board of Supervisors; March of Dimes California Chapter; Marin County Board of Supervisors (support if amended); National Coalition of Black Women; Osteopathic Physicians and Surgeons of California (OPSC); Providence Health and Services Southern California; Reed Union School District; San Dieguito Unified School District; San Francisco Unified School District; Secular Coalition for California; Silicon Valley Leadership Group; Solana Beach School District; The Children's Partnership; UAW Local 5810; numerous individuals

Opposition: Alder Grove Charter School – Director; American Civil Liberties Union (concern); Association of American Physicians & Surgeons; Association of Personalized Learning Schools & Services (APLUS); AWAKE California; California Chiropractic Association; California Coalition for Health Choice; California Coalition for Health Choice, the Central Valley and Central Sierra Chapters; California Naturopathic Doctors Association (oppose unless amended); California Nurses for Ethical Standards; California ProLife Council; California Right to Life Committee, Inc.; Californians for Freedom of Choice; Californians for Medical Freedom- Tahoe; Canary Party; Capitol Resource Institute; Children's Healthcare is a Legal Duty, Inc. (CHILD); Connecting Waters Charter School; Educate. Advocate.; Families for Early Autism Treatment (FEAT); Homeschool Association of California; Libertarian Party of Sacramento County; National Autism Association of California; National Vaccine Information Center; Our Kids, Our Choice (OKOC); Pacific Justice Institute Center for Public Policy; ParentalRights.Org; Plumas Charter School's Executive Director; Pro-Parental Rights; Safe Minds; Saint Andrew Orthodox Christian Church – Pastor; San Lorenzo Valley Unified School District – Superintendent (concerns); UnblindMyMind; Vaccine-Injury Awareness League; numerous individuals

HISTORY

Source: Vaccinate California

Related Pending Legislation: SB 792 (Mendoza) would prohibit a person from being employed at a day care center or day care home unless he or she has been immunized against influenza, pertussis, and measles.

Prior Legislation:

AB 2109 (Pan, Ch. 821, Stats. 2012) *See* Background.

Prior Vote:

Senate Education Committee (Ayes 7, Noes 2)

Senate Health Committee: (Ayes 6, Noes 2)

EXHIBIT 15

Date of Hearing: June 20, 2019

ASSEMBLY COMMITTEE ON HEALTH
Jim Wood, Chair
SB 276 (Pan) – As Amended June 17, 2019

SENATE VOTE: 24-10

SUBJECT: Immunizations: medical exemptions.

SUMMARY: Requires the Department Public Health (DPH) to annually review immunization reports from all schools and institutions to identify medical exemptions subject to review. Requires a clinically trained DPH staff member to review exemptions from schools or institutions with an immunization rate of less than 95% or physicians and surgeons who submit five or more medical exemptions in a calendar year. Permits DPH to deny or revoke a medical exemption determined to be inappropriate or invalid, as specified. Establishes an appeals process for medical exemptions that are denied or revoked and creates an independent review panel made up of three physicians for purposes of appeals. Requires DPH to create a standardized statewide form for the purpose of obtaining a medical exemption or medical exemptions for immunization requirements. Requires the form to include specific information, including the name; California medical license of the physician issuing the medical exemption; and, certification that the physician has conducted a physical examination and evaluation of the child consistent with the standard care. States that medical exemptions granted prior to January 1, 2021 that are found to be fraudulent or inconsistent, as specified, may be revoked or denied. Specifically, **this bill:**

- 1) Requires DPH, by January 1, 2021, to develop and make available for use by licensed physicians and surgeons an electronic, standardized, and statewide medical exemption certification form that will be transmitted directly using the existing California Immunization Registry (CAIR).
- 2) Requires medical exemption certification forms to be printed, signed, and submitted directly to the governing authority of the school or institution or to the governing authority of the school or institution through CAIR, when applicable.
- 3) Requires, commencing January 1, 2021, the standardized form to be the only documentation of a medical exemption that the governing authority can accept, except for those medical exemptions authorized prior to the adoption of the standardized form under this bill.
- 4) Requires the standardized form, at a minimum, to require all of the following information:
 - a) The name, California medical license number, and business address and telephone number of the physician and surgeon who issued the medical exemption, and of the primary care physician (PCP) of the child, if different from the physician and surgeon who issued the medical exemption;
 - b) The name of the child for whom the exemption is sought and the name and address of the child's parent or guardian, and the name and address of the child's school or institution;

- c) A statement certifying that the issuing physician and surgeon has conducted a physical examination and evaluation of the child consistent with the relevant standard of care, and complied with all the requirements of this bill;
 - d) Whether the issuing physician and surgeon is the child's PCP. Requires that if the issuing physician and surgeon is not the child's PCP and has not been treating the child for at least one year, the issuing physician must attest that the PCP has been contacted and advised of the submission of the medical exemption form;
 - e) A description of the medical basis for which the exemption for each individual immunization is sought. Requires each specific immunization to be listed separately and space to be provided on the form for the inclusion of descriptive information for each immunization for which the exemption is sought;
 - f) Whether the medical exemption is permanent or temporary, including the date upon which a temporary medical exemption will expire. Prohibits a temporary exemption from exceeding one year;
 - g) An authorization for DPH to contact the issuing physician for purposes of this bill and for the release of records related to the medical exemption to DPH, the Medical Board of California (MBC) and the Osteopathic Medical Board of California (OMB); and,
 - h) A certification by the issuing physician and surgeon, under penalty of perjury, that the statements and information contained in the form are true, accurate, and complete.
- 5) Prohibits a physician and surgeon from charging for either of the following:
 - a) Filling out a medical exemption form; or,
 - b) An examination related to the renewal of a temporary medical exemption.
 - 6) Requires, commencing January 1, 2021, if a parent or guardian requests a licensed physician and surgeon to submit a medical exemption for the parent's or guardian's child, the physician and surgeon to inform the parent or guardian of the requirements of this bill. Provides that if a parent or guardian consents, the physician and surgeon must examine the child and submit a completed medical exemption certification form to DPH. Allows a medical exemption form to be submitted to DPH at any time.
 - 7) Requires DPH, by January 1, 2021, to create a standardized system to monitor immunization levels in schools and institutions as defined in existing law, and to monitor patterns of unusually high exemption form submissions by a particular physician and surgeon or a medical practice.
 - 8) Permits DPH to review any medical exemption granted by a physician and surgeon before January 1, 2021. States the following for medical exemptions that were authorized prior to the adoption of the standardized form under this bill (prior to January 1, 2021):
 - a) A parent or guardian must submit by January 1, 2021, a copy of the medical exemption to DPH for inclusion in CAIR in order for the medical exemption to remain valid;

- b) If the local health officer (LHO) determines that a medical exemption granted prior to January 1, 2021, and submitted to DPH is fraudulent or inconsistent with applicable Centers for Disease Control and Prevention (CDC), federal Advisory Committee on Immunization Practices (ACIP), or American Academy of Pediatrics (AAP) criteria for appropriate medical exemptions, the LHO may provide the information to the State Public Health Officer (SPHO) who may revoke the exemption upon the request of the LHO; and,
 - c) Requires DPH to annually review immunization reports from all schools and institutions in order to identify medical exemptions granted prior to January 1, 2021, for inconsistencies with CDC, ACIP, and AAP guidelines.
- 9) Requires a clinically trained immunization DPH staff member to review all medical exemptions from either of the following:
 - a) Schools or institutions with an immunization rate of less than 95%; and,
 - b) Physicians and surgeons who have submitted five or more medical exemptions in a calendar year.
 - 10) Requires DPH to identify those medical exemption forms that do not meet applicable CDC, ACIP, or AAP criteria for appropriate medical exemptions. Permits DPH to contact the PCP or issuing physician and surgeon to request additional information to support the medical exemption.
 - 11) Permits DPH, based on the medical discretion of the clinically trained immunization staff member, to accept a medical exemption that is based on other contraindications or precautions, including the consideration of family medical history if the issuing physician and surgeon provides written documentation to support the medical exemption that is consistent with the relevant standard of care.
 - 12) Requires any medical exemption that DPH's reviewing immunization staff member determines to be inappropriate or otherwise invalid, under the review specified in 10) and 11) above, to also be reviewed by the SPHO or a physician and surgeon designee of the SPHO. Permits, under this review, the SPHO or physician and surgeon designee to deny or revoke a medical exemption, as applicable.
 - 13) Requires DPH to notify the issuing physician and surgeon, the school or institution, and the LHO with jurisdiction over the school or institution of a denial or revocation of a medical exemption that is subject to review.
 - 14) Requires a child to comply with the conditional admission schedule for immunization and continued attendance requirements specified in regulations in the case of a medical exemption that is denied, revoked, or pending appeal.
 - 15) Prohibits DPH from accepting a medical exemption form from a physician and surgeon if it determines that a physician and surgeon poses a risk to the public's health in one or more communities until the physician and surgeon demonstrates to DPH that the risk no longer exists, but in no event will a physician be barred from submitting their forms for less than two years.

- 16) Prohibits DPH from accepting medical exemption forms from a physician and surgeon with a pending accusation with the MBC or OMB relating to immunization standards of care until the accusation is resolved in favor of the physician and surgeon.
- 17) Requires DPH to notify the MBC and OMB, as appropriate, of the following:
 - a) Physicians and surgeons that have issued medical exemption forms that have been denied or revoked under this bill; or,
 - b) Physicians and surgeons who qualify under 15) above.
- 18) Permits a DPH clinically trained immunization staff member to review any exemption in CAIR as necessary to protect public health.
- 19) Requires DPH, MBC, and OMB to enter into a memorandum of understanding or similar agreement to ensure compliance with this bill.
- 20) Requires DPH and the independent review panel specified in 23) below, to comply with all applicable state and federal privacy and confidentiality laws and permits disclosure only in accordance with existing state and federal privacy and confidentiality laws.
- 21) Permits DPH, if it determines that contracts are required to implement this bill, to award these contracts on a single-source or sole-source basis and exempt from the public contract requirements, as specified. Permits DPH to implement and administer the provisions of this bill through provider bulletins or similar instructions without taking regulatory action.
- 22) Permits a parent or guardian to appeal the denial or revocation of a medical exemption to the California Health and Human Services (CHHS) Secretary. Permits parents and guardians to provide necessary information to the independent review panel for the appeal.
- 23) Requires the Secretary of CHHS to appoint an independent expert review panel, consisting of three licensed physicians and surgeons who are PCP or immunization experts, to review appeals. Requires CHHS to establish requirements, including conflict-of-interest standards, as specified, that a physician and surgeon is required to meet in order to qualify for an appointment to the panel.
- 24) Requires the independent expert review panel to evaluate appeals consistent with the CDC and ACIP guidelines and the relevant standard of care, as applicable.
- 25) Requires the independent expert review panel to submit its findings and recommendations to the secretary. Requires the CHHS Secretary's final decision to be consistent with the findings of the independent expert review panel, and is not subject to further administrative review.
- 26) Requires the existing report filed by the governing authority of each school or institution of new entrants to be filed annually.
- 27) Makes other technical and conforming changes.
- 28) Finds and declares the importance of vaccines.

EXISTING LAW:

- 1) Establishes DPH to, among other functions, examine the causes of communicable diseases occurring or likely to occur in this state and as the entity mainly responsible for the prevention of communicable diseases.
- 2) Authorizes the SPHO, as the director of DPH, broad authority to detect, monitor, and prevent the spread of communicable disease in the state, including the ability to:
 - a) Require the reporting of communicable diseases that DPH identifies, on timelines and in a manner determined by the DPH;
 - b) Adopt and enforce regulations requiring strict or modified isolation, or quarantine, for any of the contagious, infectious, or communicable diseases, if in the opinion of DPH, the action is necessary for the protection of the public health;
 - c) Take measures as are necessary to ascertain the nature of the disease and prevent its spread; and, allows DPH to take possession or control of the body of any living person, or the corpse of any deceased person, as specified;
 - d) Quarantine, isolate, inspect, and disinfect persons, animals, houses, rooms, other property, places, cities, or localities, whenever in its judgment the action is necessary to protect or preserve the public health; and,
 - e) Destroy such objects as bedding, carpets, household goods, furnishings, materials, clothing, or animals, when ordinary means of disinfection are considered unsafe, and when the property is in its judgment, an imminent menace to the public health.
- 3) Requires the SPHO to be a licensed physician and surgeon who has demonstrated medical, public health, and management experience.
- 4) Requires a LHO knowing or having reason to believe that any case of reportable diseases, or any other contagious, infectious or communicable disease exists, or has recently existed, within the territory under his or her jurisdiction, to take measures as may be necessary to prevent the spread of the disease or occurrence of additional cases.
- 5) Prohibits the governing authority of a school or other institution from unconditionally admitting any person as a pupil of any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center, unless, prior to his or her first admission to that institution, he or she has been fully immunized against the following diseases, as specified:
 - a) Diphtheria;
 - b) Haemophilus influenzae type b (Hib);
 - c) Measles;
 - d) Mumps;
 - e) Pertussis;
 - f) Poliomyelitis;
 - g) Rubella;

- h) Tetanus;
 - i) Hepatitis b (except after 7th grade); and,
 - j) Chickenpox.
- 6) Requires the governing authority of each school or institution to require documentary proof of each entrant's immunization status.
 - 7) Requires the governing authority to record the immunizations of each new entrant in the entrant's permanent enrollment and scholarship record on a form provided by DPH.
 - 8) Requires the immunization record of each new entrant admitted conditionally to be reviewed periodically by the governing authority to ensure that they have been fully immunized against appropriate communicable diseases. Requires immunizations received after entry to be added to the pupil's immunization record.
 - 9) Prohibits any further admittance to school for a pupil admitted conditionally who failed to obtain the required immunizations within the time limits allowed in the regulations of DPH unless the pupil has obtained an authorized medical exemption. Permits admittance to a school or institution for a pupil that has become up to date with required immunizations.
 - 10) Requires the governing authority to file a written report on the immunization status of new entrants to the school or institution under their jurisdiction with DPH and the local health department at times and on forms prescribed by DPH.
 - 11) Requires the governing authority to cooperate with the county health officer in carrying out programs for the immunization of persons applying for admission to any school or institution under its jurisdiction. Permits the governing board of any school district to use funds, property, and personnel of the district for that purpose. Permits the governing authority of any school or other institution to permit any licensed physician or any qualified registered nurse to administer immunizing agents to any person seeking admission to any school or institution under its jurisdiction.
 - 12) Permits DPH to add to the list of required immunizations any other disease deemed appropriate, taking into consideration the recommendations of the CDC, ACIP, and the AAP Committee on Infectious Diseases.
 - 13) Waives the above immunization requirements if the parent or guardian files with the governing authority a written statement by a licensed physician to the effect that the physical condition of the child is such, or medical circumstances relating to the child are such, that immunization is not considered safe, indicating the specific nature and probable duration of the medical condition or circumstances including, but not limited to, family medical history, for which the physician does not recommend immunization.
 - 14) Permits a child for whom the requirement has been waived, if there is good cause to believe that a child has been exposed to one of the specified communicable diseases and the child's proof of immunization status does not show proof of immunization against that disease, to be temporarily excluded from the school or institution until the LHO is satisfied that the child is no longer at risk of developing or transmitting the disease.

- 15) Establishes the MBC, under the Medical Practice Act, and the OMB, under the Osteopathic Act, which, among other authorities, is the entity that conducts investigations of complaints against physicians and surgeon, including those relating to immunization practice standards of care.

FISCAL EFFECT: According to the Senate Appropriations Committee, up to \$9.4 million in fiscal year (FY) 2019-20; \$9.97 million in FY 2020-21; \$10.8 million in FY 2021-22; \$10.2 million in FY 2022-23, and \$10.15 million in FY 2023-24. All costs to be borne by General Fund for DPH workload and staff to promulgate regulations, prepare appeals, and review exemption requests. In addition, staff anticipates possible contract costs, and ongoing operations costs, for the development and maintenance of a database and its security.

COMMENTS:

- 1) **PURPOSE OF THIS BILL.** According to the author, since the start of 2019, 1,044 measles cases have been reported across 28 states, far surpassing last year's number of cases. This is the greatest number of cases since 1992 and since 2000 when measles was declared eliminated. The author states that SB 277 (Pan and Allen), Chapter 35, Statutes of 2015, eliminated all non-medical exemptions for immunizations required for school entry. While SB 277 was successful in raising immunization rates, the number of medical exemptions issued more than tripled since the law went into effect. According to the author, many of the exemptions are clustered in the same schools, creating concentrated pockets of unvaccinated individuals. At almost 60 schools in the state, more than 10% of kindergarteners had medical exemptions. The rise in medical exemptions is associated with an increase in physicians issuing exemptions for children without medically-justified contraindications. While the vast majority of physicians uphold standards of care, a small number of unethical physicians have monetized their license by selling medical exemptions for profit. Currently, California law requires no state-level oversight or standardization of exemptions. As a result, medical exemptions often contain incomplete information and may be issued for reasons other than medically-justified contraindications. The author concludes that this bill will restore integrity to California's immunization exemption process.
- 2) **BACKGROUND.** According to the CDC, diseases that used to be common in the U.S. and around the world, including polio, measles, diphtheria, pertussis (whooping cough), rubella (German measles), mumps, tetanus, rotavirus and Hib can now be prevented by vaccination. Due to vaccines, one of the most terrible diseases in history – smallpox – no longer exists outside the laboratory because of vaccines. Over the years vaccines have prevented countless cases of diseases and saved millions of lives. Vaccines work by utilizing the body's own immune system to protect against dangerous pathogens to build immunity to that disease. Immunity means that the body has an existing defense system specific to a disease that protects a person from getting sick if they come into contact with that disease. According to the World Health Organization, vaccines have been estimated to have saved at least 10 million lives between 2010 and 2015 alone.

For the vast majority of individuals, vaccines have been shown to be safe and effective. This is a key component to why vaccinating as much of the population as possible is crucial for the operability of vaccines in fighting infectious disease. Herd immunity, also referred to as community immunity, is when a largely vaccinated population (95% of a community for the most contagious of diseases) can actually suppress a disease to the point of eradication,

which greatly protects the most vulnerable population who cannot receive vaccines because of age or medical condition that renders vaccines unsafe for that individual. For example, newborn babies are immune to many diseases because they have antibodies they got from their mothers. However, this immunity goes away during the first year of life. If an unvaccinated child is exposed to a disease germ, the child's body may not be strong enough to fight the disease. Before vaccines, many children died from diseases that vaccines now prevent, such as whooping cough, measles, and polio. Those same germs exist today, but because babies are protected by vaccines, we do not see these diseases nearly as often.

a) **Current Public Health Threats.** Although vaccines have been an incredible success in protecting communities from some of the most dangerous communicable diseases, in recent years there has been an uptick in the number of measles cases across the U.S., including in California. Highly contagious viruses, like the measles, can be contracted by individuals traveling to regions where it has not been eliminated and bring it back to the U.S. When this occurs, vulnerable, unvaccinated individuals are at risk of contracting the disease. Measles is one of the most contagious communicable diseases, nine out of 10 susceptible individuals that come into contact with the measles will develop the disease. The last large outbreak of the measles in California was in 2014-2015 in the Disneyland outbreak. According to DPH, at least 131 California residents contracted the measles either at Disneyland or from contact with an individual who contracted the disease at Disneyland in December 2014 according to DPH. Those infected included approximately 45% unvaccinated individuals and approximately 43% individuals with unknown vaccination records, according to a Morbidity and Mortality Weekly Report published by the CDC. Since 2015, according to the data from the CDC, there has been a steady increase in identified measles cases nationwide. To date in 2019, the CDC has reported 1,022 new cases of the measles. In California, there have been 51 cases of the measles across the state. It is worthwhile to note that 40 of these cases were in adults. This is likely because adults born prior to the 1989 recommendation of a second dose of the measles vaccine (MMR), have less immunity and are left susceptible to the disease. Nevertheless, the contagiousness of the measles leaves infants and children that are not vaccinated at great risk for contracting the disease which can lead to hospitalization and even death. In the pre-vaccine era, according to the CDC, nearly all children contracted the measles before they were 15 years old and an estimated 48,000 children were hospitalized and 400 to 500 children died from this disease annually. That is the detriment communities face if community immunity is insufficient.

b) **Immunization Requirements.** All 50 states in the U.S. have enacted laws or regulations that require children to receive certain vaccines before they enter certain childcare facilities and/or school. Exceptions to these laws vary by state, and can include medical, religious, and/or philosophical objections. In California, where vaccine laws are some of the strictest in the nation, personal belief exemptions (PBEs) based on religious or philosophical objections are no longer permitted since the passage of SB 277. Two other states, West Virginia and Mississippi, have also passed laws to ban PBEs. Medical exemptions from a licensed physician, however, continue to be accepted in schools.

Current state law mandates immunization of school-aged children against 10 specific diseases as specified in 4) under existing law above. Each of the 10 diseases were added to California code through legislative action, after careful consideration of the public health risks of these diseases, costs to the state and health system, communicability, and

rates of transmission. All of the diseases for which California requires school vaccinations are serious conditions that pose very real health risks to children. Most of the diseases can be spread by contact with other infected children. Tetanus does not spread from student to student, but because it is such a serious potentially fatal disease, and it is easily preventable by vaccine, it is a required vaccination for school enrollment in children.

- c) **California Immunization Status Report 2018-2019.** California schools are required to annually submit to DPH a report of the immunization status of their students. According to the 2018-2019 Kindergarten Immunization Assessment report published by the DPH Immunization Branch, 94.8% of all children entering kindergarten for the 2018-2019 school year were up to date and on time with all of the required immunizations. This is a 0.3% decrease in the immunization rate from the previous year. However, approximately 20% of schools and institutions have been identified to have immunization rates under 95%. These include day care centers (2,031/9,212 institutions), kindergartens (1,548/6,758 schools) and middle schools (331/3,362 schools) that have an immunization rate less than 95%.

Although schools or institutions are required to report the immunization status of their students to DPH at least annually, in 2018-2019, there were approximately 1,000 schools and institutions that did not comply with this requirement.

In 2018 a group of researchers published two peer-reviewed articles (one in the journal *Pediatrics* and the other in the *Journal of Research and Practice*) detailing the experiences of LHOs and immunization staff in addressing medical exemptions after the passage of SB 277. One of the major concerns raised by these groups identified by the studies was the lack of a centralized review of medical exemptions. The LHOs and immunization staff interviewed (representing 35/61 local health departments) identified that the medical exemptions their jurisdictions received being accepted were, from their perspectives, problematic and not always consistent with trusted guidelines for immunization practices, including the CDC, ACIP, and AAP guidelines referenced in this bill.

- d) **MBC Investigation.** Following the implementation of SB 277, there was, as reported above, an increase in medical exemptions in California. According to the MBC, since the passage of SB 277, there have been 173 confirmed complaints against 66 physicians regarding suspect medical exemptions according to the MBC. Additionally, there are 104 pending complaints among 52 physicians. The MBC has taken action against one physician. However, the MBC states that the investigations into complaints related to immunization standard of care, have been dismissed because of insufficient evidence, since patients that received the medical exemptions do not provide authorization of their medical exemption that are necessary to support the MBC's accusation.
- e) **Best Practice Guidelines for Administering Vaccines.** The CDC, in coordination with the recommendations from ACIP, publishes the best practice guidelines for immunization schedules and for medical exemption decisions, including guidance on appropriate contraindications or precautions to administering vaccines. The ACIP is a committee of medical and public health experts that develop public health and safety-based recommendations on the public use of vaccines and related biological products. The ACIP includes 15 voting members responsible for making vaccine recommendations.

The Secretary of the U.S. Department of Health and Human Services (DHHS) selects these members following an application and nomination process. Fourteen of the members have expertise in vaccinology, immunology, pediatrics, internal medicine, nursing, family medicine, virology, public health, infectious diseases, and/or preventive medicine; one member is a consumer representative who provides perspectives on the social and community aspects of vaccination. In addition to the 15 voting members, ACIP includes eight ex officio members who represent other federal agencies with responsibility for immunization programs in the United States, and 30 non-voting representatives of liaison organizations that bring related immunization expertise. Professional organizations work with ACIP to develop the annual childhood and adult schedules. These organizations include the AAP, the American Academy of Family Physicians, the American College of Obstetricians and Gynecologists, and the American College of Physicians. The 2019 Recommended Immunization Schedules for Persons Aged zero through 18 Years state: “children under six are recommended to receive vaccines for: hepatitis b; rotavirus; diphtheria, tetanus, and pertussis (DTaP); Hib; pneumococcal; polio; influenza; MMR; varicella; hepatitis a; and meningococcal.”

- f) **Public Vaccine Safety Concerns:** Safety studies, both throughout the Federal Drug Administration (FDA) drug trials process, and in ongoing studies show that vaccines are safe for the vast majority of the population. In California, 95.1% of all school-aged children have their full course of vaccination completed according to the CDC recommended schedule. As with all drugs, vaccines do not come without any side effects. The mild, acute reactions to vaccines include injection site redness, soreness, and a fever. These reactions have not been found to lead to any long term detriment. More severe reactions, such as encephalopathy and severe allergic reactions are considered valid contraindications of vaccines under CDC/ACIP/AAP guidelines. In addition to the antigen, or microbe specific to the disease a vaccine protects against, vaccines also include a number of other ingredients. The vaccine ingredient that causes much of the concerns or vaccine hesitancy are the adjuvants.

According to the FDA, for over 70 years, adjuvants have been components of non-live vaccines that stimulate the body to protect against the antigen being injected as part of the vaccine. Alum, or aluminum salts are the most commonly used adjuvants in the U.S. for vaccines, and illicit a defense immune response against the antigen (disease microbe). The use of adjuvants allows less antigen to be used in the vaccine and also allows vaccines to be safe and effective for immunocompromised individuals. This is why in the CDC/ACIP/AAP best practice guidelines, only live vaccines such as MMR and Varicella, are contraindicated for individuals without sufficient immunocompetence. The National Institutes for Health branch National Institute of Allergy and Infectious Disease, in 2018, refined and published their research goals for a Strategic Plan for Research on Vaccine Adjuvants, which include improving the efficacy and understanding of long-term safety of existing and novel adjuvants used in vaccines.

g) **Federal Vaccine Injury Programs.**

- i) **Vaccine Adverse Event Reporting System (VAERS).** The CDC and FDA run VAERS, a national surveillance program to detect possible safety issues with U.S. vaccines by collecting information related to adverse events and side effects that occur after vaccination. VAERS was created in 1990 as part of the National

Childhood Vaccine Injury Act. The major goals of this reporting system are to monitor vaccine reactions and to apply that knowledge to assess the safety of vaccines while monitoring public health emergencies relating to vaccines. Anyone may submit their adverse reactions to this program.

- ii) **The National Vaccine Injury Compensation Program (NVICP).** NVICP was established in the 1980s after lawsuits against vaccine companies and health care providers threatened to cause vaccine shortages and reduce U.S. vaccination rates. A consequence of vaccine shortages could have been a resurgence of vaccine preventable diseases. NVICP is a no-fault alternative to the traditional legal system for resolving vaccine injury petitions and is paid for by vaccine manufacturers through a \$0.75 per dose tax.

NVICP permits any individual who received a covered vaccine and believes they were injured as a result, to file a petition. Parents, legal guardians and legal representatives are permitted to file on behalf of children, disabled adults, and individuals who are deceased.

To get compensation, an individual must file a petition with the U.S. Court of Federal Claims. DHHS medical staff reviews the petition, determines if it meets the medical criteria for compensation and makes a preliminary recommendation. The U.S. Department of Justice develops a report that includes the medical recommendation and legal analysis and submits it to the Court. The report is presented to a court-appointed special master, who decides whether the petitioner should be compensated, often after holding a hearing in which both parties can present evidence. If compensation is awarded, the special master determines the amount and type of compensation. The Court then orders DHHS to award compensation. Even if the petition is dismissed, if certain requirements are met, the Court can order DHHS to pay attorneys' fees and costs. The special master's decision may be appealed and petitioners who reject the decision of the court (or withdraw their petitions within certain timelines) may file a claim in civil court against the vaccine company and/or the health care provider who administered the vaccine. This process takes about two to three years to complete.

According to a NVICP compensation report updated on June 1, 2019, from 2006 to 2017 over 3.4 billion doses of covered vaccines were distributed in the U.S. For petitions filed in this time period, 6,314 petitions were adjudicated by the Court, and of those 4,328 were compensated. This means for every 1 million doses of vaccine that were distributed, approximately 1 individual was compensated. Since 1988, over 20,728 petitions have been filed with the NVICP. Over that 30-year time period, 17,923 petitions have been adjudicated, with 6,597 of those determined to be compensable, while 11,326 were dismissed. Total compensation paid over the life of the program is approximately \$4.1 billion.

3) Major Provisions of this Bill:

- a) **Standardized Medical Exemption Form.** This bill requires DPH to develop a standardized form for medical exemptions. This form must include the following information:

- i) *Physician Information.* Name and California medical license number, business address and telephone number, of the PCP and the physician issuing the medical exemption;
 - ii) *Child Information.* Name of the child, and the name and address of the child's parents or guardians;
 - iii) *Physical examination and evaluation.* A statement certifying that the issuing physician physically examined and evaluated the child according to standards of care;
 - iv) *PCP.* Whether the issuing physician is the child's PCP. If the physician issuing the medical exemption has not been treating the child for at least one year, then the issuing physician must attest that the PCP has been contacted and advised of the submission of the medical exemption;
 - v) *Medical reason.* A description of the medical reason for which the medical exemption is sought. The form must have space for each specific, required immunization;
 - vi) *Permanent or temporary.* Whether the medical exemption is permanent or temporary. For temporary medical exemptions, the form must also include the duration, specified to be up to one year, of the exemption;
 - vii) *Authorization.* An authorization for the release of medical records related to the medical exemption to the DPH, the MBC, and OMB;
 - viii) *Penalty of Perjury.* The physician issuing the form must certify under penalty of law that the information included on the form is accurate; and,
 - ix) *Form fee.* The physician is prohibited from charging a fee for filling out the medical exemption and for follow up examinations regarding temporary exemptions.
- b) Review of Medical Exemptions Obtained On or After January 1, 2021.**
- i) This bill requires DPH to annually review immunization reports from all schools and institutions and identify those that are subject to review. A clinically trained immunization staff from DPH shall review all medical exemptions from CAIR under either of the following circumstances:
 - (1) Schools or institutions which are found to have an immunization rate of less than 95%; or,
 - (2) Physicians and surgeons who have submitted five or more medical exemptions annually.
 - ii) There are two criteria established for the review, as follows:

- (1) DPH will identify those medical exemption forms that do not meet applicable CDC, ACIP, or AAP criteria for appropriate medical exemptions. DPH may contact the PCP or issuing physician to request additional information to support the medical exemption.
- (2) DPH, based on the medical discretion of the clinically trained immunization staff member, may accept a medical exemption that is based on other contraindications or precautions, including consideration of family medical history, if the issuing physician provides written documentation to support the medical exemption that is consistent with the relevant standard of care.

If a medical exemption is determined under either of the above circumstances as inappropriate or invalid, the SPHO or physician designee will also review these exemptions to determine whether to deny or revoke a medical exemption.

- c) **Notification.** If a medical exemption is denied or revoked, DPH must notify the issuing physician, school or institution and the LHO where the school is located of this denial or revocation;
- d) **Conditional Admission.** Consistent with existing regulations, if a medical exemption is denied or revoked, a child must comply with the conditional admission schedule for immunizations and continued attendance requirements specified in existing regulations;
- e) **Prohibition on issuing medical exemptions for two years.** This bill prohibits DPH from accepting medical exemptions from physicians under one or both of the following circumstances:
 - i) If DPH determines that a physician poses a risk to the public's health in one or more communities until the physician demonstrates to DPH that the risk no longer exist, but in no event should DPH accept medical exemptions from this physician and surgeon for at least two years; and,
 - ii) If there is a pending accusation against a physician with the MBC or OMB relating to immunization standards of care until the accusation is resolved in favor of the physician.
- f) **Appeals.** This bill permits a medical exemption denied or revoked, as specified, to be appealed by a parent or guardian to the Secretary CHHS. Allows parents or guardians to provide necessary information to the independent expert review panel for purposes of the appeal. The appeals process is as follows:
 - i) The CHHS Secretary is required to appoint an independent panel of experts to hear the appeal. The panel must consist of three clinically licensed physicians that are PCPs or immunization experts. CHHS must establish requirements, including conflict of interest standards that the three panelist must meet in order to qualify for an appointment to the panel;

- ii) The independent review panel is required to evaluate appeals consistent with CDC/ACIP guidelines and the relevant standard of care as applicable;
 - iii) The independent expert review panel will submit its findings and recommendations to the CHHS Secretary; and,
 - iv) The CHHS Secretary's final decision will be consistent with the findings of the independent expert review panel and is not subject to further administrative review.
- g) Medical exemptions issued before January 1, 2021.** This bill requires parents and guardians with medical exemptions issued prior to the creation of the standardized medical exemption certification form to submit their existing medical exemptions to DPH to be included in CAIR. This bill does not require DPH to review medical exemptions obtained prior to January 1, 2021, however, it does permit review of these medical exemptions.
- h) Public Health.** This bill permits DPH to review any exemption in CAIR as necessary to protect public health.
- 4) SUPPORT.** According to one of the sponsors of this bill, the California Medical Association (CMA), high levels of immunization are necessary to, through a process called "community immunity," protect those who are unable to be immunized against vaccine-preventable illness. Given the highly contagious nature of diseases such as measles, vaccination rates of up to 95% are necessary. CMA states that since the passage of SB 277, the use of medical exemptions has more than tripled, putting many communities below the required protective immunization level.

The AAP, a cosponsor of this bill, states that this bill would create a partnership between state public health, schools and doctors to help keep children safe at school and to protect vulnerable community members, including babies too young to be immunized and people who are immunocompromised, from the risks associated with contracting these diseases. It would also protect the community at large from outbreaks of vaccine-preventable disease.

- 5) OPPOSITION.** According to the National Vaccine Information Center (NVIC), it is inappropriate for DPH, a state agency, to be given legal authority to hijack the private patient physician relationship by being placed in the position to reject doctor issued medical vaccine exemptions. Confining vaccine exemptions to narrow and incomplete CDC guidelines hurts children. NVIC states that forcing physicians to violate their professional judgment and their conscience is a form of state-sponsored tyranny that should not be part of public health law in any state.

Advocates for Physicians' Rights (APR), another organization opposed to this bill states that the CDC guidelines generally do not recognize family health history of allergic reactions or side effects as a valid reason upon which to base a medical exemption (and the only time they do recognize such is for altered immuno-incompetence in relation to MMR and Varicella). APR concludes that this runs counter to long-accepted medical standards of care, which recognize family history as a strong predictor of medical outcomes, and will negate physicians' clinical judgment regarding statistically-likely harm to members of a family that share the same gene pool.

6) PREVIOUS LEGISLATION.

- a) SB 277 eliminated the personal belief exemption from the requirement that children receive vaccines for certain infectious diseases prior to being admitted to any public or private elementary or secondary school or day care center.
- b) SB 2109 (Pan), Chapter 821, Statutes of 2012, requires a separate form prescribed by DPH to accompany a letter or affidavit to exempt a child from immunization requirements under existing law on the basis that an immunization is contrary to beliefs of the child's parent or guardian.
- c) AB 2064 (V. Manuel Pérez) of 2012, would have required a health care service plan or health insurer that provides coverage for childhood and adolescent immunizations to reimburse a physician or physician group in an amount not less than the actual cost of acquiring the vaccine plus the cost of administration of the vaccine. AB 2064 was held in the Assembly Appropriations Committee on the suspense file.
- d) SB 614 (Kehoe), Chapter 123, Statutes of 2011, allowed a pupil in grades seven through 12, to conditionally attend school for up to 30 calendar days beyond the pupil's first day of attendance for the 2011-12 school year, if that pupil has not been fully immunized with all pertussis boosters appropriate for the pupil's age if specified conditions are met.
- e) AB 354 (Arambula), Chapter 434, Statutes of 2010, allows DPH to update vaccination requirements for children entering schools and child care facilities and adds the American Academy of Family Physicians to the list of entities whose recommendations DPH must consider when updating the list of required vaccinations. Required children entering grades 7 through 12 receive a TDaP booster prior to admittance to school.
- f) AB 1201 (V. Manuel Pérez) of 2009, would have required a health care service plan or health insurer that provides coverage for childhood and adolescent immunizations to reimburse a physician or physician group the entire cost of acquiring and administering the vaccine, and prohibits a health plan or insurer from requiring cost-sharing for immunizations. AB 1202 was held on the Assembly Appropriations Committee suspense file.
- g) SB 1179 (Aanestad) of 2008, would have deleted DPH's authority to add diseases to the list of those requiring immunizations prior to entry to any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center. SB 1179 died in the Senate Health Committee.
- h) AB 2580 (Arambula) of 2008, would have required pupils entering the seventh grade to be fully immunized against pertussis by receiving any necessary adolescent booster immunization. AB 2580 was held on the Senate Appropriations Committee suspense file.
- i) SB 676 (Ridley-Thomas) of 2007, would have required pupils entering the seventh grade to be fully immunized against pertussis. SB 676 was held on suspense in Assembly Appropriations Committee.

- j) SB 533 (Yee) of 2007, would have added pneumococcus to the list of diseases that pupils are required to be immunized against before entry into any private or public elementary or secondary school, child care center, day nursery, nursery school, family day care home, or development center, except for children who are 24 months of age or older. SB 533 was vetoed by the Governor.
- k) SB 574 (Wolk), Chapter 329, Statutes of 2005, authorized the creation of an immunization information system, a system that is currently known as the California Immunization Registry that is overseen by DPH.

7) PROPOSED AMENDMENTS. The Committee recommends the following amendments:

- a) Clarify that if the issuing physician is not the child's PCP, the issuing physician must also provide an explanation on why the issuing physician and not the PCP is filling out the medical exemption form.
- b) Require the form to include how long the physician has been treating the child.
- c) Clarify attendance requirements for students whose medical exemptions are revoked or whose medical exemption is pending appeal.
- d) Clarify the limitation on charging for examination related to temporary medical exemption.
- e) Clarify the requirement for DPH to notify the MBC or OMB when a physician submits five or more medical exemptions forms in a school year that are revoked.
- f) Delete the authorization for the LHO to determine if a medical exemption granted prior to January 1, 2021 is fraudulent or inconsistent with CDC criteria, as specified, and instead require DPH to review medical forms submitted prior to January 1, 2021 if: the school or institution has 95% overall immunization rate, or the physician has submitted five or more medical exemptions in a calendar year.
- g) Require DPH to clearly establish and communicate the process for the review of medical exemptions conducted under this bill.
- h) Require DPH to review school or institutions that do not submit immunization reports or medical exemption forms to DPH.
- i) Require DPH to also notify the parent or guardian if a medical exemption is revoked.
- j) Require the DHHS to establish process and guidelines for the appeal process.
- k) Clarify that the physicians who serve on the independent expert review panel have relevant knowledge, training or experience relating to primary care or immunization.
- l) Makes other, technical and conforming changes.

REGISTERED SUPPORT / OPPOSITION:

Support

California Medical Association (cosponsor)
American Academy of Pediatrics, California (cosponsor)
Vaccinate California (cosponsor)
AIDS Healthcare Foundation
American College of Physicians - California Chapter
California Academy of Eye Physicians & Surgeons
California Academy of Family Physicians
California Academy of Pain Medicine
California Academy of Preventive Medicine
California Association of Hospitals and Health Systems
California Chapter American College of Cardiology
California Children's Hospital Association
California Hospital Association
California Life Sciences Association
California Medical Association
California Optometric Association
California Orthopedic Association
California School Nurses Organization
California Society for Allergy, Asthma and Immunology
California Society of Health System Pharmacists
California Society of Physical Medicine and Rehabilitation
California State Association of Counties
California State PTA
Children Now
Children's Defense Fund-California
Children's Specialty Care Coalition
County Health Executives Association of California
County of Los Angeles Board Of Supervisors
County of Marin
County of Santa Clara
Donate Life California
Health Officers Association of California
Infectious Disease Association of California
Kaiser Permanente
LA Care Health Plan
March of Dimes
Parent's For Choice
Sonoma County Health Action Committee for Healthcare Improvement
Sutter Health
Vaccinate California

Opposition

A Voice For Choice Advocacy
Advocates For Physicians' Rights

Alliance For Natural Health USA
Amy's Chocolate
Animal Wellness & Veterinary Pain Management, Inc.
Association of American Physicians And Surgeons
Autism International Association, Inc
Breathe Bodyworks Holistic Healing Network
California Health Coalition Advocacy
California Right To Life Committee, Inc.
Californians for Trusted Healthcare
Children's Health Coalition
Concerned Physicians Opposed to SB 276
Drjockers.Com
Eagle Forum of California
Educate.Advocate
Families For Early Autism Treatment
Matrix Mothers
Moms Across America
National Health Freedom Action
National Vaccine Information Center
Orange County Health Choice
Parentalrights.Org
Parents United 4 Kids
Physicians Association For Anthroposophical Medicine
Physicians for Informed Consent
Progressives for Choice
Raphael Medicine & Therapies Pc
SCV For Parental Rights
U Turn For Christ
Vaccine-Injury Awareness League
West Coast Elite Dance
West Virginians For Health Freedom
Numerous Individuals

Analysis Prepared by: Marissa Kraynak, Ph.D. / HEALTH / (916) 319-2097

EXHIBIT 16

2019-2020 Kindergarten Immunization Assessment – Executive Summary California Department of Public Health, Immunization Branch

Immunization requirements for school entry help protect children and communities from vaccine-preventable diseases. Each autumn California schools are required to report to the California Department of Public Health (CDPH) the status of their students under state immunization requirement laws. In recent years there have been changes to these laws and how public health departments assist schools to implement them. To reflect longstanding national recommendations, starting in 2019 students entering kindergarten in California have been required to receive two rather than one dose of Varicella (chickenpox) vaccine. In 2014 and 2015 Assembly Bill (AB) 2109 added requirements for exemptions to required immunizations based on personal beliefs. 2019-2020 is the fourth full school year that entrants have been subject to Senate Bill (SB) 277, which no longer permits them to receive such personal beliefs exemptions (PBEs).

Reported immunization rates remain at high levels but have decreased in the last few years. The proportion of students attending kindergarten in 2019-2020 reported to have received all required vaccines is 94.3%, a 0.5 percentage point decrease from the 2018-2019 school year, a 0.8 percentage point decrease from the 2017-2018 school year, and a 4.1 percentage point increase over six years since 2013-2014.

The decrease in the combined rate reflects observance of the new requirement for a second dose of Varicella vaccine, for which 96.0% were reported as having completed in 2019-2020. In comparison, 97.9% in 2018-2019 were reported as having received the prior standard of at least one dose of vaccine or having had a history of chickenpox disease.

Compared to 2018-2019, completion rates for other specific immunization series were unchanged for Polio, Hepatitis B, and Measles, Mumps and Rubella (MMR) vaccine and increased 0.1 percentage points for Diphtheria, Tetanus and Pertussis (DTP) vaccine. In 2019-2020 and 2018-2019, 17 (29%) counties reported fewer than 95% of their kindergarteners as having had two doses of MMR vaccine, compared to 14 (24%) counties in 2016-2017 and 31 (53%) counties in 2015-2016.

Compared to 2018-2019, in 2019-2020, the proportion of kindergartners reported as:

- Being overdue for required immunizations increased from 1.1% to 1.5%.
- Lacking immunizations for other reasons specified under SB 277 increased from 1.5% to 1.6%, with 1.3% reported as being enrolled in independent study programs.
- Having permanent medical exemptions increased from 0.9% to 1.0%.
- Conditional entrants remained unchanged at 1.7% in both 2018-2019 and 2019-2020 school years, a 5.2 percentage point decrease over the five years since 2014-2015.
- PBEs remained unchanged at 0.0%, reflecting their cessation under SB 277. Previously during measures specified in AB 2109, the rate of PBEs had decreased from 3.2% in 2013-2014 to 2.4% in 2015-2016.

CDPH and local health departments in California continue to closely monitor immunization coverage and to support schools in protecting the health of their students and communities.

2019-2020 Kindergarten Immunization Assessment – Technical Notes

Introduction

Each autumn all schools with kindergartens in California are required to report student compliance with California School Immunization Laws (California Health and Safety Code Sections 120325-120375). This report summarizes data for the 2019-2020 school year reported by public and private kindergartens statewide (Table 1, Figures 1-8) and by county (Tables 2-11).

To reflect longstanding national recommendations, starting in 2019 changes to the [California Code of Regulations](#) have required students entering kindergarten in California to receive two rather than one dose of Varicella (chickenpox) vaccine.

In the 2014-2015 and 2015-2016 school years, entrants were subject to [Assembly Bill \(AB\) 2109](#), which added requirements for exemptions to required immunizations based on personal beliefs. 2019-2020 is the fourth full school year that entrants have been subject to [Senate Bill \(SB\) 277](#), which no longer permits them to receive such personal beliefs exemptions (PBEs).

Starting in the 2015-2016 school year, many public health departments in California have worked with schools to improve their application of the [Conditional Admission Immunization Schedule](#) for the conditional admission of eligible students.

Methods

During the autumn of 2019, California schools registered with the California Department of Education reported data on kindergarteners in the 2019-2020 school year to the California Department of Public Health (CDPH). Based on their immunization status, students were classified by school staff into the following categories:

- Received all required immunizations, including the following doses:
 - 5 or more of Diphtheria, Tetanus and Pertussis (DTP) vaccine (4 doses are acceptable if at least 1 dose was received on or after the fourth birthday): ['4+DTP'];
 - 3 or more of Polio vaccine (3 doses are acceptable if at least 1 dose was received on or after the fourth birthday): ['3+ Polio'];
 - 2 or more of Measles-containing and Mumps-containing vaccines received on or after the first birthday, and 1 or more of Rubella vaccine, typically combined as Measles, Mumps and Rubella (MMR) vaccine: ['2+ MMR']. Through 2018-2019, the requirement was for one rather two doses of Mumps-containing vaccine but was no different for Measles and Rubella vaccine;
 - 3 or more of Hepatitis B (Hep B) vaccine: ['3+ Hep B'], and
 - 2 or more of Varicella (Var): ['2+ Var']. In contrast, from 2000-2001 through 2018-2019, the requirement was for 1 or more doses of Varicella vaccine or a history documented by a physician of having had chickenpox disease. History of disease is currently requested to be reported as a permanent medical exemption.
- Conditional entrants who had:
 - Not received all required doses but were not overdue for required doses, or
 - A temporary medical exemption to one or more required immunizations.
 Conditional entrants are required to receive additional doses after entry.

- Have a permanent medical exemption (PME) to one or more required immunizations.
- Other students lacking immunizations. Under SB 277, entrants since the 2016-2017 school year have not been required to have immunizations if they attend:
 - A home-based private school or
 - A public independent study program and do not receive classroom-based instruction.
 - In addition, students who have an individualized education program (IEP) may continue to receive all necessary services identified in their IEP regardless of their immunization status.

Students in these settings were classified in this category if they lacked required immunizations and did not meet the criteria for other categories.

- Children overdue for one or more required immunizations and subject to exclusion from school until the overdue requirements have been met.

Under SB 277, since the 2016-2017 school year personal beliefs exemptions (PBEs) have no longer been an option for children entering kindergarten.

To simplify reporting, in 2015-2016 and earlier school years any immunizations received by children with PBEs or PMEs were not reported in the completion rates of each specific required immunization series (e.g., 4+ DTP, 2+ MMR, etc.). To improve accuracy, CDPH has requested schools to include these doses when reporting completion rates of specific immunizations since the 2016-2017 school year.

Due to rounding, figures may differ from the sums of their components. Differences were calculated between exact figures, varying at times by 0.1% from the differences between rounded figures.

Results

The number of kindergarteners in California whose immunization status was reported decreased from 555,735 in 2018-2019 to 554,250 in the 2019-2020 school year (Table 1). This is consistent with [recent statewide declines in school enrollment](#), as the number of schools that reported increased marginally from 7,964 in 2018-2019 to 8,000 in 2019-2020, and the number of schools that did not report decreased from 236 to 133 (Tables 1 and 2). Private schools account for 8% (43,146 / 554,250) of all kindergarteners about whom data was reported in 2019-2020, 24% (1,891 / 8,000) of all schools that reported data on kindergarteners and 89% (118 / 133) of schools that did not report.

Figures 1-5 show trends for students in public and private schools reported as having: received all required immunizations; entered conditionally; PMEs; PBEs; and completed specific immunization series. Figures 6-8 display for recent school years the distribution of major reporting categories for students reported from: all schools; public schools; and private schools.

All required immunizations: Of 554,250 kindergarteners whose schools reported their status, 522,581 (94.3%) had received all required immunizations, a decrease from the previous school year of 0.5 percentage points (Tables 1 and 5) and an increase over the six school years since 2013-2014 of 4.1 percentage points (Figures 1 and 6). For counties reporting at least 25 students, the highest rates, at least 97.0%, are reported in Monterey, Inyo, and Del Norte (Tables 3-5).

In 2019-2020, 11 (19%) of 58 counties in California have rates of kindergarteners with all required vaccines that are below 90%, compared with nine (16%) in 2018-2019 (Tables 4 and 5, Figure 9). The rate in some of these counties is influenced by online or virtual schools that are based in the county but that may enroll children who reside in other counties (Box); many students in virtual schools qualify for exemptions from requirements under SB 277 (see Methods and below).

% of Pupils Receiving All Required Immunizations				For Schools Based in County, % of Pupils Reported as Enrolled in Virtual Schools*
County	All Schools Based in County	Classroom-Based Schools	Virtual Schools*	
El Dorado	79.7%	92.7%	24.5%	19.2%
Sutter	85.3%	96.1%	33.0%	17.1%
Glenn	86.1%	96.8%	22.9%	14.4%
Kern	88.6%	96.1%	23.3%	10.3%

* Virtual schools are based in the specified county but may enroll children who reside in other counties.

As in past years, a higher proportion of students in public compared to private schools were reported as having had all required immunizations (94.4% vs. 92.4%; difference of 2.0 percentage points) (Table 1, Figures 7 and 8). However, this gap is smaller by 0.1 percentage points than it was in 2018-2019, as there was a one-year decrease of 0.5 percentage points for students in public schools and 0.4 percentage points for those in private schools.

Specific immunization series: Completion rates for specific immunization series varied between 96.0% for Varicella vaccine and 97.4% for Hepatitis B vaccine (Tables 1 and 11, Figure 5).

2019-2020 is the first school year that two or more doses of Varicella vaccine have been required for kindergarteners in California. 96.0% were reported as having completed a two-dose series in 2019-2020, whereas 97.9% in 2018-2019 were reported as having received at least one dose of vaccine or having had a history of chickenpox disease. (Data from 2019-2020 on receipt of at least one dose of Varicella vaccine or from prior years on receipt of two doses are not available.) History of chickenpox disease, which as a result of widespread immunization is now infrequent and often more difficult to diagnose, has since 2019-2020 been requested to be reported as a permanent medical exemption to immunization.

Rates in 2019-2020 remained the same for Polio, MMR, and Hep B vaccines and increased 0.1 percentage points for DTP vaccine. Rates for receipt remain higher in public schools; for MMR, 96.7% of students at public schools and 94.7% at private schools are reported as having received two doses, a decrease from 2018-2019 respectively of 0.0 percentage points and 0.3 percentage points, and an increase compared to 2015-2016 respectively of 1.8 percentage points and 4.2 percentage points. In both 2019-2020 and 2018-2019, 17 (29%) counties reported fewer than 95% of their kindergarteners as having had two doses of MMR (Table 11, Figure 10), compared to 16 (28%) counties in 2017-2018, 14 (24%) counties in 2016-2017 and 31 (53%) counties in 2015-2016.

Conditional entrants: Over the last five school years, the proportion of students reported as conditional entrants has decreased from 6.9% in 2014-2015 to 1.7% in 2019-2020 (Table 1, Figures 2 and 6). Compared to the 2018-2019 school year, the proportion of conditional entrants

in 2019-2020 remained the same in all schools and public schools while decreasing in private schools by 0.6 percentage points (Table 1). Of the 1.7% (9,188) of all students reported as conditional entrants in 2019-2020, 0.2% (1,097) were reported as having had a temporary medical exemption, a 0.1 percentage point decrease from 2018-2019.

PMEs: The percentage of students with PMEs increased from 0.9% in 2018-2019 to 1.0% in 2019-2020 (Tables 1 and 7, Figure 3). In public schools, the number of students reported with PMEs increased from 3,805 (0.7%) to 4,179 (0.8%) (Figure 7), while for private schools, the number of students increased from 1,007 (2.4%) to 1,089 (2.5%) (Figure 8).

Other students lacking required immunizations: The proportion of kindergarteners reported to be lacking one or more required immunizations and to attend an independent study program and do not receive classroom-based instruction, attend a home-based private school, or receive services in an IEP (Tables 1, 8 and 9) increased from 1.5% (8,318) in 2018-2019 to 1.6% (8,986) in 2019-2020. Children reported as being enrolled in public independent study programs accounted for most students in this category (1.3% or 7,018) (Table 9), and for most of the increase compared to the previous year (0.10 of the 0.14 percentage point increase). The percentage increase of enrollment in independent study is 10.9% (63 students) in Glenn County. Some of these students are enrolled in virtual schools and reside in other counties.

Overdue: The percentage of students reported as being overdue for one or more immunizations (Tables 1 and 3) increased from 1.1% in 2018-2019 to 1.5% in 2019-2020 (Table 1, Figure 6). In public schools the number of students reported as overdue increased from 5,448 (1.1%) to 7,215 (1.4%) (Figure 7). For private schools the number of students reported as overdue increased from 635 (1.5%) to 1,012 (2.3%) (Figure 8).

PBEs: With the option of PBEs no longer available to new entrants under SB 277, the percentage of kindergarteners with PBEs remains unchanged at 0.0% since 2017-2018, compared to 2.4% in 2015-2016 and 3.2% in 2013-2014 (Figures 4 and 6, Table 8).

Combined categories: Kindergarteners who are required to receive all mandated vaccines are reported in three categories: having received all required vaccines; conditional entrants; and being overdue for required doses. The kindergarteners who were reported in the sum of these three categories decreased by 0.2% percentage points from 97.6% in 2018-2019 to 97.4% in 2019-2020.

Conversely the sum of kindergarteners reported as not having to receive all required immunizations in elementary school because of PMEs; PBEs; or for other criteria specified in SB 277, increased by 0.2 percentage points from 2.4% in 2018-2019 to 2.6% in 2019-2020; the combined rate for public schools increased from 2.3% to 2.5% and for private schools increased from 2.8% to 2.9%. Over time the combined rate has been 3.3% in 2013-2014, 2.5% in 2015-2016, 1.5% in 2016-2017, and 2.6% in 2019-2020.

Discussion

The numbers of kindergarteners (554,250) and public schools (6,109) whose status was reported in 2019-2020 remain at amongst the highest levels since the 2001-2002 school year, when Varicella vaccine became the most recent addition to the immunizations required for kindergarteners.

Reported immunization rates remain at high levels but have decreased over the last three school years. Compared to 2018-2019, the proportion of students reported to enter kindergarten in California in 2019-2020 after receiving all required immunizations decreased by 0.5 percentage points to 94.3%, following an increase by 5.2 percentage points to 95.6% between the two school years from 2014-2015 to 2016-2017.

The decrease in the combined rate reflects observance of the new requirement for a second dose of Varicella vaccine, for which 96.0% were reported as having completed in 2019-2020. In comparison, 97.9% in 2018-2019 were reported as having received the prior standard of at least one dose of vaccine or having had a history of chickenpox disease; in contrast to Varicella vaccine, rates for the other required vaccines were stable. The 0.5 percentage point decrease in the rate of all required vaccines is similar in magnitude to the 0.4 percentage point increase in kindergarteners reported as overdue for one or more required immunizations, suggesting that many overdue students had not received their second dose of Varicella vaccine by the beginning of the school year. CDPH will closely monitor these trends to see whether additional experience and support with the increased Varicella vaccine requirement will help schools reduce the number of overdue students.

The proportion of children reported in other categories of exemptions increased in 2019-2020, as 1.6% lacked required immunizations under other criteria introduced in SB 277. Most of these children were reported as being enrolled in independent study programs, representing an increase of 0.1 percentage points from 2018-2019. Another 1.0% were reported as having PME, an increase of 0.1% from 2018-2019. In sum, 2.6% of entrants were reported as not having had required immunizations because of PME, PBE, or other criteria related to SB 277, compared to 2.4% in 2018-2019. Over the recent period of multiple changes in policies and laws in California; the combined rate has been 3.3% in 2013-2014, 2.6% in 2015-2016, 1.5% in 2016-2017, and 2.6% in 2019-2020. Future assessments will continue to monitor these categories.

The proportion of conditional entrants in 2019-2020 remained unchanged since 2018-2019 after a decrease of 5.1 percentage points in the three school years between 2014-2015 and 2017-2018. The current reported rate of conditional entrants, 1.5%, remains the lowest reported since the 2001-2002 school year. Measures to support schools on the proper use of conditional admission criteria have been described in previous reports.

It is possible that children who in previous school years would have been inaccurately categorized as conditional entrants represent some of the 1.5% of entrants reported as overdue in 2019-2020. Continued efforts to educate schools and support immunization services might further reduce the number of children who in future years are categorized either as conditional entrants or overdue; in sum these categories account for 3.1% of kindergarteners reported in 2019-2020, compared to 2.8% reported in 2018-2019.

Children in schools and communities with lower immunization rates remain at higher risk of contracting and transmitting vaccine preventable diseases. In 2019-2020, 11 (19%) of 58 counties in California have had rates of kindergarteners with all required vaccines that are below 90% (Figure 9). 17 (29%) counties, compared to 14 (24%) in 2016-2017 and 31 (53%) in 2015-2016, report fewer than 95% of their kindergarteners as having had two doses of MMR (Table 11, Figure 10), an approximate threshold necessary to prevent the transmission of measles. In addition, recent changes to California's school immunization laws did not apply to earlier cohorts of children who are no longer of school age. Unimmunized older children and adults were amongst those who caught measles during recent outbreaks in California. For these individuals,

decisions that were made in previous decades to not immunize have had lingering consequences for themselves and their communities.

Limitations

This report is subject to limitations that include:

- 133 California elementary schools, including 118 private schools and 15 public schools, did not report their immunization data; in the absence of reporting, CDPH does not know how many of them enrolled kindergarteners this year or the immunization status of their kindergarteners.
- As in previous years, private home schools that did not register with the California Department of Education may not have reported data to CDPH, which would result in continued underestimates of their enrollment.
- Nineteen schools, including at least two virtual schools, that registered with the California Department of Education as being public schools, and which appear to enroll both public and private students, reported 161 students as attending home-based private schools. In this report these students are classified as attending public schools. Any misclassification of enrollment between public and private schools, or between independent study and home-based private schools, has not affected the total of students in the category of other students lacking immunization, but has affected its subcategories.
- Part of the relative improvements in the completion rates of specific immunization series starting in the 2016-2017 school year may have been due to the inclusion in reporting of doses received by partially immunized children who had PBEs or PME to other required immunizations. In reporting to CDPH during prior school years, doses received by children with exemptions were not included in completion rates for any specific vaccine. This may have resulted in underestimates of completion rates for specific vaccines in prior years and overestimates of their increases between recent and prior years. The magnitude of the resultant increase to the rate of any immunization series in 2019-2020 resulting from this change in reporting could be no greater than 2.6%, the total of students reported in categories as not having to receive all required immunizations (PMEs or other criteria specified in SB 277). This reporting change should not have affected rates, or changes in rates, for the category of having received all required vaccines.
- The timing of immunization is often not included in the assessment criteria; if doses were given at inappropriate ages or intervals, the reported rates may overestimate levels of immunity.
- It is possible that some immunization records provided to schools have been incomplete. The presence of incomplete records would underestimate immunization coverage. Any improvements over time in completion of records since the time of reporting would increase estimates of coverage.
- Changes over time in the quality of reporting by schools are another potential explanation for changes in immunization rates.

For further information, please contact CDPH Immunization Branch at SchoolAssessments@cdph.ca.gov.

For media inquiries, please contact CDPH Office of Public Affairs via e-mail cdphpress@cdph.ca.gov or phone 916-440-7259.

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Table 11. Number and Percentage of Students with Required Immunizations by Vaccine Series, by County

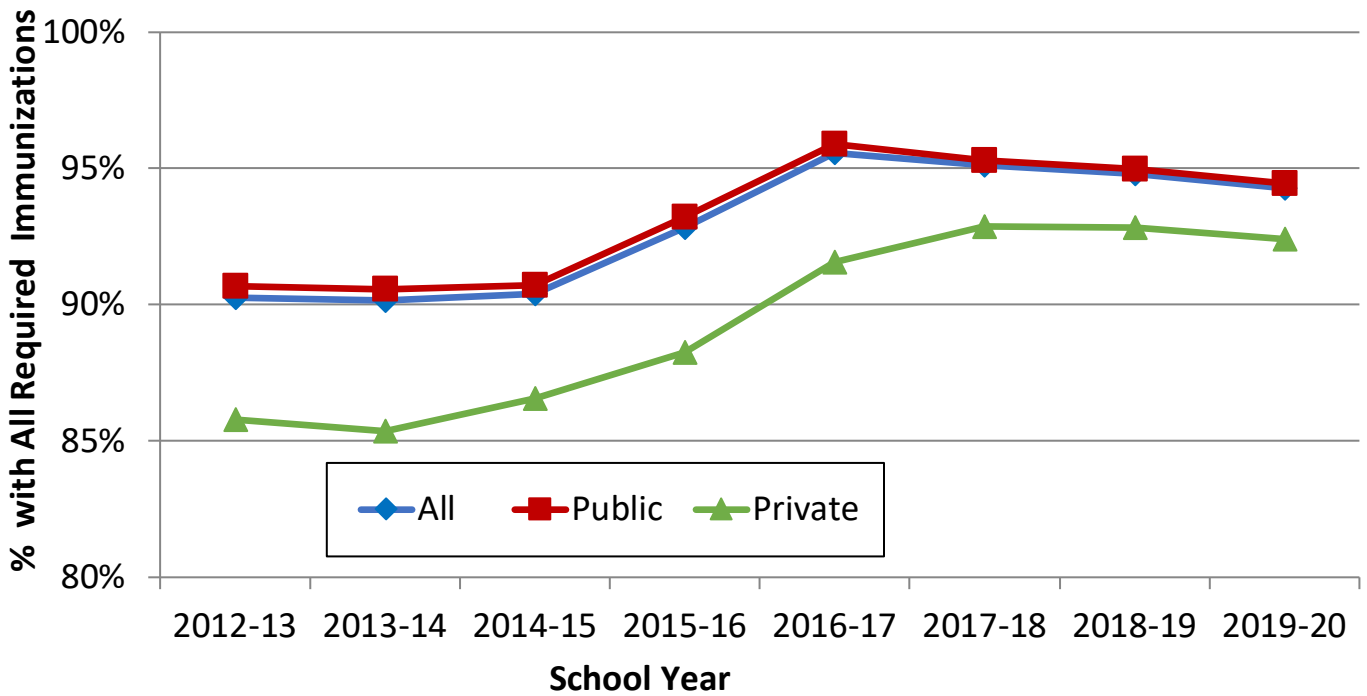


Figure 1. Percentage of Kindergarten Students with All Required Immunizations, by School Type and School Year, 2012-2013 to 2019-2020

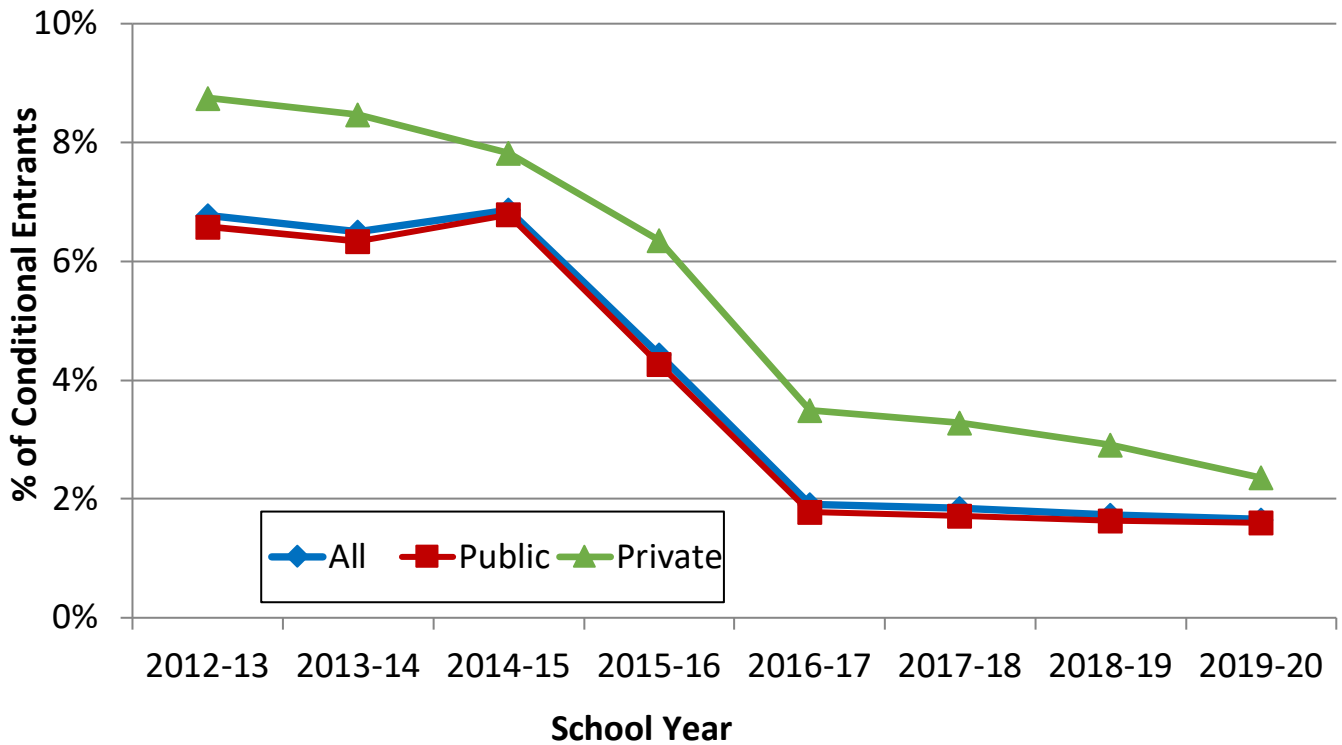


Figure 2. Percentage of Conditional Entrants into Kindergarten, by School Type and School Year, 2012-2013 to 2019-2020

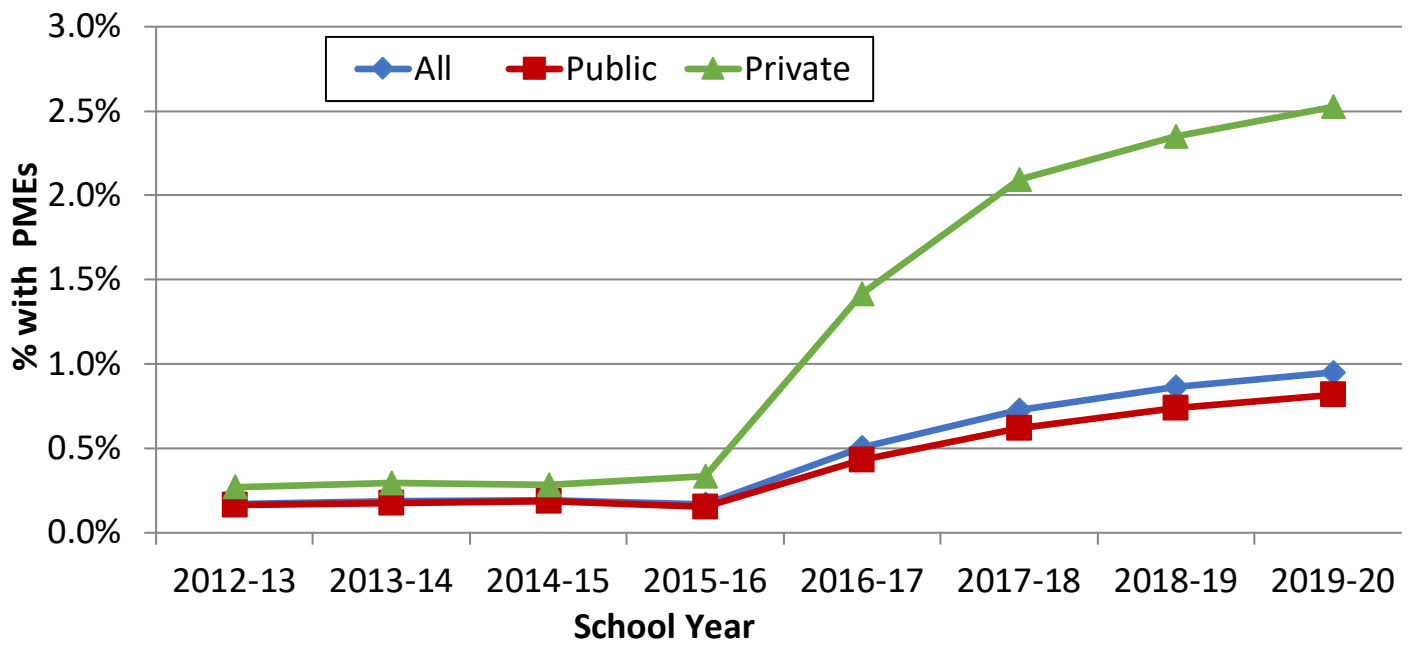


Figure 3. Percentage of Kindergarten Students with Permanent Medical Exemptions (PMEs), by School Type and School Year, 2012-2013 to 2019-2020

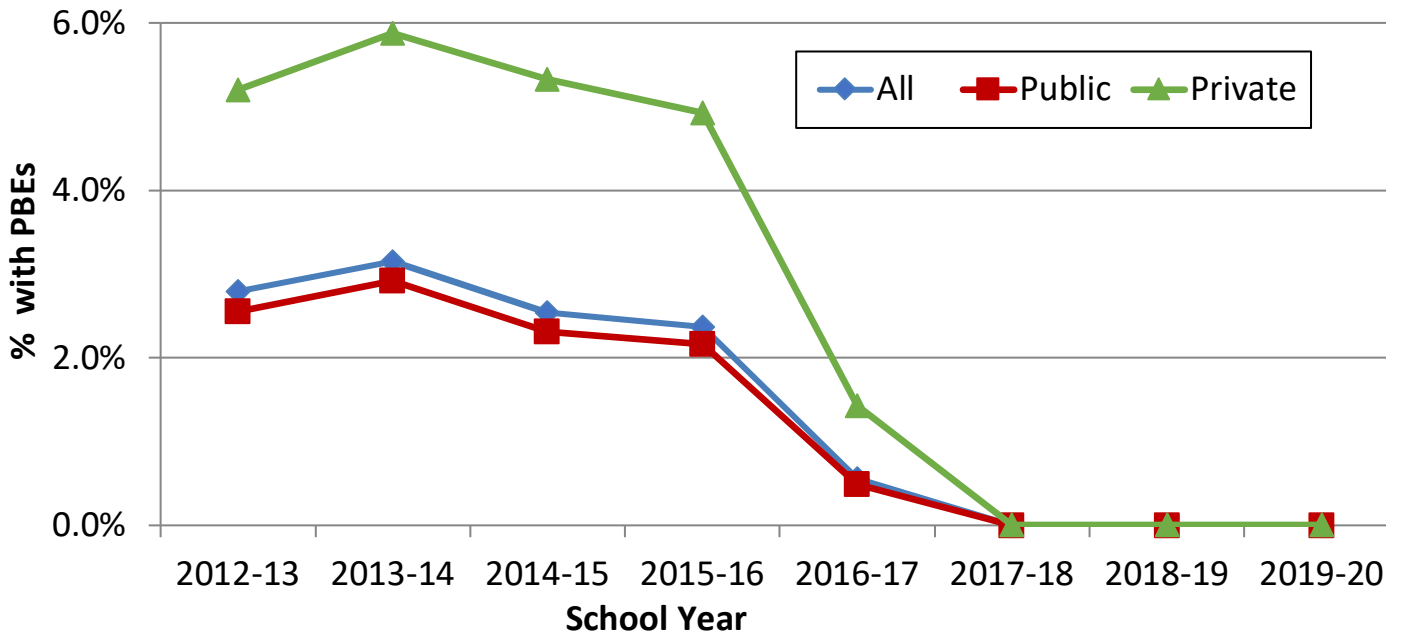
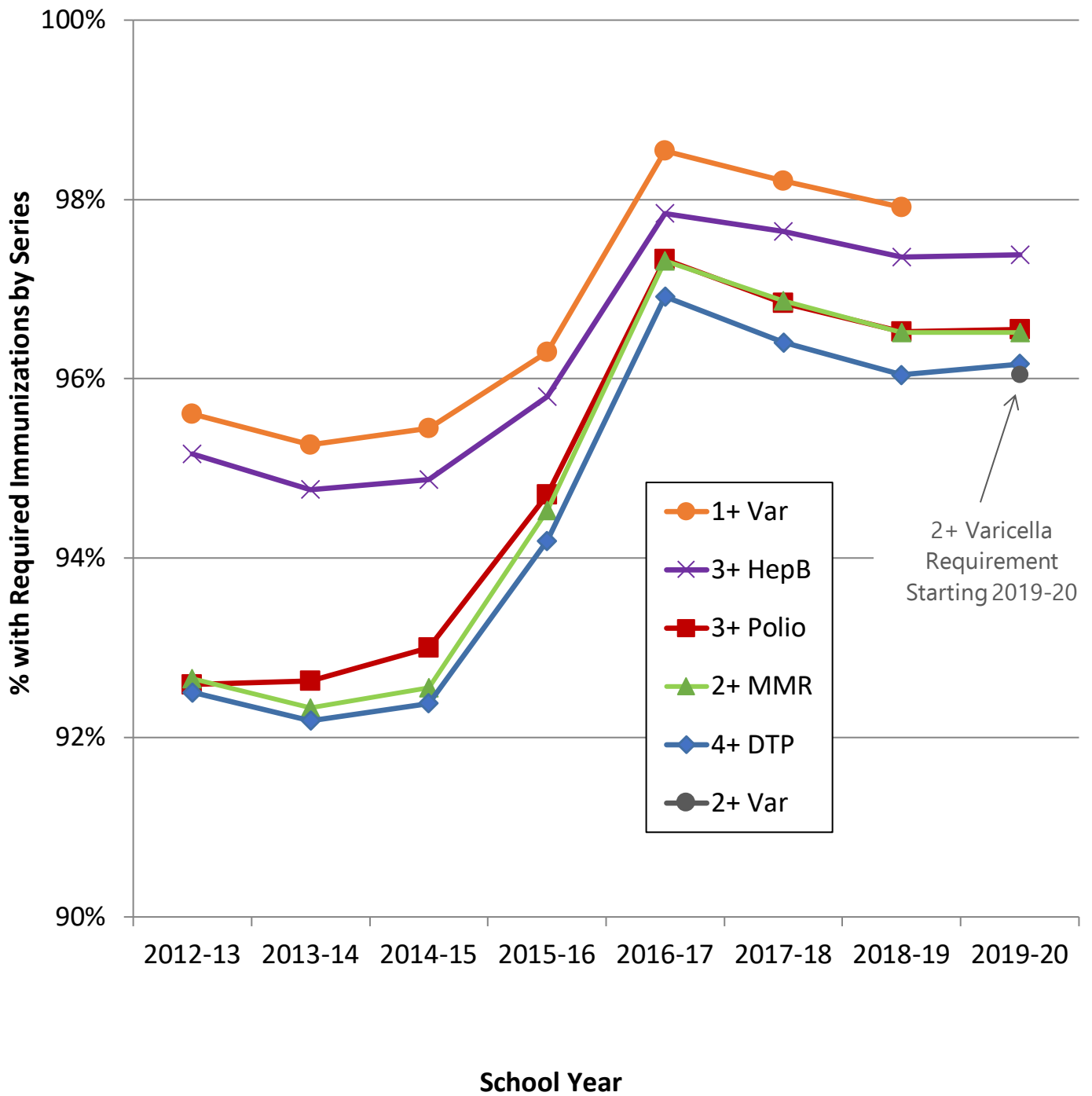
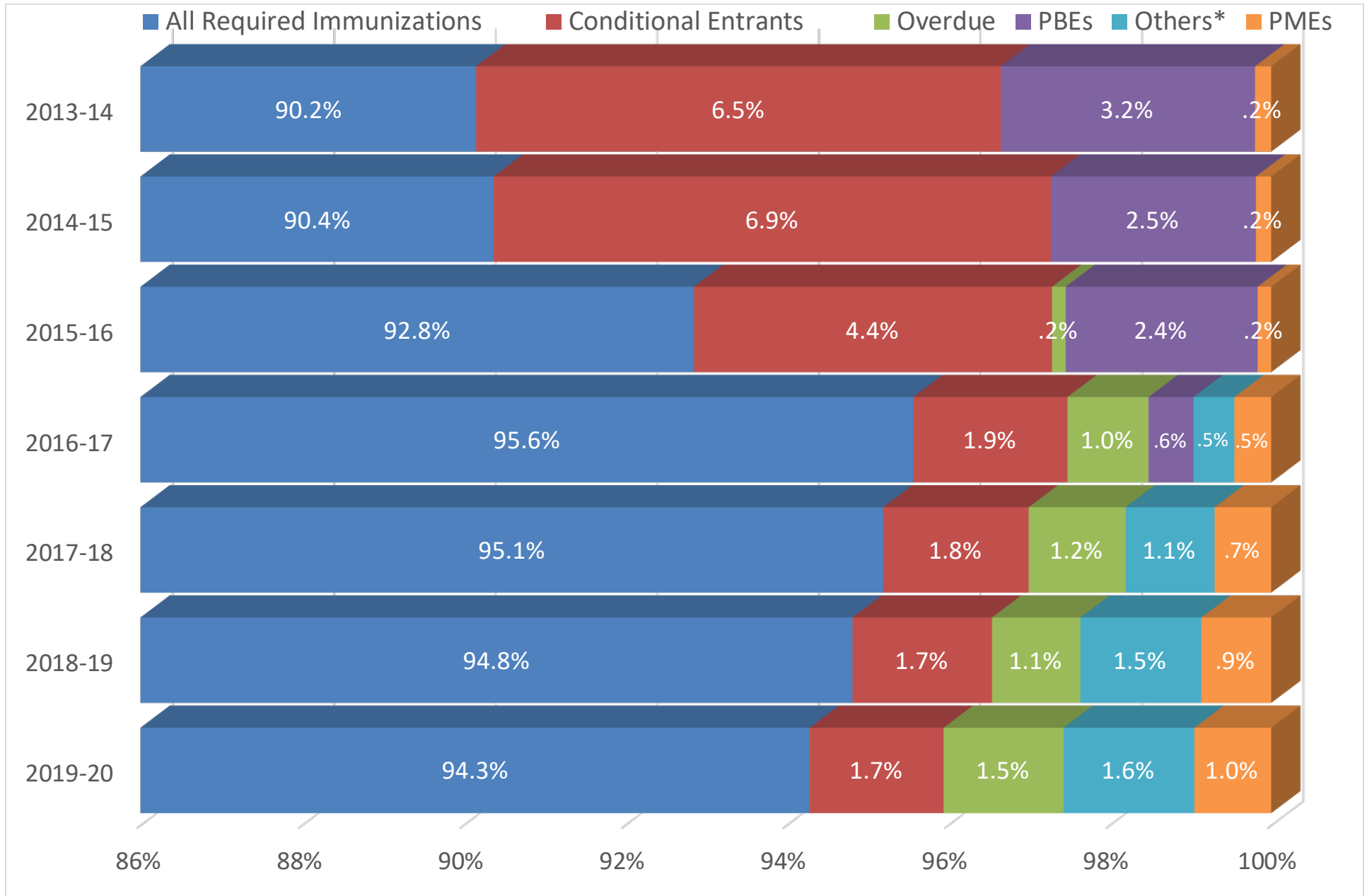


Figure 4. Percentage of Kindergarten Students with Personal Belief Exemptions (PBEs), by School Type and School Year, 2012-2013 to 2019-2020



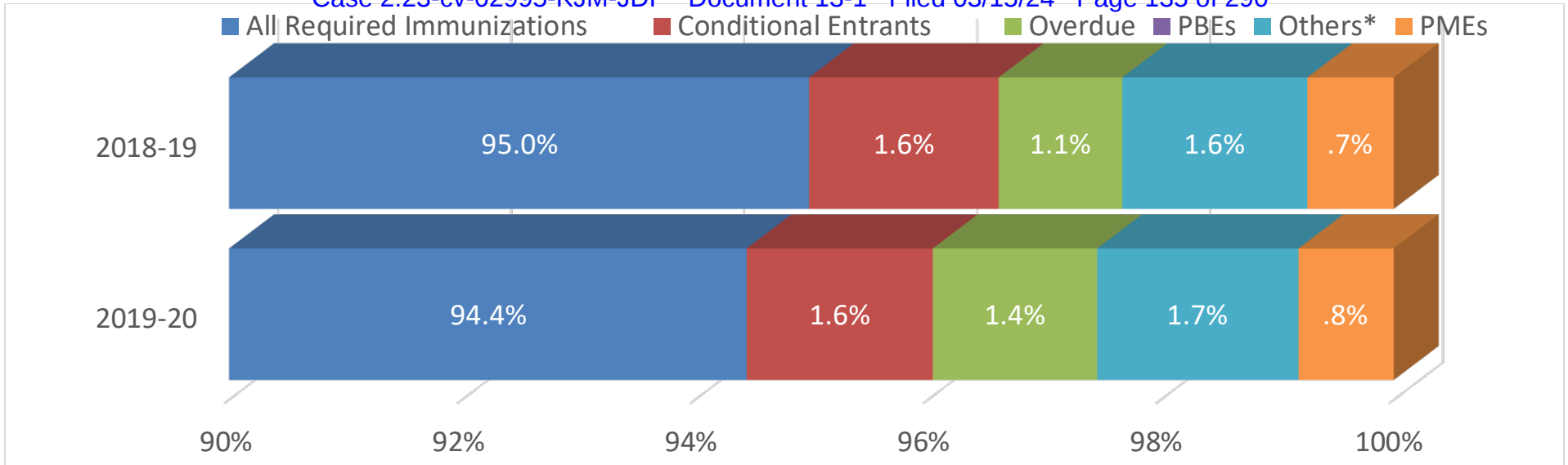
*One or more doses of varicella required through the 2018-2019 school year. Two or more doses of varicella required for the 2019-20 school year and forward.

Figure 5. Percentage of Kindergarten Students with Specific Required Immunizations by Series and School Year, 2012-2013 to 2019-2020.



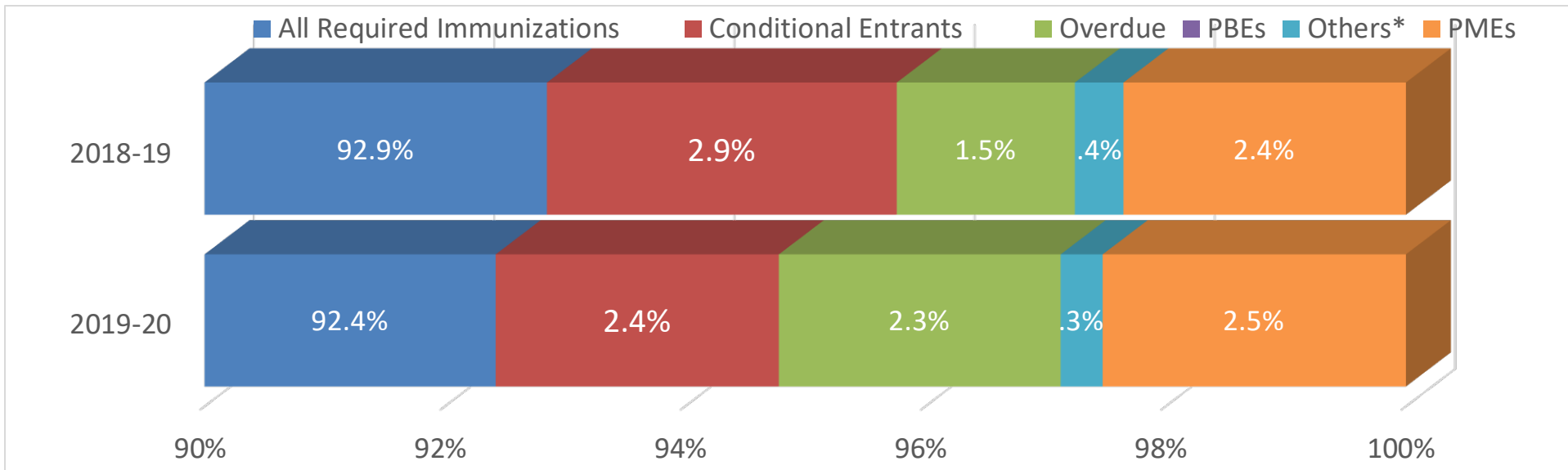
*Other children lacking required immunizations under criteria specified in SB 277.

Figure 6. Percentage of All Kindergarten Students by Reported Admission Status by School Year, 2013-2014 to 2019-2020. In the 2014-2015 and 2015-2016 school years, entrants were subject to AB 2109. Since the 2016-2017 school year, entrants have been subject to SB 277. Starting from the 2019-20 school year and forward, the varicella requirement changed from one or more to two or more doses



*Other children lacking required immunizations under criteria specified in SB 277.

Figure 7. Percentage of Public School Kindergarten Students by Reported Admission Status by School Year, 2018-2019 and 2019-2020



*Other children lacking required immunizations under criteria specified in SB 277.

Figure 8. Percentage of Private School Kindergarten Students by Reported Admission Status by School Year, 2018-2019 and 2019-2020

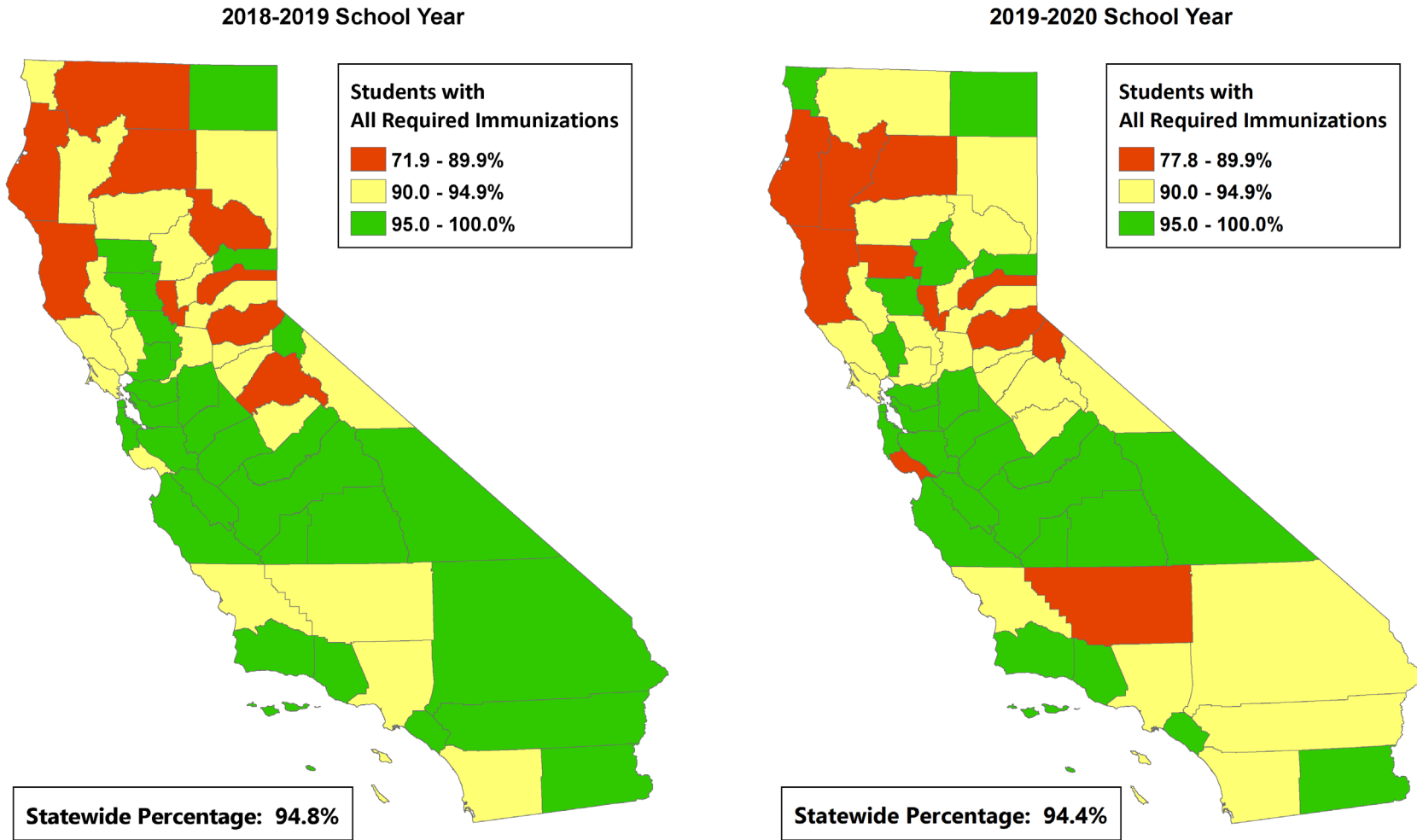


Figure 9. Kindergarten Students with All Required Immunizations, by County, 2018-2019 and 2019-2020 School Years
See pages 3 and 4 for additional information.

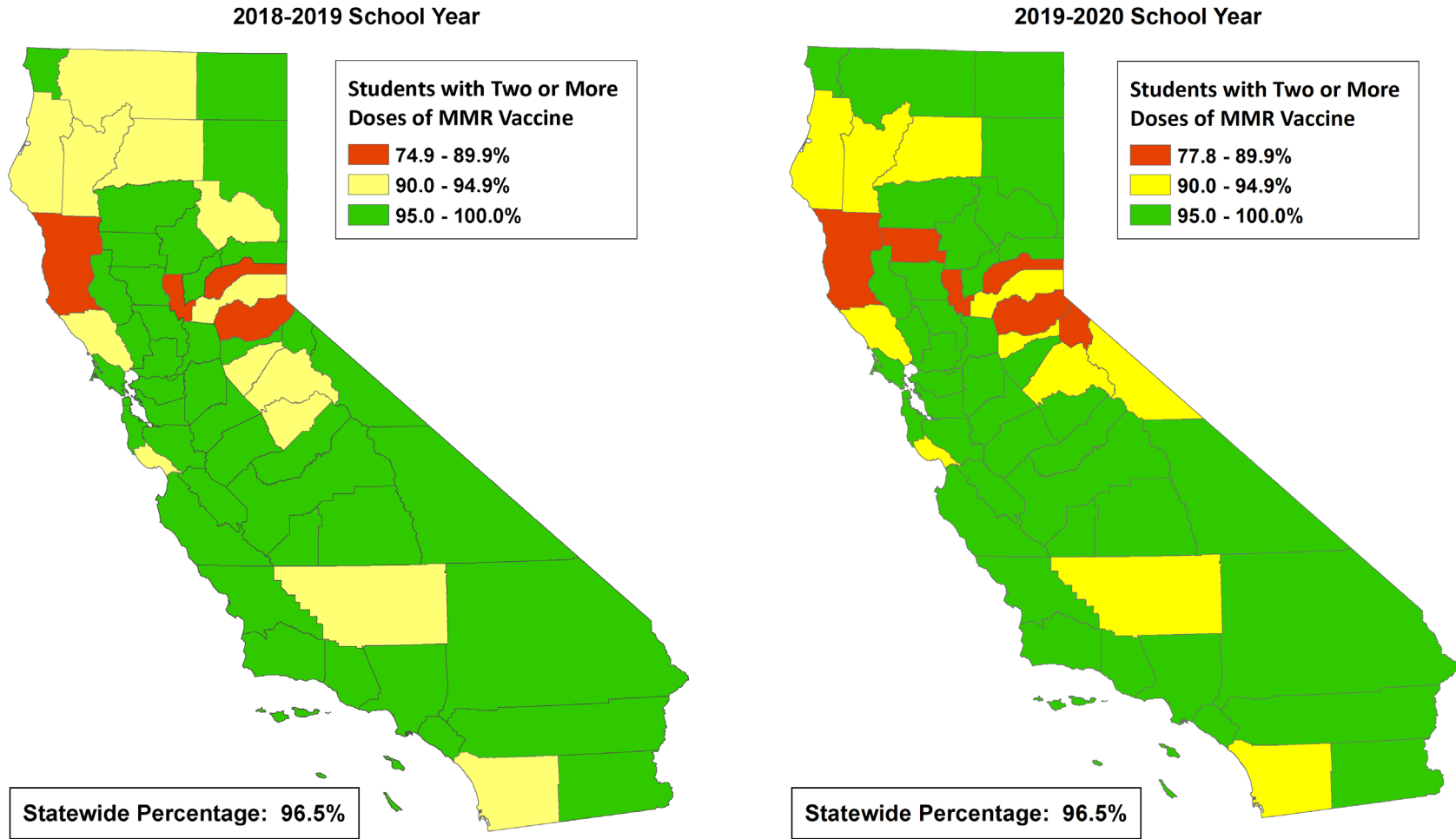


Figure 10. Kindergarten Students with Two or More Doses of MMR Vaccine, by County, 2018-2019 and 2019-2020 School Years

Table 1: Kindergarten Immunization Assessment Summary, 2018-2019 and 2019-2020 School Years

	2019-2020			2018-2019			1-Year Percentage Point Change*		
	All	Public	Private	All	Public	Private	All	Public	Private
Number of Schools Reporting Kindergarten Students	8,000	6,109	1,891	7,964	6,068	1,896			
Number of Kindergarten Students	554,250	511,104	43,146	555,735	512,908	42,827			
All Required Immunizations	94.3%	94.4%	92.4%	94.8%	95.0%	92.9%	-0.5%	-0.5%	-0.4%
Conditional Entrants	1.7%	1.6%	2.4%	1.7%	1.6%	2.9%	-0.1%	0.0%	-0.6%
Permanent Medical Exemptions	1.0%	0.8%	2.5%	0.9%	0.7%	2.4%	0.1%	0.1%	0.2%
Personal Belief Exemptions	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Others Lacking immunizations†	1.6%	1.7%	0.3%	1.5%	1.6%	0.4%	0.1%	0.1%	-0.1%
Overdue^	1.5%	1.4%	2.3%	1.1%	1.1%	1.5%	0.4%	0.3%	0.9%
4+ DTP	96.2%	96.3%	94.6%	96.0%	96.1%	94.8%	0.1%	0.2%	-0.2%
3+ Polio	96.5%	96.7%	94.8%	96.5%	96.7%	94.8%	0.0%	0.0%	0.1%
2+ MMR	96.5%	96.7%	94.7%	96.5%	96.6%	95.0%	0.0%	0.0%	-0.3%
3+ Hep B	97.4%	97.5%	96.1%	97.4%	97.5%	96.3%	0.0%	0.0%	-0.2%
2+ Var (or physician-documented disease)**	96.0%	96.2%	94.4%	97.9%	98.0%	96.5%	-1.9%	-1.8%	-2.2%

* Differences between exact percentages may vary from the differences between the rounded percentages listed to the left in table.

† Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

^ Overdue for one or more required immunizations.

** 1+ doses of varicella vaccine was required through the 2018-2019 school year. Starting in the 2019-2020 school year and forward, 2+ doses of varicella vaccine were required.

KINDERGARTEN IMMUNIZATION ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 2: NUMBER AND PERCENTAGE OF SCHOOLS REPORTING,
 BY COUNTY AND TYPE

	ALL			PUBLIC			PRIVATE		
	NUMBER OF SCHOOLS	NUMBER REPORTING	PERCENT REPORTING	NUMBER OF SCHOOLS	NUMBER REPORTING	PERCENT REPORTING	NUMBER OF SCHOOLS	NUMBER REPORTING	PERCENT REPORTING
STATE TOTAL	8,133	8,000	98.4%	6,124	6,109	99.8%	2,009	1,891	94.1%
COUNTY									
ALAMEDA	317	317	100.0%	225	225	100.0%	92	92	100.0%
ALPINE	2	2	100.0%	2	2	100.0%	0	0	0.0%
AMADOR	7	7	100.0%	6	6	100.0%	1	1	100.0%
BUTTE	56	56	100.0%	48	48	100.0%	8	8	100.0%
CALAVERAS	14	11	78.6%	11	11	100.0%	3	0	0.0%
COLUSA	6	6	100.0%	5	5	100.0%	1	1	100.0%
CONTRA COSTA	233	223	95.7%	168	166	98.8%	65	57	87.7%
DEL NORTE	10	10	100.0%	10	10	100.0%	0	0	0.0%
EL DORADO	46	44	95.7%	40	40	100.0%	6	6	100.0%
FRESNO	226	223	98.7%	202	202	100.0%	24	24	100.0%
GLENN	15	14	93.3%	12	12	100.0%	3	3	100.0%
HUMBOLDT	58	58	100.0%	52	52	100.0%	6	6	100.0%
IMPERIAL	46	45	97.8%	38	38	100.0%	8	7	87.5%
INYO	6	6	100.0%	6	6	100.0%	0	0	0.0%
KERN	185	182	98.4%	162	162	100.0%	23	23	100.0%
KINGS	39	36	92.3%	33	33	100.0%	6	5	83.3%
LAKE	18	15	83.3%	15	14	93.3%	3	2	66.7%
LASSEN	12	12	100.0%	12	12	100.0%	0	0	0.0%
LOS ANGELES	1,928	1,847	95.8%	1,328	1,324	99.7%	600	531	88.5%
MADERA	43	38	88.4%	40	38	95.0%	3	2	66.7%
MARIN	72	72	100.0%	46	46	100.0%	26	26	100.0%
MARIPOSA	8	8	100.0%	8	8	100.0%	0	0	0.0%
MENDOCINO	34	32	94.1%	28	26	92.9%	6	6	100.0%
MERCED	68	64	94.1%	55	55	100.0%	13	9	69.2%
MODOC	4	4	100.0%	4	4	100.0%	0	0	0.0%
MONO	6	6	100.0%	5	5	100.0%	1	1	100.0%
MONTEREY	96	96	100.0%	83	83	100.0%	13	13	100.0%
NAPA	37	37	100.0%	23	23	100.0%	14	14	100.0%
NEVADA	24	24	100.0%	20	20	100.0%	4	4	100.0%

KINDERGARTEN IMMUNIZATION ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 2: NUMBER AND PERCENTAGE OF SCHOOLS REPORTING,
 BY COUNTY AND TYPE

	ALL			PUBLIC			PRIVATE		
	NUMBER OF SCHOOLS	NUMBER REPORTING	PERCENT REPORTING	NUMBER OF SCHOOLS	NUMBER REPORTING	PERCENT REPORTING	NUMBER OF SCHOOLS	NUMBER REPORTING	PERCENT REPORTING
STATE TOTAL	8,133	8,000	98.4%	6,124	6,109	99.8%	2,009	1,891	94.1%
COUNTY									
ORANGE	615	609	99.0%	413	413	100.0%	202	202	100.0%
PLACER	95	95	100.0%	81	81	100.0%	14	14	100.0%
PLUMAS	8	8	100.0%	5	5	100.0%	3	3	100.0%
RIVERSIDE	405	388	95.8%	307	306	99.7%	98	88	89.8%
SACRAMENTO	304	304	100.0%	241	241	100.0%	63	63	100.0%
SAN BENITO	20	20	100.0%	16	16	100.0%	4	4	100.0%
SAN BERNARDINO	440	435	98.9%	364	364	100.0%	76	76	100.0%
SAN DIEGO	614	607	98.9%	479	479	100.0%	135	135	100.0%
SAN FRANCISCO	157	155	98.7%	86	86	100.0%	71	70	98.6%
SAN JOAQUIN	183	180	98.4%	162	162	100.0%	21	21	100.0%
SAN LUIS OBISPO	60	60	100.0%	46	46	100.0%	14	14	100.0%
SAN MATEO	164	163	99.4%	108	108	100.0%	56	56	100.0%
SANTA BARBARA	106	105	99.1%	82	82	100.0%	24	24	100.0%
SANTA CLARA	384	384	100.0%	262	262	100.0%	122	122	100.0%
SANTA CRUZ	63	61	96.8%	46	46	100.0%	17	17	100.0%
SHASTA	59	58	98.3%	50	50	100.0%	9	9	100.0%
SIERRA	2	2	100.0%	2	2	100.0%	0	0	0.0%
SISKIYOU	27	27	100.0%	24	24	100.0%	3	3	100.0%
SOLANO	83	73	88.0%	61	61	100.0%	22	12	54.5%
SONOMA	131	122	93.1%	109	106	97.2%	22	19	86.4%
STANISLAUS	127	127	100.0%	112	112	100.0%	15	15	100.0%
SUTTER	33	29	87.9%	30	30	100.0%	3	3	100.0%
TEHAMA	24	22	91.7%	21	21	100.0%	3	2	66.7%
TRINITY	10	10	100.0%	10	10	100.0%	0	0	0.0%
TULARE	126	121	96.0%	113	113	100.0%	13	10	76.9%
TUOLUMNE	16	16	100.0%	11	11	100.0%	5	5	100.0%
VENTURA	186	183	98.4%	135	135	100.0%	51	50	98.0%
VIRTUAL		68	0.0%		0	0.0%		0	0.0%
YOLO	48	47	97.9%	36	36	100.0%	12	12	100.0%

KINDERGARTEN IMMUNIZATION ASSESSMENT - CALIFORNIA, 2019-2020

TABLE 3: TOTAL ENROLLMENT AND ADMISSION STATUS,
BY COUNTY

	TOTAL STUDENTS	STUDENTS WITH ALL REQUIRED IMMUNIZATIONS		CONDITIONAL ENTRANTS		STUDENTS WITH PME		OTHERS LACKING REQUIRED IMMUNIZATIONS†		OVERDUE^	
	NUMBER	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STATE TOTAL	554,250	522,581	94.3%	9,188	1.7%	5,268	1.0%	8,986	1.6%	8,227	1.5%
COUNTY											
ALAMEDA	21,622	20,855	96.5%	237	1.1%	141	0.7%	36	0.2%	353	1.6%
ALPINE	9	<20*	--*	<20*	--*	<20*	--*	<20*	--*	<20*	--*
AMADOR	308	281	91.2%	13	4.2%	6	1.9%	2	0.6%	6	1.9%
BUTTE	2,742	2,609	95.1%	74	2.7%	21	0.8%	27	1.0%	11	0.4%
CALAVERAS	455	427	93.8%	8	1.8%	7	1.5%	8	1.8%	5	1.1%
COLUSA	372	360	96.8%	1	0.3%	0	0.0%	0	0.0%	11	3.0%
CONTRA COSTA	15,692	15,092	96.2%	249	1.6%	118	0.8%	45	0.3%	188	1.2%
DEL NORTE	394	382	97.0%	3	0.8%	0	0.0%	3	0.8%	6	1.5%
EL DORADO	2,909	2,318	79.7%	65	2.2%	125	4.3%	392	13.5%	9	0.3%
FRESNO	18,461	17,802	96.4%	187	1.0%	55	0.3%	294	1.6%	123	0.7%
GLENN	576	496	86.1%	8	1.4%	4	0.7%	63	10.9%	5	0.9%
HUMBOLDT	1,715	1,510	88.0%	46	2.7%	96	5.6%	12	0.7%	51	3.0%
IMPERIAL	3,117	2,982	95.7%	79	2.5%	6	0.2%	12	0.4%	38	1.2%
INYO	271	263	97.0%	7	2.6%	1	0.4%	0	0.0%	0	0.0%
KERN	18,327	16,240	88.6%	251	1.4%	128	0.7%	1,462	8.0%	246	1.3%
KINGS	2,576	2,497	96.9%	51	2.0%	6	0.2%	11	0.4%	11	0.4%
LAKE	796	723	90.8%	25	3.1%	6	0.8%	6	0.8%	36	4.5%
LASSEN	350	322	92.0%	19	5.4%	5	1.4%	3	0.9%	1	0.3%
LOS ANGELES	133,622	126,230	94.5%	2,249	1.7%	825	0.6%	1,048	0.8%	3,270	2.4%
MADERA	2,727	2,622	96.1%	40	1.5%	7	0.3%	21	0.8%	37	1.4%
MARIN	3,252	3,055	93.9%	75	2.3%	94	2.9%	10	0.3%	18	0.6%
MARIPOSA	160	149	93.1%	9	5.6%	0	0.0%	2	1.3%	0	0.0%
MENDOCINO	1,218	1,044	85.7%	88	7.2%	37	3.0%	7	0.6%	42	3.4%
MERCED	5,321	5,143	96.7%	83	1.6%	6	0.1%	33	0.6%	56	1.1%
MODOC	120	115	95.8%	1	0.8%	1	0.8%	0	0.0%	3	2.5%
MONO	138	125	90.6%	7	5.1%	4	2.9%	0	0.0%	2	1.4%
MONTEREY	6,733	6,537	97.1%	95	1.4%	56	0.8%	4	0.1%	41	0.6%
NAPA	1,746	1,687	96.6%	14	0.8%	24	1.4%	6	0.3%	15	0.9%
NEVADA	985	783	79.5%	33	3.4%	129	13.1%	30	3.0%	10	1.0%

† Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

^ Overdue for one or more immunizations.

* Additional precautions for student de-identification are based on jurisdiction enrollment for kindergarten. For jurisdictions with: Fewer than 20 enrollees, the data are omitted; 20-49 enrollees, values of 95% or higher are listed as ≥95%; 50-99 enrollees, values of 98% or higher are listed as ≥98%; 100 or more enrollees, values of 99% or higher are listed as ≥99%.

KINDERGARTEN IMMUNIZATION ASSESSMENT - CALIFORNIA, 2019-2020

TABLE 3: TOTAL ENROLLMENT AND ADMISSION STATUS,
BY COUNTY

	TOTAL STUDENTS	STUDENTS WITH ALL REQUIRED IMMUNIZATIONS		CONDITIONAL ENTRANTS		STUDENTS WITH PME		OTHERS LACKING REQUIRED IMMUNIZATIONS†		OVERDUE^	
	NUMBER	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STATE TOTAL	554,250	522,581	94.3%	9,188	1.7%	5,268	1.0%	8,986	1.6%	8,227	1.5%
COUNTY											
ORANGE	41,381	39,527	95.5%	622	1.5%	457	1.1%	338	0.8%	437	1.1%
PLACER	6,709	6,074	90.5%	162	2.4%	219	3.3%	88	1.3%	166	2.5%
PLUMAS	208	192	92.3%	8	3.8%	3	1.4%	1	0.5%	4	1.9%
RIVERSIDE	36,134	33,827	93.6%	673	1.9%	314	0.9%	932	2.6%	388	1.1%
SACRAMENTO	21,495	20,057	93.3%	464	2.2%	342	1.6%	407	1.9%	225	1.0%
SAN BENITO	1,099	1,058	96.3%	14	1.3%	6	0.5%	1	0.1%	20	1.8%
SAN BERNARDINO	34,542	32,441	93.9%	617	1.8%	147	0.4%	866	2.5%	471	1.4%
SAN DIEGO	45,956	42,717	93.0%	697	1.5%	658	1.4%	1,633	3.6%	251	0.5%
SAN FRANCISCO	6,963	6,637	95.3%	77	1.1%	52	0.7%	1	0.0%	196	2.8%
SAN JOAQUIN	12,320	11,710	95.0%	214	1.7%	48	0.4%	176	1.4%	172	1.4%
SAN LUIS OBISPO	3,095	2,915	94.2%	57	1.8%	68	2.2%	26	0.8%	29	0.9%
SAN MATEO	9,168	8,857	96.6%	121	1.3%	64	0.7%	10	0.1%	116	1.3%
SANTA BARBARA	6,500	6,253	96.2%	94	1.4%	91	1.4%	27	0.4%	35	0.5%
SANTA CLARA	24,963	24,068	96.4%	313	1.3%	187	0.7%	57	0.2%	338	1.4%
SANTA CRUZ	3,415	3,049	89.3%	74	2.2%	94	2.8%	158	4.6%	40	1.2%
SHASTA	2,525	2,259	89.5%	82	3.2%	68	2.7%	72	2.9%	44	1.7%
SIERRA	25	--*	≥95%	--*	≤5%	0	0.0%	0	0.0%	0	0.0%
SISKIYOU	530	503	94.9%	10	1.9%	6	1.1%	3	0.6%	8	1.5%
SOLANO	5,966	5,638	94.5%	92	1.5%	29	0.5%	5	0.1%	202	3.4%
SONOMA	6,043	5,576	92.3%	127	2.1%	189	3.1%	43	0.7%	108	1.8%
STANISLAUS	9,366	8,961	95.7%	186	2.0%	62	0.7%	27	0.3%	130	1.4%
SUTTER	2,017	1,720	85.3%	13	0.6%	18	0.9%	263	13.0%	3	0.1%
TEHAMA	1,073	1,004	93.6%	23	2.1%	7	0.7%	13	1.2%	26	2.4%
TRINITY	138	120	87.0%	6	4.3%	7	5.1%	1	0.7%	4	2.9%
TULARE	9,535	9,205	96.5%	112	1.2%	23	0.2%	168	1.8%	27	0.3%
TUOLUMNE	584	527	90.2%	21	3.6%	21	3.6%	8	1.4%	7	1.2%
VENTURA	11,466	10,951	95.5%	198	1.7%	125	1.1%	69	0.6%	123	1.1%
YOLO	2,959	2,791	94.3%	60	2.0%	48	1.6%	27	0.9%	33	1.1%
YUBA	1,361	1,263	92.8%	33	2.4%	6	0.4%	29	2.1%	30	2.2%

† Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

^ Overdue for one or more immunizations.

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KINDERGARTEN IMMUNIZATION ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 4: TOTAL ENROLLMENT AND ADMISSION STATUS, 2019-2020 AND 2018-2019,
 BY COUNTY

	SCHOOL YEAR	TOTAL STUDENTS	STUDENTS WITH ALL REQUIRED IMMUNIZATION	CONDITIONAL ENTRANTS	STUDENTS WITH PME	OTHERS LACKING REQUIRED	OVERDUE [^]
		NUMBER	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
STATE TOTAL	2019-20	554,250	94.3%	1.7%	1.0%	1.6%	1.5%
	2018-19	555,735	94.8%	1.7%	0.8%	1.5%	1.1%
ALAMEDA	2019-20	21,622	96.5%	1.1%	0.7%	0.2%	1.6%
	2018-19	21,818	96.6%	1.1%	0.6%	0.2%	1.5%
ALPINE	2019-20	9	--*	--*	--*	--*	--*
	2018-19	10	--*	--*	--*	--*	--*
AMADOR	2019-20	308	91.2%	4.2%	1.9%	0.6%	1.9%
	2018-19	279	91.8%	3.9%	1.1%	2.9%	0.4%
BUTTE	2019-20	2,742	95.1%	2.7%	0.8%	1.0%	0.4%
	2018-19	2,822	94.2%	2.6%	1.2%	1.6%	0.4%
CALAVERAS	2019-20	455	93.8%	1.8%	1.5%	1.8%	1.1%
	2018-19	437	90.2%	3.2%	2.7%	3.9%	0.0%
COLUSA	2019-20	372	96.8%	0.3%	0.0%	0.0%	3.0%
	2018-19	360	97.5%	2.5%	0.0%	0.0%	0.0%
CONTRA COSTA	2019-20	15,692	96.2%	1.6%	0.8%	0.3%	1.2%
	2018-19	15,192	96.4%	1.6%	0.9%	0.3%	0.8%
DEL NORTE	2019-20	394	97.0%	0.8%	0.0%	0.8%	1.5%
	2018-19	382	94.2%	1.8%	1.0%	2.1%	0.8%
EL DORADO	2019-20	2,909	79.7%	2.2%	4.3%	13.5%	0.3%
	2018-19	2,453	87.8%	3.2%	3.8%	5.1%	0.1%
FRESNO	2019-20	18,461	96.4%	1.0%	0.3%	1.6%	0.7%
	2018-19	18,758	96.6%	1.4%	0.3%	1.3%	0.5%
GLENN	2019-20	576	86.1%	1.4%	0.7%	10.9%	0.9%
	2018-19	540	96.3%	0.9%	0.6%	0.0%	2.2%
HUMBOLDT	2019-20	1,715	88.0%	2.7%	5.6%	0.7%	3.0%
	2018-19	1,708	88.2%	3.1%	5.8%	1.4%	1.5%
IMPERIAL	2019-20	3,117	95.7%	2.5%	0.2%	0.4%	1.2%
	2018-19	3,134	97.3%	1.9%	0.2%	0.3%	0.4%
INYO	2019-20	271	97.0%	2.6%	0.4%	0.0%	0.0%
	2018-19	231	95.7%	4.3%	0.0%	0.0%	0.0%
KERN	2019-20	18,327	88.6%	1.4%	0.7%	8.0%	1.3%
	2018-19	18,110	91.1%	2.6%	0.3%	5.5%	0.5%
KINGS	2019-20	2,576	96.9%	2.0%	0.2%	0.4%	0.4%
	2018-19	2,686	97.5%	1.7%	0.2%	0.1%	0.5%
LAKE	2019-20	796	90.8%	3.1%	0.8%	0.8%	4.5%
	2018-19	848	92.3%	5.1%	1.4%	0.1%	1.1%
LASSEN	2019-20	350	92.0%	5.4%	1.4%	0.9%	0.3%
	2018-19	385	94.3%	2.6%	0.8%	2.3%	0.0%

† Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

[^] Overdue for one or more immunizations.

* Additional precautions for student de-identification are based on jurisdiction enrollment for kindergarten. For jurisdictions with: Fewer than 20 enrollees, the data are omitted; 20-49 enrollees, values of 95% or higher are listed as ≥95%; 50-99 enrollees, values of 98% or higher are listed as ≥98%; 100 or more enrollees, values of 99% or higher are listed as ≥99%.

KINDERGARTEN IMMUNIZATION ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 4: TOTAL ENROLLMENT AND ADMISSION STATUS, 2019-2020 AND 2018-2019,
 BY COUNTY

	SCHOOL YEAR	TOTAL STUDENTS	STUDENTS WITH ALL REQUIRED IMMUNIZATION	CONDITIONAL ENTRANTS	STUDENTS WITH PME	OTHERS LACKING REQUIRED	OVERDUE [^]
		NUMBER	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
STATE TOTAL	2019-20	554,250	94.3%	1.7%	1.0%	1.6%	1.5%
	2018-19	555,735	94.8%	1.7%	0.8%	1.5%	1.1%
LOS ANGELES	2019-20	133,622	94.5%	1.7%	0.6%	0.8%	2.4%
	2018-19	136,039	94.5%	1.7%	0.6%	1.3%	1.9%
MADERA	2019-20	2,727	96.1%	1.5%	0.3%	0.8%	1.4%
	2018-19	2,762	95.5%	1.3%	0.4%	1.3%	1.4%
MARIN	2019-20	3,252	93.9%	2.3%	2.9%	0.3%	0.6%
	2018-19	3,170	94.3%	2.7%	2.6%	0.2%	0.3%
MARIPOSA	2019-20	160	93.1%	5.6%	0.0%	1.3%	0.0%
	2018-19	156	91.0%	6.4%	1.3%	1.3%	0.0%
MENDOCINO	2019-20	1,218	85.7%	7.2%	3.0%	0.6%	3.4%
	2018-19	1,204	85.0%	2.2%	4.2%	0.5%	8.1%
MERCED	2019-20	5,321	96.7%	1.6%	0.1%	0.6%	1.1%
	2018-19	5,240	97.5%	1.6%	0.2%	0.3%	0.4%
MODOC	2019-20	120	95.8%	0.8%	0.8%	0.0%	2.5%
	2018-19	111	99.1%	0.0%	0.0%	0.0%	0.9%
MONO	2019-20	138	90.6%	5.1%	2.9%	0.0%	1.4%
	2018-19	150	90.7%	4.0%	2.7%	0.0%	2.7%
MONTEREY	2019-20	6,733	97.1%	1.4%	0.8%	0.1%	0.6%
	2018-19	6,926	97.5%	1.2%	0.8%	0.0%	0.6%
NAPA	2019-20	1,746	96.6%	0.8%	1.4%	0.3%	0.9%
	2018-19	1,429	94.5%	2.9%	1.7%	0.5%	0.3%
NEVADA	2019-20	985	79.5%	3.4%	13.1%	3.0%	1.0%
	2018-19	990	80.3%	4.3%	10.6%	4.6%	0.1%
ORANGE	2019-20	41,381	95.5%	1.5%	1.1%	0.8%	1.1%
	2018-19	41,734	95.7%	1.8%	1.1%	0.7%	0.7%
PLACER	2019-20	6,709	90.5%	2.4%	3.3%	1.3%	2.5%
	2018-19	6,470	91.7%	2.9%	2.4%	0.9%	2.0%
PLUMAS	2019-20	208	92.3%	3.8%	1.4%	0.5%	1.9%
	2018-19	210	86.2%	7.1%	3.8%	2.9%	0.0%
RIVERSIDE	2019-20	36,134	93.6%	1.9%	0.9%	2.6%	1.1%
	2018-19	35,422	96.3%	1.7%	0.7%	0.5%	0.8%
SACRAMENTO	2019-20	21,495	93.3%	2.2%	1.6%	1.9%	1.0%
	2018-19	21,501	93.4%	2.5%	1.4%	1.8%	0.9%
SAN BENITO	2019-20	1,099	96.3%	1.3%	0.5%	0.1%	1.8%
	2018-19	1,052	97.0%	1.3%	0.2%	0.0%	1.5%
SAN BERNARDINO	2019-20	34,542	93.9%	1.8%	0.4%	2.5%	1.4%
	2018-19	33,920	95.1%	1.9%	0.4%	1.6%	0.8%

[†] Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

[^] Overdue for one or more immunizations.

* Additional precautions for student de-identification are based on jurisdiction enrollment for kindergarten. For jurisdictions with: Fewer than 20 enrollees, the data are omitted; 20-49 enrollees, values of 95% or higher are listed as ≥95%; 50-99 enrollees, values of 98% or higher are listed as ≥98%; 100 or more enrollees, values of 99% or higher are listed as ≥99%.

KINDERGARTEN IMMUNIZATION ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 4: TOTAL ENROLLMENT AND ADMISSION STATUS, 2019-2020 AND 2018-2019,
 BY COUNTY

	SCHOOL YEAR	TOTAL STUDENTS	STUDENTS WITH ALL REQUIRED IMMUNIZATION	CONDITIONAL ENTRANTS	STUDENTS WITH PME	OTHERS LACKING REQUIRED	OVERDUE [^]
		NUMBER	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
STATE TOTAL	2019-20	554,250	94.3%	1.7%	1.0%	1.6%	1.5%
	2018-19	555,735	94.8%	1.7%	0.8%	1.5%	1.1%
SAN DIEGO	2019-20	45,956	93.0%	1.5%	1.4%	3.6%	0.5%
	2018-19	46,256	92.5%	1.7%	1.3%	4.0%	0.5%
SAN FRANCISCO	2019-20	6,963	95.3%	1.1%	0.7%	0.0%	2.8%
	2018-19	6,840	95.7%	1.0%	0.7%	0.0%	2.6%
SAN JOAQUIN	2019-20	12,320	95.0%	1.7%	0.4%	1.4%	1.4%
	2018-19	12,410	96.7%	1.4%	0.2%	1.2%	0.4%
SAN LUIS OBISPO	2019-20	3,095	94.2%	1.8%	2.2%	0.8%	0.9%
	2018-19	3,012	94.7%	1.8%	2.3%	0.8%	0.4%
SAN MATEO	2019-20	9,168	96.6%	1.3%	0.7%	0.1%	1.3%
	2018-19	9,275	96.6%	1.1%	0.5%	0.0%	1.7%
SANTA BARBARA	2019-20	6,500	96.2%	1.4%	1.4%	0.4%	0.5%
	2018-19	6,273	96.7%	1.2%	1.1%	0.7%	0.2%
SANTA CLARA	2019-20	24,963	96.4%	1.3%	0.7%	0.2%	1.4%
	2018-19	25,505	97.3%	1.0%	0.5%	0.2%	1.0%
SANTA CRUZ	2019-20	3,415	89.3%	2.2%	2.8%	4.6%	1.2%
	2018-19	3,579	90.9%	1.8%	2.7%	4.0%	0.6%
SHASTA	2019-20	2,525	89.5%	3.2%	2.7%	2.9%	1.7%
	2018-19	2,466	87.8%	3.7%	3.0%	3.5%	1.9%
SIERRA	2019-20	25	≥95%	≤5%	0.0%	0.0%	0.0%
	2018-19	36	97.2%	0.0%	0.0%	2.8%	0.0%
SISKIYOU	2019-20	530	94.9%	1.9%	1.1%	0.6%	1.5%
	2018-19	561	88.9%	3.2%	1.4%	5.0%	1.4%
SOLANO	2019-20	5,966	94.5%	1.5%	0.5%	0.1%	3.4%
	2018-19	5,933	97.5%	1.7%	0.4%	0.2%	0.2%
SONOMA	2019-20	6,043	92.3%	2.1%	3.1%	0.7%	1.8%
	2018-19	6,343	91.3%	2.4%	3.4%	1.5%	1.4%
STANISLAUS	2019-20	9,366	95.7%	2.0%	0.7%	0.3%	1.4%
	2018-19	9,346	95.9%	1.7%	0.7%	1.1%	0.6%
SUTTER	2019-20	2,017	85.3%	0.6%	0.9%	13.0%	0.1%
	2018-19	2,310	71.9%	0.6%	1.2%	25.5%	0.9%
TEHAMA	2019-20	1,073	93.6%	2.1%	0.7%	1.2%	2.4%
	2018-19	983	93.9%	3.0%	0.8%	1.5%	0.8%
TRINITY	2019-20	138	87.0%	4.3%	5.1%	0.7%	2.9%
	2018-19	124	91.1%	3.2%	3.2%	0.8%	1.6%
TULARE	2019-20	9,535	96.5%	1.2%	0.2%	1.8%	0.3%
	2018-19	9,105	98.1%	1.1%	0.2%	0.4%	0.2%

† Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

^ Overdue for one or more immunizations.

* Additional precautions for student de-identification are based on jurisdiction enrollment for kindergarten. For jurisdictions with: Fewer than 20 enrollees, the data are omitted; 20-49 enrollees, values of 95% or higher are listed as ≥95%; 50-99 enrollees, values of 98% or higher are listed as ≥98%; 100 or more enrollees, values of 99% or higher are listed as ≥99%.

KINDERGARTEN IMMUNIZATION ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 4: TOTAL ENROLLMENT AND ADMISSION STATUS, 2019-2020 AND 2018-2019,
 BY COUNTY

	SCHOOL YEAR	TOTAL STUDENTS	STUDENTS WITH ALL REQUIRED IMMUNIZATION	CONDITIONAL ENTRANTS	STUDENTS WITH PME	OTHERS LACKING REQUIRED	OVERDUE [^]
		NUMBER	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
STATE TOTAL	2019-20	554,250	94.3%	1.7%	1.0%	1.6%	1.5%
	2018-19	555,735	94.8%	1.7%	0.8%	1.5%	1.1%
TUOLUMNE	2019-20	584	90.2%	3.6%	3.6%	1.4%	1.2%
	2018-19	614	87.5%	3.9%	3.3%	2.6%	2.8%
VENTURA	2019-20	11,466	95.5%	1.7%	1.1%	0.6%	1.1%
	2018-19	11,814	96.1%	1.5%	1.2%	0.7%	0.5%
YOLO	2019-20	2,959	94.3%	2.0%	1.6%	0.9%	1.1%
	2018-19	2,907	95.6%	2.9%	1.2%	0.2%	0.1%
YUBA	2019-20	1,361	92.8%	2.4%	0.4%	2.1%	2.2%
	2018-19	1,404	92.5%	2.1%	0.4%	1.6%	3.3%

† Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

[^] Overdue for one or more immunizations.

* Additional precautions for student de-identification are based on jurisdiction enrollment for kindergarten. For jurisdictions with: Fewer than 20 enrollees, the data are omitted; 20-49 enrollees, values of 95% or higher are listed as ≥95%; 50-99 enrollees, values of 98% or higher are listed as ≥98%; 100 or more enrollees, values of 99% or higher are listed as ≥99%.

KINDERGARTEN ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 5: NUMBER AND PERCENTAGE OF STUDENTS WITH ALL REQUIRED IMMUNIZATIONS IN 2019-2020 AND 2018-2019,
 AND 1-YEAR PERCENTAGE POINT CHANGE, BY COUNTY

	2019-2020			2018-2019			1-YEAR PERCENTAGE POINT CHANGE	
	TOTAL STUDENTS	NUMBER WITH ALL REQUIRED IMMUNIZATIONS	PERCENT	TOTAL STUDENTS	NUMBER WITH ALL REQUIRED IMMUNIZATIONS	PERCENT	PERCENT	NUMBER WITH ALL REQUIRED IMMUNIZATIONS
STATE TOTAL	554,250	522,581	94.3%	555,735	526,923	94.8%	-0.5%	-4,342
COUNTY								
ALAMEDA	21,622	20,855	96.5%	21,818	21,078	96.6%	-0.2%	-223
ALPINE	9	<20*	--*	10	<20*	--*	--*	--*
AMADOR	308	281	91.2%	279	256	91.8%	-0.5%	25
BUTTE	2,742	2,609	95.1%	2,822	2,657	94.2%	1.0%	-48
CALAVERAS	455	427	93.8%	437	394	90.2%	3.7%	33
COLUSA	372	360	96.8%	360	351	97.5%	-0.7%	9
CONTRA COSTA	15,692	15,092	96.2%	15,192	14,644	96.4%	-0.2%	448
DEL NORTE	394	382	97.0%	382	360	94.2%	2.7%	22
EL DORADO	2,909	2,318	79.7%	2,453	2,153	87.8%	-8.1%	165
FRESNO	18,461	17,802	96.4%	18,758	18,113	96.6%	-0.1%	-311
GLENN	576	496	86.1%	540	520	96.3%	-10.2%	-24
HUMBOLDT	1,715	1,510	88.0%	1,708	1,507	88.2%	-0.2%	3
IMPERIAL	3,117	2,982	95.7%	3,134	3,049	97.3%	-1.6%	-67
INYO	271	263	97.0%	231	221	95.7%	1.4%	42
KERN	18,327	16,240	88.6%	18,110	16,495	91.1%	-2.5%	-255
KINGS	2,576	2,497	96.9%	2,686	2,620	97.5%	-0.6%	-123
LAKE	796	723	90.8%	848	783	92.3%	-1.5%	-60
LASSEN	350	322	92.0%	385	363	94.3%	-2.3%	-41
LOS ANGELES	133,622	126,230	94.5%	136,039	128,618	94.5%	-0.1%	-2,388
MADERA	2,727	2,622	96.1%	2,762	2,637	95.5%	0.7%	-15
MARIN	3,252	3,055	93.9%	3,170	2,989	94.3%	-0.3%	66
MARIPOSA	160	149	93.1%	156	142	91.0%	2.1%	7
MENDOCINO	1,218	1,044	85.7%	1,204	1,024	85.0%	0.7%	20
MERCED	5,321	5,143	96.7%	5,240	5,109	97.5%	-0.8%	34
MODOC	120	115	95.8%	111	110	99.1%	-3.3%	5
MONO	138	125	90.6%	150	136	90.7%	-0.1%	-11
MONTEREY	6,733	6,537	97.1%	6,926	6,750	97.5%	-0.4%	-213
NAPA	1,746	1,687	96.6%	1,429	1,350	94.5%	2.1%	337
NEVADA	985	783	79.5%	990	795	80.3%	-0.8%	-12

* Additional precautions for student de-identification are based on jurisdiction enrollment for kindergarten. For jurisdictions with: Fewer than 20 enrollees, the data are omitted; 20-49 enrollees, values of 95% or higher are listed as ≥95%; 50-99 enrollees, values of 98% or higher are listed as ≥98%; 100 or more enrollees, values of 99% or higher are listed as ≥99%.

KINDERGARTEN ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 5: NUMBER AND PERCENTAGE OF STUDENTS WITH ALL REQUIRED IMMUNIZATIONS IN 2019-2020 AND 2018-2019,
 AND 1-YEAR PERCENTAGE POINT CHANGE, BY COUNTY

	2019-2020			2018-2019			1-YEAR PERCENTAGE POINT CHANGE	
	TOTAL STUDENTS	NUMBER WITH ALL REQUIRED IMMUNIZATIONS	PERCENT	TOTAL STUDENTS	NUMBER WITH ALL REQUIRED IMMUNIZATIONS	PERCENT	PERCENT	NUMBER WITH ALL REQUIRED IMMUNIZATIONS
STATE TOTAL	554,250	522,581	94.3%	555,735	526,923	94.8%	-0.5%	-4,342
COUNTY								
ORANGE	41,381	39,527	95.5%	41,734	39,951	95.7%	-0.2%	-424
PLACER	6,709	6,074	90.5%	6,470	5,936	91.7%	-1.2%	138
PLUMAS	208	192	92.3%	210	181	86.2%	6.1%	11
RIVERSIDE	36,134	33,827	93.6%	35,422	34,104	96.3%	-2.7%	-277
SACRAMENTO	21,495	20,057	93.3%	21,501	20,087	93.4%	-0.1%	-30
SAN BENITO	1,099	1,058	96.3%	1,052	1,020	97.0%	-0.7%	38
SAN BERNARDINO	34,542	32,441	93.9%	33,920	32,266	95.1%	-1.2%	175
SAN DIEGO	45,956	42,717	93.0%	46,256	42,807	92.5%	0.4%	-90
SAN FRANCISCO	6,963	6,637	95.3%	6,840	6,547	95.7%	-0.4%	90
SAN JOAQUIN	12,320	11,710	95.0%	12,410	12,005	96.7%	-1.7%	-295
SAN LUIS OBISPO	3,095	2,915	94.2%	3,012	2,852	94.7%	-0.5%	63
SAN MATEO	9,168	8,857	96.6%	9,275	8,958	96.6%	0.0%	-101
SANTA BARBARA	6,500	6,253	96.2%	6,273	6,069	96.7%	-0.5%	184
SANTA CLARA	24,963	24,068	96.4%	25,505	24,817	97.3%	-0.9%	-749
SANTA CRUZ	3,415	3,049	89.3%	3,579	3,252	90.9%	-1.6%	-203
SHASTA	2,525	2,259	89.5%	2,466	2,165	87.8%	1.7%	94
SIERRA	25	--*	≥95%	36	35	97.2%	--*	--*
SISKIYOU	530	503	94.9%	561	499	88.9%	6.0%	4
SOLANO	5,966	5,638	94.5%	5,933	5,786	97.5%	-3.0%	-148
SONOMA	6,043	5,576	92.3%	6,343	5,793	91.3%	0.9%	-217
STANISLAUS	9,366	8,961	95.7%	9,346	8,959	95.9%	-0.2%	2
SUTTER	2,017	1,720	85.3%	2,310	1,660	71.9%	13.4%	60
TEHAMA	1,073	1,004	93.6%	983	923	93.9%	-0.3%	81
TRINITY	138	120	87.0%	124	113	91.1%	-4.2%	7
TULARE	9,535	9,205	96.5%	9,105	8,936	98.1%	-1.6%	269
TUOLUMNE	584	527	90.2%	614	537	87.5%	2.8%	-10
VENTURA	11,466	10,951	95.5%	11,814	11,353	96.1%	-0.6%	-402
YOLO	2,959	2,791	94.3%	2,907	2,779	95.6%	-1.3%	12
YUBA	1,361	1,263	92.8%	1,404	1,299	92.5%	0.3%	-36

* Additional precautions for student de-identification are based on jurisdiction enrollment for kindergarten. For jurisdictions with: Fewer than 20 enrollees, the data are omitted; 20-49 enrollees, values of 95% or higher are listed as ≥95%; 50-99 enrollees, values of 98% or higher are listed as ≥98%; 100 or more enrollees, values of 99% or higher are listed as ≥99%.

KINDERGARTEN ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 6: NUMBER AND PERCENTAGE OF CONDITIONAL ENTRANTS IN 2019-2020 AND 2018-2019,
 AND 1-YEAR PERCENTAGE POINT CHANGE, BY COUNTY

	2019-2020			2018-2019			1-YEAR PERCENTAGE POINT CHANGE	
	TOTAL	CONDITIONAL ENTRANTS	PERCENT	TOTAL	CONDITIONAL ENTRANTS	PERCENT	PERCENT	CONDITIONAL ENTRANTS
STATE TOTAL	554,250	9,188	1.7%	555,735	9,599	1.7%	-0.1%	-411
COUNTY								
ALAMEDA	21,622	237	1.1%	21,818	231	1.1%	0.0%	6
ALPINE	9	<20*	--*	10	<20*	--*	--*	--*
AMADOR	308	13	4.2%	279	11	3.9%	0.3%	2
BUTTE	2,742	74	2.7%	2,822	73	2.6%	0.1%	1
CALAVERAS	455	8	1.8%	437	14	3.2%	-1.4%	-6
COLUSA	372	1	0.3%	360	9	2.5%	-2.2%	-8
CONTRA COSTA	15,692	249	1.6%	15,192	247	1.6%	0.0%	2
DEL NORTE	394	3	0.8%	382	7	1.8%	-1.1%	-4
EL DORADO	2,909	65	2.2%	2,453	78	3.2%	-0.9%	-13
FRESNO	18,461	187	1.0%	18,758	256	1.4%	-0.4%	-69
GLENN	576	8	1.4%	540	5	0.9%	0.5%	3
HUMBOLDT	1,715	46	2.7%	1,708	53	3.1%	-0.4%	-7
IMPERIAL	3,117	79	2.5%	3,134	58	1.9%	0.7%	21
INYO	271	7	2.6%	231	10	4.3%	-1.7%	-3
KERN	18,327	251	1.4%	18,110	474	2.6%	-1.2%	-223
KINGS	2,576	51	2.0%	2,686	45	1.7%	0.3%	6
LAKE	796	25	3.1%	848	43	5.1%	-1.9%	-18
LASSEN	350	19	5.4%	385	10	2.6%	2.8%	9
LOS ANGELES	133,622	2,249	1.7%	136,039	2,252	1.7%	0.0%	-3
MADERA	2,727	40	1.5%	2,762	36	1.3%	0.2%	4
MARIN	3,252	75	2.3%	3,170	85	2.7%	-0.4%	-10
MARIPOSA	160	9	5.6%	156	10	6.4%	-0.8%	-1
MENDOCINO	1,218	88	7.2%	1,204	27	2.2%	5.0%	61
MERCED	5,321	83	1.6%	5,240	83	1.6%	0.0%	0
MODOC	120	1	0.8%	111	0	0.0%	0.8%	1
MONO	138	7	5.1%	150	6	4.0%	1.1%	1
MONTEREY	6,733	95	1.4%	6,926	81	1.2%	0.2%	14
NAPA	1,746	14	0.8%	1,429	42	2.9%	-2.1%	-28
NEVADA	985	33	3.4%	990	43	4.3%	-1.0%	-10

* Additional precautions for student de-identification are based on jurisdiction enrollment for kindergarten. For jurisdictions with: Fewer than 20 enrollees, the data are omitted; 20-49 enrollees, values of 95% or higher are listed as ≥95%; 50-99 enrollees, values of 98% or higher are listed as ≥98%; 100 or more enrollees, values of 99% or higher are listed as ≥99%.

KINDERGARTEN ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 6: NUMBER AND PERCENTAGE OF CONDITIONAL ENTRANTS IN 2019-2020 AND 2018-2019,
 AND 1-YEAR PERCENTAGE POINT CHANGE, BY COUNTY

	2019-2020			2018-2019			1-YEAR PERCENTAGE POINT CHANGE	
	TOTAL	CONDITIONAL ENTRANTS	PERCENT	TOTAL	CONDITIONAL ENTRANTS	PERCENT	PERCENT	CONDITIONAL ENTRANTS
STATE TOTAL	554,250	9,188	1.7%	555,735	9,599	1.7%	-0.1%	-411
COUNTY								
ORANGE	41,381	622	1.5%	41,734	741	1.8%	-0.3%	-119
PLACER	6,709	162	2.4%	6,470	190	2.9%	-0.5%	-28
PLUMAS	208	8	3.8%	210	15	7.1%	-3.3%	-7
RIVERSIDE	36,134	673	1.9%	35,422	598	1.7%	0.2%	75
SACRAMENTO	21,495	464	2.2%	21,501	527	2.5%	-0.3%	-63
SAN BENITO	1,099	14	1.3%	1,052	14	1.3%	-0.1%	0
SAN BERNARDINO	34,542	617	1.8%	33,920	660	1.9%	-0.2%	-43
SAN DIEGO	45,956	697	1.5%	46,256	770	1.7%	-0.1%	-73
SAN FRANCISCO	6,963	77	1.1%	6,840	71	1.0%	0.1%	6
SAN JOAQUIN	12,320	214	1.7%	12,410	176	1.4%	0.3%	38
SAN LUIS OBISPO	3,095	57	1.8%	3,012	54	1.8%	0.0%	3
SAN MATEO	9,168	121	1.3%	9,275	105	1.1%	0.2%	16
SANTA BARBARA	6,500	94	1.4%	6,273	78	1.2%	0.2%	16
SANTA CLARA	24,963	313	1.3%	25,505	258	1.0%	0.2%	55
SANTA CRUZ	3,415	74	2.2%	3,579	66	1.8%	0.3%	8
SHASTA	2,525	82	3.2%	2,466	91	3.7%	-0.4%	-9
SIERRA	25	--*	≤5%	36	0	0.0%	--*	--*
SISKIYOU	530	10	1.9%	561	18	3.2%	-1.3%	-8
SOLANO	5,966	92	1.5%	5,933	103	1.7%	-0.2%	-11
SONOMA	6,043	127	2.1%	6,343	152	2.4%	-0.3%	-25
STANISLAUS	9,366	186	2.0%	9,346	162	1.7%	0.3%	24
SUTTER	2,017	13	0.6%	2,310	14	0.6%	0.0%	-1
TEHAMA	1,073	23	2.1%	983	29	3.0%	-0.8%	-6
TRINITY	138	6	4.3%	124	4	3.2%	1.1%	2
TULARE	9,535	112	1.2%	9,105	98	1.1%	0.1%	14
TUOLUMNE	584	21	3.6%	614	24	3.9%	-0.3%	-3
VENTURA	11,466	198	1.7%	11,814	179	1.5%	0.2%	19
YOLO	2,959	60	2.0%	2,907	83	2.9%	-0.8%	-23
YUBA	1,361	33	2.4%	1,404	30	2.1%	0.3%	3

* Additional precautions for student de-identification are based on jurisdiction enrollment for kindergarten. For jurisdictions with: Fewer than 20 enrollees, the data are omitted; 20-49 enrollees, values of 95% or higher are listed as ≥95%; 50-99 enrollees, values of 98% or higher are listed as ≥98%; 100 or more enrollees, values of 99% or higher are listed as ≥99%.

KINDERGARTEN ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 7: NUMBER AND PERCENTAGE OF STUDENTS WITH A PERMANENT MEDICAL EXEMPTION (PME) IN 2019-2020 AND 2018-2019,
 AND 1-YEAR PERCENTAGE POINT CHANGE, BY COUNTY

	2019-2020			2018-2019			1-YEAR PERCENTAGE POINT CHANGE	
	TOTAL STUDENTS	PME	PERCENT	TOTAL STUDENTS	PME	PERCENT	PERCENT	NUMBER PME
STATE TOTAL	554,250	5,268	1.0%	555,735	4,812	0.9%	0.1%	456
COUNTY								
ALAMEDA	21,622	141	0.7%	21,818	132	0.6%	0.0%	9
ALPINE	9	<20*	--*	10	<20*	--*	--*	--*
AMADOR	308	6	1.9%	279	3	1.1%	0.9%	3
BUTTE	2,742	21	0.8%	2,822	34	1.2%	-0.4%	-13
CALAVERAS	455	7	1.5%	437	12	2.7%	-1.2%	-5
COLUSA	372	0	0.0%	360	0	0.0%	0.0%	0
CONTRA COSTA	15,692	118	0.8%	15,192	132	0.9%	-0.1%	-14
DEL NORTE	394	0	0.0%	382	4	1.0%	-1.0%	-4
EL DORADO	2,909	125	4.3%	2,453	93	3.8%	0.5%	32
FRESNO	18,461	55	0.3%	18,758	52	0.3%	0.0%	3
GLENN	576	4	0.7%	540	3	0.6%	0.1%	1
HUMBOLDT	1,715	96	5.6%	1,708	99	5.8%	-0.2%	-3
IMPERIAL	3,117	6	0.2%	3,134	6	0.2%	0.0%	0
INYO	271	1	0.4%	231	0	0.0%	0.4%	1
KERN	18,327	128	0.7%	18,110	57	0.3%	0.4%	71
KINGS	2,576	6	0.2%	2,686	5	0.2%	0.0%	1
LAKE	796	6	0.8%	848	12	1.4%	-0.7%	-6
LASSEN	350	5	1.4%	385	3	0.8%	0.6%	2
LOS ANGELES	133,622	825	0.6%	136,039	783	0.6%	0.0%	42
MADERA	2,727	7	0.3%	2,762	12	0.4%	-0.2%	-5
MARIN	3,252	94	2.9%	3,170	82	2.6%	0.3%	12
MARIPOSA	160	0	0.0%	156	2	1.3%	-1.3%	-2
MENDOCINO	1,218	37	3.0%	1,204	50	4.2%	-1.1%	-13
MERCED	5,321	6	0.1%	5,240	8	0.2%	0.0%	-2
MODOC	120	1	0.8%	111	0	0.0%	0.8%	1
MONO	138	4	2.9%	150	4	2.7%	0.2%	0
MONTEREY	6,733	56	0.8%	6,926	52	0.8%	0.1%	4
NAPA	1,746	24	1.4%	1,429	25	1.7%	-0.4%	-1
NEVADA	985	129	13.1%	990	105	10.6%	2.5%	24

* County reporting fewer than 20 children in kindergarten.

KINDERGARTEN ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 7: NUMBER AND PERCENTAGE OF STUDENTS WITH A PERMANENT MEDICAL EXEMPTION (PME) IN 2019-2020 AND 2018-2019,
 AND 1-YEAR PERCENTAGE POINT CHANGE, BY COUNTY

	2019-2020			2018-2019			1-YEAR PERCENTAGE POINT CHANGE	
	TOTAL STUDENTS	PME	PERCENT	TOTAL STUDENTS	PME	PERCENT	PERCENT	NUMBER PME
STATE TOTAL	554,250	5,268	1.0%	555,735	4,812	0.9%	0.1%	456
COUNTY								
ORANGE	41,381	457	1.1%	41,734	456	1.1%	0.0%	1
PLACER	6,709	219	3.3%	6,470	155	2.4%	0.9%	64
PLUMAS	208	3	1.4%	210	8	3.8%	-2.4%	-5
RIVERSIDE	36,134	314	0.9%	35,422	232	0.7%	0.2%	82
SACRAMENTO	21,495	342	1.6%	21,501	309	1.4%	0.2%	33
SAN BENITO	1,099	6	0.5%	1,052	2	0.2%	0.4%	4
SAN BERNARDINO	34,542	147	0.4%	33,920	147	0.4%	0.0%	0
SAN DIEGO	45,956	658	1.4%	46,256	599	1.3%	0.1%	59
SAN FRANCISCO	6,963	52	0.7%	6,840	46	0.7%	0.1%	6
SAN JOAQUIN	12,320	48	0.4%	12,410	26	0.2%	0.2%	22
SAN LUIS OBISPO	3,095	68	2.2%	3,012	68	2.3%	-0.1%	0
SAN MATEO	9,168	64	0.7%	9,275	49	0.5%	0.2%	15
SANTA BARBARA	6,500	91	1.4%	6,273	72	1.1%	0.3%	19
SANTA CLARA	24,963	187	0.7%	25,505	129	0.5%	0.2%	58
SANTA CRUZ	3,415	94	2.8%	3,579	97	2.7%	0.0%	-3
SHASTA	2,525	68	2.7%	2,466	75	3.0%	-0.3%	-7
SIERRA	25	0	0.0%	36	0	0.0%	0.0%	0
SISKIYOU	530	6	1.1%	561	8	1.4%	-0.3%	-2
SOLANO	5,966	29	0.5%	5,933	22	0.4%	0.1%	7
SONOMA	6,043	189	3.1%	6,343	213	3.4%	-0.2%	-24
STANISLAUS	9,366	62	0.7%	9,346	66	0.7%	0.0%	-4
SUTTER	2,017	18	0.9%	2,310	28	1.2%	-0.3%	-10
TEHAMA	1,073	7	0.7%	983	8	0.8%	-0.2%	-1
TRINITY	138	7	5.1%	124	4	3.2%	1.8%	3
TULARE	9,535	23	0.2%	9,105	22	0.2%	0.0%	1
TUOLUMNE	584	21	3.6%	614	20	3.3%	0.3%	1
VENTURA	11,466	125	1.1%	11,814	140	1.2%	-0.1%	-15
YOLO	2,959	48	1.6%	2,907	35	1.2%	0.4%	13
YUBA	1,361	6	0.4%	1,404	6	0.4%	0.0%	0

* County reporting fewer than 20 children in kindergarten.

KINDERGARTEN ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 8: NUMBER AND PERCENTAGE OF OTHER STUDENTS LACKING REQUIRED IMMUNIZATIONS[†] IN 2019-2020 AND 2018-2019,
 AND 1-YEAR PERCENTAGE POINT CHANGE, BY COUNTY

	2019-2020			2018-2019			1-YEAR PERCENTAGE POINT CHANGE	
	TOTAL STUDENTS	OTHERS LACKING REQUIRED IMMUNIZATIONS [†]	PERCENT	TOTAL STUDENTS	OTHERS LACKING REQUIRED IMMUNIZATIONS [†]	PERCENT	PERCENT	OTHERS LACKING REQUIRED IMMUNIZATIONS [†]
STATE TOTAL	554,250	8,986	1.6%	555,735	8,318	1.5%	0.1%	668
COUNTY								
ALAMEDA	21,622	36	0.2%	21,818	41	0.2%	0.0%	-5
ALPINE	9	<20*	--*	10	<20*	--*	--*	--*
AMADOR	308	2	0.6%	279	8	2.9%	-2.2%	-6
BUTTE	2,742	27	1.0%	2,822	46	1.6%	-0.6%	-19
CALAVERAS	455	8	1.8%	437	17	3.9%	-2.1%	-9
COLUSA	372	0	0.0%	360	0	0.0%	0.0%	0
CONTRA COSTA	15,692	45	0.3%	15,192	40	0.3%	0.0%	5
DEL NORTE	394	3	0.8%	382	8	2.1%	-1.3%	-5
EL DORADO	2,909	392	13.5%	2,453	126	5.1%	8.3%	266
FRESNO	18,461	294	1.6%	18,758	237	1.3%	0.3%	57
GLENN	576	63	10.9%	540	0	0.0%	10.9%	63
HUMBOLDT	1,715	12	0.7%	1,708	24	1.4%	-0.7%	-12
IMPERIAL	3,117	12	0.4%	3,134	10	0.3%	0.1%	2
INYO	271	0	0.0%	231	0	0.0%	0.0%	0
KERN	18,327	1,462	8.0%	18,110	996	5.5%	2.5%	466
KINGS	2,576	11	0.4%	2,686	2	0.1%	0.4%	9
LAKE	796	6	0.8%	848	1	0.1%	0.6%	5
LASSEN	350	3	0.9%	385	9	2.3%	-1.5%	-6
LOS ANGELES	133,622	1,048	0.8%	136,039	1,746	1.3%	-0.5%	-698
MADERA	2,727	21	0.8%	2,762	37	1.3%	-0.6%	-16
MARIN	3,252	10	0.3%	3,170	6	0.2%	0.1%	4
MARIPOSA	160	2	1.3%	156	2	1.3%	0.0%	0
MENDOCINO	1,218	7	0.6%	1,204	6	0.5%	0.1%	1
MERCED	5,321	33	0.6%	5,240	18	0.3%	0.3%	15
MODOC	120	0	0.0%	111	0	0.0%	0.0%	0
MONO	138	0	0.0%	150	0	0.0%	0.0%	0
MONTEREY	6,733	4	0.1%	6,926	3	0.0%	0.0%	1
NAPA	1,746	6	0.3%	1,429	7	0.5%	-0.1%	-1
NEVADA	985	30	3.0%	990	46	4.6%	-1.6%	-16

[†] Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

* County reporting fewer than 20 children in kindergarten.

KINDERGARTEN ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 8: NUMBER AND PERCENTAGE OF OTHER STUDENTS LACKING REQUIRED IMMUNIZATIONS[†] IN 2019-2020 AND 2018-2019,
 AND 1-YEAR PERCENTAGE POINT CHANGE, BY COUNTY

	2019-2020			2018-2019			1-YEAR PERCENTAGE POINT CHANGE	
	TOTAL STUDENTS	OTHERS LACKING REQUIRED IMMUNIZATIONS [†]	PERCENT	TOTAL STUDENTS	OTHERS LACKING REQUIRED IMMUNIZATIONS [†]	PERCENT	PERCENT	OTHERS LACKING REQUIRED IMMUNIZATIONS [†]
STATE TOTAL	554,250	8,986	1.6%	555,735	8,318	1.5%	0.1%	668
COUNTY								
ORANGE	41,381	338	0.8%	41,734	310	0.7%	0.1%	28
PLACER	6,709	88	1.3%	6,470	57	0.9%	0.4%	31
PLUMAS	208	1	0.5%	210	6	2.9%	-2.4%	-5
RIVERSIDE	36,134	932	2.6%	35,422	194	0.5%	2.0%	738
SACRAMENTO	21,495	407	1.9%	21,501	395	1.8%	0.1%	12
SAN BENITO	1,099	1	0.1%	1,052	0	0.0%	0.1%	1
SAN BERNARDINO	34,542	866	2.5%	33,920	559	1.6%	0.9%	307
SAN DIEGO	45,956	1,633	3.6%	46,256	1,843	4.0%	-0.4%	-210
SAN FRANCISCO	6,963	1	0.0%	6,840	0	0.0%	0.0%	1
SAN JOAQUIN	12,320	176	1.4%	12,410	154	1.2%	0.2%	22
SAN LUIS OBISPO	3,095	26	0.8%	3,012	25	0.8%	0.0%	1
SAN MATEO	9,168	10	0.1%	9,275	4	0.0%	0.1%	6
SANTA BARBARA	6,500	27	0.4%	6,273	44	0.7%	-0.3%	-17
SANTA CLARA	24,963	57	0.2%	25,505	45	0.2%	0.1%	12
SANTA CRUZ	3,415	158	4.6%	3,579	144	4.0%	0.6%	14
SHASTA	2,525	72	2.9%	2,466	87	3.5%	-0.7%	-15
SIERRA	25	0	0.0%	36	1	2.8%	-2.8%	-1
SISKIYOU	530	3	0.6%	561	28	5.0%	-4.4%	-25
SOLANO	5,966	5	0.1%	5,933	12	0.2%	-0.1%	-7
SONOMA	6,043	43	0.7%	6,343	98	1.5%	-0.8%	-55
STANISLAUS	9,366	27	0.3%	9,346	106	1.1%	-0.8%	-79
SUTTER	2,017	263	13.0%	2,310	588	25.5%	-12.4%	-325
TEHAMA	1,073	13	1.2%	983	15	1.5%	-0.3%	-2
TRINITY	138	1	0.7%	124	1	0.8%	-0.1%	0
TULARE	9,535	168	1.8%	9,105	35	0.4%	1.4%	133
TUOLUMNE	584	8	1.4%	614	16	2.6%	-1.2%	-8
VENTURA	11,466	69	0.6%	11,814	86	0.7%	-0.1%	-17
YOLO	2,959	27	0.9%	2,907	7	0.2%	0.7%	20
YUBA	1,361	29	2.1%	1,404	22	1.6%	0.6%	7

[†] Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

* County reporting fewer than 20 children in kindergarten.

KINDERGARTEN IMMUNIZATION ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 9: NUMBER AND PERCENTAGE OF OTHER STUDENTS LACKING REQUIRED IMMUNIZATIONS† IN 2019-2020
 BY SUBGROUP AND COUNTY

	TOTAL STUDENTS	OTHERS LACKING REQUIRED IMMUNIZATIONS†		OTHERS LACKING REQUIRED IMMUNIZATIONS†					
				INDEPENDENT STUDY		IEP SERVICES		HOME-BASED PRIVATE SCHOOL	
				NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STATE TOTAL	554,250	8,986	1.6%	7,018	1.3%	1,673	0.3%	295	0.1%
COUNTY									
ALAMEDA	21,622	36	0.2%	0	0.0%	34	0.2%	2	0.0%
ALPINE	9	<20*	--*	<20*	--*	<20*	--*	--*	--*
AMADOR	308	2	0.6%	0	0.0%	2	0.6%	0	0.0%
BUTTE	2,742	27	1.0%	23	0.8%	4	0.1%	0	0.0%
CALAVERAS	455	8	1.8%	6	1.3%	2	0.4%	0	0.0%
COLUSA	372	0	0.0%	0	0.0%	0	0.0%	0	0.0%
CONTRA COSTA	15,692	45	0.3%	15	0.1%	30	0.2%	0	0.0%
DEL NORTE	394	3	0.8%	3	0.8%	0	0.0%	0	0.0%
EL DORADO	2,909	392	13.5%	386	13.3%	6	0.2%	0	0.0%
FRESNO	18,461	294	1.6%	278	1.5%	15	0.1%	1	0.0%
GLENN	576	63	10.9%	63	10.9%	0	0.0%	0	0.0%
HUMBOLDT	1,715	12	0.7%	6	0.3%	5	0.3%	1	0.1%
IMPERIAL	3,117	12	0.4%	0	0.0%	12	0.4%	0	0.0%
INYO	271	0	0.0%	0	0.0%	0	0.0%	0	0.0%
KERN	18,327	1,462	8.0%	1,390	7.6%	70	0.4%	2	0.0%
KINGS	2,576	11	0.4%	7	0.3%	4	0.2%	0	0.0%
LAKE	796	6	0.8%	4	0.5%	2	0.3%	0	0.0%
LASSEN	350	3	0.9%	3	0.9%	0	0.0%	0	0.0%
LOS ANGELES	133,622	1,048	0.8%	473	0.4%	553	0.4%	22	0.0%
MADERA	2,727	21	0.8%	19	0.7%	2	0.1%	0	0.0%
MARIN	3,252	10	0.3%	0	0.0%	10	0.3%	0	0.0%
MARIPOSA	160	2	1.3%	1	0.6%	1	0.6%	0	0.0%
MENDOCINO	1,218	7	0.6%	5	0.4%	2	0.2%	0	0.0%
MERCED	5,321	33	0.6%	0	0.0%	33	0.6%	0	0.0%
MODOC	120	0	0.0%	0	0.0%	0	0.0%	0	0.0%
MONO	138	0	0.0%	0	0.0%	0	0.0%	0	0.0%
MONTEREY	6,733	4	0.1%	0	0.0%	4	0.1%	0	0.0%
NAPA	1,746	6	0.3%	0	0.0%	0	0.0%	6	0.3%
NEVADA	985	30	3.0%	25	2.5%	5	0.5%	0	0.0%

† Includes students reported as attending independent study who do not receive classroom-based instruction or receiving IEP services or home-based private schools.

KINDERGARTEN IMMUNIZATION ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 9: NUMBER AND PERCENTAGE OF OTHER STUDENTS LACKING REQUIRED IMMUNIZATIONS† IN 2019-2020
 BY SUBGROUP AND COUNTY

	TOTAL STUDENTS	OTHERS LACKING REQUIRED IMMUNIZATIONS†		OTHERS LACKING REQUIRED IMMUNIZATIONS†					
				INDEPENDENT STUDY		IEP SERVICES		HOME-BASED PRIVATE SCHOOL	
	NUMBER	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STATE TOTAL	554,250	8,986	1.6%	7,018	1.3%	1,673	0.3%	295	0.1%
COUNTY									
ORANGE	41,381	338	0.8%	130	0.3%	192	0.5%	16	0.0%
PLACER	6,709	88	1.3%	55	0.8%	33	0.5%	0	0.0%
PLUMAS	208	1	0.5%	0	0.0%	1	0.5%	0	0.0%
RIVERSIDE	36,134	932	2.6%	843	2.3%	64	0.2%	25	0.1%
SACRAMENTO	21,495	407	1.9%	257	1.2%	103	0.5%	47	0.2%
SAN BENITO	1,099	1	0.1%	1	0.1%	0	0.0%	0	0.0%
SAN BERNARDINO	34,542	866	2.5%	747	2.2%	104	0.3%	15	0.0%
SAN DIEGO	45,956	1,633	3.6%	1,489	3.2%	114	0.2%	30	0.1%
SAN FRANCISCO	6,963	1	0.0%	0	0.0%	1	0.0%	0	0.0%
SAN JOAQUIN	12,320	176	1.4%	48	0.4%	63	0.5%	65	0.5%
SAN LUIS OBISPO	3,095	26	0.8%	2	0.1%	24	0.8%	0	0.0%
SAN MATEO	9,168	10	0.1%	8	0.1%	2	0.0%	0	0.0%
SANTA BARBARA	6,500	27	0.4%	26	0.4%	1	0.0%	0	0.0%
SANTA CLARA	24,963	57	0.2%	0	0.0%	57	0.2%	0	0.0%
SANTA CRUZ	3,415	158	4.6%	141	4.1%	17	0.5%	0	0.0%
SHASTA	2,525	72	2.9%	58	2.3%	11	0.4%	3	0.1%
SIERRA	25	0	0.0%	0	0.0%	0	0.0%	0	0.0%
SISKIYOU	530	3	0.6%	3	0.6%	0	0.0%	0	0.0%
SOLANO	5,966	5	0.1%	5	0.1%	0	0.0%	0	0.0%
SONOMA	6,043	43	0.7%	20	0.3%	22	0.4%	1	0.0%
STANISLAUS	9,366	27	0.3%	10	0.1%	14	0.1%	3	0.0%
SUTTER	2,017	263	13.0%	219	10.9%	7	0.3%	37	1.8%
TEHAMA	1,073	13	1.2%	10	0.9%	3	0.3%	0	0.0%
TRINITY	138	1	0.7%	0	0.0%	1	0.7%	0	0.0%
TULARE	9,535	168	1.8%	160	1.7%	8	0.1%	0	0.0%
TUOLUMNE	584	8	1.4%	3	0.5%	2	0.3%	3	0.5%
VENTURA	11,466	69	0.6%	36	0.3%	19	0.2%	14	0.1%
YOLO	2,959	27	0.9%	24	0.8%	3	0.1%	0	0.0%
YUBA	1,361	29	2.1%	16	1.2%	11	0.8%	2	0.1%

† Includes students reported as attending independent study who do not receive classroom-based instruction or receiving IEP services or home-based private schools.

KINDERGARTEN ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 10: NUMBER AND PERCENTAGE OF STUDENTS WITH OVERDUE STATUS^ IN 2019-2020 AND 2018-2019,
 AND 1-YEAR PERCENTAGE POINT CHANGE, BY COUNTY

	2019-2020			2018-2019			1-YEAR PERCENTAGE POINT CHANGE	
	TOTAL STUDENTS	OVERDUE^	PERCENT	TOTAL STUDENTS	OVERDUE^	PERCENT	PERCENT	OVERDUE^
STATE TOTAL	554,250	8,227	1.5%	555,735	6,083	1.1%	0.4%	2,144
COUNTY								
ALAMEDA	21,622	353	1.6%	21,818	336	1.5%	0.1%	17
ALPINE	9	<20*	--*	10	<20*	--*	--*	--*
AMADOR	308	6	1.9%	279	1	0.4%	1.6%	5
BUTTE	2,742	11	0.4%	2,822	12	0.4%	0.0%	-1
CALAVERAS	455	5	1.1%	437	0	0.0%	1.1%	5
COLUSA	372	11	3.0%	360	0	0.0%	3.0%	11
CONTRA COSTA	15,692	188	1.2%	15,192	129	0.8%	0.3%	59
DEL NORTE	394	6	1.5%	382	3	0.8%	0.7%	3
EL DORADO	2,909	9	0.3%	2,453	3	0.1%	0.2%	6
FRESNO	18,461	123	0.7%	18,758	100	0.5%	0.1%	23
GLENN	576	5	0.9%	540	12	2.2%	-1.4%	-7
HUMBOLDT	1,715	51	3.0%	1,708	25	1.5%	1.5%	26
IMPERIAL	3,117	38	1.2%	3,134	11	0.4%	0.9%	27
INYO	271	0	0.0%	231	0	0.0%	0.0%	0
KERN	18,327	246	1.3%	18,110	88	0.5%	0.9%	158
KINGS	2,576	11	0.4%	2,686	14	0.5%	-0.1%	-3
LAKE	796	36	4.5%	848	9	1.1%	3.5%	27
LASSEN	350	1	0.3%	385	0	0.0%	0.3%	1
LOS ANGELES	133,622	3,270	2.4%	136,039	2,640	1.9%	0.5%	630
MADERA	2,727	37	1.4%	2,762	40	1.4%	-0.1%	-3
MARIN	3,252	18	0.6%	3,170	8	0.3%	0.3%	10
MARIPOSA	160	0	0.0%	156	0	0.0%	0.0%	0
MENDOCINO	1,218	42	3.4%	1,204	97	8.1%	-4.6%	-55
MERCED	5,321	56	1.1%	5,240	22	0.4%	0.6%	34
MODOC	120	3	2.5%	111	1	0.9%	1.6%	2
MONO	138	2	1.4%	150	4	2.7%	-1.2%	-2
MONTEREY	6,733	41	0.6%	6,926	40	0.6%	0.0%	1
NAPA	1,746	15	0.9%	1,429	5	0.3%	0.5%	10
NEVADA	985	10	1.0%	990	1	0.1%	0.9%	9

^ Overdue for one or more immunizations.

* County reporting fewer than 20 children in kindergarten.

KINDERGARTEN ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 10: NUMBER AND PERCENTAGE OF STUDENTS WITH OVERDUE STATUS^ IN 2019-2020 AND 2018-2019,
 AND 1-YEAR PERCENTAGE POINT CHANGE, BY COUNTY

	2019-2020			2018-2019			1-YEAR PERCENTAGE POINT CHANGE	
	TOTAL STUDENTS	OVERDUE^	PERCENT	TOTAL STUDENTS	OVERDUE^	PERCENT	PERCENT	OVERDUE^
STATE TOTAL	554,250	8,227	1.5%	555,735	6,083	1.1%	0.4%	2,144
COUNTY								
ORANGE	41,381	437	1.1%	41,734	276	0.7%	0.4%	161
PLACER	6,709	166	2.5%	6,470	132	2.0%	0.4%	34
PLUMAS	208	4	1.9%	210	0	0.0%	1.9%	4
RIVERSIDE	36,134	388	1.1%	35,422	294	0.8%	0.2%	94
SACRAMENTO	21,495	225	1.0%	21,501	183	0.9%	0.2%	42
SAN BENITO	1,099	20	1.8%	1,052	16	1.5%	0.3%	4
SAN BERNARDINO	34,542	471	1.4%	33,920	288	0.8%	0.5%	183
SAN DIEGO	45,956	251	0.5%	46,256	237	0.5%	0.0%	14
SAN FRANCISCO	6,963	196	2.8%	6,840	176	2.6%	0.2%	20
SAN JOAQUIN	12,320	172	1.4%	12,410	49	0.4%	1.0%	123
SAN LUIS OBISPO	3,095	29	0.9%	3,012	13	0.4%	0.5%	16
SAN MATEO	9,168	116	1.3%	9,275	159	1.7%	-0.4%	-43
SANTA BARBARA	6,500	35	0.5%	6,273	10	0.2%	0.4%	25
SANTA CLARA	24,963	338	1.4%	25,505	256	1.0%	0.4%	82
SANTA CRUZ	3,415	40	1.2%	3,579	20	0.6%	0.6%	20
SHASTA	2,525	44	1.7%	2,466	48	1.9%	-0.2%	-4
SIERRA	25	0	0.0%	36	0	0.0%	0.0%	0
SISKIYOU	530	8	1.5%	561	8	1.4%	0.1%	0
SOLANO	5,966	202	3.4%	5,933	10	0.2%	3.2%	192
SONOMA	6,043	108	1.8%	6,343	87	1.4%	0.4%	21
STANISLAUS	9,366	130	1.4%	9,346	53	0.6%	0.8%	77
SUTTER	2,017	3	0.1%	2,310	20	0.9%	-0.7%	-17
TEHAMA	1,073	26	2.4%	983	8	0.8%	1.6%	18
TRINITY	138	4	2.9%	124	2	1.6%	1.3%	2
TULARE	9,535	27	0.3%	9,105	14	0.2%	0.1%	13
TUOLUMNE	584	7	1.2%	614	17	2.8%	-1.6%	-10
VENTURA	11,466	123	1.1%	11,814	56	0.5%	0.6%	67
YOLO	2,959	33	1.1%	2,907	3	0.1%	1.0%	30
YUBA	1,361	30	2.2%	1,404	47	3.3%	-1.1%	-17

^ Overdue for one or more immunizations.

* County reporting fewer than 20 children in kindergarten.

KINDERGARTEN IMMUNIZATION ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 11: NUMBER AND PERCENTAGE OF STUDENTS WITH REQUIRED IMMUNIZATIONS BY VACCINE SERIES,
 BY COUNTY

	TOTAL STUDENTS	DTP 4+		POLIO 3+		MMR 2		HEP B 3+		VAR 2+	
	NUMBER	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STATE TOTAL	554,250	532,988	96.2%	535,112	96.5%	534,929	96.5%	539,760	97.4%	532,349	96.0%
COUNTY											
ALAMEDA	21,622	21,208	98.1%	21,285	98.4%	21,301	98.5%	21,342	98.7%	21,127	97.7%
ALPINE	9	<20*	--*	<20*	--*	<20*	--*	<20*	--*	<20*	--*
AMADOR	308	289	93.8%	293	95.1%	291	94.5%	292	94.8%	287	93.2%
BUTTE	2,742	2,646	96.5%	2,665	97.2%	2,674	97.5%	2,683	97.8%	2,666	97.2%
CALAVERAS	455	434	95.4%	434	95.4%	435	95.6%	441	96.9%	432	94.9%
COLUSA	372	369	99.2%	370	99.5%	369	99.2%	371	99.7%	363	97.6%
CONTRA COSTA	15,692	15,303	97.5%	15,346	97.8%	15,370	97.9%	15,464	98.5%	15,294	97.5%
DEL NORTE	394	386	98.0%	390	99.0%	388	98.5%	389	98.7%	387	98.2%
EL DORADO	2,909	2,397	82.4%	2,422	83.3%	2,404	82.6%	2,518	86.6%	2,377	81.7%
FRESNO	18,461	17,963	97.3%	18,034	97.7%	18,071	97.9%	18,163	98.4%	18,039	97.7%
GLENN	576	506	87.8%	510	88.5%	510	88.5%	523	90.8%	507	88.0%
HUMBOLDT	1,715	1,581	92.2%	1,578	92.0%	1,583	92.3%	1,582	92.2%	1,570	91.5%
IMPERIAL	3,117	3,050	97.9%	3,079	98.8%	3,056	98.0%	3,096	99.3%	3,051	97.9%
INYO	271	265	97.8%	267	98.5%	268	98.9%	268	98.9%	267	98.5%
KERN	18,327	17,149	93.6%	16,754	91.4%	16,726	91.3%	17,223	94.0%	16,632	90.8%
KINGS	2,576	2,520	97.8%	2,548	98.9%	2,552	99.1%	2,561	99.4%	2,542	98.7%
LAKE	796	738	92.7%	754	94.7%	759	95.4%	770	96.7%	757	95.1%
LASSEN	350	329	94.0%	337	96.3%	337	96.3%	337	96.3%	332	94.9%
LOS ANGELES	133,622	129,305	96.8%	129,772	97.1%	129,649	97.0%	131,279	98.2%	128,836	96.4%
MADERA	2,727	2,652	97.2%	2,663	97.7%	2,673	98.0%	2,675	98.1%	2,668	97.8%
MARIN	3,252	3,123	96.0%	3,140	96.6%	3,152	96.9%	3,147	96.8%	3,116	95.8%
MARIPOSA	160	152	95.0%	153	95.6%	153	95.6%	156	97.5%	153	95.6%
MENDOCINO	1,218	1,081	88.8%	1,095	89.9%	1,092	89.7%	1,092	89.7%	1,080	88.7%
MERCED	5,321	5,191	97.6%	5,254	98.7%	5,250	98.7%	5,275	99.1%	5,225	98.2%
MODOC	120	116	96.7%	116	96.7%	117	97.5%	119	99.2%	116	96.7%
MONO	138	127	92.0%	125	90.6%	128	92.8%	127	92.0%	128	92.8%
MONTEREY	6,733	6,613	98.2%	6,626	98.4%	6,641	98.6%	6,654	98.8%	6,611	98.2%
NAPA	1,746	1,716	98.3%	1,716	98.3%	1,711	98.0%	1,707	97.8%	1,709	97.9%
NEVADA	985	822	83.5%	819	83.1%	820	83.2%	823	83.6%	803	81.5%

* Additional precautions for student de-identification are based on jurisdiction enrollment for kindergarten. For jurisdictions with: Fewer than 20 enrollees, the data are omitted; 20-49 enrollees, values of 95% or higher are listed as ≥95%; 50-99 enrollees, values of 98% or higher are listed as ≥98%; 100 or more enrollees, values of 99% or higher are listed as ≥99%.

KINDERGARTEN IMMUNIZATION ASSESSMENT - CALIFORNIA, 2019-2020
 TABLE 11: NUMBER AND PERCENTAGE OF STUDENTS WITH REQUIRED IMMUNIZATIONS BY VACCINE SERIES,
 BY COUNTY

	TOTAL STUDENTS	DTP 4+		POLIO 3+		MMR 2		HEP B 3+		VAR 2+	
	NUMBER	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STATE TOTAL	554,250	532,988	96.2%	535,112	96.5%	534,929	96.5%	539,760	97.4%	532,349	96.0%
COUNTY											
ORANGE	41,381	40,222	97.2%	40,341	97.5%	40,303	97.4%	40,613	98.1%	40,171	97.1%
PLACER	6,709	6,301	93.9%	6,337	94.5%	6,283	93.7%	6,375	95.0%	6,260	93.3%
PLUMAS	208	200	96.2%	198	95.2%	201	96.6%	201	96.6%	195	93.8%
RIVERSIDE	36,134	34,370	95.1%	34,591	95.7%	34,624	95.8%	34,737	96.1%	34,448	95.3%
SACRAMENTO	21,495	20,421	95.0%	20,622	95.9%	20,602	95.8%	20,752	96.5%	20,522	95.5%
SAN BENITO	1,099	1,075	97.8%	1,075	97.8%	1,070	97.4%	1,085	98.7%	1,076	97.9%
SAN BERNARDINO	34,542	32,895	95.2%	33,177	96.0%	33,221	96.2%	33,668	97.5%	33,179	96.1%
SAN DIEGO	45,956	43,421	94.5%	43,594	94.9%	43,556	94.8%	43,887	95.5%	43,376	94.4%
SAN FRANCISCO	6,963	6,778	97.3%	6,805	97.7%	6,793	97.6%	6,814	97.9%	6,748	96.9%
SAN JOAQUIN	12,320	11,890	96.5%	12,008	97.5%	12,008	97.5%	12,132	98.5%	11,941	96.9%
SAN LUIS OBISPO	3,095	2,968	95.9%	2,979	96.3%	2,978	96.2%	3,007	97.2%	2,961	95.7%
SAN MATEO	9,168	8,973	97.9%	8,995	98.1%	8,996	98.1%	9,038	98.6%	8,930	97.4%
SANTA BARBARA	6,500	6,341	97.6%	6,369	98.0%	6,364	97.9%	6,384	98.2%	6,333	97.4%
SANTA CLARA	24,963	24,494	98.1%	24,578	98.5%	24,503	98.2%	24,661	98.8%	24,372	97.6%
SANTA CRUZ	3,415	3,157	92.4%	3,155	92.4%	3,161	92.6%	3,178	93.1%	3,179	93.1%
SHASTA	2,525	2,350	93.1%	2,356	93.3%	2,368	93.8%	2,405	95.2%	2,345	92.9%
SIERRA	25	--*	≥95%	--*	≥95%	--*	≥95%	--*	≥95%	--*	≥95%
SISKIYOU	530	515	97.2%	516	97.4%	517	97.5%	518	97.7%	517	97.5%
SOLANO	5,966	5,807	97.3%	5,848	98.0%	5,850	98.1%	5,868	98.4%	5,820	97.6%
SONOMA	6,043	5,720	94.7%	5,728	94.8%	5,723	94.7%	5,758	95.3%	5,699	94.3%
STANISLAUS	9,366	9,054	96.7%	9,151	97.7%	9,162	97.8%	9,199	98.2%	9,143	97.6%
SUTTER	2,017	1,748	86.7%	1,760	87.3%	1,772	87.9%	1,812	89.8%	1,786	88.5%
TEHAMA	1,073	1,024	95.4%	1,039	96.8%	1,037	96.6%	1,051	97.9%	1,026	95.6%
TRINITY	138	123	89.1%	121	87.7%	126	91.3%	127	92.0%	127	92.0%
TULARE	9,535	9,281	97.3%	9,332	97.9%	9,337	97.9%	9,385	98.4%	9,317	97.7%
TUOLUMNE	584	541	92.6%	548	93.8%	547	93.7%	555	95.0%	546	93.5%
VENTURA	11,466	11,115	96.9%	11,157	97.3%	11,156	97.3%	11,238	98.0%	11,084	96.7%
YOLO	2,959	2,845	96.1%	2,849	96.3%	2,858	96.6%	2,886	97.5%	2,842	96.0%
YUBA	1,361	1,296	95.2%	1,306	96.0%	1,301	95.6%	1,317	96.8%	1,299	95.4%

* Additional precautions for student de-identification are based on jurisdiction enrollment for kindergarten. For jurisdictions with: Fewer than 20 enrollees, the data are omitted; 20-49 enrollees, values of 95% or higher are listed as ≥95%; 50-99 enrollees, values of 98% or higher are listed as ≥98%; 100 or more enrollees, values of 99% or higher are listed as ≥99%.

EXHIBIT 17

Kindergarten Immunization Assessment, 2020-2021 and 2021-2022 First Grade Immunization Assessment, 2021-2022

Executive summary

Immunization requirements for school entry help protect children and communities from vaccine-preventable diseases. Schools in California are required to report student immunization status to the California Department of Public Health (CDPH) every year. This report summarizes California student immunization rates reported at kindergarten in the 2020-2021 and 2021-2022 school years and at first grade in 2021-2022.

Events potentially affecting immunization and reporting during this period included:

- The Coronavirus 2019 (COVID-19) pandemic has disrupted routine primary health care and education.
- Beginning January 1, 2021 Senate Bills [\(SB\) 276](#) and [SB 714](#) have required that all new medical exemptions to requirements for school entry be issued through a statewide database accessed at the California Immunization Registry Medical Exemption (CAIR-ME) website.

Reported immunization rates in 2021-2022 decreased slightly from before the pandemic. The proportion of kindergarten students reported to have received all required immunizations was 94.3% in 2019-2020 and 94.0% in 2021-2022. An interim rate for kindergarten students in 2020-2021, when immunization or reporting might have been affected by delayed immunization and widespread school closures, was 92.8%. The rate for this cohort during first grade in 2021-2022 was 96.0%. The rate of kindergarteners reported as having received 2 doses of Measles, Mumps and Rubella (MMR) in 2021-2022 was 96.3%, with 16 (28%) of California counties reporting MMR rates below 95%. The rate of kindergarteners reported with permanent medical exemptions decreased from 1.0% in 2019-2020 to 0.3% in 2021-2022, the lowest level since 2015-2016.

CDPH and local health departments in California continue to closely monitor immunization coverage and to support schools in protecting the health of their students and communities.

Introduction

All schools with kindergartens in California are required to report annually on student compliance per California Health and Safety Code Sections 120325-120375. This report summarizes the 2020-2021 and 2021-2022 school year data for kindergarteners. In 2021-2022, an additional reporting requirement was added for first grade students to follow immunization trends during the COVID-19 pandemic, associated with delayed primary healthcare, lengthy school closures, shifts from in-person to virtual and hybrid learning, and, in concert with [smaller birth cohorts](#), a decreased kindergarten student enrollment of 10% between [2019-2020](#) and [2021-2022](#) per California Department of Education data.

California laws over the past decade have modified:

- **Medical exemptions to required immunization:** Starting January 1, 2021, Senate Bills [SB 276](#) and [SB 714](#) have required that all new medical exemptions for school and child care entry be issued through CAIR-ME, an electronic, statewide database. Medical exemptions can only be issued by physicians and surgeons licensed with the Medical Board or Osteopathic Medical Board of California and must meet criteria for appropriate exemptions from the Centers for Disease Control and Prevention, Advisory Committee on Immunization Practices and American Academy of Pediatrics.
- **Personal beliefs exemptions (PBEs):** PBEs have not been permitted since 2016 per [SB 277](#).
- **Required doses:** Since 2019, students entering kindergarten are required to receive two rather than one dose of Varicella (chickenpox) vaccine due to changes in the [California Code of Regulations](#).

Methods

California schools registered with the California Department of Education reported to CDPH data on enrolled kindergarteners during the winter of the 2020-2021 and 2021-2022 school years. In 2021-2022, schools reporting kindergarten enrollment were also required to report the immunization status of first grade students to monitor their vulnerability to vaccine-preventable diseases during the pandemic.

Based on their immunization status, students were classified by school staff into the following categories:

- Received all required immunizations, including the following doses:
 - 5 or more of Diphtheria, Tetanus and Pertussis (DTP) vaccine (4 doses are acceptable if at least 1 dose was received on or after the fourth birthday): ['4+DTP'];
 - 4 or more of Polio vaccine (3 doses are acceptable if at least 1 dose was received on or after the fourth birthday): ['3+ Polio'];
 - 2 or more of Measles-containing and Mumps-containing vaccines received on or after the first birthday, and 1 or more of Rubella vaccine, typically combined as Measles, Mumps and Rubella (MMR) vaccine: ['2+ MMR'];
 - 3 or more of Hepatitis B (Hep B) vaccine: ['3+ Hep B'], and
 - 2 or more of Varicella (Var): ['2+ Var']. From 2000-2019, the requirement was for 1 or more doses of Varicella vaccine or a history documented by a physician of having had chickenpox disease. History of disease is currently reported as a permanent medical exemption.
- Conditional entrants who had:
 - Not received all required doses but were not overdue for required doses, or
 - A temporary medical exemption to one or more required immunizations.
 Conditional entrants are required to receive additional doses after entry.
- Have a permanent medical exemption (PME) to one or more required immunizations.
- Other students lacking immunizations. Under SB 277, entrants since the 2016-2017 school year have not been required to have immunizations if they attend:
 - A home-based private school or
 - A public independent study program and do not receive classroom-based instruction.
 - In addition, students who have an individualized education program (IEP) may continue to receive all necessary services identified in their IEP regardless of their immunization status.
 Students in these settings were classified in this category if they lacked required immunizations and did not meet the criteria for other categories.
- Children overdue for one or more required immunizations and subject to exclusion from school until the overdue requirements have been met.

Under SB 277, since the 2016-2017 school year personal beliefs exemptions (PBEs) have no longer been an option for children entering kindergarten.

Starting in 2016-2017 school year, any immunizations received by children with PBEs or PME for different immunizations are reported in the completion rates of each specific required immunization series (e.g., 4+ DTP, 2+ MMR, etc.).

Due to rounding, figures may differ from the sums of their components. Differences were calculated between exact figures, varying at times by 0.1% from the differences between rounded figures.

Results

In 2021-2022, 7,824 schools reported immunization status for 503,722 kindergarten students, and 7,598 schools reported on 431,819 first grade students (Table 1 and 2). Compared to 2019-2020, the number of kindergarten schools that reported in 2021-2022 decreased by 2% and number of reported kindergarteners decreased by 9%. Between 2019-2020 and 2021-2022, the number of private schools reporting kindergarten education decreased 10% from 1,891 to 1,693 schools, while the number of public schools with kindergarten increased slightly from 6,109 to 6,131. Similar to previous years, public schools accounted for 78% of all schools reporting kindergarten education and 92% of all reported kindergarten students in 2021-2022. Among nonreporting schools, 87% (161/185) were private schools.

All required immunizations: Among the 503,722 reported kindergarten students in 2021-2022, 94.0% had received all required immunizations, a decrease of 0.3 percentage points from 2019-2020 (Table 1 and Figure 1); these findings were similar for the subset of public schools.

The interim rate for kindergarten students in 2020-2021 was 92.8%, while the rate for this cohort during first grade in 2021-2022 was 96.0% (Table 2).

Specific immunization series: Completion rates for specific immunization series among kindergarteners in 2021-2022 ranged from 95.7% for DTP to 97.3% for Hep B (Table 1 and Figure 2). Compared to 2019-2020, in 2021-2022 rates for DTP vaccine decreased from 96.2% to 95.7%, varicella vaccine remained unchanged at 96.0%, polio vaccine decreased from 96.5% to 96.2% and Hep B vaccine decreased from 97.4% to 97.3%.

MMR rates among kindergarteners decreased 0.2 percentage points from 96.5% in 2019-2020 to 96.3% in 2021-2022, including 96.4% in public schools and 95.5% in private schools.

As with the trend for all required vaccines, the rates reported for each specific vaccine were lower during the first pandemic reporting year of 2020-2021 and similar in 2021-2022 compared to 2019-2020.

PMEs: The number of kindergarteners reported with permanent medical exemptions was 5,268 (1.0%) in 2019-2020 and 1,366 (0.3%) in 2021-2022 (Table 1, Figures 3 and 4). Among first grade students in 2021-2022, 1,675 students (0.4%) were reported with PMEs, compared to 2,865 (0.6%) of kindergarten students in 2020-2021 (Table 2). Both public and private schools reported fewer PMEs in 2021-2022 than previous years.

Conditional entrants: The proportion of kindergarteners reported as conditional entrants decreased from 1.7% in 2019-2020 to 1.3% in 2021-2022 (Table 1, Figure 4), while 0.6% of first grade students were reported as conditional entrants in 2021-2022 (Table 2). 1,097 kindergarteners in 2019-2020 were reported with temporary medical exemptions (0.2% of all students and 12% of conditional entrants), compared to 430 (0.1% of all students and 6% of conditional entrants) in 2021-2022. Among first grade students in 2021-2022, 225 students were reported with temporary medical exemptions (0.1% of all students and 9% of conditional entrants).

For the sum of permanent and temporary medical exemptions during kindergarten, 6,365 (1.1%) were reported in 2019-2020 and 1,796 (0.4%) in 2021-2022.

Overdue: The rates of kindergarteners reported as overdue were 1.5% in 2019-2020, 4.0% in 2020-2021 and 2.3% in 2021-2022 (Table 1 and Figure 4), while 1.3% of first-grade students were reported as overdue in 2021-2022 (Table 2). Between 2019-2020 and 2021-2022, the proportion of overdue kindergarteners increased from 1.4% to 2.2% in public schools and from 2.3% to 3.3% in private schools.

Other students lacking required immunizations: Kindergarteners who were reported as lacking one or more required immunizations who attend a public independent study program and do not receive classroom-based

instruction, attend a home-based private school, or receive IEP services increased from 1.6% in 2019-2020 to 2.1% in 2021-2022 (Table 1 and Figure 4).

County-level immunization rates: Immunization rates varied widely, being lower in some northern and central counties in California (Tables 3 and 4, Figures 5 and 6). In 2021-2022, 13 (22%) of 58 counties reported kindergartens with all required immunizations below 90%, compared to 11 (19%) counties in 2019-2020. In most counties, rates for all required immunizations in first grade students during 2021-2022 were higher than rates in kindergarten students during 2020-2021.

As in prior school years, counties with a higher proportion of kindergarten enrollment in online or virtual schools had lower immunization rates. El Dorado, Glenn, Kern, and Sutter counties reported more than 5% of kindergarten students being enrolled in virtual schools in 2021-2022 and rates of all required vaccines between 78 - 88%. In these counties, there were large differences in all required immunization rates between students in classroom-based schools versus virtual schools (Box).

% Of Kindergarteners with All Required Immunizations in 2021-2022				For Schools Based in County, % of Pupils Reported as Enrolled in Virtual Schools*
County	All Schools Based in County	Classroom-Based Schools	Virtual Schools*	
Sutter	77.5%	96.1%	35.0%	30.4%
El Dorado	78.2%	92.7%	18.2%	19.4%
Glenn	85.1%	96.7%	23.3%	15.7%
Kern	88.2%	93.9%	21.0%	7.9%

*Virtual schools are based in the specified county but may enroll children who reside in other counties.

MMR rates for kindergarteners by county ranged from 79.9% to 99.3% in 2021-2022, with 16 (28%) counties reporting MMR rates lower than 95%, including 5 counties with rates lower than 90%. This is similar to the rates in 2018-2019 and 2019-2020, in which 17 (29%) counties reported fewer than 95% of their kindergarteners as having had at least two MMR doses. For first-grade students in 2021-2022, MMR rates by county ranged from 83.8% to 100%, with 12 (21%) counties with MMR rates lower than 95%.

Discussion

Despite the demands and disruptions from the pandemic, California schools continue to provide valuable information on the immunity of their students, with public schools reporting immunization status of 97% (449,496/462,172) of kindergarteners counted in CDE enrollment data in [2020-2021](#) and 98% (461,506/469,928) in [2021-2022](#). Private school reporting was lower at 91% (36,042/39,392) in 2020-2021 and 94% (42,216/45,037) in 2021-2022.

The rate of all required immunizations reported for kindergarten students was similar at 94.3% in 2019-2020 and 94.0% in 2021-2022. An interim lower rate of 92.8% for kindergarteners during the initial school year of the pandemic in 2020-2021 was followed by a rate of 96.0% during first grade in 2021-2022. As data on first graders had not been collected previously, it is unclear whether the pace of catch-up during first grade in 2021-2022 was unusual. Immunization rates for most individual required vaccines have also decreased slightly during the pandemic. School reporting during the pandemic, especially during 2020-2021, may have been

hampered by closures, shortages or turnover of staff at schools, and delayed care or recordkeeping at clinical sites.

Over the last decade, the rate of all required immunizations rose from 91.0% in 2011-2012 to 95.6% in 2015-2016, and then decreased to 94.0% in 2021-2022. During this period, reasons for increasing immunization rates might have included: public health departments working with schools to improve the application of [conditional admission schedules](#), personal beliefs exemptions no longer being permitted per [SB 277](#) and [CDE school audits](#) incorporating immunization compliance review. In contrast, during this period increases were also reported in kindergarteners with medical exemptions or lacking immunizations while in educational programs that are individualized or based outside of the classroom. Since implementation of [SB 276](#) and [SB 714](#), which require medical exemptions to align with national standards and be subject to review by CDPH, the rates of PME have decreased from a record high of 1.0% kindergarteners in 2019-2020 to 0.3% of kindergarteners and 0.4% of first graders in 2021-2022.

National trends and rates for kindergarteners during the 2020-2021 school year reported to [CDC](#) were similar to California (CA), whether for MMR (93.9% US vs. 95.1% CA), DTaP (93.6% vs 94.7%) or Varicella (93.6% vs. 94.8%). In 2021-2022, 16 (28%) of California counties had reported MMR rates in kindergarten students below 95%, an approximate threshold necessary to prevent the transmission of measles. Regional differences in immunization rates for school-required vaccines reflect trends for [COVID-19 vaccines in California](#).

Children in schools and communities with lower immunization rates remain at higher risk of contracting and transmitting vaccine preventable diseases. Efforts to monitor, support, and increase immunizations should continue as in-person learning and social activities resume; efforts to protect school communities with required vaccines and COVID-19 vaccines can be complementary and synergistic.

Limitations

This report is subject to limitations that include:

- Submission of student immunization records to school staff and reporting by school staff of immunization data to CDPH might have been reduced during the pandemic. Incomplete immunization records might have resulted in underestimates of immunization rates.
- CDPH does not know how many of the schools that did not report had enrolled kindergarteners or the immunization status of their kindergarten students. In 2020-2021, 342 California elementary schools, including 297 private schools and 45 public schools, did not report. In 2021-2022, 185 California elementary schools, including 161 private schools and 24 public schools, did not report. Underreporting could have biased the reported immunization rates in either direction.
- As in previous years, private home schools that did not register with the California Department of Education may not have reported data to CDPH, which would result in underestimates of their enrollment.
- The timing of immunization is often not included in the assessment criteria; if doses were given at inappropriate ages or intervals, reported rates may overestimate levels of immunity.

Figures

Figure 1. Percentage of Students with All Required Immunizations by School Year, Left: Kindergarten, 2014-2015 to 2021-2022 School Years; Right: Kindergarten, 2020-2021 School Year, First Grade, 2021-2022 School Year

Figure 2. Percentage of Students with Specific Required Immunizations by Series and School Year, Left: Kindergarten, 2014-2015 to 2021-2022 School Years; Right: Kindergarten, 2020-2021 School Year, First Grade, 2021-2022 School Year

Figure 3. Percentage of Students with Permanent Medical Exemptions (PME) by School Year, Left: Kindergarten, 2014-2015 to 2021-2022 School Years; Right: Kindergarten, 2020-2021 School Year, First Grade, 2021-2022 School Year

Figure 4. Percentage of All Kindergarten and First Grade Students by Reported Admission Status by School Year, Top: Kindergarten, 2014-2015 to 2021-2022 School Years: Bottom: Kindergarten, 2020-21 School Year and First Grade, 2021-2022 School Year.

Figure 5. Map: Kindergarten and First Grade Students with All Required Immunizations, by County, Kindergarten, 2019-2020 to 2021-2022 School Years and First Grade, 2021-2022 School Year

Figure 6. Map: Kindergarten and First Grade Students with Two or More Doses of MMR Vaccine, by County, Kindergarten, 2019-2020 to 2021-2022 School Years and First Grade, 2021-2022 School Year

Tables

Table 1. Kindergarten Immunization Assessment Summary, 2019-2020 through 2021-2022 School Years

Table 2. Immunization Assessment Summary of Kindergarten in 2020-2021 and Subsequent 1st Grade in 2021-2022

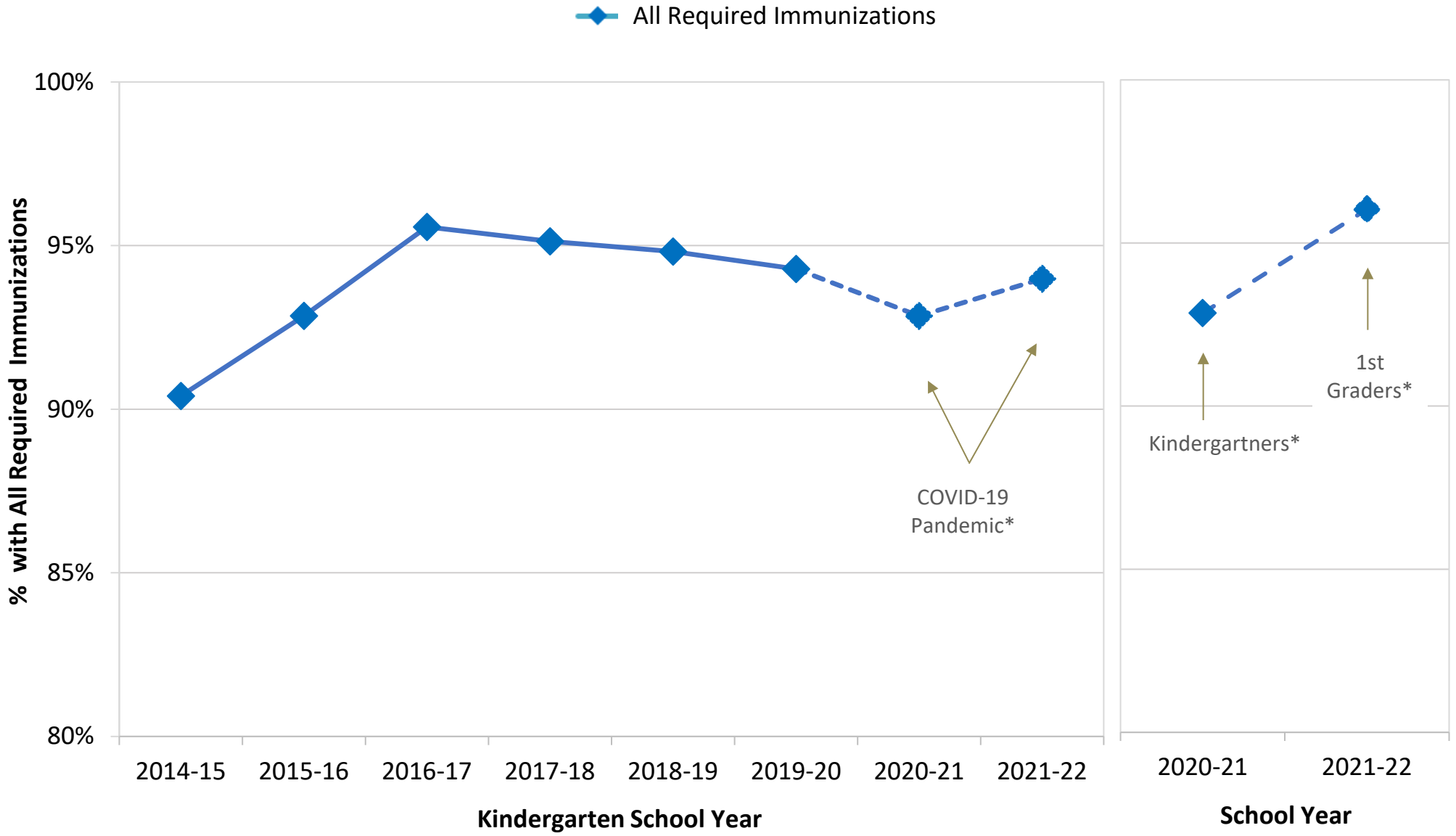
Table 3. Total Enrollment and Admission Status of Kindergarten, 2021-2022, 2020-2021 and 2019-2020 School Years and First Grade, 2021-2022 School Year, by County

Table 4. Total Enrollment and Specific Required Immunizations by Series, Kindergarten, 2021-2022, 2020-2021, 2019-2020 and First Grade, 2021-2022, by County

Figure 1. Percentage of Students with All Required Immunizations by School Year

Left: Kindergarteners in the 2014-2015 to 2021-2022 School Years

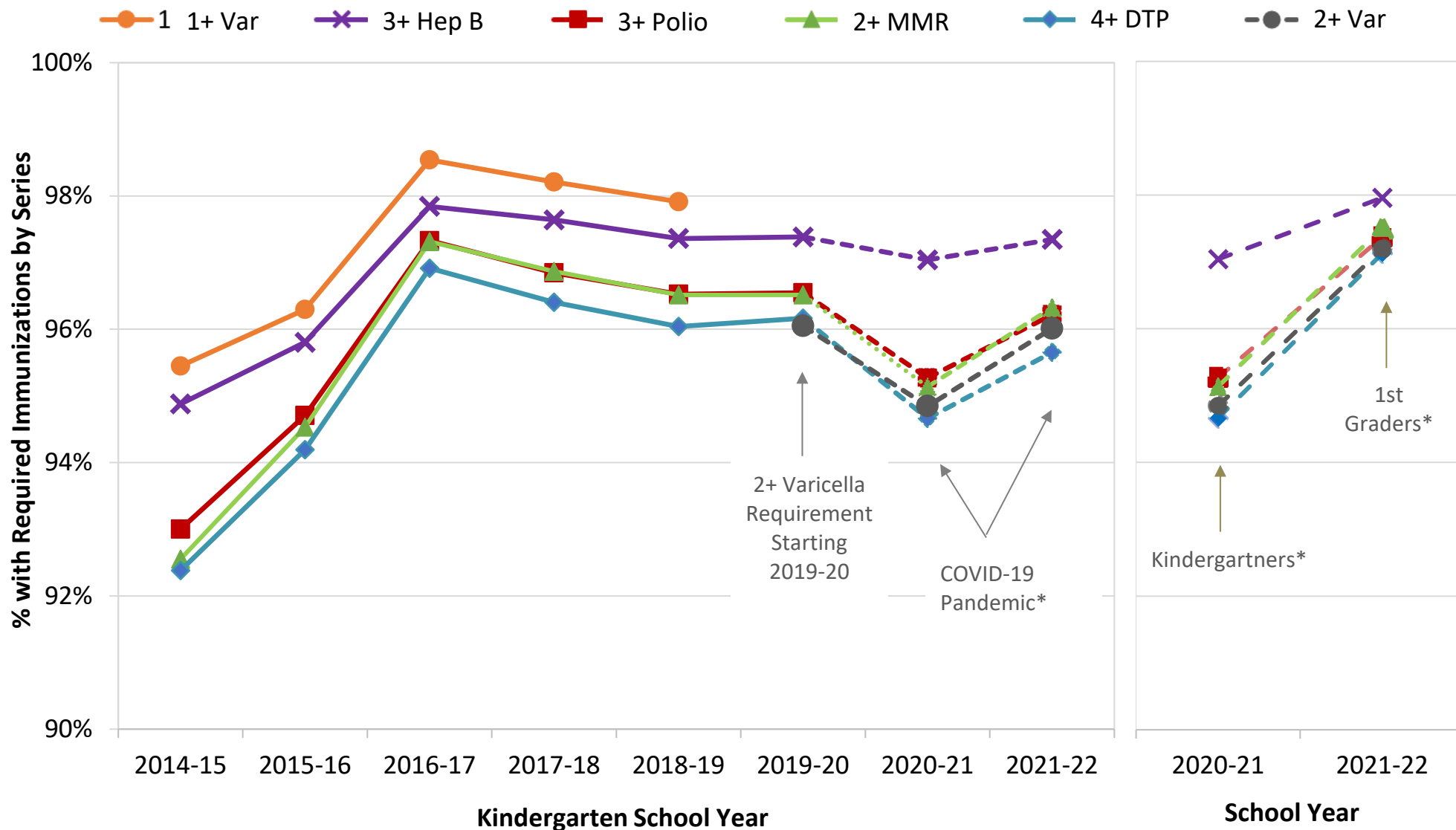
Right: Kindergarteners in the 2020-2021 School Year and First Graders in the 2021-2022 School Year



*Immunization and data collection potentially affected by the COVID-19 pandemic.

Left: Kindergarteners in the 2014-2015 to 2021-2022 School Years

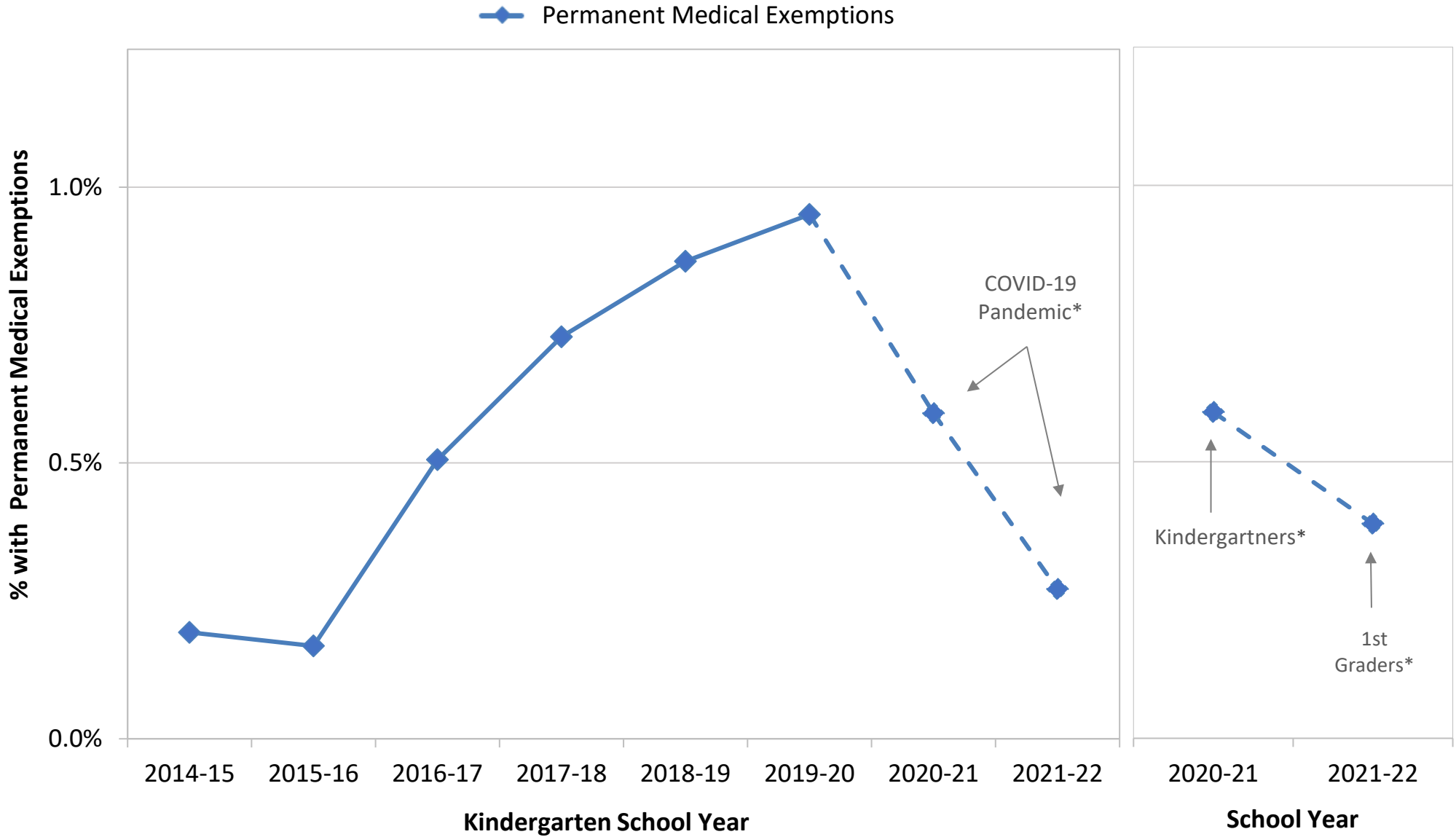
Right: Kindergarteners in the 2020-2021 School Year and First Graders in the 2021-2022 School Year



*Immunization and data collection potentially affected by the COVID-19 pandemic.

Left: Kindergarteners in the 2014-2015 to 2021-2022 School Years

Right: Kindergarteners in the 2020-2021 School Year and First Graders in the 2021-2022 School Year



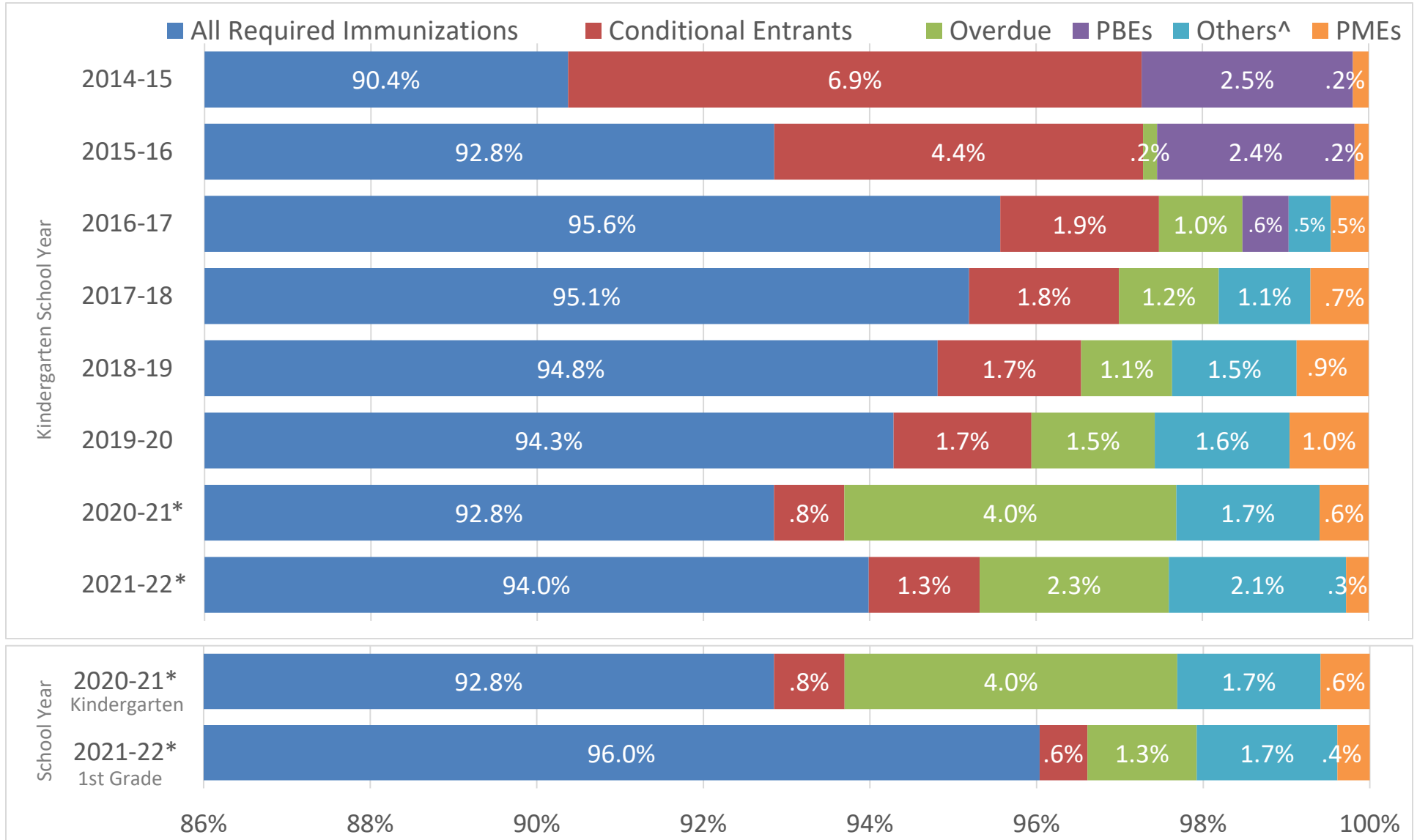
*Immunization and data collection potentially affected by the COVID-19 pandemic.

Figure 4. Percentage of All Kindergarten and First Grade Students by Reported Admission Status by School Year

Top: Kindergarteners in the 2014-2015 to 2021-2022 School Years

Bottom: Kindergarteners in the 2020-2021 School Year and First Graders in the 2021-2022 School Year

In the 2014-2015 and 2015-2016 school years, entrants were subject to AB 2109. Since the 2016-2017 school year, entrants have been subject to SB 277. In the 2019-20 school year, the varicella requirement changed from one or more to two or more doses.



^ Other children lacking required immunizations under criteria specified in SB 277.

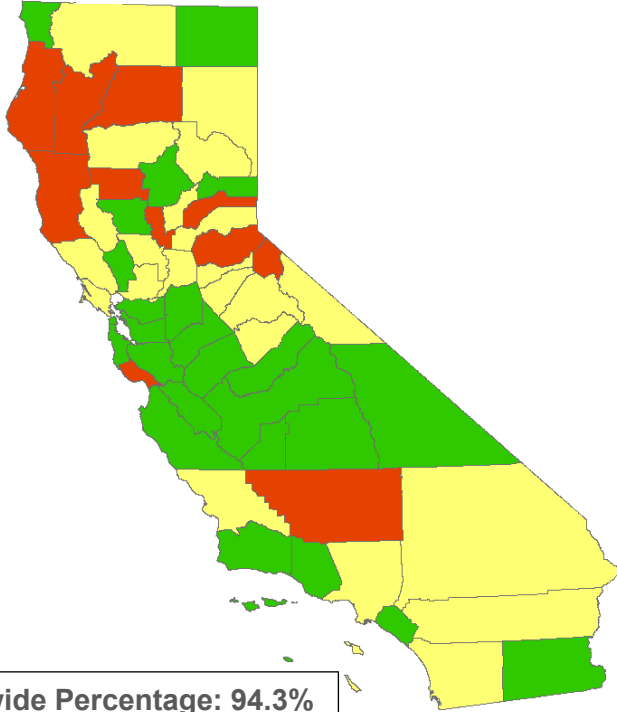
*Immunization and data collection potentially affected by the COVID-19 pandemic.

Figure 5. Kindergarten and First Grade Students with All Required Immunizations by County

Kindergartners in the 2019-2020 to 2021-2022 School Years
First Graders in the 2021-2022 School Year

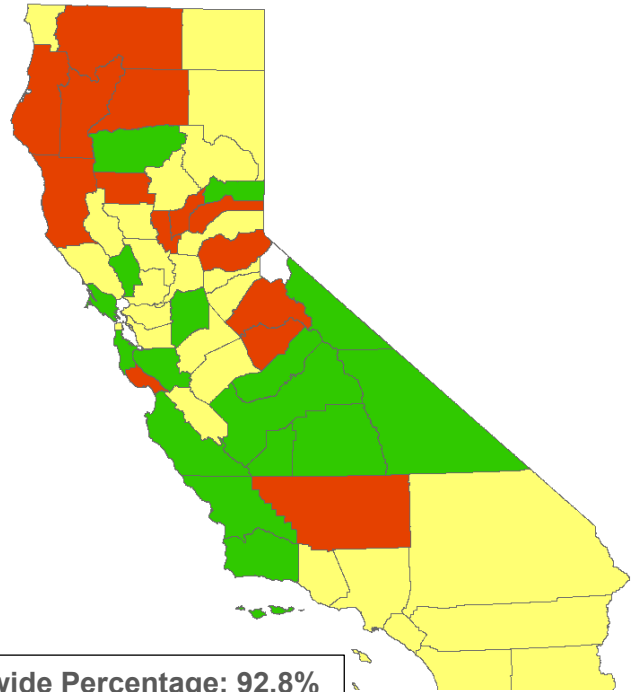


Kindergarten
2019-2020 School Year



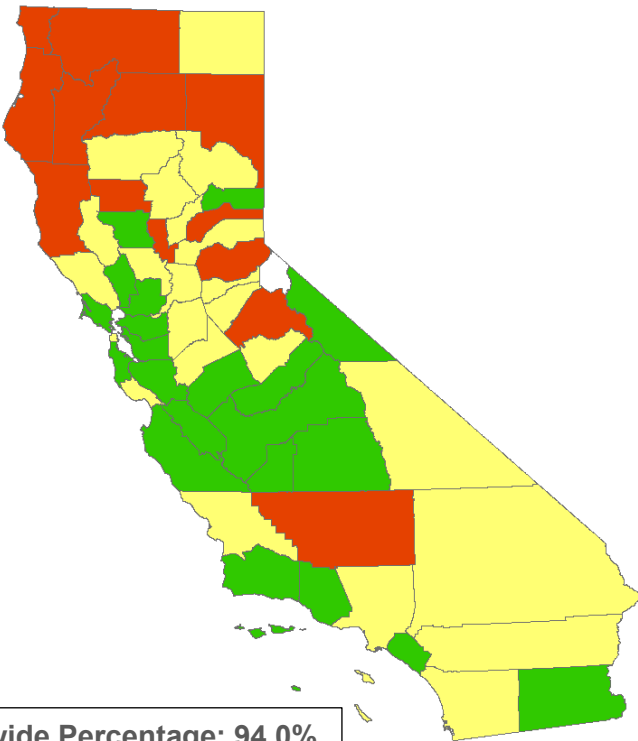
Statewide Percentage: 94.3%

Kindergarten
2020-2021 School Year*



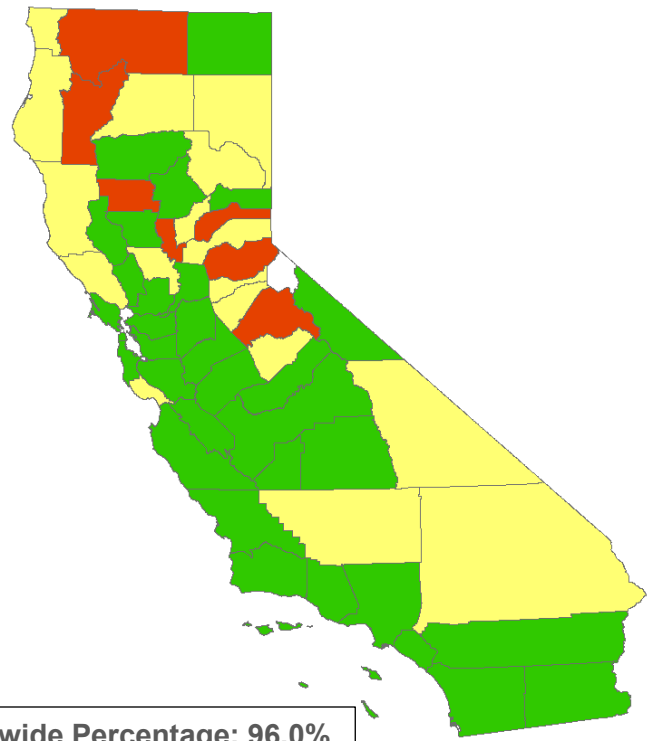
Statewide Percentage: 92.8%

Kindergarten
2021-2022 School Year*



Statewide Percentage: 94.0%

First Grade
2021-2022 School Year*



Statewide Percentage: 96.0%

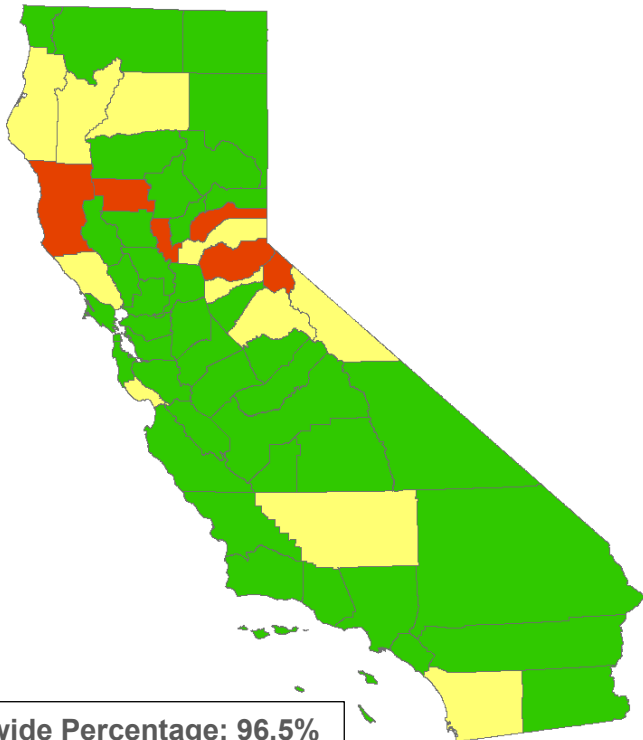
*Immunization and data collection potentially affected by the COVID-19 pandemic.

Figure 6. Kindergarten and First Grade Students with Two or More Doses of MMR Vaccine, by County
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Kindergartners in the 2019-2020 to 2021-2022 School Years
 First Graders in the 2021-2022 School Year

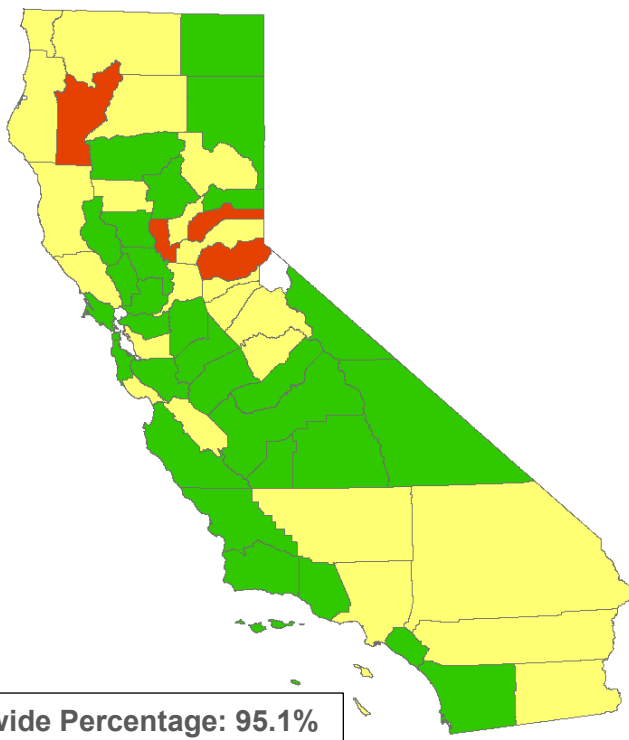


Kindergarten
 2019-2020 School Year



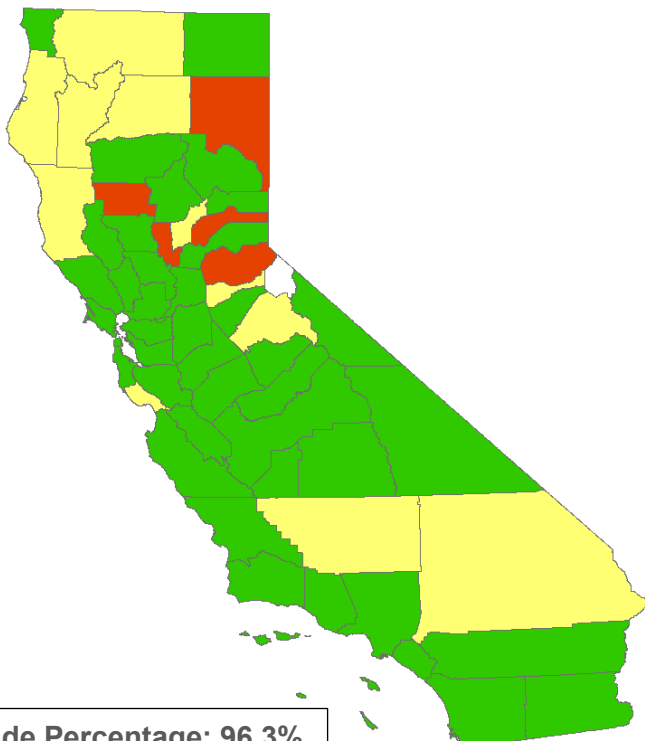
Statewide Percentage: 96.5%

Kindergarten
 2020-2021 School Year*



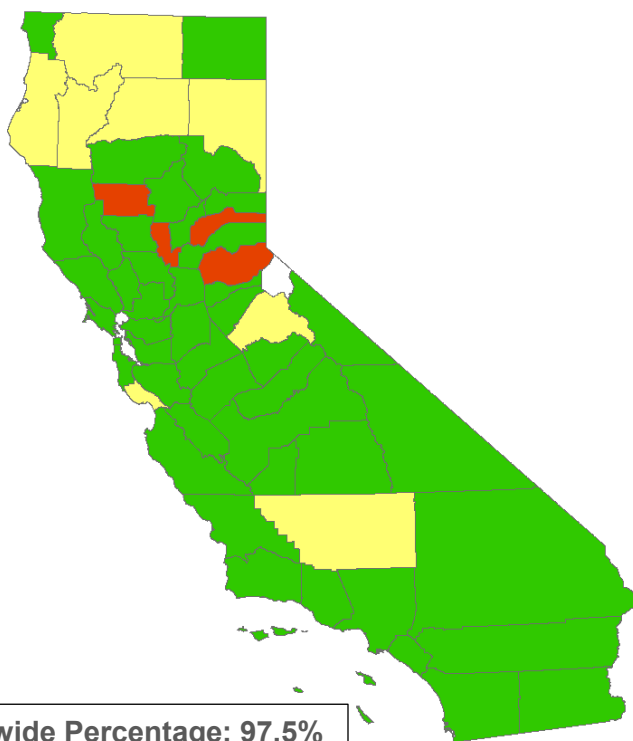
Statewide Percentage: 95.1%

Kindergarten
 2021-2022 School Year*



Statewide Percentage: 96.3%

First Grade
 2021-2022 School Year*



Statewide Percentage: 97.5%

*Immunization and data collection potentially affected by the COVID-19 pandemic.

Table 1: Kindergarten Immunization Assessment Summary, 2019-2020 through 2021-2022 School Years

	Kindergarten									Kindergarten: 2021-22 and 2019-20		
	2021-2022			2020-2021			2019-2020			2-Year Percentage Point Change**		
	All	Public	Private	All	Public	Private	All	Public	Private	All	Public	Private
Number of Schools Reporting Kindergarten*	7,824	6,131	1,693	7,749	6,070	1,679	8,000	6,109	1,891	-2%	0%	-10%
Number of Kindergarten Students	503,722	461,506	42,216	485,538	449,496	36,042	554,250	511,104	43,146	-9%	-10%	-2%
All Required Immunizations	94.0%	94.1%	93.1%	92.8%	92.9%	92.6%	94.3%	94.4%	92.4%	-0.3%	-0.4%	0.7%
Conditional Entrants	1.3%	1.3%	1.8%	0.8%	0.8%	1.7%	1.7%	1.6%	2.4%	-0.3%	-0.3%	-0.6%
Permanent Medical Exemptions	0.3%	0.2%	1.0%	0.6%	0.5%	1.9%	1.0%	0.8%	2.5%	-0.7%	-0.6%	-1.6%
Personal Beliefs Exemptions	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Others Lacking immunizations†	2.1%	2.2%	0.9%	1.7%	1.8%	0.9%	1.6%	1.7%	0.3%	0.5%	0.5%	0.5%
Overdue^	2.3%	2.2%	3.3%	4.0%	4.1%	2.8%	1.5%	1.4%	2.3%	0.8%	0.8%	1.0%
4+ DTP	95.7%	95.7%	95.3%	94.7%	94.7%	94.6%	96.2%	96.3%	94.6%	-0.5%	-0.6%	0.7%
3+ Polio	96.2%	96.3%	95.6%	95.2%	95.3%	94.9%	96.5%	96.7%	94.8%	-0.3%	-0.4%	0.8%
2+ MMR	96.3%	96.4%	95.5%	95.1%	95.1%	94.7%	96.5%	96.7%	94.7%	-0.2%	-0.3%	0.8%
3+ Hep B	97.3%	97.4%	97.1%	97.0%	97.1%	96.3%	97.4%	97.5%	96.1%	0.0%	-0.1%	1.0%
2+ Var (or physician-documented disease)^^	96.0%	96.1%	95.3%	94.8%	94.8%	94.6%	96.0%	96.2%	94.4%	0.0%	-0.1%	0.9%

* Number of schools reporting kindergarten students.

** Differences between exact percentages; may vary from the differences between the rounded percentages listed to the left in table.

† Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

^ Overdue for one or more required immunizations.

^^ In the 2019-20 school year, the varicella requirement changed from one or more to two or more doses.

Table 2. Immunization Assessment Summary of Kindergarten in 2020-2021 and Subsequent 1st Grade in 2021-2022

	1st Grade			Kindergarten			1st Grade 2021-22 and Kindergarten 2020-21		
	2021-2022			2020-2021			1-Year Percentage Point Change**		
	All	Public	Private	All	Public	Private	All	Public	Private
Number of Schools Reporting Students*	7,598	6,064	1,534	7,749	6,070	1,679	-2%	0%	-9%
Number of Students	431,819	398,465	33,354	485,538	449,496	36,042	-11%	-11%	-7%
All Required Immunizations	96.0%	96.1%	94.9%	92.8%	92.9%	92.6%	3.2%	3.3%	2.3%
Conditional Entrants	0.6%	0.6%	0.8%	0.8%	0.8%	1.7%	-0.3%	-0.2%	-0.9%
Permanent Medical Exemptions	0.4%	0.3%	1.3%	0.6%	0.5%	1.9%	-0.2%	-0.2%	-0.7%
Personal Beliefs Exemptions	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Others Lacking immunizations†	1.7%	1.7%	1.2%	1.7%	1.8%	0.9%	0.0%	-0.1%	0.3%
Overdue^	1.3%	1.3%	1.8%	4.0%	4.1%	2.8%	-2.7%	-2.8%	-1.0%
4+ DTP	97.1%	97.2%	96.4%	94.7%	94.7%	94.6%	2.5%	2.5%	1.7%
3+ Polio	97.4%	97.5%	96.4%	95.2%	95.3%	94.9%	2.1%	2.2%	1.6%
2+ MMR	97.5%	97.6%	96.5%	95.1%	95.1%	94.7%	2.4%	2.5%	1.8%
3+ Hep B	98.0%	98.0%	97.1%	97.0%	97.1%	96.3%	0.9%	0.9%	0.7%
2+ Var (or physician-documented disease)^^	97.2%	97.3%	96.3%	94.8%	94.8%	94.6%	2.4%	2.4%	1.7%

* Number of schools reporting kindergarten students during the 2020-2021 school year and first grade students during the 2021-2022 school year.

** Differences between exact percentages; may vary from the differences between the rounded percentages listed to the left in table.

† Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

^ Overdue for one or more required immunizations.

^^ In the 2019-20 school year, the varicella requirement changed from one or more to two or more doses.

Kindergarten and 1st Grade Immunization Assessment - California, 2021-2022
 Table 3: Total Enrollment and Admission Status of Kindergarten, 2021-2022, 2020-2021 and 2019-2020 School Years
 and First Grade, 2021-2022 School Year, By County*

	School Year	Grade	Total Students	Students with All Required Immunizations	Conditional Entrants	Students with a Permanent Medical Exemption	Others Lacking Required Immunizations†	Overdue^
			Number	Percent	Percent	Percent	Percent	Percent
STATE TOTAL	2021-22	1st Grade	431,819	96.0%	0.6%	0.4%	1.7%	1.3%
		Kindergarten	503,722	94.0%	1.3%	0.3%	2.1%	2.3%
	2020-21	Kindergarten	485,538	92.8%	0.8%	0.6%	1.7%	4.0%
		Kindergarten	554,250	94.3%	1.7%	1.0%	1.6%	1.5%
ALAMEDA	2021-22	1st Grade	16,710	96.8%	0.4%	0.3%	0.2%	2.3%
		Kindergarten	19,422	95.1%	0.7%	0.4%	0.3%	3.6%
	2020-21	Kindergarten	19,752	90.3%	0.6%	0.3%	0.7%	8.2%
		Kindergarten	21,622	96.5%	1.1%	0.7%	0.2%	1.6%
ALPINE	2021-22	1st Grade	--**	--*	--*	--*	--*	--*
		Kindergarten	--**	--*	--*	--*	--*	--*
	2020-21	Kindergarten	--**	--*	--*	--*	--*	--*
		Kindergarten	9	--*	--*	--*	--*	--*
AMADOR	2021-22	1st Grade	350	93.7%	0.6%	0.0%	0.6%	5.1%
		Kindergarten	355	91.0%	0.3%	0.0%	1.4%	7.3%
	2020-21	Kindergarten	367	93.2%	1.4%	1.9%	0.3%	3.3%
		Kindergarten	308	91.2%	4.2%	1.9%	0.6%	1.9%
BUTTE	2021-22	1st Grade	2,248	97.1%	0.6%	0.4%	1.2%	0.7%
		Kindergarten	2,590	94.2%	2.0%	0.2%	2.0%	1.6%
	2020-21	Kindergarten	2,470	94.5%	1.4%	0.9%	1.5%	1.7%
		Kindergarten	2,742	95.1%	2.7%	0.8%	1.0%	0.4%
CALAVERAS	2021-22	1st Grade	407	93.9%	0.0%	0.7%	3.7%	1.7%
		Kindergarten	417	92.8%	1.2%	0.0%	4.1%	1.9%
	2020-21	Kindergarten	362	90.9%	1.7%	0.6%	5.5%	1.4%
		Kindergarten	455	93.8%	1.8%	1.5%	1.8%	1.1%
COLUSA	2021-22	1st Grade	322	≥99.0%	≤1.0%	0.0%	0.0%	0.9%
		Kindergarten	392	98.0%	1.0%	0.3%	0.5%	0.3%
	2020-21	Kindergarten	346	94.5%	0.0%	0.0%	0.0%	5.5%
		Kindergarten	372	96.8%	0.3%	0.0%	0.0%	3.0%
CONTRA COSTA	2021-22	1st Grade	12,459	97.1%	0.6%	0.4%	0.4%	1.5%
		Kindergarten	14,248	95.1%	1.0%	0.2%	0.8%	2.9%
	2020-21	Kindergarten	14,400	94.8%	0.6%	0.5%	0.5%	3.6%
		Kindergarten	15,692	96.2%	1.6%	0.8%	0.3%	1.2%
DEL NORTE	2021-22	1st Grade	282	94.7%	0.4%	1.8%	1.8%	1.4%
		Kindergarten	351	88.6%	2.3%	1.4%	4.6%	3.1%
	2020-21	Kindergarten	282	93.3%	0.7%	2.5%	2.1%	1.4%
		Kindergarten	394	97.0%	0.8%	0.0%	0.8%	1.5%
EL DORADO	2021-22	1st Grade	2,213	85.9%	0.5%	2.2%	10.6%	0.8%
		Kindergarten	2,721	78.2%	1.7%	0.4%	17.2%	2.5%
	2020-21	Kindergarten	2,373	82.0%	1.8%	2.9%	11.6%	1.7%
		Kindergarten	2,909	79.7%	2.2%	4.3%	13.5%	0.3%
FRESNO	2021-22	1st Grade	14,941	97.7%	0.3%	0.1%	1.3%	0.5%
		Kindergarten	16,906	95.6%	0.9%	0.1%	2.0%	1.5%
	2020-21	Kindergarten	16,220	97.3%	0.5%	0.1%	1.3%	0.7%
		Kindergarten	18,461	96.4%	1.0%	0.3%	1.6%	0.7%
GLENN	2021-22	1st Grade	491	88.0%	0.4%	0.0%	11.4%	0.2%
		Kindergarten	572	85.1%	0.5%	0.0%	13.1%	1.2%
	2020-21	Kindergarten	544	88.4%	0.6%	0.2%	8.8%	2.0%
		Kindergarten	576	86.1%	1.4%	0.7%	10.9%	0.9%
HUMBOLDT	2021-22	1st Grade	1,260	90.0%	0.8%	3.4%	2.3%	3.5%
		Kindergarten	1,526	85.5%	2.5%	3.7%	3.0%	5.4%
	2020-21	Kindergarten	1,447	87.8%	1.0%	3.9%	2.0%	5.3%
		Kindergarten	1,715	88.0%	2.7%	5.6%	0.7%	3.0%

Kindergarten and 1st Grade Immunization Assessment - California, 2021-2022
 Table 3: Total Enrollment and Admission Status of Kindergarten, 2021-2022, 2020-2021 and 2019-2020 School Years
 and First Grade, 2021-2022 School Year, By County*

	School Year	Grade	Total Students	Students with All Required Immunizations	Conditional Entrants	Students with a Permanent Medical Exemption	Others Lacking Required Immunizations†	Overdue^
			Number	Percent	Percent	Percent	Percent	Percent
STATE TOTAL	2021-22	1st Grade	431,819	96.0%	0.6%	0.4%	1.7%	1.3%
		Kindergarten	503,722	94.0%	1.3%	0.3%	2.1%	2.3%
	2020-21	Kindergarten	485,538	92.8%	0.8%	0.6%	1.7%	4.0%
		Kindergarten	554,250	94.3%	1.7%	1.0%	1.6%	1.5%
IMPERIAL	2021-22	1st Grade	2,511	96.3%	0.2%	0.2%	0.8%	2.5%
		Kindergarten	2,754	95.2%	1.1%	0.8%	1.0%	1.9%
	2020-21	Kindergarten	2,762	93.2%	1.4%	0.0%	0.7%	4.7%
		Kindergarten	3,117	95.7%	2.5%	0.2%	0.4%	1.2%
INYO	2021-22	1st Grade	207	94.7%	1.0%	0.0%	0.0%	4.3%
		Kindergarten	151	91.4%	0.7%	0.7%	0.0%	7.3%
	2020-21	Kindergarten	187	96.3%	0.5%	0.0%	0.5%	2.7%
		Kindergarten	271	97.0%	2.6%	0.4%	0.0%	0.0%
KERN	2021-22	1st Grade	14,092	91.1%	0.6%	0.3%	6.7%	1.3%
		Kindergarten	16,369	88.2%	1.8%	0.6%	6.7%	2.7%
	2020-21	Kindergarten	15,354	88.0%	1.4%	0.5%	7.2%	3.0%
		Kindergarten	18,327	88.6%	1.4%	0.7%	8.0%	1.3%
KINGS	2021-22	1st Grade	2,055	97.8%	0.5%	0.1%	0.8%	0.8%
		Kindergarten	2,458	96.1%	1.7%	0.1%	1.1%	0.9%
	2020-21	Kindergarten	2,341	97.8%	0.9%	0.3%	0.6%	0.5%
		Kindergarten	2,576	96.9%	2.0%	0.2%	0.4%	0.4%
LAKE	2021-22	1st Grade	754	95.8%	1.5%	0.7%	0.8%	1.3%
		Kindergarten	886	93.9%	3.4%	0.0%	1.0%	1.7%
	2020-21	Kindergarten	768	91.7%	0.9%	0.8%	0.8%	5.9%
		Kindergarten	796	90.8%	3.1%	0.8%	0.8%	4.5%
LASSEN	2021-22	1st Grade	309	92.6%	1.3%	1.0%	1.3%	3.9%
		Kindergarten	315	89.5%	0.6%	0.0%	3.2%	6.7%
	2020-21	Kindergarten	335	92.2%	1.8%	1.2%	1.5%	3.3%
		Kindergarten	350	92.0%	5.4%	1.4%	0.9%	0.3%
LOS ANGELES	2021-22	1st Grade	95,509	96.6%	0.5%	0.3%	0.8%	1.8%
		Kindergarten	116,937	94.3%	1.2%	0.2%	1.2%	3.0%
	2020-21	Kindergarten	114,141	91.6%	0.7%	0.4%	1.1%	6.2%
		Kindergarten	133,622	94.5%	1.7%	0.6%	0.8%	2.4%
MADERA	2021-22	1st Grade	2,328	97.9%	0.2%	0.0%	0.6%	1.3%
		Kindergarten	2,636	95.3%	1.5%	0.1%	0.8%	2.3%
	2020-21	Kindergarten	2,586	96.8%	0.4%	0.2%	0.8%	1.9%
		Kindergarten	2,727	96.1%	1.5%	0.3%	0.8%	1.4%
MARIN	2021-22	1st Grade	2,643	97.7%	0.7%	1.3%	0.1%	0.3%
		Kindergarten	2,847	96.6%	1.8%	0.5%	0.1%	0.9%
	2020-21	Kindergarten	2,832	96.3%	0.7%	2.0%	0.1%	0.9%
		Kindergarten	3,252	93.9%	2.3%	2.9%	0.3%	0.6%
MARIPOSA	2021-22	1st Grade	146	91.1%	2.1%	1.4%	2.1%	3.4%
		Kindergarten	171	91.8%	4.1%	0.6%	0.0%	3.5%
	2020-21	Kindergarten	163	80.4%	4.3%	0.0%	5.5%	9.8%
		Kindergarten	160	93.1%	5.6%	0.0%	1.3%	0.0%
MENDOCINO	2021-22	1st Grade	976	93.0%	1.0%	0.9%	1.0%	4.0%
		Kindergarten	1,183	88.8%	2.6%	0.7%	0.7%	7.3%
	2020-21	Kindergarten	1,084	87.3%	4.5%	2.7%	0.6%	5.0%
		Kindergarten	1,218	85.7%	7.2%	3.0%	0.6%	3.4%
MERCED	2021-22	1st Grade	4,161	97.2%	0.6%	0.1%	0.9%	1.1%
		Kindergarten	5,007	95.4%	1.6%	0.0%	1.3%	1.7%
	2020-21	Kindergarten	4,566	94.4%	1.1%	0.1%	0.6%	3.8%
		Kindergarten	5,321	96.7%	1.6%	0.1%	0.6%	1.1%

Kindergarten and 1st Grade Immunization Assessment - California, 2021-2022
 Table 3: Total Enrollment and Admission Status of Kindergarten, 2021-2022, 2020-2021 and 2019-2020 School Years
 and First Grade, 2021-2022 School Year, By County*

	School Year	Grade	Total Students	Students with All Required Immunizations	Conditional Entrants	Students with a Permanent Medical Exemption	Others Lacking Required Immunizations†	Overdue^
			Number	Percent	Percent	Percent	Percent	Percent
STATE TOTAL	2021-22	1st Grade	431,819	96.0%	0.6%	0.4%	1.7%	1.3%
		Kindergarten	503,722	94.0%	1.3%	0.3%	2.1%	2.3%
	2020-21	Kindergarten	485,538	92.8%	0.8%	0.6%	1.7%	4.0%
		Kindergarten	554,250	94.3%	1.7%	1.0%	1.6%	1.5%
MODOC	2021-22	1st Grade	120	96.7%	2.5%	0.0%	0.0%	0.8%
		Kindergarten	102	94.1%	2.0%	0.0%	0.0%	3.9%
	2020-21	Kindergarten	117	94.9%	0.9%	0.0%	0.0%	4.3%
		Kindergarten	120	95.8%	0.8%	0.8%	0.0%	2.5%
MONO	2021-22	1st Grade	116	≥99.0%	≤1.0%	0.0%	0.0%	0.0%
		Kindergarten	148	96.6%	2.7%	0.0%	0.7%	0.0%
	2020-21	Kindergarten	124	96.8%	0.8%	0.0%	0.0%	2.4%
		Kindergarten	138	90.6%	5.1%	2.9%	0.0%	1.4%
MONTEREY	2021-22	1st Grade	5,150	98.4%	0.5%	0.2%	0.1%	0.9%
		Kindergarten	6,357	97.5%	0.8%	0.1%	0.2%	1.4%
	2020-21	Kindergarten	6,220	97.4%	0.8%	0.4%	0.2%	1.2%
		Kindergarten	6,733	97.1%	1.4%	0.8%	0.1%	0.6%
NAPA	2021-22	1st Grade	1,449	96.8%	0.4%	0.6%	1.7%	0.6%
		Kindergarten	1,581	96.5%	1.1%	0.3%	0.9%	1.1%
	2020-21	Kindergarten	1,596	95.7%	1.1%	0.9%	1.7%	0.6%
		Kindergarten	1,746	96.6%	0.8%	1.4%	0.3%	0.9%
NEVADA	2021-22	1st Grade	696	84.8%	1.9%	3.7%	6.3%	3.3%
		Kindergarten	927	82.4%	4.2%	2.7%	7.9%	2.8%
	2020-21	Kindergarten	834	81.9%	3.0%	9.0%	3.8%	2.3%
		Kindergarten	985	79.5%	3.4%	13.1%	3.0%	1.0%
ORANGE	2021-22	1st Grade	32,231	97.5%	0.5%	0.4%	0.8%	0.8%
		Kindergarten	38,034	96.0%	1.0%	0.3%	1.2%	1.4%
	2020-21	Kindergarten	36,305	94.7%	0.9%	0.8%	0.8%	2.8%
		Kindergarten	41,381	95.5%	1.5%	1.1%	0.8%	1.1%
PLACER	2021-22	1st Grade	5,261	94.6%	1.1%	1.7%	1.6%	1.0%
		Kindergarten	6,549	92.9%	2.0%	0.8%	2.5%	1.8%
	2020-21	Kindergarten	5,628	92.7%	1.8%	2.2%	0.7%	2.6%
		Kindergarten	6,709	90.5%	2.4%	3.3%	1.3%	2.5%
PLUMAS	2021-22	1st Grade	155	93.5%	1.9%	1.3%	1.9%	1.3%
		Kindergarten	202	91.1%	3.0%	0.5%	3.5%	2.0%
	2020-21	Kindergarten	191	91.1%	0.5%	1.6%	5.8%	1.0%
		Kindergarten	208	92.3%	3.8%	1.4%	0.5%	1.9%
RIVERSIDE	2021-22	1st Grade	29,235	96.0%	0.5%	0.3%	2.1%	1.0%
		Kindergarten	33,796	93.8%	1.6%	0.2%	2.4%	2.1%
	2020-21	Kindergarten	31,555	92.2%	0.7%	0.5%	2.8%	3.8%
		Kindergarten	36,134	93.6%	1.9%	0.9%	2.6%	1.1%
SACRAMENTO	2021-22	1st Grade	18,030	95.0%	1.1%	0.8%	1.5%	1.7%
		Kindergarten	19,897	92.7%	1.9%	0.3%	2.1%	3.0%
	2020-21	Kindergarten	19,509	91.5%	1.1%	0.9%	2.0%	4.5%
		Kindergarten	21,495	93.3%	2.2%	1.6%	1.9%	1.0%
SAN BENITO	2021-22	1st Grade	846	97.8%	0.1%	0.4%	0.0%	1.8%
		Kindergarten	983	97.0%	0.5%	0.2%	0.1%	2.1%
	2020-21	Kindergarten	991	91.2%	1.4%	0.1%	0.0%	7.3%
		Kindergarten	1,099	96.3%	1.3%	0.5%	0.1%	1.8%
SAN BERNARDINO	2021-22	1st Grade	28,985	94.7%	0.5%	0.2%	3.1%	1.5%
		Kindergarten	32,198	92.1%	1.5%	0.2%	3.8%	2.4%
	2020-21	Kindergarten	30,438	90.4%	0.6%	0.3%	2.1%	6.6%
		Kindergarten	34,542	93.9%	1.8%	0.4%	2.5%	1.4%

Kindergarten and 1st Grade Immunization Assessment - California, 2021-2022
 Table 3: Total Enrollment and Admission Status of Kindergarten, 2021-2022, 2020-2021 and 2019-2020 School Years
 and First Grade, 2021-2022 School Year, By County*

	School Year	Grade	Total Students	Students with All Required Immunizations	Conditional Entrants	Students with a Permanent Medical Exemption	Others Lacking Required Immunizations†	Overdue^
			Number	Percent	Percent	Percent	Percent	Percent
STATE TOTAL	2021-22	1st Grade	431,819	96.0%	0.6%	0.4%	1.7%	1.3%
		Kindergarten	503,722	94.0%	1.3%	0.3%	2.1%	2.3%
	2020-21	Kindergarten	485,538	92.8%	0.8%	0.6%	1.7%	4.0%
		Kindergarten	554,250	94.3%	1.7%	1.0%	1.6%	1.5%
SAN DIEGO	2021-22	1st Grade	36,235	95.3%	0.7%	0.3%	3.1%	0.6%
		Kindergarten	41,632	93.3%	1.4%	0.2%	3.9%	1.1%
	2020-21	Kindergarten	40,748	93.9%	1.0%	0.7%	3.3%	1.1%
		Kindergarten	45,956	93.0%	1.5%	1.4%	3.6%	0.5%
SAN FRANCISCO	2021-22	1st Grade	5,519	95.6%	0.2%	0.2%	0.1%	3.9%
		Kindergarten	6,068	94.5%	0.7%	0.4%	0.0%	4.4%
	2020-21	Kindergarten	6,325	92.0%	0.3%	0.5%	0.1%	7.1%
		Kindergarten	6,963	95.3%	1.1%	0.7%	0.0%	2.8%
SAN JOAQUIN	2021-22	1st Grade	10,750	96.7%	0.5%	0.1%	2.0%	0.8%
		Kindergarten	11,902	94.9%	1.3%	0.1%	2.3%	1.3%
	2020-21	Kindergarten	10,791	95.1%	1.1%	0.3%	1.8%	1.7%
		Kindergarten	12,320	95.0%	1.7%	0.4%	1.4%	1.4%
SAN LUIS OBISPO	2021-22	1st Grade	2,451	97.1%	0.5%	0.8%	0.7%	0.9%
		Kindergarten	2,846	94.1%	2.0%	0.6%	1.0%	2.2%
	2020-21	Kindergarten	2,466	95.2%	1.3%	0.9%	0.8%	1.9%
		Kindergarten	3,095	94.2%	1.8%	2.2%	0.8%	0.9%
SAN MATEO	2021-22	1st Grade	7,250	97.5%	0.4%	0.3%	0.4%	1.5%
		Kindergarten	8,028	96.4%	0.6%	0.2%	0.6%	2.3%
	2020-21	Kindergarten	8,140	97.1%	0.6%	0.5%	0.3%	1.6%
		Kindergarten	9,168	96.6%	1.3%	0.7%	0.1%	1.3%
SANTA BARBARA	2021-22	1st Grade	5,232	97.2%	0.6%	0.5%	1.2%	0.4%
		Kindergarten	6,066	96.3%	1.1%	0.3%	1.1%	1.2%
	2020-21	Kindergarten	5,473	95.5%	0.7%	0.6%	0.9%	2.3%
		Kindergarten	6,500	96.2%	1.4%	1.4%	0.4%	0.5%
SANTA CLARA	2021-22	1st Grade	19,070	97.6%	0.3%	0.4%	0.4%	1.2%
		Kindergarten	21,901	96.5%	0.8%	0.2%	0.4%	2.0%
	2020-21	Kindergarten	21,759	96.0%	0.6%	0.3%	0.4%	2.6%
		Kindergarten	24,963	96.4%	1.3%	0.7%	0.2%	1.4%
SANTA CRUZ	2021-22	1st Grade	2,938	92.2%	0.8%	0.9%	5.7%	0.4%
		Kindergarten	3,307	91.1%	2.0%	0.3%	5.9%	0.8%
	2020-21	Kindergarten	3,097	88.8%	1.1%	1.7%	6.3%	2.1%
		Kindergarten	3,415	89.3%	2.2%	2.8%	4.6%	1.2%
SHASTA	2021-22	1st Grade	1,959	93.0%	0.7%	1.6%	3.3%	1.4%
		Kindergarten	2,511	89.5%	3.1%	1.0%	3.7%	2.7%
	2020-21	Kindergarten	2,189	88.6%	2.1%	2.5%	3.6%	3.2%
		Kindergarten	2,525	89.5%	3.2%	2.7%	2.9%	1.7%
SIERRA	2021-22	1st Grade	34	≥95.0%	≤5.0%	0.0%	0.0%	0.0%
		Kindergarten	32	96.9%	0.0%	0.0%	0.0%	3.1%
	2020-21	Kindergarten	23	≥95.0%	≤5.0%	0.0%	0.0%	0.0%
		Kindergarten	25	≥95.0%	≤5.0%	0.0%	0.0%	0.0%
SISKIYOU	2021-22	1st Grade	383	88.8%	2.6%	0.3%	6.8%	1.6%
		Kindergarten	500	87.6%	5.2%	0.0%	4.6%	2.6%
	2020-21	Kindergarten	463	89.0%	1.5%	0.4%	6.7%	2.4%
		Kindergarten	530	94.9%	1.9%	1.1%	0.6%	1.5%
SOLANO	2021-22	1st Grade	4,451	98.2%	0.7%	0.2%	0.3%	0.6%
		Kindergarten	5,236	96.5%	1.9%	0.1%	0.5%	1.0%
	2020-21	Kindergarten	5,036	94.7%	1.0%	0.5%	0.5%	3.3%
		Kindergarten	5,966	94.5%	1.5%	0.5%	0.1%	3.4%

Kindergarten and 1st Grade Immunization Assessment - California, 2021-2022
 Table 3: Total Enrollment and Admission Status of Kindergarten, 2021-2022, 2020-2021 and 2019-2020 School Years
 and First Grade, 2021-2022 School Year, By County*

	School Year	Grade	Total Students	Students with All Required Immunizations	Conditional Entrants	Students with a Permanent Medical Exemption	Others Lacking Required Immunizations†	Overdue^
			Number	Percent	Percent	Percent	Percent	Percent
STATE TOTAL	2021-22	1st Grade	431,819	96.0%	0.6%	0.4%	1.7%	1.3%
		Kindergarten	503,722	94.0%	1.3%	0.3%	2.1%	2.3%
	2020-21	Kindergarten	485,538	92.8%	0.8%	0.6%	1.7%	4.0%
		Kindergarten	554,250	94.3%	1.7%	1.0%	1.6%	1.5%
SONOMA	2021-22	1st Grade	4,657	94.0%	1.2%	0.9%	2.1%	1.7%
		Kindergarten	5,931	92.6%	1.6%	0.4%	2.6%	2.7%
	2020-21	Kindergarten	5,566	91.6%	1.1%	1.9%	0.8%	4.6%
		Kindergarten	6,043	92.3%	2.1%	3.1%	0.7%	1.8%
STANISLAUS	2021-22	1st Grade	7,858	96.1%	0.8%	0.2%	1.5%	1.4%
		Kindergarten	8,707	94.0%	1.6%	0.1%	1.9%	2.4%
	2020-21	Kindergarten	8,619	94.5%	1.1%	0.5%	0.4%	3.6%
		Kindergarten	9,366	95.7%	2.0%	0.7%	0.3%	1.4%
SUTTER	2021-22	1st Grade	1,691	81.5%	0.2%	0.7%	17.1%	0.6%
		Kindergarten	2,222	77.5%	1.5%	0.2%	19.7%	1.0%
	2020-21	Kindergarten	1,764	81.7%	0.6%	0.9%	15.1%	1.6%
		Kindergarten	2,017	85.3%	0.6%	0.9%	13.0%	0.1%
TEHAMA	2021-22	1st Grade	834	97.6%	0.4%	0.6%	1.0%	0.5%
		Kindergarten	962	94.6%	2.0%	0.1%	1.0%	2.3%
	2020-21	Kindergarten	838	95.1%	1.6%	0.2%	0.8%	2.3%
		Kindergarten	1,073	93.6%	2.1%	0.7%	1.2%	2.4%
TRINITY	2021-22	1st Grade	115	88.7%	0.9%	4.3%	1.7%	4.3%
		Kindergarten	117	89.7%	5.1%	0.0%	0.9%	4.3%
	2020-21	Kindergarten	134	85.8%	3.0%	4.5%	1.5%	5.2%
		Kindergarten	138	87.0%	4.3%	5.1%	0.7%	2.9%
TULARE	2021-22	1st Grade	7,322	97.8%	0.3%	0.2%	1.2%	0.5%
		Kindergarten	8,542	96.1%	1.0%	0.1%	1.7%	1.2%
	2020-21	Kindergarten	8,344	96.6%	0.4%	0.2%	1.3%	1.4%
		Kindergarten	9,535	96.5%	1.2%	0.2%	1.8%	0.3%
TUOLUMNE	2021-22	1st Grade	469	89.1%	4.7%	1.3%	3.2%	1.7%
		Kindergarten	566	86.9%	2.1%	6.2%	2.1%	2.7%
	2020-21	Kindergarten	474	81.9%	8.6%	2.3%	3.6%	3.6%
		Kindergarten	584	90.2%	3.6%	3.6%	1.4%	1.2%
VENTURA	2021-22	1st Grade	9,403	96.9%	0.6%	0.5%	1.4%	0.7%
		Kindergarten	10,540	95.1%	1.4%	0.2%	1.6%	1.7%
	2020-21	Kindergarten	10,410	94.9%	1.1%	0.7%	1.3%	2.1%
		Kindergarten	11,466	95.5%	1.7%	1.1%	0.6%	1.1%
YOLO	2021-22	1st Grade	2,383	94.6%	0.9%	0.5%	2.0%	2.0%
		Kindergarten	2,746	94.1%	0.9%	0.3%	2.4%	2.3%
	2020-21	Kindergarten	2,535	92.6%	0.9%	0.6%	2.4%	3.6%
		Kindergarten	2,959	94.3%	2.0%	1.6%	0.9%	1.1%
YUBA	2021-22	1st Grade	1,167	94.3%	2.2%	0.1%	1.4%	2.0%
		Kindergarten	1,372	90.3%	4.7%	0.3%	2.3%	2.3%
	2020-21	Kindergarten	1,154	88.8%	0.9%	0.1%	3.0%	7.2%
		Kindergarten	1,361	92.8%	2.4%	0.4%	2.1%	2.2%

* Additional precautions for student de-identification are based on jurisdiction enrollment for kindergarten. For jurisdictions with: Fewer than 20 enrollees, the data are omitted; 20-49 enrollees, values of 95% or higher are listed as ≥95%; 50-99 enrollees, values of 98% or higher are listed as ≥98%; 100 or more enrollees, values of 99% or higher are listed as ≥99%.

** Schools did not report.

† Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

^ Overdue for one or more required immunizations.

Kindergarten and 1st Grade Immunization Assessment - California, 2021-2022
 Table 4: Total Enrollment and Specific Required Immunizations by Series,
 Kindergarten, 2021-2022, 2020-2021, 2019-2020 and First Grade, 2021-2022, By County*

	School Year	Grade	Total Students	DTP 4+	Polio 3+	MMR 2+	HepB 3+	Var 2+
			Number	Percent	Percent	Percent	Percent	Percent
STATE TOTAL	2021-22	1st Grade	431,819	97.1%	97.4%	97.5%	98.0%	97.2%
		Kindergarten	503,722	95.7%	96.2%	96.3%	97.3%	96.0%
	2020-21	Kindergarten	485,538	94.7%	95.2%	95.1%	97.0%	94.8%
		Kindergarten	554,250	96.2%	96.5%	96.5%	97.4%	96.0%
ALAMEDA	2021-22	1st Grade	16,710	98.0%	98.3%	98.4%	98.6%	97.7%
		Kindergarten	19,422	96.7%	97.2%	97.2%	97.8%	96.6%
	2020-21	Kindergarten	19,752	92.0%	92.5%	92.6%	93.5%	92.2%
		Kindergarten	21,622	98.1%	98.4%	98.5%	98.7%	97.7%
ALPINE	2021-22	1st Grade	--*	--*	--*	--*	--*	--*
		Kindergarten	--*	--*	--*	--*	--*	
	2020-21	Kindergarten	--*	--*	--*	--*	--*	
		Kindergarten	9	--*	--*	--*	--*	
AMADOR	2021-22	1st Grade	350	94.6%	95.7%	96.3%	96.6%	95.4%
		Kindergarten	355	91.5%	93.2%	94.1%	97.2%	93.5%
	2020-21	Kindergarten	367	94.6%	94.8%	94.6%	96.7%	94.3%
		Kindergarten	308	93.8%	95.1%	94.5%	94.8%	93.2%
BUTTE	2021-22	1st Grade	2,248	97.8%	98.1%	98.1%	98.5%	97.9%
		Kindergarten	2,590	95.9%	96.9%	97.9%	97.8%	97.2%
	2020-21	Kindergarten	2,470	96.0%	96.3%	97.0%	98.0%	97.0%
		Kindergarten	2,742	96.5%	97.2%	97.5%	97.8%	97.2%
CALAVERAS	2021-22	1st Grade	407	95.1%	95.8%	95.8%	97.1%	95.3%
		Kindergarten	417	93.8%	94.2%	96.4%	96.9%	95.9%
	2020-21	Kindergarten	362	92.8%	93.4%	92.8%	95.6%	92.3%
		Kindergarten	455	95.4%	95.4%	95.6%	96.9%	94.9%
COLUSA	2021-22	1st Grade	322	≥99.0%	≥99.0%	≥99.0%	≥99.0%	≥99.0%
		Kindergarten	392	98.5%	≥99.0%	≥99.0%	≥99.0%	≥99.0%
	2020-21	Kindergarten	346	97.1%	96.8%	96.5%	98.0%	96.5%
		Kindergarten	372	≥99.0%	≥99.0%	≥99.0%	≥99.0%	97.6%
CONTRA COSTA	2021-22	1st Grade	12,459	98.0%	98.4%	98.5%	98.7%	98.1%
		Kindergarten	14,248	96.9%	97.3%	97.5%	98.2%	97.0%
	2020-21	Kindergarten	14,400	96.2%	96.7%	96.4%	98.2%	96.3%
		Kindergarten	15,692	97.5%	97.8%	97.9%	98.5%	97.5%
DEL NORTE	2021-22	1st Grade	282	95.0%	95.7%	96.1%	96.8%	95.4%
		Kindergarten	351	94.0%	95.4%	95.2%	97.2%	90.3%
	2020-21	Kindergarten	282	93.3%	94.0%	94.3%	96.5%	94.3%
		Kindergarten	394	98.0%	≥99.0%	98.5%	98.7%	98.2%
EL DORADO	2021-22	1st Grade	2,213	90.0%	90.1%	89.3%	91.1%	89.0%
		Kindergarten	2,721	83.9%	84.0%	83.6%	87.0%	82.7%
	2020-21	Kindergarten	2,373	84.7%	85.3%	84.8%	88.2%	85.0%
		Kindergarten	2,909	82.4%	83.3%	82.6%	86.6%	81.7%
FRESNO	2021-22	1st Grade	14,941	98.6%	98.8%	98.8%	≥99.0%	98.7%
		Kindergarten	16,906	97.0%	97.4%	97.5%	98.0%	97.4%
	2020-21	Kindergarten	16,220	97.9%	98.3%	98.3%	98.8%	98.2%
		Kindergarten	18,461	97.3%	97.7%	97.9%	98.4%	97.7%
GLENN	2021-22	1st Grade	491	89.0%	88.8%	89.4%	90.0%	88.4%
		Kindergarten	572	87.2%	88.1%	87.4%	89.5%	86.2%
	2020-21	Kindergarten	544	89.9%	89.9%	90.6%	92.3%	89.7%
		Kindergarten	576	87.8%	88.5%	88.5%	90.8%	88.0%
HUMBOLDT	2021-22	1st Grade	1,260	93.1%	93.3%	93.7%	94.0%	93.8%
		Kindergarten	1,526	91.1%	90.9%	91.5%	92.7%	91.6%
	2020-21	Kindergarten	1,447	92.7%	92.5%	92.6%	93.8%	92.0%
		Kindergarten	1,715	92.2%	92.0%	92.3%	92.2%	91.5%

Kindergarten and 1st Grade Immunization Assessment - California, 2021-2022
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	School Year	Grade	Total Students	DTP 4+	Polio 3+	MMR 2+	HepB 3+	Var 2+
			Number	Percent	Percent	Percent	Percent	Percent
STATE TOTAL	2021-22	1st Grade	431,819	97.1%	97.4%	97.5%	98.0%	97.2%
		Kindergarten	503,722	95.7%	96.2%	96.3%	97.3%	96.0%
	2020-21	Kindergarten	485,538	94.7%	95.2%	95.1%	97.0%	94.8%
IMPERIAL	2021-22	1st Grade	2,511	98.1%	98.0%	98.5%	≥99.0%	98.6%
		Kindergarten	2,754	96.4%	97.4%	97.2%	≥99.0%	98.0%
	2020-21	Kindergarten	2,762	95.4%	97.1%	94.8%	98.3%	96.1%
		Kindergarten	3,117	97.9%	98.8%	98.0%	≥99.0%	97.9%
INYO	2021-22	1st Grade	207	96.1%	96.6%	95.2%	≥99.0%	96.1%
		Kindergarten	151	94.7%	94.0%	95.4%	98.0%	94.7%
	2020-21	Kindergarten	187	97.9%	98.4%	96.8%	98.9%	96.8%
Kindergarten		271	97.8%	98.5%	98.9%	98.9%	98.5%	
KERN	2021-22	1st Grade	14,092	92.7%	93.2%	93.5%	95.1%	92.9%
		Kindergarten	16,369	90.1%	91.3%	91.6%	93.7%	91.6%
	2020-21	Kindergarten	15,354	89.9%	91.0%	90.9%	94.1%	90.4%
		Kindergarten	18,327	93.6%	91.4%	91.3%	94.0%	90.8%
KINGS	2021-22	1st Grade	2,055	98.5%	98.7%	98.7%	≥99.0%	98.3%
		Kindergarten	2,458	96.9%	98.3%	98.1%	98.6%	97.8%
	2020-21	Kindergarten	2,341	98.4%	98.5%	98.6%	≥99.0%	98.6%
		Kindergarten	2,576	97.8%	98.9%	≥99.0%	≥99.0%	98.7%
LAKE	2021-22	1st Grade	754	96.9%	97.1%	97.9%	98.1%	97.3%
		Kindergarten	886	95.4%	96.5%	97.0%	97.9%	97.4%
	2020-21	Kindergarten	768	93.6%	95.2%	95.6%	96.6%	95.2%
		Kindergarten	796	92.7%	94.7%	95.4%	96.7%	95.1%
LASSEN	2021-22	1st Grade	309	93.5%	94.5%	94.8%	93.2%	94.8%
		Kindergarten	315	89.8%	90.5%	89.8%	91.1%	89.8%
	2020-21	Kindergarten	335	93.1%	94.6%	95.5%	95.2%	94.6%
		Kindergarten	350	94.0%	96.3%	96.3%	96.3%	94.9%
LOS ANGELES	2021-22	1st Grade	95,509	97.9%	98.0%	98.1%	98.6%	97.7%
		Kindergarten	116,937	96.3%	96.6%	96.7%	98.0%	96.3%
	2020-21	Kindergarten	114,141	94.0%	94.5%	94.4%	97.3%	93.9%
Kindergarten		133,622	96.8%	97.1%	97.0%	98.2%	96.4%	
MADERA	2021-22	1st Grade	2,328	98.2%	98.2%	98.4%	98.7%	98.4%
		Kindergarten	2,636	96.7%	97.3%	97.5%	97.8%	97.7%
	2020-21	Kindergarten	2,586	97.4%	97.6%	97.8%	97.9%	97.6%
		Kindergarten	2,727	97.2%	97.7%	98.0%	98.1%	97.8%
MARIN	2021-22	1st Grade	2,643	98.6%	98.6%	98.6%	98.7%	98.3%
		Kindergarten	2,847	98.5%	98.6%	≥99.0%	98.5%	98.3%
	2020-21	Kindergarten	2,832	97.4%	97.6%	97.7%	97.9%	97.2%
		Kindergarten	3,252	96.0%	96.6%	96.9%	96.8%	95.8%
MARIPOSA	2021-22	1st Grade	146	92.5%	95.2%	95.9%	95.9%	93.8%
		Kindergarten	171	93.6%	97.7%	97.7%	97.1%	95.3%
	2020-21	Kindergarten	163	87.1%	89.0%	90.2%	92.0%	89.0%
		Kindergarten	160	95.0%	95.6%	95.6%	97.5%	95.6%
MENDOCINO	2021-22	1st Grade	976	94.6%	95.5%	96.2%	96.1%	95.5%
		Kindergarten	1,183	92.1%	93.7%	93.7%	94.3%	92.6%
	2020-21	Kindergarten	1,084	90.6%	91.4%	91.9%	92.7%	90.6%
		Kindergarten	1,218	88.8%	89.9%	89.7%	89.7%	88.7%
MERCED	2021-22	1st Grade	4,161	98.2%	98.3%	98.5%	≥99.0%	98.1%
		Kindergarten	5,007	96.7%	97.4%	97.4%	98.4%	97.2%
	2020-21	Kindergarten	4,566	96.0%	96.5%	96.8%	98.9%	96.4%
		Kindergarten	5,321	97.6%	98.7%	98.7%	≥99.0%	98.2%

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	School Year	Grade	Total Students	DTP 4+	Polio 3+	MMR 2+	HepB 3+	Var 2+
			Number	Percent	Percent	Percent	Percent	Percent
STATE TOTAL	2021-22	1st Grade	431,819	97.1%	97.4%	97.5%	98.0%	97.2%
		Kindergarten	503,722	95.7%	96.2%	96.3%	97.3%	96.0%
	2020-21	Kindergarten	485,538	94.7%	95.2%	95.1%	97.0%	94.8%
		Kindergarten	554,250	96.2%	96.5%	96.5%	97.4%	96.0%
MODOC	2021-22	1st Grade	120	96.7%	98.3%	≥99.0%	≥99.0%	≥99.0%
		Kindergarten	102	94.1%	98.0%	98.0%	≥99.0%	≥99.0%
	2020-21	Kindergarten	117	97.4%	96.6%	96.6%	≥99.0%	96.6%
		Kindergarten	120	96.7%	96.7%	97.5%	≥99.0%	96.7%
MONO	2021-22	1st Grade	116	≥99.0%	≥99.0%	≥99.0%	≥99.0%	≥99.0%
		Kindergarten	148	98.0%	98.0%	≥99.0%	98.0%	98.6%
	2020-21	Kindergarten	124	≥99.0%	≥99.0%	≥99.0%	≥99.0%	97.6%
		Kindergarten	138	92.0%	90.6%	92.8%	92.0%	92.8%
MONTEREY	2021-22	1st Grade	5,150	≥99.0%	≥99.0%	≥99.0%	≥99.0%	98.9%
		Kindergarten	6,357	98.6%	98.7%	98.8%	≥99.0%	98.5%
	2020-21	Kindergarten	6,220	98.4%	98.6%	98.8%	≥99.0%	98.6%
		Kindergarten	6,733	98.2%	98.4%	98.6%	98.8%	98.2%
NAPA	2021-22	1st Grade	1,449	≥99.0%	97.5%	≥99.0%	98.8%	98.9%
		Kindergarten	1,581	98.5%	98.0%	98.8%	≥99.0%	98.7%
	2020-21	Kindergarten	1,596	96.6%	96.5%	96.7%	96.9%	96.6%
		Kindergarten	1,746	98.3%	98.3%	98.0%	97.8%	97.9%
NEVADA	2021-22	1st Grade	696	86.5%	87.1%	87.1%	87.9%	86.6%
		Kindergarten	927	86.3%	87.1%	86.9%	89.1%	86.9%
	2020-21	Kindergarten	834	84.8%	84.9%	85.4%	87.9%	85.0%
		Kindergarten	985	83.5%	83.1%	83.2%	83.6%	81.5%
ORANGE	2021-22	1st Grade	32,231	98.3%	98.5%	98.5%	98.9%	98.3%
		Kindergarten	38,034	97.3%	97.8%	97.7%	98.7%	97.4%
	2020-21	Kindergarten	36,305	96.2%	96.9%	96.8%	98.3%	96.6%
		Kindergarten	41,381	97.2%	97.5%	97.4%	98.1%	97.1%
PLACER	2021-22	1st Grade	5,261	95.8%	96.0%	96.3%	96.6%	96.1%
		Kindergarten	6,549	94.5%	95.1%	95.4%	96.0%	95.1%
	2020-21	Kindergarten	5,628	94.1%	94.9%	94.6%	96.0%	94.3%
		Kindergarten	6,709	93.9%	94.5%	93.7%	95.0%	93.3%
PLUMAS	2021-22	1st Grade	155	96.1%	96.8%	96.8%	97.4%	96.1%
		Kindergarten	202	96.0%	95.5%	96.0%	96.5%	93.6%
	2020-21	Kindergarten	191	93.7%	93.7%	94.8%	97.9%	93.7%
		Kindergarten	208	96.2%	95.2%	96.6%	96.6%	93.8%
RIVERSIDE	2021-22	1st Grade	29,235	97.0%	97.5%	97.5%	97.9%	97.4%
		Kindergarten	33,796	95.3%	96.2%	96.4%	97.4%	96.3%
	2020-21	Kindergarten	31,555	94.2%	95.1%	94.6%	97.1%	94.7%
		Kindergarten	36,134	95.1%	95.7%	95.8%	96.1%	95.3%
SACRAMENTO	2021-22	1st Grade	18,030	96.1%	96.7%	97.1%	97.5%	96.7%
		Kindergarten	19,897	94.3%	95.5%	95.8%	96.5%	95.6%
	2020-21	Kindergarten	19,509	93.7%	94.6%	94.5%	96.3%	94.2%
		Kindergarten	21,495	95.0%	95.9%	95.8%	96.5%	95.5%
SAN BENITO	2021-22	1st Grade	846	98.1%	98.6%	≥99.0%	≥99.0%	98.9%
		Kindergarten	983	98.0%	98.3%	98.9%	≥99.0%	98.8%
	2020-21	Kindergarten	991	93.8%	93.8%	93.8%	98.3%	95.8%
		Kindergarten	1,099	97.8%	97.8%	97.4%	98.7%	97.9%
SAN BERNARDINO	2021-22	1st Grade	28,985	95.7%	96.1%	96.3%	97.0%	96.0%
		Kindergarten	32,198	93.9%	94.8%	94.9%	96.1%	94.8%
	2020-21	Kindergarten	30,438	92.6%	93.2%	93.1%	96.2%	93.0%
		Kindergarten	34,542	95.2%	96.0%	96.2%	97.5%	96.1%

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	School Year	Grade	Total Students	DTP 4+	Polio 3+	MMR 2+	HepB 3+	Var 2+
			Number	Percent	Percent	Percent	Percent	Percent
STATE TOTAL	2021-22	1st Grade	431,819	97.1%	97.4%	97.5%	98.0%	97.2%
		Kindergarten	503,722	95.7%	96.2%	96.3%	97.3%	96.0%
	2020-21	Kindergarten	485,538	94.7%	95.2%	95.1%	97.0%	94.8%
SAN DIEGO	2021-22	1st Grade	36,235	96.3%	96.5%	96.6%	97.1%	96.3%
		Kindergarten	41,632	94.7%	95.3%	95.3%	96.4%	94.9%
	2020-21	Kindergarten	40,748	95.2%	95.6%	95.4%	96.7%	95.2%
		Kindergarten	45,956	94.5%	94.9%	94.8%	95.5%	94.4%
SAN FRANCISCO	2021-22	1st Grade	5,519	96.6%	96.9%	97.3%	97.4%	97.8%
		Kindergarten	6,068	95.9%	96.3%	96.4%	97.0%	95.8%
	2020-21	Kindergarten	6,325	94.2%	94.9%	95.1%	95.5%	94.8%
		Kindergarten	6,963	97.3%	97.7%	97.6%	97.9%	96.9%
SAN JOAQUIN	2021-22	1st Grade	10,750	97.3%	97.8%	97.8%	98.4%	97.8%
		Kindergarten	11,902	96.1%	96.6%	96.8%	97.8%	96.7%
	2020-21	Kindergarten	10,791	96.3%	97.3%	97.0%	98.4%	96.8%
		Kindergarten	12,320	96.5%	97.5%	97.5%	98.5%	96.9%
SAN LUIS OBISPO	2021-22	1st Grade	2,451	98.0%	97.9%	98.3%	98.8%	98.2%
		Kindergarten	2,846	95.7%	96.3%	96.2%	97.8%	96.4%
	2020-21	Kindergarten	2,466	96.8%	96.8%	96.9%	98.3%	96.6%
		Kindergarten	3,095	95.9%	96.3%	96.2%	97.2%	95.7%
SAN MATEO	2021-22	1st Grade	7,250	98.6%	98.9%	98.9%	98.9%	98.2%
		Kindergarten	8,028	97.8%	98.4%	98.2%	98.7%	97.5%
	2020-21	Kindergarten	8,140	98.1%	98.5%	98.3%	≥99.0%	97.9%
		Kindergarten	9,168	97.9%	98.1%	98.1%	98.6%	97.4%
SANTA BARBARA	2021-22	1st Grade	5,232	98.2%	98.4%	98.5%	98.6%	98.0%
		Kindergarten	6,066	97.6%	97.8%	98.0%	98.4%	97.5%
	2020-21	Kindergarten	5,473	96.7%	97.4%	97.0%	98.1%	96.7%
		Kindergarten	6,500	97.6%	98.0%	97.9%	98.2%	97.4%
SANTA CLARA	2021-22	1st Grade	19,070	98.5%	98.7%	98.7%	98.9%	98.3%
		Kindergarten	21,901	97.8%	98.3%	98.1%	98.7%	97.8%
	2020-21	Kindergarten	21,759	97.3%	97.7%	97.6%	98.6%	97.1%
		Kindergarten	24,963	98.1%	98.5%	98.2%	98.8%	97.6%
SANTA CRUZ	2021-22	1st Grade	2,938	93.9%	93.6%	93.9%	94.6%	93.5%
		Kindergarten	3,307	93.5%	93.3%	94.1%	94.6%	93.5%
	2020-21	Kindergarten	3,097	93.3%	93.3%	92.2%	93.5%	92.4%
		Kindergarten	3,415	92.4%	92.4%	92.6%	93.1%	93.1%
SHASTA	2021-22	1st Grade	1,959	94.2%	94.6%	94.8%	95.5%	94.8%
		Kindergarten	2,511	91.0%	92.0%	92.6%	94.5%	92.9%
	2020-21	Kindergarten	2,189	91.2%	92.3%	91.9%	94.7%	92.1%
		Kindergarten	2,525	93.1%	93.3%	93.8%	95.2%	92.9%
SIERRA	2021-22	1st Grade	34	≥99.0%	≥99.0%	≥99.0%	≥99.0%	≥99.0%
		Kindergarten	32	≥99.0%	≥99.0%	96.9%	≥99.0%	≥99.0%
	2020-21	Kindergarten	23	≥99.0%	≥99.0%	≥99.0%	≥99.0%	≥99.0%
		Kindergarten	25	≥99.0%	≥99.0%	≥99.0%	≥99.0%	≥99.0%
SISKIYOU	2021-22	1st Grade	383	94.0%	92.7%	93.7%	95.0%	93.7%
		Kindergarten	500	92.4%	93.0%	93.0%	93.8%	93.8%
	2020-21	Kindergarten	463	91.1%	91.6%	90.7%	91.6%	91.8%
		Kindergarten	530	97.2%	97.4%	97.5%	97.7%	97.5%
SOLANO	2021-22	1st Grade	4,451	98.8%	≥99.0%	≥99.0%	≥99.0%	98.9%
		Kindergarten	5,236	97.6%	98.2%	98.3%	98.7%	98.0%
	2020-21	Kindergarten	5,036	96.4%	97.3%	96.7%	98.0%	96.5%
		Kindergarten	5,966	97.3%	98.0%	98.1%	98.4%	97.6%

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STATE TOTAL	2021-22	1st Grade	431,819	97.1%	97.4%	97.5%	98.0%	97.2%
		Kindergarten	503,722	95.7%	96.2%	96.3%	97.3%	96.0%
	2020-21	Kindergarten	485,538	94.7%	95.2%	95.1%	97.0%	94.8%
		Kindergarten	554,250	96.2%	96.5%	96.5%	97.4%	96.0%
SONOMA	2021-22	1st Grade	4,657	95.7%	96.0%	96.3%	96.4%	95.7%
		Kindergarten	5,931	94.4%	94.7%	95.0%	95.8%	94.6%
	2020-21	Kindergarten	5,566	93.4%	93.9%	94.0%	96.1%	93.4%
		Kindergarten	6,043	94.7%	94.8%	94.7%	95.3%	94.3%
STANISLAUS	2021-22	1st Grade	7,858	97.0%	97.5%	97.7%	98.3%	97.5%
		Kindergarten	8,707	95.3%	96.2%	96.3%	97.8%	96.1%
	2020-21	Kindergarten	8,619	95.5%	96.6%	96.2%	98.1%	95.7%
		Kindergarten	9,366	96.7%	97.7%	97.8%	98.2%	97.6%
SUTTER	2021-22	1st Grade	1,691	83.3%	83.3%	83.9%	86.6%	83.2%
		Kindergarten	2,222	79.2%	80.0%	79.9%	84.4%	79.7%
	2020-21	Kindergarten	1,764	83.8%	84.6%	84.3%	88.7%	83.6%
		Kindergarten	2,017	86.7%	87.3%	87.9%	89.8%	88.5%
TEHAMA	2021-22	1st Grade	834	98.3%	98.7%	98.6%	98.8%	98.6%
		Kindergarten	962	96.0%	96.7%	97.2%	98.2%	96.4%
	2020-21	Kindergarten	838	96.1%	97.4%	97.4%	98.2%	97.3%
		Kindergarten	1,073	95.4%	96.8%	96.6%	97.9%	95.6%
TRINITY	2021-22	1st Grade	115	91.3%	89.6%	90.4%	93.9%	89.6%
		Kindergarten	117	94.0%	93.2%	93.2%	92.3%	91.5%
	2020-21	Kindergarten	134	89.6%	89.6%	89.6%	90.3%	90.3%
		Kindergarten	138	89.1%	87.7%	91.3%	92.0%	92.0%
TULARE	2021-22	1st Grade	7,322	98.9%	≥99.0%	98.9%	≥99.0%	98.7%
		Kindergarten	8,542	97.9%	98.1%	98.2%	98.6%	97.8%
	2020-21	Kindergarten	8,344	97.5%	97.7%	97.8%	98.7%	97.7%
		Kindergarten	9,535	97.3%	97.9%	97.9%	98.4%	97.7%
TUOLUMNE	2021-22	1st Grade	469	91.7%	94.2%	93.0%	94.2%	92.8%
		Kindergarten	566	89.6%	92.4%	93.5%	94.5%	93.1%
	2020-21	Kindergarten	474	89.0%	90.1%	91.8%	92.8%	90.5%
		Kindergarten	584	92.6%	93.8%	93.7%	95.0%	93.5%
VENTURA	2021-22	1st Grade	9,403	97.6%	97.7%	97.8%	98.1%	97.4%
		Kindergarten	10,540	96.6%	97.1%	97.1%	98.0%	96.8%
	2020-21	Kindergarten	10,410	96.3%	96.5%	96.6%	97.6%	96.4%
		Kindergarten	11,466	96.9%	97.3%	97.3%	98.0%	96.7%
YOLO	2021-22	1st Grade	2,383	96.3%	96.7%	96.6%	97.0%	96.3%
		Kindergarten	2,746	95.4%	96.2%	95.8%	96.8%	95.5%
	2020-21	Kindergarten	2,535	94.6%	95.2%	95.3%	96.6%	95.2%
		Kindergarten	2,959	96.1%	96.3%	96.6%	97.5%	96.0%
YUBA	2021-22	1st Grade	1,167	95.6%	95.7%	96.1%	96.5%	95.8%
		Kindergarten	1,372	92.7%	93.7%	93.2%	95.0%	93.4%
	2020-21	Kindergarten	1,154	93.0%	94.6%	93.9%	96.6%	91.7%
		Kindergarten	1,361	95.2%	96.0%	95.6%	96.8%	95.4%

* Additional precautions for student de-identification are based on jurisdiction enrollment for kindergarten. For jurisdictions with: Fewer than 20 enrollees, the data are omitted; 20-49 enrollees, values of 95% or higher are listed as ≥95%; 50-99 enrollees, values of 98% or higher are listed as ≥98%; 100 or more enrollees, values of 99% or higher are listed as ≥99%.

** Schools did not report.

EXHIBIT 18

2020-2021 and 2021-2022 Seventh Grade Immunization Assessment

Executive summary

Immunization requirements for school entry help protect children and communities from vaccine-preventable diseases. Schools in California are required to report student immunization status to the California Department of Public Health (CDPH) every year. This report summarizes California student immunization rates reported at 7th grade in the 2020-2021 and 2021-2022 school years and at 8th grade in 2021-2022.

Events potentially affecting immunization and reporting during this period included:

- The Coronavirus 2019 (COVID-19) pandemic disrupted routine primary health care and education.
- Beginning January 1, 2021 Senate Bills [\(SB\) 276](#) and [SB 714](#) have required that all new medical exemptions to requirements for school entry be issued through a statewide database, the California Immunization Registry Medical Exemption (CAIR-ME) website.

Reported immunization rates for Tdap decreased slightly in 2021-2022 from 2019-2020, while Varicella rates remained similar. The proportion of 7th grade students reported to have received Tdap immunization was 97.3% in 2019-2020 and 95.9% in 2021-2022. An interim 7th grade Tdap rate in 2020-2021, during the height of the COVID-19 pandemic which likely affected immunization delivery and school reporting, was 88.6%. The Tdap rate for this cohort during 8th grade in 2021-2022 was 97.1%. Reported rate of Varicella immunizations among 7th graders was 97.1% in 2019-2020 and 97.2% in 2021-2022. The proportion of 7th graders reported with permanent medical exemptions decreased for Tdap from 0.4% in 2019-2020 to 0.1% in 2021-2022 and for Varicella from 0.9% in 2019-2020 to 0.4% in 2021-2022.

CDPH and local health departments in California continue to closely monitor immunization coverage and to support schools in protecting the health of their students and communities.

Introduction

All schools with 7th grade students in California are required to report annually on student compliance per California Health and Safety Code Sections 120325-120375. This report summarizes the 2020-2021 and 2021-2022 school year data for 7th graders. In 2021-2022, an additional reporting requirement was added for 8th grade students to monitor immunization trends during the COVID-19 pandemic, associated with lengthy school closures, shifts from in-person to virtual and hybrid learning, and delays in routine health care. In addition, [California Department of Education data](#) show that 7th grade student enrollment decreased by 7% during the 2-year interval between 2019-2020 and 2021-2022.

California laws over the past decade have modified:

- Required doses: Since 2019, students entering 7th grade are required to receive two doses of Varicella (chickenpox) vaccine due to changes in the [California Code of Regulations](#).
- Medical exemptions to required immunization: Starting January 1, 2021, Senate Bills [\(SB\) 276](#) and [SB 714](#) require that all new medical exemptions for school and child care entry be issued through CAIR-ME, an electronic, statewide database. Medical exemptions can only be issued

by physicians and surgeons licensed with the Medical Board or Osteopathic Medical Board of California and must meet criteria for appropriate exemptions from the Centers for Disease Control and Prevention, Advisory Committee on Immunization Practices, and American Academy of Pediatrics.

- Personal beliefs exemptions (PBEs): PBEs have not been permitted since 2016 per [SB 277](#).

Methods

California schools registered with the California Department of Education reported to CDPH data on enrolled 7th grade students during the winter of the 2020-2021 and 2021-2022 school years. In 2021-2022, schools reporting 7th grade enrollment were also required to report the immunization status of 8th grade students to monitor their vulnerability to vaccine-preventable diseases during the pandemic.

Based on their immunization status, students were classified by school staff into the following categories:

- Students immunized with required vaccines:
 - 1 or more doses of Tetanus, diphtheria and pertussis booster (Tdap) vaccine
 - 2 or more doses of Varicella vaccine ['2+ Var'].
- Conditional entrants who had a temporary medical exemption (TME) to Tdap or Varicella vaccine or were not yet due for their second dose of Varicella vaccine.
- Students with a permanent medical exemption (PME) to either Tdap or Varicella vaccine. For Varicella vaccine, PME's were further distinguished between
 - Physician (MD/DO) verification of varicella disease
 - Medical reasons other than varicella disease
- Other students lacking required immunizations: Under SB 277, entrants since the 2016-2017 school year have not been required to have immunizations if they attend:
 - A home-based private school or
 - An independent study program and do not receive classroom-based instruction.
 - In addition, students who have an individualized education program (IEP) may continue to receive all necessary services identified in their IEP regardless of their immunization status.

Students in these settings were classified in this category if they lacked required immunizations and did not meet the criteria for other categories.

- Students overdue for required immunizations and subject to exclusion from school until the overdue requirement has been met.

Under SB 277, personal belief exemptions (PBEs) have no longer been an option for 7th graders since the 2016-2017 school year.

Due to rounding, total figures may differ from the sums of their components. Differences were calculated between exact figures, varying at times by 0.1% from the differences between rounded figures.

Results

In 2021-2022, 4,654 schools reported immunization status for 463,512 seventh grade students and 4,524 schools reported immunization status for 480,613 eighth grade students (Tables 1 and 2). Compared to 2019-2020, the number of schools with 7th grade that reported decreased by 2% in 2021-2022. The number of 7th grade students with reported immunization status decreased from 2019-2020 to 2021-2022 by 8.2%, compared to decreases in enrollment, per CDE data, of 7%. Between 2019-2020 and 2021-2022, the number of private schools reporting 7th graders decreased by 7%, while the number of public schools increased slightly by 0.9%. Similar to previous years, public schools accounted for 65% of all schools reporting 7th grade education and 92% of all reported 7th grade students in 2021-2022. Among nonreporting schools in 2021-2022, 78% (153 out of 195) were private schools.

Immunized with Tdap: Among 463,512 7th grade students reported in 2021-2022, 95.9% had received Tdap immunization, a decrease of 1.4% compared to 2019-2020 (Table 1 and Figure 1). As in prior years, a higher proportion of students in public compared to private schools were reported as being immunized with Tdap (96.1% public vs. 93.5% private).

The interim Tdap immunization rate for 7th grade students in 2020-2021 was 88.6% while the rate for this cohort in 8th grade in 2021-2022 increased to 97.1% (Table 2).

Immunized with Varicella vaccine: In 2021-2022, 97.2% of 7th grade students were reported as having received 2 doses of Varicella vaccine, a 0.1% decrease compared to 2019-2020 (Table 1 and Figure 2). A higher proportion of students in public compared to private schools were reported as being immunized with Varicella (97.4% public vs. 95.0% private).

The interim Varicella immunization rate for 7th grade students in 2020-2021 was 96.3% while the rate for this cohort in 8th grade in 2021-2022 was 97.7% (Table 2).

Permanent Medical Exemptions: Both public and private schools reported fewer PME's in 2021-2022 than previous years (Table 1, Figures 3 and 4). The proportion of 7th grade students reported with PME's for Tdap vaccine has decreased from a peak of 0.5% in 2018-2019 to 0.1% in 2021-2022.

The proportion of 7th graders with PME's for Varicella decreased from 0.9% in 2019-2020 to 0.4% in 2021-2022. Among 1,687 PME's for Varicella, 58% (980) reported physician verification of varicella disease and 42% (707) reported other medical reasons for exemption.

Among 8th grade students in 2021-2022, 769 students (0.2%) were reported with PME's for Tdap and 2,157 students (0.4%) with PME's for Varicella.

Conditional entrants: The proportion of 7th grade students in all schools reported as conditional entrants because of a temporary medical exemption for Tdap immunization decreased from 0.1% in 2019-2020 to <0.1% in 2021-2022 (Table 1, Figures 5 and 6).

For Varicella immunization, the proportion of 7th graders reported as conditional entrants decreased between 2019-2020 and 2021-2022 from 0.3% to 0.2% in all schools and in public schools, and 0.6% to 0.4% in private schools (Table 1, Figures 5 and 7). The majority were reported as students not yet due for their second dose of Varicella vaccine (856 out of 975 students in 2021-2022) as compared to having a temporary medical exemption (119 out of 975).

The proportion of 8th graders in 2021-2022 reported as conditional entrants was 0.1% for Varicella immunization and <0.1% for Tdap immunization.

Other students lacking required immunizations: Seventh graders reported as attending an independent study program without classroom-based instruction, attending home-based private school, or receiving services in an IEP and lacking immunizations have increased over the past 6 years. Students in this category lacking Tdap immunization increased from 1.5% in 2019-2020 to 2.2% in 2021-2022, including 2.2% for public schools and 2.5% for private schools. Seventh graders in this category reported as lacking two doses of Varicella vaccine increased from 1.0% in 2019-2020 to 1.3% in 2021-2022, including 1.2% in public schools and 2.2% in private schools. Similar to prior years, most students in this category were reported as being enrolled in independent study programs in 2021-2022 (6,620 out of 10,089 students lacking Tdap immunization and 4,095 out of 5,905 students lacking Varicella immunization).

The interim proportion of 7th graders in independent study without classroom-based instruction, home-based private school or receiving IEP services and lacking immunizations was 2.6% for Tdap and 1.2% for Varicella in 2020-2021, while the rates for this cohort in 8th grade in 2021-2022 were 1.6% for lacking Tdap and 1.1% for lacking Varicella.

Overdue: The percentage of 7th grade students reported as being overdue for Tdap immunization has been increasing over the past 7 years, including an increase in 1.1 percentage points from 0.7% in 2019-2020 to 1.8% in 2021-2022. Students reported as overdue for Tdap immunization increased in both public and private schools, 1.7% in public and 3.3% in private schools in 2021-2022. The proportion of 8th graders in 2021-2022 reported as overdue for Tdap immunization was 1.1%, decreased from 8.5% in the corresponding 7th grade cohort in 2020-2021.

Seventh grade students reported as being overdue for Varicella immunization increased from 0.7% in 2019-2020 to 0.9% to 2021-2022, including 0.8% in public schools and 1.7% in private schools. The proportion of 8th graders in 2021-2022 reported as overdue for Varicella immunization was 0.7%, decreased from 1.8% in the corresponding 7th grade cohort in 2020-2021.

County-level immunization rates: Immunization rates varied widely by county in California, including lower rates in some northern and central counties (Tables 3 and 4, Figures 8 and 9). In 2021-2022, 22 (38%) of 58 counties reported 7th grade Tdap immunization rates below 95%, compared to 12 (21%) counties in 2019-2020.

Counties with higher proportion of students enrolled in online or virtual schools had lower Tdap immunization rates, similar to prior years. Four counties, El Dorado, Glenn, Kern, and Sutter, reported more than 5% of seventh grade students enrolled in virtual schools and corresponding lower Tdap immunization rates among students in virtual schools versus classroom-based schools (Box).

% of 7th graders with Tdap immunization in 2021-2022				For Schools Based in County, % of pupils reported as enrolled in virtual schools
County	All Schools Based in County	Classroom-Based Schools	Virtual Schools*	
Sutter	79.9%	96.4%	32.4%	19.4%
El Dorado	83.3%	95.8%	14.2%	15.0%
Glenn	89.4%	98.0%	16.0%	10.6%
Kern	91.8%	98.1%	10.5%	6.8%

*Virtual schools are based in the specified county but may enroll children who reside in other counties.

Varicella immunization rates below 95% were reported by 12 (21%) counties in 2021-2022, compared to 16 (28%) in 2019-2020.

In most counties, rates for Tdap and varicella immunization in 8th grade students in 2021-2022 were higher than rates in the corresponding 7th grade cohort in 2020-2021.

Discussion

In the midst of the COVID-19 pandemic, California schools continued to report essential immunization information about their students. Public schools reported the immunization status of 97% (447,943/460,703) of 7th graders counted in [CDE public school enrollment data](#) in 2020-2021 and 98% (428,603/435,773) in 2021-2022. Private school reporting was lower at 88% (32,770/37,079) in 2020-2021 and 92% (34,909/37,747) in 2021-2022 per [CDE private school enrollment data](#).

The Tdap immunization rate among 7th graders was 95.9% in 2021-2022, below rates ranging from 96.6% to 98.4% during the 10 years before the pandemic. An interim lower rate of 88.6% for 7th graders in 2020-2021 was followed by a rate of 97.1% among 8th graders in 2021-2022. Data on 8th grade students have not been collected previously, thus it is unclear whether the pace of catch-up in 2021-2022 was unusual. Compared to 2019-2020, the proportion of 7th graders reported in 2021-2022 categorized as overdue for Tdap immunization more than doubled from 0.7% to 1.8%, which may reflect disruptions in immunization, attendance, or reporting capacity during the pandemic.

The Varicella immunization rate among 7th graders in 2021-2022 was 97.2%, similar to a rate of 97.1% in 2019-2020. An interim lower rate of 96.3% for 7th graders in 2020-2021 was followed by a rate of 97.7% among 8th graders in 2021-2022. In California during 2021-2022, varicella immunization rates were higher among 7th graders than [kindergarteners](#) in public schools (7th grade 97.4%; kindergarten 96.1%), but not private schools (7th grade 95.0%; kindergarten 95.3%).

The proportion of 7th grade students with PMEs has decreased after implementation of [SB 276](#) and [SB 714](#), which require medical exemptions to align with national standards and be subject to review by CDPH: PMEs for Tdap decreased from 0.4% in 2019-2020 to 0.1% in 2021-2022 and PMEs for Varicella decreased from 0.9% in 2019-2020 to 0.4% in 2021-2022. This trend is similar to decreasing PMEs reported among [kindergarteners](#). By contrast, the proportion of students exempted from

immunization requirements per criteria in [SB 277](#) has been increasing among 7th graders. Most of these 7th graders are reported as being in independent study programs (1.4% IEP of 2.2% lacking Tdap; 0.9% IEP of 1.3% lacking Varicella).

Adolescents in schools and communities with lower immunization rates remain at higher risk of contracting and transmitting vaccine preventable diseases. In 2021-2022, rates of immunization less than 95% were reported for Tdap in 22 (38%) counties in California and for Varicella vaccine in 12 (21%) counties. Regional differences in reported school-required immunization rates reflect trends for [COVID-19 vaccines in California](#). Encouraging immunization throughout childhood and adolescence should continue as our school communities return to routine in-person learning. Ongoing efforts to protect school communities with required vaccines and COVID-19 vaccines can be complementary and synergistic.

Limitations

This report is subject to limitations that include:

- Submission of student immunization records to school staff and reporting by school staff of immunization data to CDPH might have been reduced during the pandemic. Incomplete immunization records might have resulted in underestimates of immunization rates.
- CDPH does not know how many of the schools that did not report had enrolled 7th grade students or the immunization status of their students. In 2020-2021, 473 California schools, including 381 private schools and 92 public schools did not report. In 2021-2022, 195 California schools, including 153 private schools and 42 public schools did not report. Underreporting could have biased the reported immunization rates in either direction.
- As in previous years, private home schools that did not register with the California Department of Education may not have reported data to CDPH, which would result in continued underestimates of their enrollment.
- It is possible that medical exemption records provided to schools were incomplete or under review during initial implementation of [SB 276](#) and [SB 714](#) on January 1, 2021, when documentation of medical exemptions transitioned from paper-based records to CAIR-ME, an electronic, statewide database. The presence of incomplete records could have biased the reported medical exemption rates in either direction.

Download the [7th Grade Immunization Assessment Summary data workbook](#) for more information (XLS)

Figures

1. Percentage of Students with 1+ Doses of Tdap Vaccine by School Year
2. Percentage of Students with 2+ Doses of Varicella Vaccine by School Year
3. Percentage of All 7th Grade and 8th Grade Students with Permanent Medical Exemptions (PMEs) to Tdap Vaccine by School Year
4. Percentage of All 7th Grade and 8th Grade Students with Permanent Medical Exemptions (PMEs) to Varicella Vaccine by School Year
5. Percentage of All 7th Grade Students by Reported Admission Status, Tdap and Varicella Vaccine, 2021-2022
6. Percentage of All 7th Grade Students with 1+ Doses of Tdap Vaccine, by Reported Admission Status, by School Year, 2014-2015 to 2021-2022
7. Percentage 7th Grade Students with 2+ Doses of Varicella Vaccine, by Reported Admission Status, by School Year, 2019-2020 to 2021-2022
8. Map: 7th Grade and 8th Grade Students with 1+ Doses of Tdap Vaccine, by County, 7th Grade, 2019-2020 to 2021-2022 School Years and 8th Grade 2021-2022 School Year
9. Map: 7th Grade and 8th Grade Students with 2+ Doses of Varicella Vaccine, by County, 7th Grade, 2019-2020 to 2021-2022 School Years and 8th Grade 2021-2022 School Year

Tables

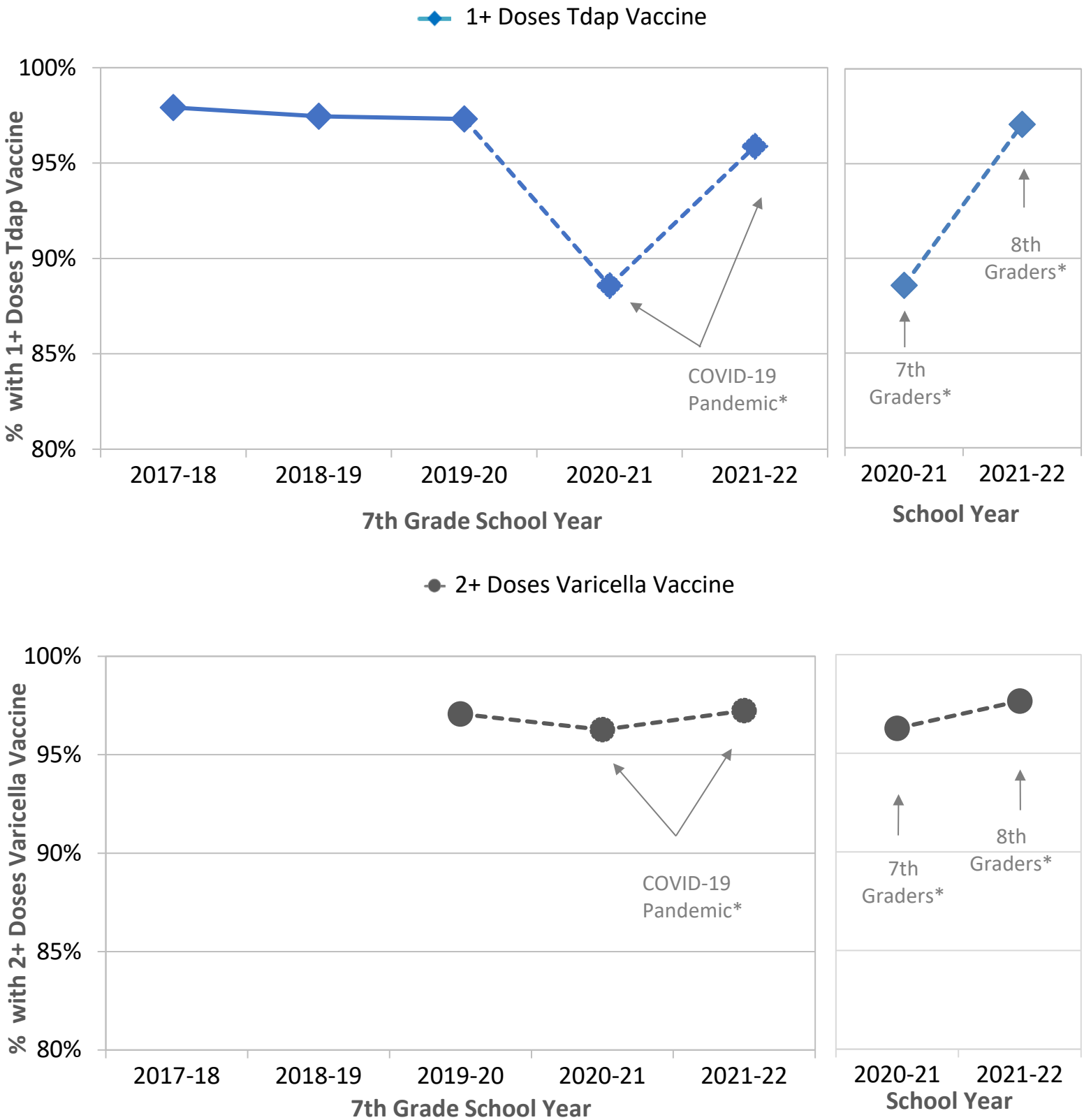
1. 7th Grade Immunization Assessment Summary, 2019-2020 through 2021-2022 School Years
2. Immunization Assessment Summary of 7th Grade in 2020-2021 and Subsequent 8th Grade in 2021-2022
3. Total Enrollment and Tdap Immunization Status of 7th Grade, 2021-2022, 2020-2021 and 2019-2020 School Years and 8th Grade, 2021-2022 School Year, by County
4. Total Enrollment and Varicella Immunization Status of 7th Grade, 2021-2022, 2020-2021 and 2019-2020 School Years and 8th Grade, 2021-2022 School Year, by County

Figure 1. Top: Percentage of Students with 1+ Doses of Tdap Vaccine by School Year

Figure 2. Bottom: Percentage of Students with 2+ Doses of Varicella Vaccine by School Year

Left: 7th Graders in the 2017-2018 to 2021-2022 School Years

Right: 7th Graders in the 2020-2021 School Year and 8th Graders in the 2021-2022 School Year



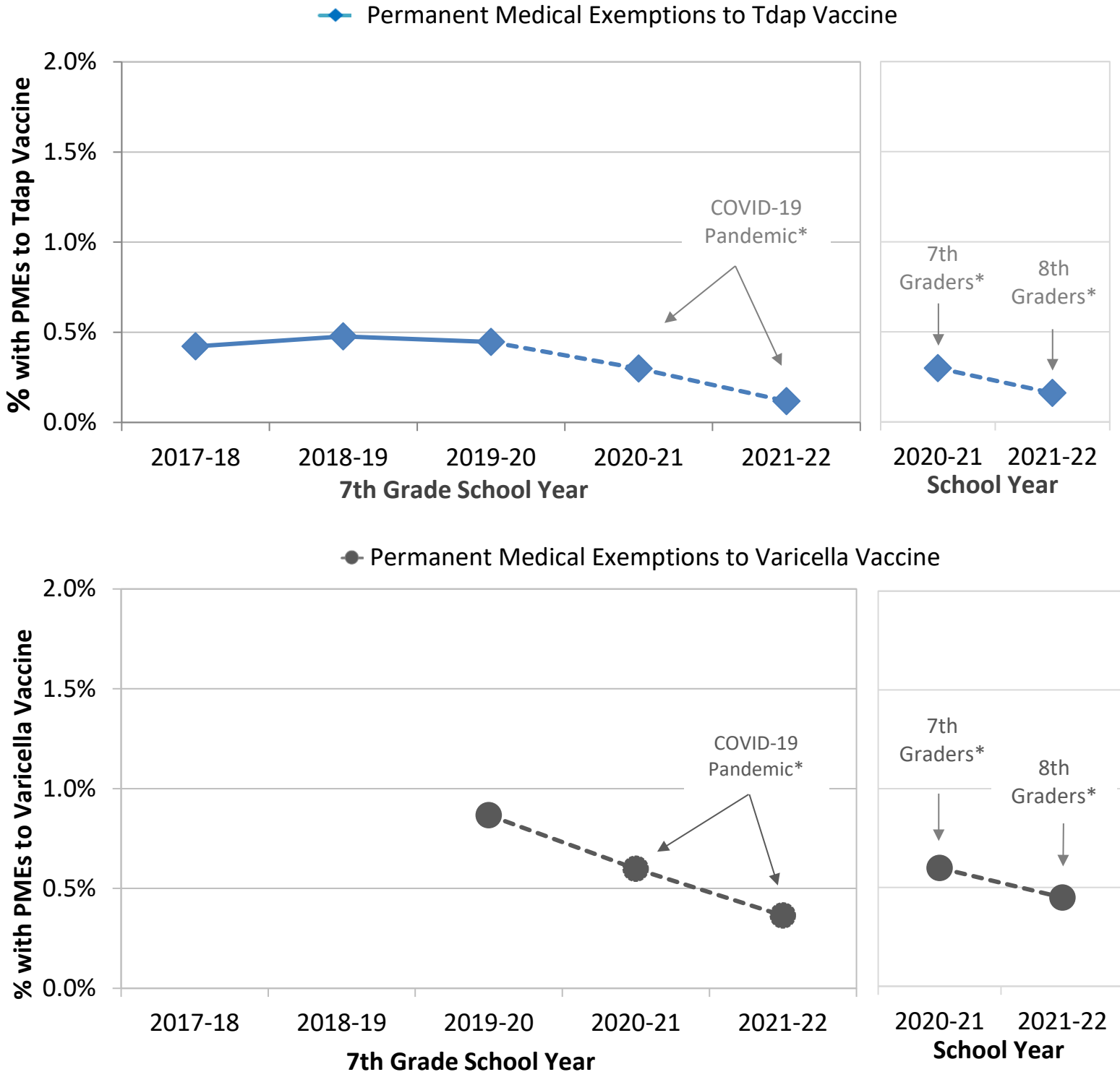
*Immunization and data collection potentially affected by the COVID-19 Pandemic.

Figure 3. Top: Percentage of All 7th Grade and 8th Grade Students with Permanent Medical Exemptions (PMEs) to Tdap Vaccine, by School Year

Figure 4. Bottom: Percentage of All 7th Grade and 8th Grade Students with Permanent Medical Exemptions (PMEs) to Varicella Vaccine by School Year, by School Year.

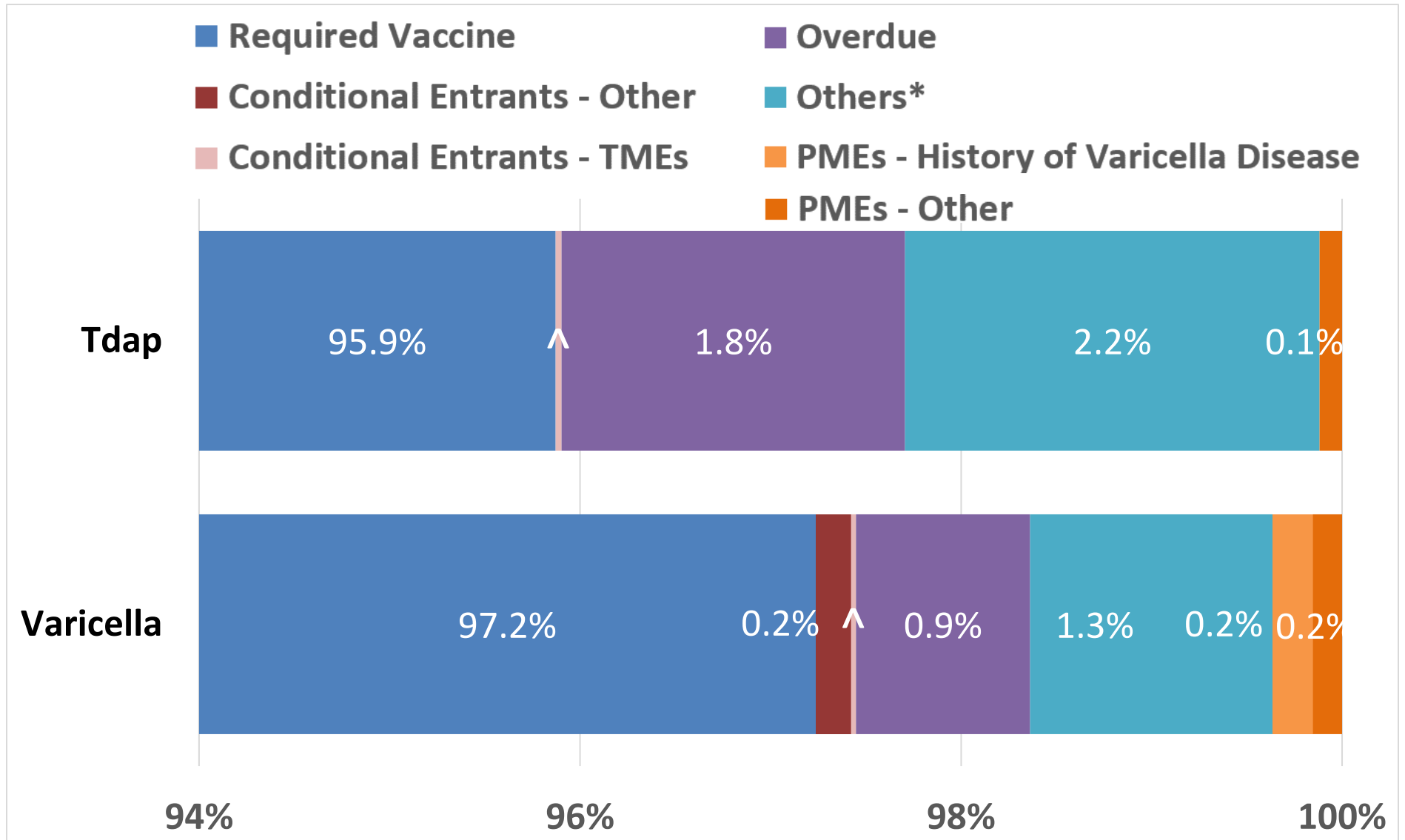
Left: 7th Graders in the 2017-2018 to 2021-2022 School Years

Right: 7th Graders in the 2020-2021 School Year and 8th Graders in the 2021-2022 School Year



*Immunization and data collection potentially affected by the COVID-19 Pandemic.

Figure 5. Percentage of All 7th Grade Students by Reported Admission Status, Tdap and Varicella Vaccine, 2021-2022 School Year[†]

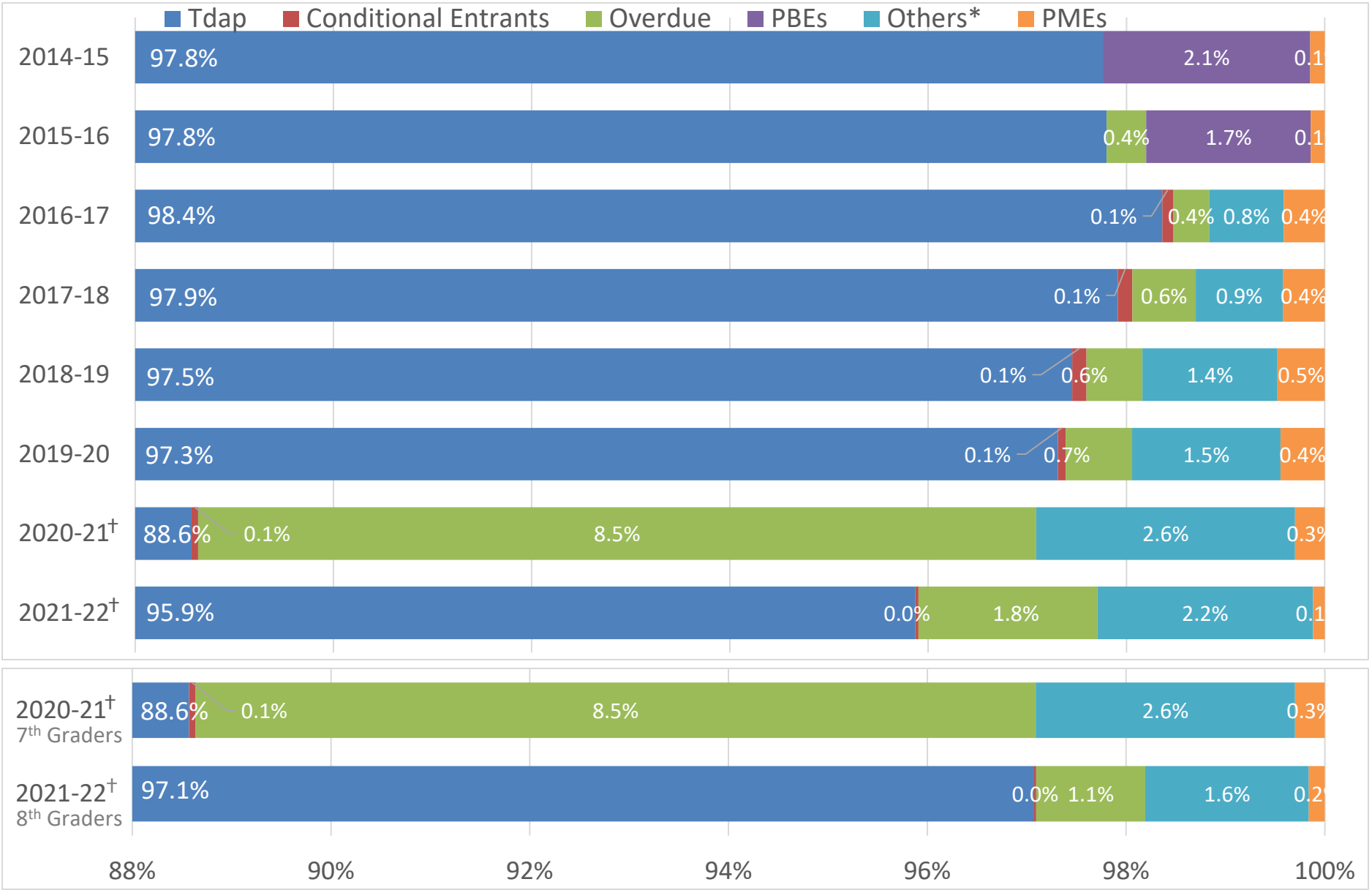


[†] Immunization and data collection potentially affected by the COVID-19 Pandemic.

* Other children lacking required immunizations under criteria specified in SB 277

^ Conditional Entrants – TMEs <0.1%

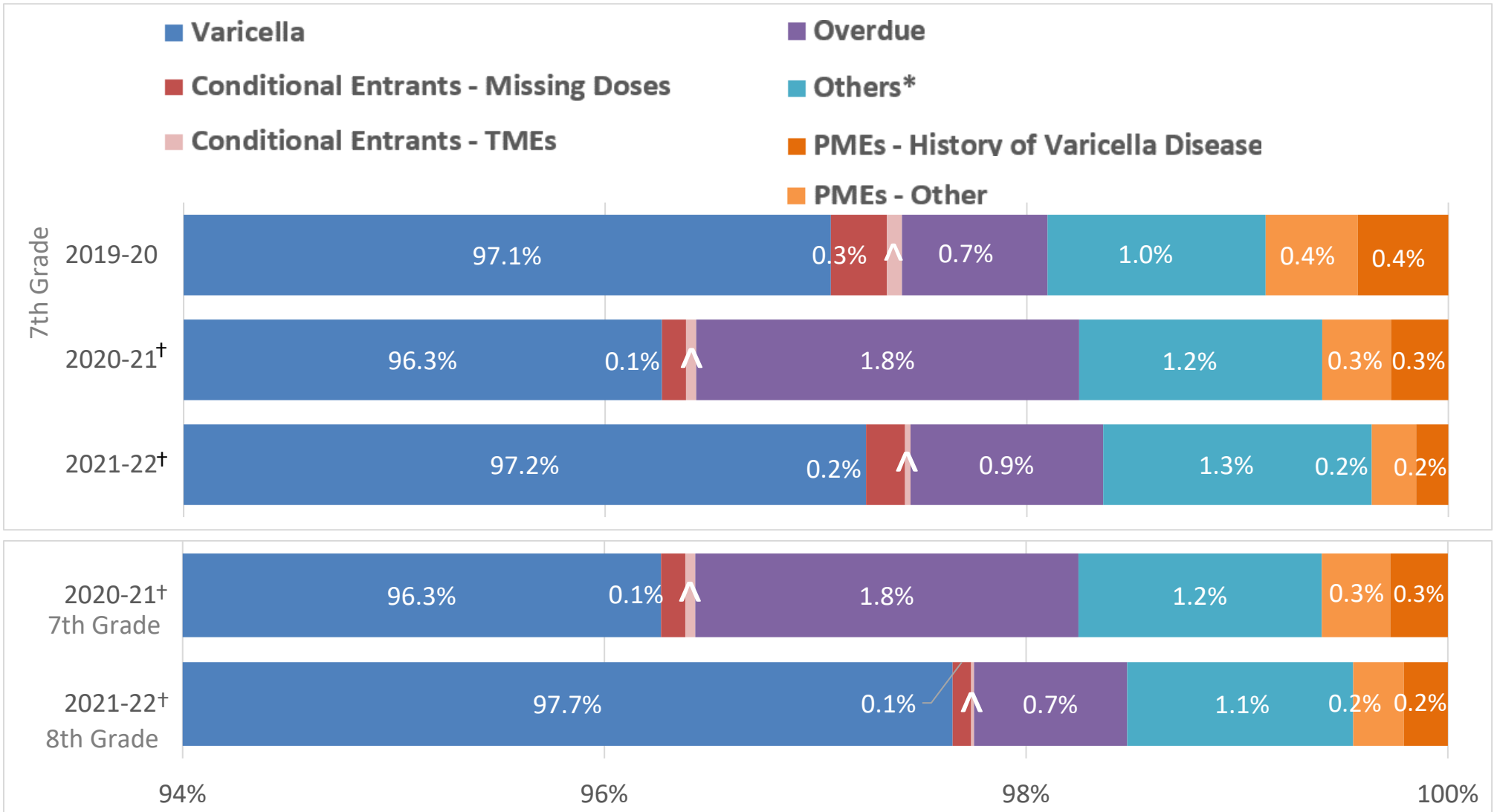
Figure 6. Percentage of 7th Grade Students with 1+ Doses of Tdap Vaccine, by Reported Admission Status by School Year, 2014-2015 to 2021-2022



*Other children lacking required immunizations under criteria specified in SB 277.

† Immunization and data collection potentially affected by the COVID-19 Pandemic.

Figure 7. Percentage 7th Grade Students with 2+ Doses of Varicella Vaccine, by Reported Admission Status by School Year, 2019-20 to 2021-22
Top: 7th Graders in the 2019-2020 to 2021-2022 School Years
Bottom: 7th Graders in the 2020-2021 School Year and 8th Graders in the 2021-2022 School Year



[†] Immunization and data collection potentially affected by the COVID-19 Pandemic.

* Other children lacking required immunizations under criteria specified in SB 277

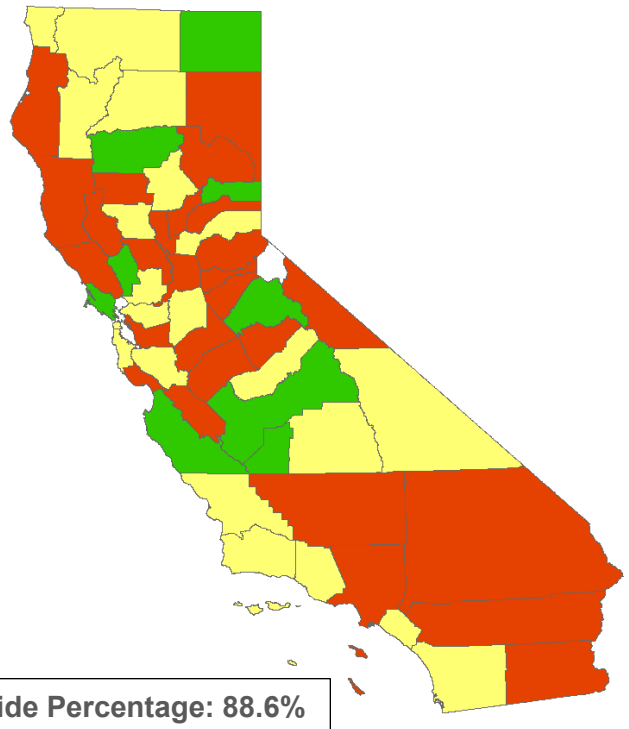
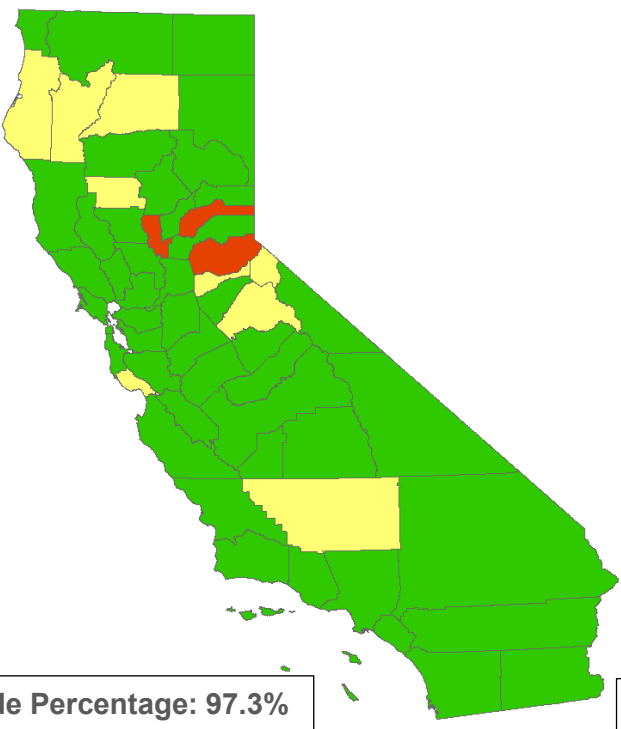
^ Conditional Entrants – TMEs <0.1%

7th Graders in the 2019-2020 to 2021-2022 School Years
 8th Graders in the 2021-2022 School Year

■ ≤ 89.9%
 ■ 90.0 – 94.9%
 ■ 95.0 – 100.0%
 Did Not Report

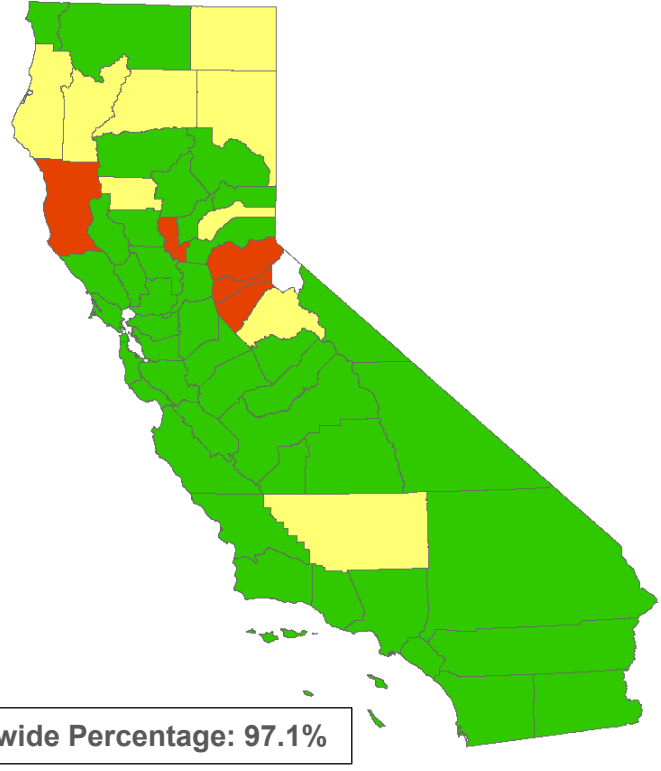
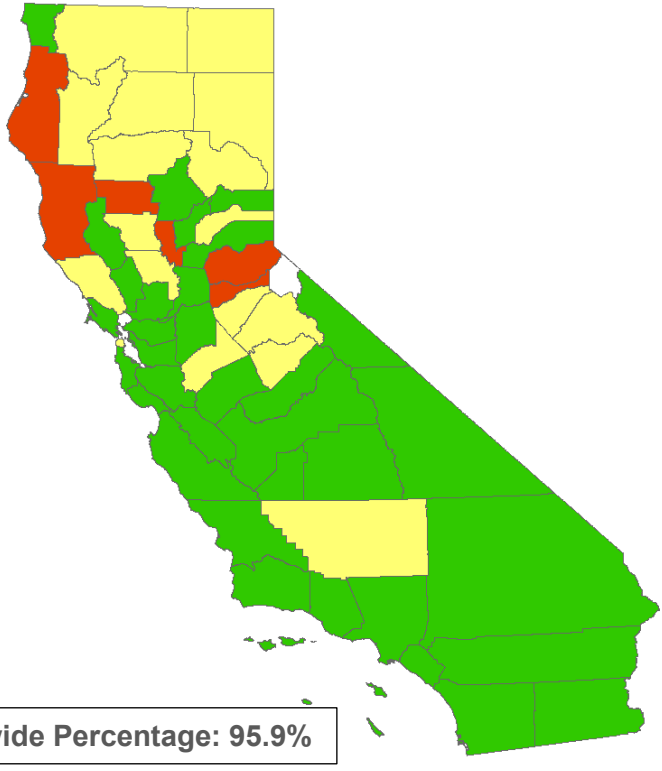
7th Grade
 2019-2020 School Year

7th Grade
 2020-2021 School Year*



7th Grade
 2021-2022 School Year*

8th Grade
 2021-2022 School Year*



*Immunization and data collection potentially affected by the COVID-19 pandemic

Figure 9. 7th and 8th Grade Students with 2+ Doses of Varicella Vaccine, by County
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7th Graders in the 2019-2020 to 2021-2022 School Years
 8th Graders in the 2021-2022 School Year

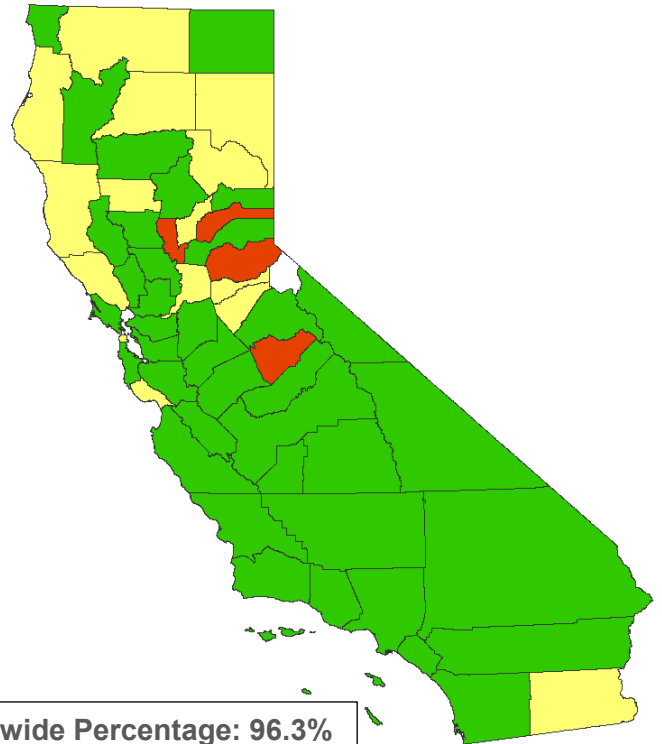
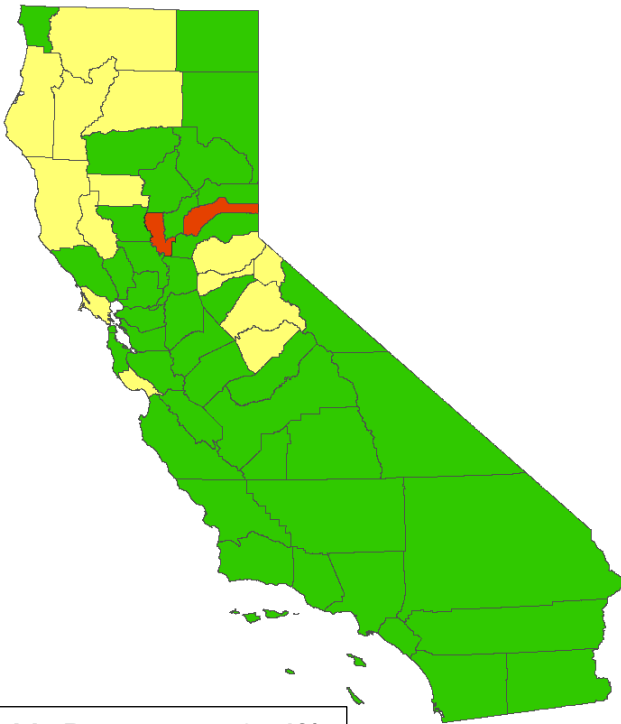
■ ≤ 89.9%
 ■ 90.0 – 94.9%
 ■ 95.0 – 100.0%
 □ Did Not Report

7th Grade

7th Grade

2019-2020 School Year

2020-2021 School Year*



Statewide Percentage: 97.1%

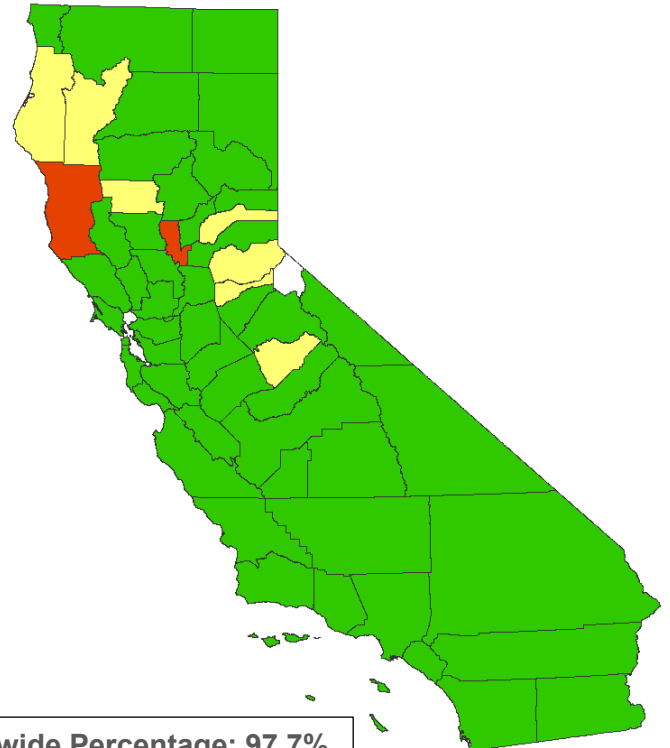
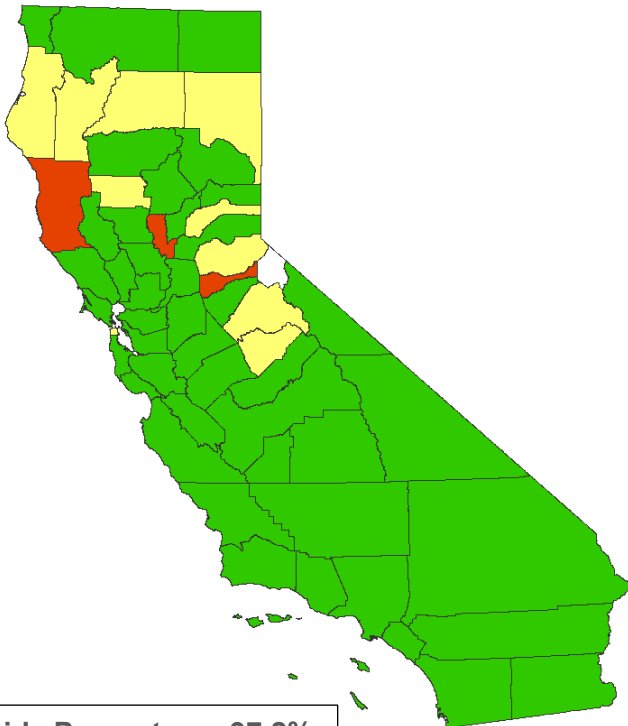
Statewide Percentage: 96.3%

7th Grade

8th Grade

2021-2022 School Year*

2021-2022 School Year*



Statewide Percentage: 97.2%

Statewide Percentage: 97.7%

*Immunization and data collection potentially affected by the COVID-19 pandemic

	7th Grade									7th Grade: 2021-22 and 2019-20		
	2021-2022			2020-2021			2019-2020			2-Year Percentage Point Change		
	All	Public	Private	All	Public	Private	All	Public	Private	All	Public	Private
Number of Schools	4,654	3,038	1,616	4,454	2,925	1,529	4,750	3,012	1,738	-2.0%	0.9%	-7.0%
Number of Students	463,512	428,603	34,909	480,713	447,943	32,770	505,017	468,248	36,769	-8.2%	-8.5%	-5.1%
Received Tdap*	95.9%	96.1%	93.5%	88.6%	88.3%	91.8%	97.3%	97.6%	94.2%	-1.4%	-1.5%	-0.7%
Conditional Entrants for Tdap	0.0%	0.0%	0.2%	0.1%	0.0%	0.3%	0.1%	0.1%	0.4%	0.0%	0.0%	-0.2%
Permanent Medical Exemptions for Tdap	0.1%	0.1%	0.5%	0.3%	0.3%	0.8%	0.4%	0.4%	1.3%	-0.3%	-0.3%	-0.8%
Personal Belief Exemptions for Tdap	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Others Lacking Tdap†	2.2%	2.2%	2.5%	2.6%	2.6%	2.4%	1.5%	1.5%	1.8%	0.7%	0.7%	0.7%
Overdue for Tdap Vaccine^	1.8%	1.7%	3.3%	8.5%	8.7%	4.6%	0.7%	0.5%	2.3%	1.1%	1.1%	1.0%
Received 2+ Varicella**	97.2%	97.4%	95.0%	96.3%	96.4%	94.7%	97.1%	97.3%	94.7%	0.2%	0.2%	0.3%
Conditional Entrants for Varicella	0.2%	0.2%	0.4%	0.2%	0.1%	0.5%	0.3%	0.3%	0.6%	-0.1%	-0.1%	-0.2%
Permanent Medical Exemptions for Varicella	0.4%	0.3%	0.7%	0.6%	0.6%	1.2%	0.9%	0.8%	1.8%	-0.5%	-0.5%	-1.0%
Personal Belief Exemptions for Varicella	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Others Lacking Varicella†	1.3%	1.2%	2.2%	1.2%	1.1%	2.0%	1.0%	1.0%	1.7%	0.2%	0.2%	0.5%
Overdue for 2+ Varicella Vaccine^^	0.9%	0.8%	1.7%	1.8%	1.8%	1.7%	0.7%	0.6%	1.3%	0.2%	0.2%	0.4%

* Received pertussis-containing immunization on or after 7th birthday.

† Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

^ Overdue for Tdap immunization.

** Received 2 doses of Varicella immunization.

^^ Overdue for 2 doses of Varicella immunization.

Table 2. Immunization Assessment Summary of 7th Grade in 2020-21 and Subsequent 8th Grade in 2021-2022

	8th Grade			7th Grade			8th Grade 2021-22 and 7th Grade 2020-21		
	2021-2022			2020-2021			1-Year Percentage Point Change		
	All	Public	Private	All	Public	Private	All	Public	Private
Number of Schools	4,524	2,981	1,543	4,454	2,925	1,529	1.6%	1.9%	0.9%
Number of Students	480,613	445,896	34,717	480,713	447,943	32,770	0.0%	-0.5%	5.9%
Received Tdap*	97.1%	97.3%	94.6%	88.6%	88.3%	91.8%	8.5%	8.9%	2.8%
Conditional Entrants for Tdap	0.0%	0.0%	0.1%	0.1%	0.0%	0.3%	0.0%	0.0%	-0.2%
Permanent Medical Exemptions for Tdap	0.2%	0.1%	0.6%	0.3%	0.3%	0.8%	-0.1%	-0.1%	-0.3%
Personal Belief Exemptions for Tdap	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Others Lacking Tdap†	1.6%	1.6%	2.5%	2.6%	2.6%	2.4%	-1.0%	-1.0%	0.0%
Overdue for Tdap Vaccine^	1.1%	1.0%	2.2%	8.5%	8.7%	4.6%	-7.4%	-7.7%	-2.4%
Received 2+ Varicella**	97.7%	97.8%	95.5%	96.3%	96.4%	94.7%	1.4%	1.4%	0.9%
Conditional Entrants for Varicella	0.1%	0.1%	0.2%	0.2%	0.1%	0.5%	-0.1%	0.0%	-0.2%
Permanent Medical Exemptions for Varicella	0.4%	0.4%	0.9%	0.6%	0.6%	1.2%	-0.1%	-0.1%	-0.3%
Personal Belief Exemptions for Varicella	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Others Lacking Varicella†	1.1%	1.0%	2.2%	1.2%	1.1%	2.0%	-0.1%	-0.1%	0.2%
Overdue for 2+ Varicella Vaccine^^	0.7%	0.7%	1.1%	1.8%	1.8%	1.7%	-1.1%	-1.1%	-0.6%

* Received pertussis-containing immunization on or after 7th birthday.

† Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

^ Overdue for Tdap immunization.

** Received 2 doses of Varicella immunization.

^^ Overdue for 2 doses of Varicella immunization.

Table 3: Total Enrollment and Tdap Immunization Status of 7th Grade, 2021-2022, 2020-2021 and 2019-2020 School Years and 8th Grade, 2021-2022 School Year, By County

	School Year	Grade	Total Students	Entrants with Tdap Vaccine	Conditional Entrants	Entrants with PME	Others Lacking Tdap Vaccine†	Overdue for Tdap Vaccine^
			Number	Percent	Percent	Percent	Percent	Percent
State Total	2021-22	8	480,613	97.1%	0.0%	0.2%	1.6%	1.1%
		7	463,512	95.9%	0.0%	0.1%	2.2%	1.8%
	2020-21	7	480,713	88.6%	0.1%	0.3%	2.6%	8.5%
		7	505,017	97.3%	0.1%	0.4%	1.5%	0.7%
Alameda	2021-22	8	17,728	97.7%	0.0%	0.1%	0.6%	1.6%
		7	17,351	95.9%	0.0%	0.0%	0.8%	3.2%
	2020-21	7	18,393	89.8%	0.1%	0.2%	1.1%	8.7%
		7	18,849	98.0%	0.1%	0.3%	0.2%	1.5%
Alpine	2021-22	8	---	---	---	---	---	---
		7	---	---	---	---	---	
	2020-21	7	---	---	---	---	---	---
		7	---	---	---	---	---	---
Amador	2021-22	8	334	85.3%	0.0%	0.0%	3.3%	11.4%
		7	293	57.3%	1.7%	0.0%	10.9%	30.0%
	2020-21	7	328	78.4%	0.0%	1.5%	6.1%	14.0%
		7	325	94.2%	0.0%	1.8%	3.4%	0.6%
Butte	2021-22	8	2,214	96.9%	0.0%	0.4%	2.3%	0.5%
		7	2,208	96.2%	0.0%	0.1%	2.6%	1.0%
	2020-21	7	2,172	92.7%	0.0%	0.6%	3.0%	3.7%
		7	2,396	97.3%	0.2%	0.6%	1.3%	0.6%
Calaveras	2021-22	8	395	89.9%	0.0%	0.8%	8.9%	0.5%
		7	411	93.4%	0.0%	0.2%	4.9%	1.5%
	2020-21	7	368	84.0%	0.3%	0.8%	14.1%	0.8%
		7	403	95.0%	0.0%	1.5%	2.7%	0.7%
Colusa	2021-22	8	423	97.9%	0.0%	0.0%	0.5%	1.7%
		7	336	94.3%	0.0%	0.0%	0.3%	5.4%
	2020-21	7	406	92.4%	0.0%	0.0%	0.0%	7.6%
		7	394	98.5%	0.0%	0.0%	0.0%	1.5%
ContraCosta	2021-22	8	13,513	98.6%	0.0%	0.1%	0.5%	0.8%
		7	13,353	96.1%	0.1%	0.1%	0.7%	3.1%
	2020-21	7	14,209	90.8%	0.0%	0.2%	1.0%	8.1%
		7	14,765	98.3%	0.0%	0.3%	0.5%	0.8%
Del Norte	2021-22	8	301	96.0%	0.0%	0.7%	2.7%	0.7%
		7	290	97.9%	0.0%	0.0%	1.4%	0.7%
	2020-21	7	305	93.1%	0.0%	0.7%	3.3%	3.0%
		7	331	97.3%	0.0%	0.0%	0.3%	2.4%
El Dorado	2021-22	8	2,336	88.4%	0.0%	0.4%	10.1%	1.0%
		7	2,253	83.3%	0.1%	0.4%	12.8%	3.4%
	2020-21	7	2,161	86.2%	0.3%	0.6%	11.5%	1.4%
		7	2,644	88.8%	0.7%	1.5%	8.9%	0.2%

Table 3: Total Enrollment and Tdap Immunization Status of 7th Grade, 2021-2022, 2020-2021 and 2019-2020 School Years and 8th Grade, 2021-2022 School Year, By County

	School Year	Grade	Total Students	Entrants with Tdap Vaccine	Conditional Entrants	Entrants with PME	Others Lacking Tdap Vaccine†	Overdue for Tdap Vaccine^
			Number	Percent	Percent	Percent	Percent	Percent
Fresno	2021-22	8	15,770	98.7%	0.0%	0.1%	1.1%	0.1%
		7	15,423	98.1%	0.0%	0.0%	1.4%	0.4%
	2020-21	7	16,082	96.9%	0.0%	0.1%	1.2%	1.7%
		7	15,839	98.3%	0.0%	0.1%	1.3%	0.2%
Glenn	2021-22	8	494	91.5%	0.0%	0.2%	7.3%	1.0%
		7	472	89.4%	0.0%	0.0%	9.5%	1.1%
	2020-21	7	484	87.2%	0.0%	0.0%	9.5%	3.3%
		7	442	94.3%	0.0%	0.0%	5.0%	0.7%
Humboldt	2021-22	8	1,442	91.7%	0.1%	1.6%	1.7%	4.9%
		7	1,347	89.3%	0.2%	1.3%	2.8%	6.4%
	2020-21	7	1,427	86.9%	0.0%	2.2%	2.8%	8.1%
		7	1,380	90.7%	0.7%	3.2%	1.5%	3.9%
Imperial	2021-22	8	2,881	97.5%	0.0%	0.0%	0.4%	2.0%
		7	2,830	96.6%	0.0%	0.0%	1.0%	2.4%
	2020-21	7	2,905	87.1%	0.0%	0.0%	0.5%	12.4%
		7	2,935	99.1%	0.1%	0.0%	0.2%	0.5%
Inyo	2021-22	8	190	97.4%	0.0%	0.0%	0.0%	2.6%
		7	233	97.9%	0.0%	0.0%	0.0%	2.1%
	2020-21	7	192	92.7%	0.0%	0.0%	0.0%	7.3%
		7	213	98.6%	0.0%	0.9%	0.5%	0.0%
Kern	2021-22	8	15,738	93.7%	0.0%	0.2%	5.4%	0.6%
		7	15,067	91.8%	0.0%	0.3%	6.9%	0.9%
	2020-21	7	15,505	87.2%	0.0%	0.2%	6.6%	6.0%
		7	15,219	94.0%	0.0%	0.2%	5.2%	0.5%
Kings	2021-22	8	2,341	99.4%	0.0%	0.0%	0.6%	0.0%
		7	2,274	98.2%	0.0%	0.0%	1.4%	0.4%
	2020-21	7	2,364	98.3%	0.1%	0.0%	1.0%	0.6%
		7	2,294	98.7%	0.2%	0.0%	1.0%	0.1%
Lake	2021-22	8	579	96.0%	0.2%	0.2%	1.9%	1.7%
		7	768	95.8%	0.0%	0.3%	2.7%	1.2%
	2020-21	7	755	86.4%	0.1%	0.5%	2.5%	10.5%
		7	736	95.4%	0.1%	1.1%	2.2%	1.2%
Lassen	2021-22	8	300	94.3%	0.0%	2.7%	2.7%	0.3%
		7	275	92.4%	0.0%	0.7%	4.0%	2.9%
	2020-21	7	299	88.6%	0.0%	2.7%	3.7%	5.0%
		7	288	95.1%	0.0%	3.8%	1.0%	0.0%
Los Angeles	2021-22	8	112,288	97.0%	0.0%	0.1%	1.2%	1.7%
		7	106,833	95.6%	0.0%	0.1%	1.7%	2.5%
	2020-21	7	109,967	85.1%	0.0%	0.3%	2.0%	12.5%
		7	119,392	98.0%	0.1%	0.3%	0.9%	0.7%

Table 3: Total Enrollment and Tdap Immunization Status of 7th Grade, 2021-2022, 2020-2021 and 2019-2020 School Years and 8th Grade, 2021-2022 School Year, By County

	School Year	Grade	Total Students	Entrants with Tdap Vaccine	Conditional Entrants	Entrants with PME	Others Lacking Tdap Vaccine†	Overdue for Tdap Vaccine^
			Number	Percent	Percent	Percent	Percent	Percent
Madera	2021-22	8	2,491	98.3%	0.0%	0.0%	0.6%	1.0%
		7	2,295	98.1%	0.0%	0.0%	0.5%	1.4%
	2020-21	7	2,556	94.5%	0.0%	0.1%	0.7%	4.7%
		7	2,014	96.9%	0.0%	0.2%	1.1%	1.7%
Marin	2021-22	8	3,016	99.2%	0.0%	0.3%	0.1%	0.4%
		7	2,885	98.7%	0.1%	0.2%	0.1%	0.8%
	2020-21	7	3,075	96.9%	0.1%	0.4%	0.4%	2.2%
		7	3,245	97.7%	0.4%	1.3%	0.3%	0.4%
Mariposa	2021-22	8	165	95.2%	0.0%	0.6%	1.8%	2.4%
		7	142	93.7%	0.0%	1.4%	1.4%	3.5%
	2020-21	7	154	84.4%	0.0%	0.6%	7.8%	7.1%
		7	130	98.5%	0.0%	0.8%	0.8%	0.0%
Mendocino	2021-22	8	971	86.2%	0.0%	0.4%	2.2%	11.2%
		7	1,030	85.9%	0.0%	0.1%	2.4%	11.6%
	2020-21	7	1,003	79.7%	0.2%	0.6%	4.5%	15.1%
		7	1,039	95.0%	0.5%	1.1%	1.6%	1.8%
Merced	2021-22	8	4,463	97.2%	0.0%	0.2%	1.6%	1.0%
		7	4,483	95.6%	0.0%	0.0%	2.1%	2.3%
	2020-21	7	4,453	86.2%	0.0%	0.1%	2.4%	11.3%
		7	4,597	98.5%	0.0%	0.1%	0.9%	0.5%
Modoc	2021-22	8	118	94.9%	0.0%	0.0%	0.0%	5.1%
		7	102	90.2%	0.0%	0.0%	3.9%	5.9%
	2020-21	7	123	99.2%	0.0%	0.0%	0.0%	0.8%
		7	102	96.1%	0.0%	1.0%	0.0%	2.9%
Mono	2021-22	8	111	100.0%	0.0%	0.0%	0.0%	0.0%
		7	100	100.0%	0.0%	0.0%	0.0%	0.0%
	2020-21	7	109	88.1%	0.0%	0.0%	0.0%	11.9%
		7	125	97.6%	0.0%	2.4%	0.0%	0.0%
Monterey	2021-22	8	6,044	98.9%	0.1%	0.1%	0.4%	0.6%
		7	5,799	98.6%	0.0%	0.1%	0.4%	0.9%
	2020-21	7	6,042	95.1%	0.1%	0.2%	0.5%	4.1%
		7	6,397	99.2%	0.0%	0.4%	0.2%	0.3%
Napa	2021-22	8	1,606	97.8%	0.0%	0.1%	1.2%	0.9%
		7	1,641	97.4%	0.0%	0.1%	1.3%	1.2%
	2020-21	7	1,591	97.3%	0.0%	0.3%	1.9%	0.5%
		7	1,682	98.5%	0.0%	0.3%	0.9%	0.4%
Nevada	2021-22	8	833	90.2%	0.0%	2.3%	6.0%	1.6%
		7	843	90.2%	0.2%	0.5%	7.2%	1.9%
	2020-21	7	806	82.5%	0.0%	5.5%	6.1%	6.0%
		7	842	89.2%	0.7%	5.5%	4.3%	0.4%

Table 3: Total Enrollment and Tdap Immunization Status of 7th Grade, 2021-2022, 2020-2021 and 2019-2020 School Years and 8th Grade, 2021-2022 School Year, By County

	School Year	Grade	Total Students	Entrants with Tdap Vaccine	Conditional Entrants	Entrants with PME	Others Lacking Tdap Vaccine†	Overdue for Tdap Vaccine^
			Number	Percent	Percent	Percent	Percent	Percent
Orange	2021-22	8	38,554	98.1%	0.0%	0.2%	1.1%	0.6%
		7	36,105	97.3%	0.0%	0.1%	1.5%	1.0%
	2020-21	7	38,419	94.2%	0.1%	0.3%	1.6%	3.8%
		7	39,699	97.9%	0.1%	0.5%	1.0%	0.5%
Placer	2021-22	8	5,220	96.2%	0.0%	0.8%	2.4%	0.7%
		7	5,778	95.9%	0.0%	0.2%	2.6%	1.3%
	2020-21	7	5,618	94.7%	0.1%	1.1%	1.2%	2.9%
		7	5,990	95.9%	0.1%	1.4%	2.0%	0.6%
Plumas	2021-22	8	175	97.1%	0.0%	0.6%	2.3%	0.0%
		7	171	94.2%	0.0%	0.0%	4.7%	1.2%
	2020-21	7	174	87.4%	0.6%	1.7%	9.8%	0.6%
		7	197	98.0%	0.0%	1.0%	1.0%	0.0%
Riverside	2021-22	8	33,475	97.6%	0.0%	0.1%	1.6%	0.6%
		7	32,331	96.5%	0.0%	0.1%	2.2%	1.2%
	2020-21	7	33,652	80.5%	0.0%	0.2%	5.7%	13.6%
		7	35,413	97.6%	0.0%	0.3%	1.5%	0.5%
Sacramento	2021-22	8	19,002	97.1%	0.0%	0.2%	1.8%	1.0%
		7	18,232	95.6%	0.0%	0.2%	2.6%	1.6%
	2020-21	7	19,321	89.3%	0.3%	0.2%	3.0%	7.2%
		7	19,967	96.9%	0.1%	0.6%	2.1%	0.4%
San Benito	2021-22	8	893	98.3%	0.0%	0.2%	0.2%	1.2%
		7	834	97.2%	0.0%	0.4%	0.6%	1.8%
	2020-21	7	900	78.2%	0.0%	0.6%	0.2%	21.0%
		7	955	99.7%	0.0%	0.2%	0.1%	0.0%
San Bernardino	2021-22	8	31,290	96.8%	0.0%	0.1%	1.7%	1.4%
		7	30,777	96.0%	0.0%	0.1%	2.0%	1.9%
	2020-21	7	30,092	79.4%	0.0%	0.3%	3.4%	16.9%
		7	32,605	96.6%	0.0%	0.2%	2.4%	0.8%
San Diego	2021-22	8	38,574	96.5%	0.0%	0.2%	2.8%	0.5%
		7	37,579	95.3%	0.0%	0.1%	3.6%	1.0%
	2020-21	7	38,918	93.1%	0.1%	0.3%	3.4%	3.0%
		7	41,159	96.2%	0.1%	0.7%	2.8%	0.2%
San Francisco	2021-22	8	5,509	95.0%	0.0%	0.1%	0.5%	4.4%
		7	5,440	92.7%	0.0%	0.1%	0.8%	6.4%
	2020-21	7	5,621	90.4%	0.0%	0.1%	1.3%	8.2%
		7	6,118	96.7%	0.1%	0.3%	0.5%	2.4%
San Joaquin	2021-22	8	11,920	97.2%	0.0%	0.1%	2.3%	0.4%
		7	11,433	96.7%	0.0%	0.1%	2.7%	0.5%
	2020-21	7	11,807	93.7%	0.0%	0.1%	2.8%	3.3%
		7	12,155	97.6%	0.0%	0.2%	1.6%	0.5%

Table 3: Total Enrollment and Tdap Immunization Status of 7th Grade, 2021-2022, 2020-2021 and 2019-2020 School Years and 8th Grade, 2021-2022 School Year, By County

	School Year	Grade	Total Students	Entrants with Tdap Vaccine	Conditional Entrants	Entrants with PME	Others Lacking Tdap Vaccine†	Overdue for Tdap Vaccine^
			Number	Percent	Percent	Percent	Percent	Percent
San Luis Obispo	2021-22	8	2,676	98.2%	0.0%	0.3%	1.0%	0.4%
		7	2,570	98.1%	0.0%	0.2%	1.0%	0.7%
	2020-21	7	2,661	92.0%	0.1%	0.5%	3.5%	3.9%
		7	3,151	97.3%	0.0%	1.0%	1.0%	0.7%
San Mateo	2021-22	8	7,555	98.3%	0.0%	0.1%	0.6%	1.0%
		7	7,486	97.6%	0.0%	0.1%	0.7%	1.5%
	2020-21	7	8,047	94.5%	0.0%	0.1%	0.4%	4.9%
		7	8,234	97.8%	0.1%	0.3%	0.5%	1.3%
Santa Barbara	2021-22	8	5,608	97.7%	0.1%	0.3%	1.0%	0.9%
		7	5,298	98.0%	0.0%	0.2%	0.8%	1.0%
	2020-21	7	5,582	94.1%	0.1%	0.4%	0.8%	4.6%
		7	5,670	98.1%	0.1%	0.9%	0.7%	0.2%
Santa Clara	2021-22	8	21,781	98.4%	0.0%	0.1%	0.6%	0.9%
		7	20,367	97.9%	0.0%	0.0%	0.8%	1.3%
	2020-21	7	22,414	92.8%	0.1%	0.2%	1.1%	5.9%
		7	22,852	98.7%	0.1%	0.3%	0.3%	0.6%
Santa Cruz	2021-22	8	3,211	96.2%	0.1%	0.3%	3.1%	0.3%
		7	3,224	96.2%	0.0%	0.2%	3.1%	0.6%
	2020-21	7	3,278	86.7%	0.1%	1.0%	7.7%	4.5%
		7	3,539	91.5%	0.0%	1.5%	6.3%	0.7%
Shasta	2021-22	8	2,164	94.2%	0.1%	0.7%	4.0%	0.9%
		7	1,984	92.3%	0.2%	0.4%	4.8%	2.4%
	2020-21	7	2,080	90.7%	0.1%	1.2%	6.8%	1.2%
		7	2,130	93.3%	0.4%	1.7%	3.5%	1.0%
Sierra	2021-22	8	37	97.3%	0.0%	0.0%	0.0%	2.7%
		7	40	100.0%	0.0%	0.0%	0.0%	0.0%
	2020-21	7	33	97.0%	0.0%	0.0%	3.0%	0.0%
		7	28	100.0%	0.0%	0.0%	0.0%	0.0%
Siskiyou	2021-22	8	448	97.5%	0.0%	0.2%	2.2%	0.0%
		7	446	93.0%	0.0%	0.2%	4.9%	1.8%
	2020-21	7	467	93.4%	0.0%	0.6%	4.9%	1.1%
		7	499	96.8%	0.2%	0.6%	1.6%	0.8%
Solano	2021-22	8	4,534	99.6%	0.0%	0.0%	0.2%	0.2%
		7	4,359	98.6%	0.0%	0.0%	0.7%	0.7%
	2020-21	7	4,610	94.3%	0.2%	0.2%	0.6%	4.7%
		7	5,130	98.8%	0.0%	0.4%	0.1%	0.6%
Sonoma	2021-22	8	5,288	96.2%	0.0%	0.3%	1.7%	1.7%
		7	5,234	94.4%	0.0%	0.2%	3.1%	2.3%
	2020-21	7	5,452	82.8%	0.1%	0.6%	1.9%	14.7%
		7	5,422	95.9%	0.2%	1.4%	1.6%	0.9%

Table 3: Total Enrollment and Tdap Immunization Status of 7th Grade, 2021-2022, 2020-2021 and 2019-2020 School Years and 8th Grade, 2021-2022 School Year, By County

	School Year	Grade	Total Students	Entrants with Tdap Vaccine	Conditional Entrants	Entrants with PME	Others Lacking Tdap Vaccine†	Overdue for Tdap Vaccine^
			Number	Percent	Percent	Percent	Percent	Percent
Stanislaus	2021-22	8	8,576	96.7%	0.0%	0.1%	1.8%	1.5%
		7	8,150	94.7%	0.0%	0.1%	2.5%	2.7%
	2020-21	7	8,565	84.8%	0.0%	0.2%	1.8%	13.1%
		7	8,837	97.6%	0.0%	0.4%	0.3%	1.6%
Sutter	2021-22	8	1,819	83.8%	0.0%	0.5%	14.8%	0.8%
		7	1,703	79.9%	0.0%	0.4%	18.7%	1.1%
	2020-21	7	1,899	74.1%	0.0%	0.3%	17.8%	7.8%
		7	1,927	82.8%	0.0%	0.4%	16.7%	0.2%
Tehama	2021-22	8	899	96.3%	0.0%	0.4%	0.9%	2.3%
		7	798	93.5%	0.0%	0.0%	1.5%	5.0%
	2020-21	7	659	95.8%	0.0%	0.6%	1.4%	2.3%
		7	870	98.0%	0.0%	0.7%	0.2%	1.0%
Trinity	2021-22	8	112	92.9%	0.0%	3.6%	0.0%	3.6%
		7	100	93.0%	0.0%	0.0%	0.0%	7.0%
	2020-21	7	103	93.2%	0.0%	2.9%	1.9%	1.9%
		7	115	92.2%	0.0%	4.3%	2.6%	0.9%
Tulare	2021-22	8	7,676	98.7%	0.0%	0.1%	0.9%	0.3%
		7	7,529	98.1%	0.0%	0.0%	1.3%	0.6%
	2020-21	7	7,663	92.0%	0.0%	0.1%	1.8%	6.1%
		7	8,232	98.2%	0.0%	0.6%	0.9%	0.2%
Tuolumne	2021-22	8	489	94.1%	0.2%	0.2%	3.3%	2.2%
		7	466	91.2%	0.0%	0.0%	4.3%	4.5%
	2020-21	7	398	95.0%	0.3%	0.3%	2.0%	2.5%
		7	481	93.8%	0.2%	1.5%	3.3%	1.2%
Ventura	2021-22	8	10,546	96.9%	0.0%	0.2%	2.3%	0.6%
		7	10,229	96.1%	0.0%	0.2%	2.6%	1.1%
	2020-21	7	10,512	91.8%	0.0%	0.4%	1.8%	6.0%
		7	11,004	97.0%	0.2%	0.8%	1.2%	0.8%
Yolo	2021-22	8	2,389	95.1%	0.1%	0.2%	1.5%	3.1%
		7	2,405	92.4%	0.0%	0.3%	2.8%	4.5%
	2020-21	7	2,429	89.3%	0.0%	0.4%	2.1%	8.2%
		7	2,416	96.9%	0.1%	0.7%	0.6%	1.7%
Yuba	2021-22	8	1,108	95.0%	0.2%	0.0%	2.9%	1.9%
		7	1,107	95.0%	0.1%	0.0%	2.3%	2.6%
	2020-21	7	1,105	77.1%	0.2%	0.3%	4.8%	17.6%
		7	1,194	96.9%	0.0%	0.2%	1.6%	1.3%

† Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

^ Overdue for Tdap immunization.

* County reporting fewer than 20 children in 7th grade and did not report

Table 4: Total Enrollment and Varicella Immunization Status of 7th Grade, 2021-2022, 2020-2021 and 2019-2020 School Years and 8th Grade, 2021-2022 School Year
By County

	School Year	Grade	Total Students	Entrants with 2+ Varicella Vaccine	Conditional Entrants	Entrants with PME	Others Lacking 2+ Varicella Vaccine†	Overdue for 2+ Varicella Vaccine^
			Number	Percent	Percent	Percent	Percent	Percent
State Total	2021-22	8	480,613	97.7%	0.1%	0.4%	1.1%	0.7%
		7	463,512	97.2%	0.2%	0.4%	1.3%	0.9%
	2020-21	7	480,713	96.3%	0.2%	0.6%	1.2%	1.8%
		7	505,017	97.1%	0.3%	0.9%	1.0%	0.7%
Alameda	2021-22	8	17,728	97.8%	0.1%	0.4%	0.4%	1.3%
		7	17,351	97.5%	0.1%	0.4%	0.5%	1.5%
	2020-21	7	18,393	96.5%	0.2%	0.6%	0.3%	2.4%
		7	18,849	97.1%	0.3%	0.7%	0.1%	1.8%
Alpine	2021-22	8	---	---	---	---	---	---
		7	---	---	---	---	---	
	2020-21	7	---	---	---	---	---	---
		7	---	---	---	---	---	---
Amador	2021-22	8	334	94.0%	0.0%	0.0%	1.2%	4.8%
		7	293	89.1%	0.0%	0.0%	2.0%	8.9%
	2020-21	7	328	92.7%	0.6%	1.5%	1.5%	3.7%
		7	325	92.3%	1.8%	2.2%	3.7%	0.0%
Butte	2021-22	8	2,214	97.6%	0.0%	0.5%	1.6%	0.3%
		7	2,208	97.7%	0.2%	0.3%	1.3%	0.4%
	2020-21	7	2,172	97.2%	0.1%	0.9%	1.1%	0.7%
		7	2,396	97.1%	0.5%	1.0%	0.7%	0.8%
Calaveras	2021-22	8	395	96.2%	0.0%	0.8%	2.3%	0.8%
		7	411	97.3%	0.0%	0.2%	1.9%	0.5%
	2020-21	7	368	94.6%	0.5%	0.8%	3.3%	0.8%
		7	403	97.0%	0.0%	1.5%	1.0%	0.5%
Colusa	2021-22	8	423	97.9%	0.0%	0.0%	0.2%	1.9%
		7	336	98.8%	0.0%	0.3%	0.0%	0.9%
	2020-21	7	406	96.3%	0.2%	0.5%	0.0%	3.0%
		7	394	96.7%	0.0%	0.8%	0.0%	2.5%
Contra Costa	2021-22	8	13,513	98.0%	0.1%	0.4%	0.4%	1.0%
		7	13,353	97.5%	0.5%	0.5%	0.4%	1.1%
	2020-21	7	14,209	96.9%	0.1%	0.6%	0.5%	1.9%
		7	14,765	97.9%	0.3%	0.9%	0.4%	0.5%
Del Norte	2021-22	8	301	95.7%	0.0%	2.7%	1.3%	0.3%
		7	290	98.3%	0.3%	0.3%	0.7%	0.3%
	2020-21	7	305	95.7%	0.0%	2.0%	1.0%	1.3%
		7	331	97.6%	0.3%	0.0%	0.3%	1.8%
El Dorado	2021-22	8	2,336	91.6%	0.1%	0.6%	6.9%	0.8%
		7	2,253	91.1%	0.3%	0.4%	6.7%	1.5%
	2020-21	7	2,161	89.6%	0.6%	0.9%	8.0%	1.0%
		7	2,644	91.7%	0.8%	1.6%	5.4%	0.5%

Table 4: Total Enrollment and Varicella Immunization Status of 7th Grade, 2021-2022,
2020-2021 and 2019-2020 School Years and 8th Grade, 2021-2022 School Year
By County

	School Year	Grade	Total Students	Entrants with 2+ Varicella Vaccine	Conditional Entrants	Entrants with PME	Others Lacking 2+ Varicella Vaccine†	Overdue for 2+ Varicella Vaccine^
			Number	Percent	Percent	Percent	Percent	Percent
Fresno	2021-22	8	15,770	98.9%	0.0%	0.2%	0.8%	0.1%
		7	15,423	98.7%	0.1%	0.2%	0.9%	0.2%
	2020-21	7	16,082	98.6%	0.1%	0.3%	0.8%	0.2%
		7	15,839	98.5%	0.2%	0.4%	0.7%	0.2%
Glenn	2021-22	8	494	93.3%	0.4%	0.2%	5.9%	0.2%
		7	472	93.2%	0.0%	0.0%	6.4%	0.4%
	2020-21	7	484	93.4%	0.0%	0.0%	5.8%	0.8%
		7	442	94.8%	0.2%	0.5%	3.8%	0.7%
Humboldt	2021-22	8	1,442	92.6%	0.5%	2.1%	1.3%	3.4%
		7	1,347	92.4%	0.5%	1.7%	1.7%	3.7%
	2020-21	7	1,427	90.9%	1.1%	2.5%	2.3%	3.2%
		7	1,380	92.5%	1.7%	3.4%	0.7%	1.7%
Imperial	2021-22	8	2,881	96.8%	0.2%	0.0%	0.3%	2.7%
		7	2,830	95.4%	0.4%	0.1%	0.2%	3.9%
	2020-21	7	2,905	94.5%	1.6%	0.5%	0.4%	2.9%
		7	2,935	98.2%	0.5%	0.3%	0.1%	0.9%
Inyo	2021-22	8	190	98.9%	0.0%	0.0%	0.0%	1.1%
		7	233	97.9%	0.9%	0.0%	0.0%	1.3%
	2020-21	7	192	99.5%	0.0%	0.0%	0.0%	0.5%
		7	213	97.2%	0.5%	1.9%	0.5%	0.0%
Kern	2021-22	8	15,738	96.1%	0.0%	0.2%	3.3%	0.3%
		7	15,067	95.4%	0.0%	0.3%	3.9%	0.4%
	2020-21	7	15,505	95.4%	0.1%	0.3%	3.7%	0.6%
		7	15,219	95.4%	0.2%	0.4%	3.5%	0.5%
Kings	2021-22	8	2,341	99.4%	0.0%	0.3%	0.3%	0.1%
		7	2,274	99.1%	0.1%	0.1%	0.6%	0.1%
	2020-21	7	2,364	99.4%	0.1%	0.0%	0.4%	0.1%
		7	2,294	99.4%	0.2%	0.0%	0.3%	0.1%
Lake	2021-22	8	579	97.4%	0.0%	0.2%	0.7%	1.7%
		7	768	97.0%	0.3%	0.3%	2.1%	0.4%
	2020-21	7	755	96.3%	0.7%	0.8%	0.5%	1.7%
		7	736	94.8%	0.7%	2.2%	1.0%	1.4%
Lassen	2021-22	8	300	96.0%	0.0%	2.3%	1.7%	0.0%
		7	275	93.1%	0.0%	0.7%	3.3%	2.9%
	2020-21	7	299	94.3%	0.3%	2.3%	2.0%	1.0%
		7	288	95.1%	0.0%	4.2%	0.7%	0.0%
Los Angeles	2021-22	8	112,288	97.7%	0.1%	0.4%	0.7%	1.1%
		7	106,833	97.3%	0.2%	0.3%	0.9%	1.3%
	2020-21	7	109,967	95.8%	0.1%	0.4%	0.8%	2.9%
		7	119,392	97.4%	0.3%	0.7%	0.7%	0.9%

Table 4: Total Enrollment and Varicella Immunization Status of 7th Grade, 2021-2022, 2020-2021 and 2019-2020 School Years and 8th Grade, 2021-2022 School Year
By County

	School Year	Grade	Total Students	Entrants with 2+ Varicella Vaccine	Conditional Entrants	Entrants with PME	Others Lacking 2+ Varicella Vaccine†	Overdue for 2+ Varicella Vaccine^
			Number	Percent	Percent	Percent	Percent	Percent
Madera	2021-22	8	2,491	98.6%	0.0%	0.0%	0.5%	0.8%
		7	2,295	98.1%	0.0%	0.1%	0.4%	1.4%
	2020-21	7	2,556	96.9%	0.2%	0.2%	0.6%	2.2%
		7	2,014	97.4%	0.1%	0.3%	0.7%	1.4%
Marin	2021-22	8	3,016	98.1%	0.2%	1.2%	0.1%	0.4%
		7	2,885	98.1%	0.5%	0.9%	0.1%	0.4%
	2020-21	7	3,075	97.3%	0.1%	1.6%	0.2%	0.7%
		7	3,245	94.9%	1.1%	3.3%	0.3%	0.4%
Mariposa	2021-22	8	165	92.1%	0.6%	2.4%	1.8%	3.0%
		7	142	92.3%	1.4%	2.1%	0.7%	3.5%
	2020-21	7	154	89.0%	0.6%	1.3%	3.9%	5.2%
		7	130	94.6%	3.1%	1.5%	0.8%	0.0%
Mendocino	2021-22	8	971	86.9%	0.1%	0.8%	2.0%	10.2%
		7	1,030	86.7%	0.2%	0.2%	1.2%	11.7%
	2020-21	7	1,003	91.6%	0.6%	0.8%	2.6%	4.4%
		7	1,039	94.1%	1.1%	1.6%	1.3%	1.9%
Merced	2021-22	8	4,463	98.7%	0.2%	0.3%	0.6%	0.3%
		7	4,483	98.4%	0.1%	0.0%	1.1%	0.4%
	2020-21	7	4,453	97.2%	0.0%	0.2%	0.7%	1.8%
		7	4,597	99.1%	0.3%	0.2%	0.2%	0.2%
Modoc	2021-22	8	118	96.6%	0.0%	0.0%	0.0%	3.4%
		7	102	96.1%	0.0%	0.0%	2.0%	2.0%
	2020-21	7	123	99.2%	0.0%	0.0%	0.0%	0.8%
		7	102	96.1%	1.0%	1.0%	0.0%	2.0%
Mono	2021-22	8	111	98.2%	0.0%	1.8%	0.0%	0.0%
		7	100	97.0%	1.0%	2.0%	0.0%	0.0%
	2020-21	7	109	97.2%	0.0%	0.0%	0.0%	2.8%
		7	125	97.6%	0.0%	2.4%	0.0%	0.0%
Monterey	2021-22	8	6,044	99.1%	0.0%	0.4%	0.1%	0.3%
		7	5,799	98.8%	0.1%	0.5%	0.2%	0.4%
	2020-21	7	6,042	98.8%	0.1%	0.6%	0.1%	0.3%
		7	6,397	98.6%	0.3%	0.7%	0.1%	0.4%
Napa	2021-22	8	1,606	97.8%	0.1%	0.3%	1.2%	0.7%
		7	1,641	97.5%	0.3%	0.2%	1.3%	0.6%
	2020-21	7	1,591	97.3%	0.1%	0.6%	1.9%	0.1%
		7	1,682	97.3%	0.2%	1.2%	1.0%	0.3%
Nevada	2021-22	8	833	91.8%	0.5%	2.8%	4.3%	0.6%
		7	843	90.3%	1.3%	1.2%	5.8%	1.4%
	2020-21	7	806	87.3%	0.5%	6.7%	4.0%	1.5%
		7	842	88.6%	1.5%	6.3%	3.0%	0.6%

Table 4: Total Enrollment and Varicella Immunization Status of 7th Grade, 2021-2022,
2020-2021 and 2019-2020 School Years and 8th Grade, 2021-2022 School Year
By County

	School Year	Grade	Total Students	Entrants with 2+ Varicella Vaccine	Conditional Entrants	Entrants with PME	Others Lacking 2+ Varicella Vaccine†	Overdue for 2+ Varicella Vaccine^
			Number	Percent	Percent	Percent	Percent	Percent
Orange	2021-22	8	38,554	98.2%	0.2%	0.6%	0.6%	0.3%
		7	36,105	98.1%	0.2%	0.5%	0.7%	0.5%
	2020-21	7	38,419	97.4%	0.2%	0.8%	0.6%	1.0%
		7	39,699	97.5%	0.5%	1.0%	0.7%	0.3%
Placer	2021-22	8	5,220	96.6%	0.1%	1.4%	1.5%	0.5%
		7	5,778	97.1%	0.3%	0.7%	1.3%	0.6%
	2020-21	7	5,618	96.2%	0.6%	1.8%	0.6%	0.9%
		7	5,990	95.0%	0.6%	1.8%	1.7%	0.9%
Plumas	2021-22	8	175	97.1%	0.0%	1.7%	1.1%	0.0%
		7	171	98.2%	0.6%	0.0%	1.2%	0.0%
	2020-21	7	174	94.3%	2.3%	2.9%	0.6%	0.0%
		7	197	96.4%	1.5%	2.0%	0.0%	0.0%
Riverside	2021-22	8	33,475	98.2%	0.1%	0.3%	1.1%	0.4%
		7	32,331	97.6%	0.1%	0.2%	1.6%	0.6%
	2020-21	7	33,652	96.1%	0.1%	0.5%	1.6%	1.8%
		7	35,413	97.3%	0.2%	0.6%	0.9%	0.9%
Sacramento	2021-22	8	19,002	97.8%	0.2%	0.4%	0.9%	0.8%
		7	18,232	97.1%	0.3%	0.4%	1.1%	1.0%
	2020-21	7	19,321	94.8%	0.2%	0.7%	1.4%	2.9%
		7	19,967	96.5%	0.4%	1.1%	1.6%	0.3%
San Benito	2021-22	8	893	98.4%	0.1%	0.2%	0.1%	1.1%
		7	834	98.9%	0.0%	0.4%	0.4%	0.4%
	2020-21	7	900	97.8%	0.0%	0.9%	0.2%	1.1%
		7	955	99.5%	0.1%	0.3%	0.1%	0.0%
San Bernardino	2021-22	8	31,290	98.2%	0.1%	0.2%	1.0%	0.5%
		7	30,777	97.3%	0.2%	0.2%	1.6%	0.6%
	2020-21	7	30,092	96.1%	0.1%	0.3%	1.4%	2.1%
		7	32,605	97.0%	0.2%	0.3%	1.8%	0.7%
San Diego	2021-22	8	38,574	96.9%	0.1%	0.6%	2.0%	0.3%
		7	37,579	96.5%	0.3%	0.4%	2.4%	0.3%
	2020-21	7	38,918	95.9%	0.3%	0.7%	2.0%	1.2%
		7	41,159	96.4%	0.4%	1.2%	1.9%	0.2%
San Francisco	2021-22	8	5,509	95.6%	0.2%	0.4%	0.1%	3.6%
		7	5,440	94.0%	0.4%	0.4%	0.2%	4.9%
	2020-21	7	5,621	94.8%	0.1%	0.6%	0.5%	4.1%
		7	6,118	96.6%	0.4%	0.9%	0.2%	1.9%
San Joaquin	2021-22	8	11,920	97.9%	0.0%	0.3%	1.6%	0.2%
		7	11,433	97.8%	0.0%	0.3%	1.5%	0.4%
	2020-21	7	11,807	97.6%	0.0%	0.4%	1.2%	0.8%
		7	12,155	97.7%	0.1%	0.4%	1.1%	0.8%

Table 4: Total Enrollment and Varicella Immunization Status of 7th Grade, 2021-2022, 2020-2021 and 2019-2020 School Years and 8th Grade, 2021-2022 School Year
By County

	School Year	Grade	Total Students	Entrants with 2+ Varicella Vaccine	Conditional Entrants	Entrants with PME	Others Lacking 2+ Varicella Vaccine†	Overdue for 2+ Varicella Vaccine^
			Number	Percent	Percent	Percent	Percent	Percent
San Luis Obispo	2021-22	8	2,676	98.8%	0.0%	0.3%	0.5%	0.4%
		7	2,570	98.4%	0.3%	0.3%	0.5%	0.4%
	2020-21	7	2,661	97.6%	0.2%	0.5%	0.5%	1.3%
		7	3,151	96.7%	0.3%	1.6%	0.5%	0.9%
San Mateo	2021-22	8	7,555	98.2%	0.1%	0.6%	0.3%	0.8%
		7	7,486	97.3%	0.2%	0.6%	0.4%	1.5%
	2020-21	7	8,047	97.4%	0.2%	0.6%	0.2%	1.7%
		7	8,234	98.0%	0.4%	1.0%	0.2%	0.4%
Santa Barbara	2021-22	8	5,608	97.4%	0.1%	0.8%	1.3%	0.5%
		7	5,298	97.9%	0.2%	0.3%	0.9%	0.7%
	2020-21	7	5,582	97.6%	0.2%	0.8%	0.4%	0.9%
		7	5,670	97.4%	0.5%	1.2%	0.5%	0.4%
Santa Clara	2021-22	8	21,781	98.2%	0.0%	1.0%	0.5%	0.3%
		7	20,367	98.1%	0.1%	0.6%	0.6%	0.6%
	2020-21	7	22,414	97.0%	0.1%	1.1%	0.6%	1.3%
		7	22,852	97.7%	0.3%	1.4%	0.3%	0.4%
Santa Cruz	2021-22	8	3,211	96.1%	0.1%	1.0%	2.4%	0.4%
		7	3,224	96.9%	0.1%	0.7%	1.8%	0.4%
	2020-21	7	3,278	93.8%	0.3%	1.7%	3.1%	1.0%
		7	3,539	93.9%	0.5%	2.5%	2.9%	0.3%
Shasta	2021-22	8	2,164	95.1%	0.1%	0.7%	2.9%	1.2%
		7	1,984	94.4%	0.4%	0.6%	3.4%	1.3%
	2020-21	7	2,080	92.1%	0.6%	1.4%	5.0%	0.9%
		7	2,130	92.8%	1.0%	2.2%	2.6%	1.5%
Sierra	2021-22	8	37	100.0%	0.0%	0.0%	0.0%	0.0%
		7	40	95.0%	0.0%	0.0%	0.0%	5.0%
	2020-21	7	33	97.0%	0.0%	0.0%	3.0%	0.0%
		7	28	100.0%	0.0%	0.0%	0.0%	0.0%
Siskiyou	2021-22	8	448	97.1%	0.0%	0.2%	2.2%	0.4%
		7	446	95.7%	0.7%	0.4%	2.9%	0.2%
	2020-21	7	467	92.7%	0.4%	0.9%	4.7%	1.3%
		7	499	94.6%	1.6%	1.0%	1.6%	1.2%
Solano	2021-22	8	4,534	99.5%	0.0%	0.1%	0.2%	0.2%
		7	4,359	98.9%	0.3%	0.0%	0.5%	0.3%
	2020-21	7	4,610	98.4%	0.2%	0.3%	0.3%	0.8%
		7	5,130	97.8%	0.2%	0.4%	0.0%	1.5%
Sonoma	2021-22	8	5,288	96.9%	0.0%	0.6%	1.3%	1.2%
		7	5,234	95.7%	0.2%	0.6%	1.9%	1.7%
	2020-21	7	5,452	94.6%	0.3%	1.1%	0.9%	3.1%
		7	5,422	95.3%	0.8%	2.0%	1.0%	0.9%

Table 4: Total Enrollment and Varicella Immunization Status of 7th Grade, 2021-2022, 2020-2021 and 2019-2020 School Years and 8th Grade, 2021-2022 School Year
By County

	School Year	Grade	Total Students	Entrants with 2+ Varicella Vaccine	Conditional Entrants	Entrants with PME	Others Lacking 2+ Varicella Vaccine†	Overdue for 2+ Varicella Vaccine^
			Number	Percent	Percent	Percent	Percent	Percent
Stanislaus	2021-22	8	8,576	98.3%	0.1%	0.2%	0.9%	0.6%
		7	8,150	98.1%	0.1%	0.2%	0.8%	0.7%
	2020-21	7	8,565	97.5%	0.2%	0.4%	0.4%	1.5%
		7	8,837	97.2%	0.4%	0.8%	0.4%	1.3%
Sutter	2021-22	8	1,819	87.7%	0.2%	0.7%	10.7%	0.8%
		7	1,703	86.0%	0.1%	0.3%	12.9%	0.7%
	2020-21	7	1,899	88.3%	0.0%	0.3%	11.0%	0.4%
		7	1,927	88.0%	0.2%	0.5%	11.2%	0.2%
Tehama	2021-22	8	899	97.9%	0.0%	0.6%	0.3%	1.2%
		7	798	97.5%	0.3%	0.1%	0.9%	1.3%
	2020-21	7	659	97.3%	0.3%	0.9%	0.8%	0.8%
		7	870	97.8%	0.3%	1.4%	0.2%	0.2%
Trinity	2021-22	8	112	92.0%	0.0%	3.6%	0.0%	4.5%
		7	100	94.0%	0.0%	0.0%	0.0%	6.0%
	2020-21	7	103	95.1%	0.0%	3.9%	1.0%	0.0%
		7	115	92.2%	0.0%	4.3%	2.6%	0.9%
Tulare	2021-22	8	7,676	99.2%	0.1%	0.1%	0.4%	0.1%
		7	7,529	99.0%	0.1%	0.1%	0.5%	0.3%
	2020-21	7	7,663	97.8%	0.1%	0.1%	0.8%	1.3%
		7	8,232	99.1%	0.2%	0.2%	0.5%	0.1%
Tuolumne	2021-22	8	489	95.7%	0.8%	0.4%	2.2%	0.8%
		7	466	94.8%	0.6%	0.2%	3.0%	1.3%
	2020-21	7	398	95.7%	1.8%	0.3%	1.3%	1.0%
		7	481	94.0%	1.0%	1.7%	2.1%	1.2%
Ventura	2021-22	8	10,546	97.1%	0.1%	0.4%	2.0%	0.5%
		7	10,229	97.2%	0.1%	0.4%	1.9%	0.4%
	2020-21	7	10,512	96.8%	0.2%	0.6%	1.4%	1.0%
		7	11,004	96.6%	0.5%	1.1%	1.0%	0.8%
Yolo	2021-22	8	2,389	97.0%	0.1%	0.5%	1.5%	0.9%
		7	2,405	95.3%	0.1%	0.3%	2.7%	1.6%
	2020-21	7	2,429	95.6%	0.2%	0.6%	1.9%	1.8%
		7	2,416	96.0%	0.4%	1.7%	0.6%	1.2%
Yuba	2021-22	8	1,108	97.3%	0.2%	0.1%	1.3%	1.2%
		7	1,107	98.0%	0.1%	0.2%	0.7%	1.0%
	2020-21	7	1,105	93.6%	0.3%	0.3%	3.2%	2.7%
		7	1,194	97.1%	0.2%	0.2%	0.4%	2.2%

† Includes students reported as attending independent study who do not receive classroom-based instruction or home-based private schools or receiving IEP services.

^ Overdue for Tdap immunization.

* County reporting fewer than 20 children in 7th grade and did not report

EXHIBIT 19



Vaccine Recommendations and Guidelines of the ACIP Home

Contraindications and Precautions

General Best Practice Guidelines for Immunization


Updated August 1, 2023

[Printer friendly version](#)  [21 pages]

Updates

Major changes to the best practice guidance in this section include 1) enhancement of the definition of a “precaution” to include any condition that might confuse diagnostic accuracy and 2) recommendation to vaccinate during a hospitalization if a patient is not acutely moderately or severely ill.

General Principles

National standards for pediatric vaccination practices have been established and include descriptions of valid contraindications and precautions to vaccination (2). Persons who administer vaccines should screen patients for contraindications and precautions to the vaccine before each dose of vaccine is administered (Table 4-1). Screening is facilitated by consistent use of screening questionnaires, which are available from certain state vaccination programs and other sources (e.g., the [Immunization Action Coalition](#) ).

Contraindications

Contraindications (conditions in a recipient that increases the risk for a serious adverse reaction) to vaccination are conditions under which vaccines should not be administered. Because the majority of contraindications are temporary, vaccinations often can be administered later when the condition leading to a contraindication no longer exists. A vaccine should not be administered when a contraindication is present; for example, MMR vaccine should not be administered to severely immunocompromised persons (1). However, certain conditions are commonly misperceived as contraindications (i.e., are not valid reasons to defer vaccination).

Severely immunocompromised persons generally should not receive live vaccines (3). Because of the theoretical risk to the fetus, women known to be pregnant generally should not receive live, attenuated virus vaccines (4). Persons who experienced encephalopathy within 7 days after administration of a previous dose of pertussis-containing vaccine not attributable to another identifiable cause should not receive additional doses of a vaccine that contains pertussis (4, 5). Severe Combined Immunodeficiency (SCID) disease and a history of intussusception are both contraindications to the receipt of rotavirus vaccines (6).

Precautions

A precaution is a condition in a recipient that might increase the risk for a serious adverse reaction, might cause diagnostic confusion, or might compromise the ability of the vaccine to produce immunity (e.g., administering measles vaccine to a person with passive immunity to measles from a blood transfusion administered up to 7 months prior) (7). A person might experience a more severe reaction to the vaccine than would have otherwise been expected; however, the risk for this

happening is less than the risk expected with a contraindication. In general, vaccinations should be deferred when a precaution is present. However, a vaccination might be indicated in the presence of a precaution if the benefit of protection from the vaccine outweighs the risk for an adverse reaction.

The presence of a moderate or severe acute illness with or without a fever is a precaution to administration of all vaccines (Table 4-1). The decision to administer or delay vaccination because of a current or recent acute illness depends on the severity of symptoms and etiology of the condition. The safety and efficacy of vaccinating persons who have mild illnesses have been documented (8-11). Vaccination should be deferred for persons with a moderate or severe acute illness. This precaution avoids causing diagnostic confusion between manifestations of the underlying illness and possible adverse effects of vaccination or superimposing adverse effects of the vaccine on the underlying illness. After they are screened for contraindications, persons with moderate or severe acute illness should be vaccinated as soon as the acute illness has improved. Studies indicate that failure to vaccinate children with minor illnesses can impede vaccination efforts (12-14). Among persons whose compliance with medical care cannot be ensured, use of every opportunity to administer appropriate vaccines is critical.

Hospitalization should be used as an opportunity to provide recommended vaccinations. Health-care facilities are held to standards of offering influenza vaccine for hospitalized patients, so providers are incentivized to vaccinate these patients at some point during hospitalization (15). Likewise, patients admitted for elective procedures will not be acutely ill during all times during their hospitalization. Most studies that have explored the effect of surgery or anesthesia on the immune system were observational, included only infants and children, and were small and indirect, in that they did not look at the immune effect on the response to vaccination specifically (16-35). They do not provide convincing evidence that recent anesthesia or surgery significantly affect response to vaccines. Current, recent, or upcoming anesthesia/surgery/hospitalization is not a contraindication to vaccination, but certain factors might lead a provider to consider current, recent, or upcoming anesthesia/surgery/hospitalization as a precaution (16-35). Efforts should be made to ensure vaccine administration during the hospitalization or at discharge. For patients who are deemed moderately or severely ill throughout the hospitalization, vaccination should occur at the earliest opportunity (i.e., during immediate post-hospitalization follow-up care, including home or office visits) when patients' clinical symptoms have improved.

A personal or family history of seizures is a precaution for MMRV vaccination; this is because a recent study found an increased risk for febrile seizures in children 12-23 months who receive MMRV compared with MMR and varicella vaccine (36).

Neither Contraindications Nor Precautions

Clinicians or other health-care providers might misperceive certain conditions or circumstances as valid contraindications or precautions to vaccination when they actually do not preclude vaccination (2) (Table 4-2). These misperceptions result in missed opportunities to administer recommended vaccines (37).

Routine physical examinations and procedures (e.g., measuring temperatures) are not prerequisites for vaccinating persons who appear to be healthy. The provider should ask the parent or guardian if the child is ill. If the child has a moderate or severe illness, the vaccination should be postponed.

TABLE 4-1. Contraindications and precautions^(a) to commonly used vaccines

Vaccine	Citation	Contraindications	Precautions
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Vaccine	Citation	Contraindications	Precautions
Dengue– ONLY use in persons who have laboratory confirmation of previous dengue infection AND reside in endemic dengue areas ^(b)	(38)	<p>Lack of laboratory evidence of previous dengue infection</p> <p>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</p> <p>Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy^(c) or patients with HIV infection who are severely immunocompromised)</p>	<p>Pregnancy</p> <p>HIV infection without evidence of severe immunosuppression</p> <p>Moderate or severe acute illness with or without fever</p>
DT, Td	(4)	<p>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</p>	<p>GBS <6 weeks after previous dose of tetanus-toxoid-containing vaccine</p> <p>History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid-containing or tetanus-toxoid-containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid-containing vaccine</p> <p>Moderate or severe acute illness with or without fever</p>
DTaP	(39)	<p>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</p> <p>Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures), not attributable to another identifiable cause, within 7 days of administration of previous dose of DTP or DTaP</p>	<p>Progressive neurologic disorder, including infantile spasms, uncontrolled epilepsy, progressive encephalopathy; defer DTaP until neurologic status clarified and stabilized</p> <p>GBS <6 weeks after previous dose of tetanus-toxoid-containing vaccine</p> <p>History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid-containing or tetanus-toxoid-containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid-containing vaccine</p> <p>Moderate or severe acute illness with or without fever</p>
Hepatitis A	(40)	<p>Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</p>	<p>Moderate or severe acute illness with or without fever</p>

Vaccine	Citation	Contraindications	Precautions
Hepatitis B	(41)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Hypersensitivity to yeast	Moderate or severe acute illness with or without fever

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Abbreviations: DT = diphtheria and tetanus toxoids; DTaP = diphtheria and tetanus toxoids and acellular pertussis; DTP = diphtheria toxoid, tetanus toxoid, and pertussis; GBS = Guillain-Barré syndrome; Hib = *Haemophilus influenzae* type b; HIV = human immunodeficiency virus; HPV = human papillomavirus; IIV = inactivated influenza vaccine; IPV = inactivated poliovirus; LAIV = live, attenuated influenza vaccine; MenACWY = quadrivalent meningococcal conjugate vaccine; MMR = measles, mumps, and rubella; MPSV4 = quadrivalent meningococcal polysaccharide vaccine; PCV13 = pneumococcal conjugate vaccine; PPSV23= pneumococcal polysaccharide vaccine; SCID = severe combined immunodeficiency; RIV=recombinant influenza vaccine; Td = tetanus and diphtheria toxoids; Tdap = tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis.

^(a) Events or conditions listed as precautions should be reviewed carefully. Benefits of and risks for administering a specific vaccine to a person under these circumstances should be considered. If the risk from the vaccine is believed to outweigh the benefit, the vaccine should not be administered. If the benefit of vaccination is believed to outweigh the risk, the vaccine should be administered. Whether and when to administer DTaP to children with proven or suspected underlying neurologic disorders should be decided on a case-by-case basis.

^(b) Only persons with laboratory confirmation of immunity according to strict guidance at [Laboratory Testing Requirements for Vaccination with Dengvaxia Dengue Vaccine](#) should receive dengue vaccination.


^(c) Substantially immunosuppressive steroid dose is considered to be ≥ 2 weeks of daily receipt of 20 mg or 2 mg/kg body weight of prednisone or equivalent.

^(d) HPV vaccine is not recommended during pregnancy

^(e) When applying this contraindication to cIIIV, the history of severe allergic reaction (e.g., anaphylaxis) must be specific to the event occurring following a dose of cIIIV. Likewise, when applying this contraindication to RIV, the history of severe allergic reaction (e.g., anaphylaxis) must be specific to the event occurring following a dose of RIV. A history of severe allergic reaction (e.g., anaphylaxis) to a non-cIIIV vaccine or to a component specific to components not contained in cIIIV, is a precaution to cIIIV. A history of severe allergic reaction (e.g., anaphylaxis) to a non-RIV vaccine or to a component specific to components not contained in RIV is a precaution to RIV.

^(f) In addition, ACIP recommends LAIV not be used for pregnant women, immunosuppressed persons, and children aged 2-4 years who have asthma or who have had a wheezing episode noted in the medical record within the past 12 months, or for whom parents report that a health care provider stated that they had wheezing or asthma within the last 12 months. LAIV should not be administered to persons who have taken influenza antiviral medications within the previous 48 hours. Persons who care for severely immunosuppressed persons who require a protective environment should not receive LAIV, or should avoid contact with such persons for 7 days after receipt.

^(g) See reference: Grohskopf LA, Alyanak E, Ferdinands JM, et al. Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices, United States, 2021-2022 Influenza Season. *MMWR Recomm Rep* 2021;70(No. RR-5):1-30.

^(h) These values are based on the clearance of the particular antiviral. LAIV4 should not be administered to persons who have taken oseltamivir or zanamivir within the previous 48 hours, peramivir within the previous 5 days, or baloxavir within the previous 17 days. This “contraindication” is due to concern with reduced effectiveness of the vaccine. To obtain specific information, please refer to Grohskopf LA, Alyanak, E, Broder KR, et. al. Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2020–21 Influenza Season. *MMWR Recomm Rep* 2020;69 (No. RR-8:1-26. Also at <https://www.cdc.gov/mmwr/volumes/69/rr/pdfs/rr6908a1-H.pdf> 

⁽ⁱ⁾ This precaution applies to infants younger than 9 months old

^(j) HIV-infected children may receive varicella vaccine if CD4+ T-lymphocyte count is $\geq 15\%$ and should receive MMR vaccine if they are aged ≥ 12 months and do not have evidence of current severe immunosuppression (i.e., individuals aged ≤ 5 years must have CD4+T lymphocyte [CD4] percentages $\geq 15\%$ for ≥ 6 months; and individuals aged > 5 years must have CD4+percentages $\geq 15\%$ and CD4+ ≥ 200 lymphocytes/mm³ for ≥ 6 months) or other current evidence of measles, rubella, and mumps immunity. In cases when only CD4+cell counts or only CD4+percentages are available for those older than age 5 years, the assessment of severe immunosuppression can be based on the CD4+values (count or percentage) that are available. In cases when CD4+percentages are not available for those aged ≤ 5 years, the assessment of severe immunosuppression can be based on age-specific CD4+counts at the time CD4+counts were measured; i.e., absence of severe immunosuppression is defined as ≥ 6 months above age-specific CD4+count criteria: CD4+count > 750 lymphocytes/mm³ while aged ≤ 12 months and CD4+count ≥ 500 lymphocytes/mm³ while aged 1 through 5 years. **Sources:** (1, 50).

(k) MMR and varicella-containing vaccines can be administered on the same day. If not administered on the same day, these vaccines should be separated by at least 28 days.

(l) If active tuberculosis is suspected, MMR should be delayed. Measles vaccination might suppress tuberculin reactivity temporarily. Measles-containing vaccine can be administered on the same day as tuberculin skin or IGRA testing. If testing cannot be performed until after the day of MMR vaccination, the test should be postponed for ≥ 4 weeks after the vaccination. If an urgent need exists to skin test or IGRA, do so with the understanding that reactivity might be reduced by the vaccine.

(m) family history of congenital or hereditary immunodeficiency in first-degree relatives (e.g., parents and siblings), unless the immune competence of the potential vaccine recipient has been substantiated clinically or verified by a laboratory

(n) For RV1 only, based on latex in product/packaging. Note that anaphylactic allergy to latex is covered in the contraindication, and would also be isolated to RV 1 in the case of latex. For more details, see (55).

(o) No adverse events associated with the use of aspirin or aspirin-containing products after varicella vaccination have been reported; however, the vaccine manufacturer recommends that vaccine recipients avoid using aspirin or aspirin-containing products for 6 weeks after receiving varicella vaccines because of the association between aspirin use and Reye syndrome after varicella. Vaccination with subsequent close monitoring should be considered for children who have rheumatoid arthritis or other conditions requiring therapeutic aspirin. The risk for serious complications associated with aspirin is likely to be greater in children in whom natural varicella develops than it is in children who receive the vaccine containing attenuated VZV. No association has been documented between Reye syndrome and analgesics or antipyretics that do not contain aspirin."

TABLE 4-2. Conditions incorrectly perceived as contraindications or precautions to vaccination (i.e., vaccines may be given under these conditions)

Vaccine	Conditions commonly misperceived as contraindications or precautions
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Abbreviations: DT = diphtheria and tetanus toxoids; DTP = diphtheria toxoid, tetanus toxoid, and pertussis; DTaP = diphtheria and tetanus toxoids and acellular pertussis; GBS = Guillain-Barré syndrome; HBsAg = hepatitis B surface antigen; Hib = *Haemophilus influenzae* type b; HIV = human immunodeficiency virus; HPV = human papillomavirus; IIV = inactivated influenza vaccine; IPV = inactivated poliovirus; LAIV = live, attenuated influenza vaccine; MenACWY = quadrivalent meningococcal conjugate vaccine; MMR = measles, mumps, and rubella; MPSV4 = quadrivalent meningococcal polysaccharide vaccine; PCV = pneumococcal conjugate vaccine; PPSV23= pneumococcal polysaccharide vaccine; Td = tetanus and diphtheria toxoids; Tdap = tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis.

(a) Antibacterial drugs might interfere with Ty21a oral typhoid vaccine, and certain antiviral drugs might interfere with varicella-containing vaccines and LAIV4.

(b) Hepatitis B vaccination should be deferred for infants weighing $< 2,000$ g if the mother is documented to be HBsAg negative. Vaccination should commence at chronological age 1 month or at hospital discharge. For infants born to HBsAg-positive women, hepatitis B immune globulin and hepatitis B vaccine should be administered within 12 hours after birth, regardless of weight.

(c) An exception is Guillain-Barré syndrome within 6 weeks of a dose of influenza vaccine or tetanus-toxoid-containing vaccine, which are precautions for influenza vaccines and tetanus-toxoid containing vaccines, respectively.



(d) MMR and varicella vaccines can be administered on the same day. If not administered on the same day, these vaccines should be separated by at least 28 days.

(e) HIV-infected children should receive immune globulin after exposure to measles. HIV-infected children can receive varicella and measles vaccine if CD4+ T-lymphocyte count is $> 15\%$. (55).

(f) Measles vaccination might suppress tuberculin reactivity temporarily. Measles-containing vaccine can be administered on the same day as tuberculin skin or IGRA testing. If testing cannot be performed until after the day of MMR vaccination, the test should be postponed for at least 4 weeks after the vaccination. If an urgent need exists to skin test or IGRA, do so with the understanding that reactivity might be reduced by the vaccine.

(g) If a vaccinee experiences a presumed vaccine-related rash 7-25 days after vaccination, the person should avoid direct contact with immunocompromised persons for the duration of the rash.

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EXHIBIT 20



[Immunization Schedules Home](#)

Child Immunization Schedule Appendix

Recommendations for Ages 18 Years or Younger, United States, 2024

[← Back to Child and Adolescent Immunization Schedule home page](#)

[Vaccines and Other Immunizing Agents in the Child Immunization Schedule](#)

How to use the schedule

To make vaccination recommendations, healthcare providers should:

1. Determine recommended vaccine by age ([Table 1 - By Age](#))
2. Determine recommended interval for catch-up vaccination ([Table 2 - Catch-up](#))
3. Assess need for additional recommended vaccines by medical condition or other indication ([Table 3 - By Medical Indication](#))
4. Review vaccine types, frequencies, intervals, and considerations for special situations ([Notes](#))
5. Review contraindications and precautions for vaccine types ([Appendix](#))
6. Review new or updated ACIP guidance ([Addendum](#))

Appendix – Guide to Contraindications and Precautions to Commonly Used Vaccines

Adapted from Table 4-1 in Advisory Committee on Immunization Practices (ACIP) General Best Practice Guidelines for Immunization: [Contraindication and Precautions, Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices—United States, 2023–24 Influenza Season, Contraindications and Precautions for COVID-19 Vaccination, and Contraindications and Precautions for JYNNEOS Vaccination](#)



COVID-19 and Flu Vaccines




Vaccines and other Immunizing Agents	Contraindicated or Not Recommended ¹	Precautions ²
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Vaccines and other Immunizing Agents	Contraindicated or Not Recommended ¹	Precautions ²
<p>COVID-19 mRNA vaccines [Pfizer-BioNTech, Moderna]</p>	<ul style="list-style-type: none"> • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a component of an mRNA COVID-19 vaccine⁵ 	<ul style="list-style-type: none"> • Diagnosed non-severe allergy (e.g., urticaria beyond the injection site) to a component of an mRNA COVID-19 vaccine⁵; or non-severe, immediate (onset less than 4 hours) allergic reaction after administration of a previous dose of an mRNA COVID-19 vaccine • Myocarditis or pericarditis within 3 weeks after a dose of any COVID-19 vaccine • Multisystem inflammatory syndrome in children (MIS-C) or multisystem inflammatory syndrome in adults (MIS-A) • Moderate or severe acute illness, with or without fever
<p>COVID-19 protein subunit vaccine [Novavax]</p>	<ul style="list-style-type: none"> • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a component of a Novavax COVID-19 vaccine⁵ 	<ul style="list-style-type: none"> • Diagnosed non-severe allergy (e.g., urticaria beyond the injection site) to a component of Novavax COVID-19 vaccine⁵; or non-severe, immediate (onset less than 4 hours) allergic reaction after administration of a previous dose of a Novavax COVID-19 vaccine • Myocarditis or pericarditis within 3 weeks after a dose of any COVID-19 vaccine • Multisystem inflammatory syndrome in children (MIS-C) or multisystem inflammatory syndrome in adults (MIS-A) • Moderate or severe acute illness, with or without fever
<p>Influenza, egg-based, inactivated injectable (IIV4)</p>	<ul style="list-style-type: none"> • Severe allergic reaction (e.g., anaphylaxis) after previous dose of any influenza vaccine (i.e., any egg-based IIV, cclIV, RIV, or LAIV of any valency) • Severe allergic reaction (e.g., anaphylaxis) to any vaccine component³ (excluding egg) 	<ul style="list-style-type: none"> • Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine • Moderate or severe acute illness with or without fever
<p>Influenza, cell culture-based inactivated injectable (cclIV4)[Flucelvax Quadrivalent]</p>	<ul style="list-style-type: none"> • Severe allergic reaction (e.g., anaphylaxis) to any cclIV of any valency, or to any component³ of cclIV4 	<ul style="list-style-type: none"> • Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine • Persons with a history of severe allergic reaction (e.g., anaphylaxis) after a previous dose of any egg-based IIV, RIV, or LAIV of any valency. If using cclIV4, administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions. May consult an allergist. • Moderate or severe acute illness with or without fever

Vaccines and other Immunizing Agents	Contraindicated or Not Recommended ¹	Precautions ²
Influenza, recombinant injectable (RIV4) [Flublok Quadrivalent]	<ul style="list-style-type: none"> • Severe allergic reaction (e.g., anaphylaxis) to any RIV of any valency, or to any component³ of RIV4 	<ul style="list-style-type: none"> • Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine • Persons with a history of severe allergic reaction (e.g., anaphylaxis) after a previous dose of any egg-based IIV, cclIV, or LAIV of any valency. If using RIV4, administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions. May consult an allergist. • Moderate or severe acute illness with or without fever
Influenza, live attenuated (LAIV4) [Flumist Quadrivalent]	<ul style="list-style-type: none"> • Severe allergic reaction (e.g., anaphylaxis) after previous dose of any influenza vaccine (i.e., any egg-based IIV, cclIV, RIV, or LAIV of any valency) • Severe allergic reaction (e.g., anaphylaxis) to any vaccine component³ (excluding egg) • Children age 2–4 years with a history of asthma or wheezing • Anatomic or functional asplenia • Immunocompromised due to any cause including, but not limited to, medications and HIV infection • Close contacts or caregivers of severely immunosuppressed persons who require a protected environment • Pregnancy • Cochlear implant • Active communication between the cerebrospinal fluid (CSF) and the oropharynx, nasopharynx, nose, ear or any other cranial CSF leak • Children and adolescents receiving aspirin or salicylate-containing medications • Received influenza antiviral medications oseltamivir or zanamivir within the previous 48 hours, peramivir within the previous 5 days, or baloxavir within the previous 17 days. 	<ul style="list-style-type: none"> • Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine • Asthma in persons age 5 years old or older • Persons with underlying medical conditions (other than those listed under contraindications) that might predispose to complications after wild-type influenza virus infection [e.g., chronic pulmonary, cardiovascular (except isolated hypertension), renal, hepatic, neurologic, hematologic, or metabolic disorders (including diabetes mellitus)] • Moderate or severe acute illness with or without fever

1. When a contraindication is present, a vaccine should **NOT** be administered. Kroger A, Bahta L, Hunter P. [ACIP General Best Practice Guidelines for Immunization](#).

2. When a precaution is present, vaccination should generally be deferred but might be indicated if the benefit of protection from the vaccine outweighs the risk for an adverse reaction. Kroger A, Bahta L, Hunter P. [ACIP General Best Practice Guidelines for Immunization](#).

3. Vaccination providers should check FDA-approved prescribing information for the most complete and updated information, including contraindications, warnings, and precautions. See [Package inserts for U.S.-licensed vaccines](#)  .
4. See [package inserts](#)  and [FDA EUA fact sheets](#)  for a full list of vaccine ingredients. mRNA COVID-19 vaccines contain polyethylene glycol (PEG).






Other Vaccines

Vaccines and other Immunizing Agents	Contraindicated or Not Recommended ¹	Precautions ²
Dengue (DEN4CYD)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised) Lack of laboratory confirmation of a previous Dengue infection 	<ul style="list-style-type: none"> Pregnancy HIV infection without evidence of severe immunosuppression Moderate or severe acute illness with or without fever
Diphtheria, tetanus, pertussis (DTaP)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ For DTaP only: Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures) not attributable to another identifiable cause within 7 days of administration of previous dose of DTP or DTaP 	<ul style="list-style-type: none"> Guillain-Barré syndrome (GBS) within 6 weeks after previous dose of tetanus-toxoid-containing vaccine History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid-containing or tetanus-toxoid-containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid-containing vaccine For DTaP only: Progressive neurologic disorder, including infantile spasms, uncontrolled epilepsy, progressive encephalopathy; defer DTaP until neurologic status clarified and stabilized Moderate or severe acute illness with or without fever
<i>Haemophilus influenzae</i> type b (Hib)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Less than age 6 weeks 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Hepatitis A (HepA)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ including neomycin 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever

Vaccines and other Immunizing Agents	Contraindicated or Not Recommended ¹	Precautions ²
Hepatitis B (HepB)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ including yeast Pregnancy: Heplisav-B and PreHevbrio are not recommended due to lack of safety data in pregnant persons. Use other hepatitis B vaccines if HepB is indicated⁴. 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Hepatitis A-Hepatitis B vaccine (HepA-HepB) [Twinrix]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ including neomycin and yeast 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Human papillomavirus (HPV)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Pregnancy: HPV vaccination not recommended 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Measles, mumps, rubella (MMR) Measles, mumps, rubella, and varicella (MMRV)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised) Pregnancy Family history of altered immunocompetence, unless verified clinically or by laboratory testing as immunocompetent 	<ul style="list-style-type: none"> Recent (≤ 11 months) receipt of antibody-containing blood product (specific interval depends on product) History of thrombocytopenia or thrombocytopenic purpura Need for tuberculin skin testing or interferon-gamma release assay (IGRA) testing Moderate or severe acute illness with or without fever For MMRV only: Personal or family (i.e., sibling or parent) history of seizures of any etiology
Meningococcal ACWY (MenACWY) (MenACWY-CRM) [Menveo] (MenACWY-TT) [MenQuadfi]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ For MenACWY-CRM only: severe allergic reaction to any diphtheria toxoid- or CRM197-containing vaccine For MenACWY-TT only: severe allergic reaction to a tetanus toxoid-containing vaccine 	<ul style="list-style-type: none"> For MenACWY-CRM only: Preterm birth if less than age 9 months Moderate or severe acute illness with or without fever


Vaccines and other Immunizing Agents	Contraindicated or Not Recommended ¹	Precautions ²
Meningococcal B (MenB) MenB-4C [Bexsero] MenB-FHbp [Trumenba]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ 	<ul style="list-style-type: none"> Pregnancy For MenB-4C only: Latex sensitivity Moderate or severe acute illness with or without fever
Meningococcal ABCWY (MenACWY-TT/MenB-FHbp) [Penbraya]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe allergic reaction to a tetanus toxoid-containing vaccine 	<ul style="list-style-type: none"> Moderate or severe acute illness, with or without fever
Mpox [Jynneos]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ 	<ul style="list-style-type: none"> Moderate or severe acute illness, with or without fever
Pneumococcal conjugate (PCV)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe allergic reaction (e.g., anaphylaxis) to any diphtheria-toxoid-containing vaccine or its component³ 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Pneumococcal polysaccharide (PPSV23)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Poliovirus vaccine, inactivated (IPV)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ 	<ul style="list-style-type: none"> Pregnancy Moderate or severe acute illness with or without fever
RSV monoclonal antibody (RSV-mAb)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component⁵ 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Respiratory syncytial virus vaccine (RSV)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Rotavirus (RV) RV1 [Rotarix], RV5 [RotaTeq]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe combined immunodeficiency (SCID) History of intussusception 	<ul style="list-style-type: none"> Altered immunocompetence other than SCID Chronic gastrointestinal disease RV1 only: Spina bifida or bladder exstrophy Moderate or severe acute illness with or without fever

Vaccines and other Immunizing Agents	Contraindicated or Not Recommended ¹	Precautions ²
<p>Tetanus, diphtheria, and acellular pertussis (Tdap)</p> <p>Tetanus, diphtheria (Td)</p>	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ For Tdap only: Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures) not attributable to another identifiable cause within 7 days of administration of previous dose of DTP, DTaP, or Tdap 	<ul style="list-style-type: none"> Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of tetanus-toxoid-containing vaccine History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid-containing or tetanus-toxoid-containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid-containing vaccine For Tdap only: Progressive or unstable neurological disorder, uncontrolled seizures, or progressive encephalopathy until a treatment regimen has been established and the condition has stabilized Moderate or severe acute illness with or without fever
<p>Varicella (VAR)</p>	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised) Pregnancy Family history of altered immunocompetence, unless verified clinically or by laboratory testing as immunocompetent 	<ul style="list-style-type: none"> Recent (≤ 11 months) receipt of antibody-containing blood product (specific interval depends on product) Receipt of specific antiviral drugs (acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination (avoid use of these antiviral drugs for 14 days after vaccination) Use of aspirin or aspirin-containing products Moderate or severe acute illness with or without fever If using MMRV, see MMR/MMRV for additional precautions

- When a contraindication is present, a vaccine should NOT be administered. Kroger A, Bahta L, Hunter P. [ACIP General Best Practice Guidelines for Immunization](#).
- When a precaution is present, vaccination should generally be deferred but might be indicated if the benefit of protection from the vaccine outweighs the risk for an adverse reaction. Kroger A, Bahta L, Hunter P. [ACIP General Best Practice Guidelines for Immunization](#).
- Vaccination providers should check FDA-approved prescribing information for the most complete and updated information, including contraindications, warnings, and precautions. See [package inserts for U.S.-licensed vaccines](#) .
- For information on the pregnancy exposure registries for persons who were inadvertently vaccinated with Heplisav-B or PreHevbrio while pregnant, please visit heplisavbpregnancyregistry.com/  or www.prehevbrio.com/#safety .
- Full prescribing information for BEYFORTUS (nirsevimab-alip) www.accessdata.fda.gov/drugsatfda_docs/label/2023/761328s000lbl.pdf  

Last Reviewed: December 6, 2023

EXHIBIT 21

 An official website of the United States government



[HHS](#) > [Vaccines and Immunizations](#) > [National Vaccine Advisory...](#)

Navigate to:



The Standards for Pediatric Immunization Practice

Does your child's health care provider meet the Standards?

In May 1992, responding to a recent resurgence of measles, the U.S. Public Health Service and a diverse group of medical and public health experts established the Standards for Pediatric Immunization Practices. These Standards, which were approved by the U.S. Public Health Service and endorsed by the American Academy of Pediatrics, represent the most desirable practices for all health care providers and immunization programs.

While addressed to health professionals, the Standards provide the public with guidelines on what should be expected of the providers and programs responsible for their child's immunization care. And while the language published in 1992 applies to childhood vaccinations, much of it applies to adult immunizations as well.

The full text follows, with an explanation of each standard, as adapted from the National Vaccine Advisory Committee's (NVAC's) discussions of the Standards. ⁽¹⁾

Preamble

Ideally, immunizations should be given as part of comprehensive child health care. This is the ultimate goal toward which the nation must strive if all of America's children are to benefit from the best primary disease prevention our health care system has to offer.

Overall improvement in our primary care delivery system requires intensive effort and will take time. However, we should not wait for changes in this system before providing immunizations more effectively to our children. Current health care policies and practices in all settings result in the failure to deliver vaccines on schedule to many of our vulnerable preschool-aged children. This failure is due primarily to barriers that impeded vaccine delivery and to missed opportunities during clinic visits.

Changes in policies and practices can immediately improve coverage. The present system should be geared to "user-friendly," family-centered, culturally sensitive, and comprehensive primary health care that can provide rapid, efficient, and consumer-oriented services to the users, i.e., children and their parents. The failure to do so is evidenced by the recent resurgence of measles and measles-related childhood mortality, which may be an omen of other vaccine-preventable disease outbreaks.

Present childhood immunization practices must be changed if we wish to protect the nation's children and immunize 90% of two-year-olds by the year 2000.

The following standards for pediatric immunization practices address these issues. These standards are recommended for use by *all* health professionals in the public and private sector who administer vaccines to or manage immunization services for infants and children. These Standards represent the most desirable immunization practices which health providers should strive to achieve to the extent possible. By adopting these Standards, providers can begin to enhance and change their own policies and practices.

While not all providers will have the funds necessary to implement the Standards immediately, those providers and programs lacking the resources to implement the Standards fully should find them a useful tool in better delineating immunization needs and in obtaining additional resources in the future in order to achieve the Healthy People 2000 immunization objective.

Standard 1: Immunization services are readily available.

By readily available, NVAC meant that the times immunization services are provided should be in keeping with the schedules of today's working parents, as well as the needs of parents who are at home full- or part-time.

NVAC suggested non-traditional times, such as weekends, evenings, early mornings, and lunch-hours, as possibilities. NVAC also suggested integrating immunization services into days and hours when other child health services, such as the Special Supplemental Food Program for Women, Infants, and Children (WIC) are offered.

NVAC also recommended that providers should keep an adequate stock of vaccines on hand, to prevent missed immunizations or the need for return visits.

Standard 2: No barriers or unnecessary prerequisites to the receipt of vaccines exist.

NVAC viewed "by appointment only" systems as barriers to immunization in both public and private settings and suggested walk-in services with waiting times of no more than 30 minutes.

NVAC suggested that such services should be provided in conjunction with rapid and efficient screening (to assess the child's current health and vaccination status, for example) and should not be contingent on receiving other comprehensive health services. NVAC determined that, unless a child has symptoms of illness, or the visit is a combined-purpose visit, a physical examination is not required at the time of an immunization. It is sufficient for the provider to observe the child's general state of health, ask the parent or guardian if the child is well, and question the parent or guardian about possible contraindications (reasons why the child should not be immunized).

Since every child needs consistent health care, parents who bring their child for "walk-in" immunization services should be counseled about the need for a personal primary care provider and should be given a referral to such a provider. In public clinics, immunizations should be provided according to a schedule (standing orders), rather than depending on individual written orders or referrals. This approach sidesteps the possibility of records being misplaced or immunization anniversaries being overlooked.

Standard 3: Immunization services are available free or for a minimal fee.

No child should miss immunizations because the parents cannot afford the fee.

For this reason, public clinics holding federal contracts for provision of immunizations must post a sign indicating that no one will be denied immunization services because of inability to pay. NVAC recommended that fees in both the public and the private sector should be reasonable.

Standard 4: Providers utilize all clinical encounters to screen and, when indicated, immunize children.

Every health care worker who sees your child should be alert to your child's immunization status, even in an emergency room setting or the office of a specialist.

If the immunizations are not up-to-date, immunization should be made available to your child during that visit or you should be referred back to the primary provider for immunization services.

Standard 5: Providers educate parents and guardians about immunization in general terms.

NVAC raised concerns not only about the need for information, but also that information should be presented in terms you can understand, including in another language, if necessary.

The provider should discuss with you the reasons why immunizations are so important, the diseases they prevent, the recommended immunization schedules, and why it's important for the immunizations to be given at the right ages. Also, your provider should instruct you to bring your child's immunization record to each visit, a step that will prevent both missed immunizations and unnecessary immunizations.

You should have an opportunity to discuss questions and raise any concerns, and your provider should have materials that you can take home to read and refresh your understanding of what was said.

Standard 6: Providers question parents or guardians about contraindications and, before immunizing a child, inform them in specific terms about the risks and benefits of the immunizations their child is to receive.

According to NVAC, you should be asked questions to determine (1) whether your child has ever had an adverse event in connection with an immunization, and (2) whether your child has any conditions or circumstances that indicate that immunization should be withheld or delayed (for example, "Has your child had any fever in the past few days?").

You have a right to know about the benefits as well as the risks of vaccines. For this reason, the U.S. federal government requires both public and private health-care providers to give you printed materials, called Vaccine Information Statements, regarding measles, mumps, rubella, diphtheria, tetanus, pertussis (whooping cough), and polio vaccinations, when your child will be having any of these. Furthermore, your health-care provider should review these statements with you.

Another type of printed material, called Important Information Statements, is required in public health clinics, and recommended in private settings, to inform you regarding other vaccinations, such as hepatitis B or Haemophilus influenzae type b. All of these materials should be current and available in appropriate languages. Your provider should also ask you if you have read the materials and whether you have any questions about the information you have been given.

Standard 7: Providers follow only true contraindications.

Your provider should exercise informed, good judgment about what constitutes a medically sound reason for withholding an immunization, using the guidelines published by the Advisory Committee on Immunization Practices, the Committee on Infectious Diseases of the American Academy of Pediatrics, and the American Academy of Family Physicians.

Standard 8: Providers administer simultaneously all vaccine doses for which a child is eligible at the time of each visit.

Available evidence suggests that simultaneous administration of childhood immunizations is safe and effective.

Measles, mumps, rubella vaccine should always be used in combination form for childhood immunizations. Simultaneous administration or combined-form vaccines reduce the number of visits or shots that are needed and help to ensure that your child completes all needed vaccinations.

Standard 9: Providers use accurate and complete recording procedures.

This standard specifies the orderly approach that should be taken to ensure accurate record-keeping, so that needed vaccinations will not be missed and unnecessary vaccinations will not be given.

Immunization providers are required by law to record what vaccine was given, the date the vaccine was given (month, day, year), the name of the manufacturer of the vaccine, the lot number, the signature and title of the person who gave the vaccine, and the address where the vaccine was given. NVAC believes that in addition, the parent or guardian should be given a permanent record to keep and carry to office visits for updates. If this record is lost, a replacement with complete immunization data should be provided.

Providers should verify vaccination histories from previous providers whenever possible, and if the provider of an immunization is not the primary care physician, a report of vaccines given should be sent to the primary care provider.

Standard 10: Providers co-schedule immunization appointments in conjunction with appointments for other child health services.

This standard recommends efficient use of the parent's and child's time, as well as an opportunity to provide immunizations that might otherwise be missed.

Standard 11: Providers report adverse events following immunization promptly, accurately, and completely.

You, as a parent, should be encouraged to report any adverse events that are or appear to be associated with a vaccination.

In turn, your health-care provider should record the event fully in the medical record and promptly report any such events that are clinically significant to the national Vaccine Adverse Event Reporting System (VAERS

<https://www.fda.gov/biologicsbloodvaccines/safetyavailability/reportaproblem/vaccineadverseevents/default.htm>), regardless of whether the event is believed to be related to the vaccine. The toll-free telephone number for VAERS is 1-800-822-7967.⁽²⁾

Standard 12: Providers operate a tracking system.

Your health-care provider is responsible for keeping accurate, up-to-date records of your child's immunizations and for alerting you when immunizations are due.

Computer systems make this easier, but providers who have not converted their records to computer storage should maintain a manual system. Children who are at high risk for not completing their immunization series should be given special attention in the tracking system.

Standard 13: Providers adhere to appropriate procedures for vaccine management.

To keep their potency, vaccines must be handled and stored appropriately, according to the directions in the manufacturer's package inserts.

A good sign in any medical office is that one qualified individual is charged with responsibility for monitoring the vaccine supplies: how many are on hand, where they are stored, how they are handled (e.g., are they returned to the refrigerator promptly?), and the expiration dates that are stamped on the bottles.

Standard 14: Providers conduct semi-annual audits to assess immunization coverage levels and to review immunization records in the patient populations they serve.

Audits are an essential and routine measure in any type of health care.

Hospitals audit how many beds are in use in a given period, the type and number of surgical procedures performed, how many patients died while in the hospital and why, the types of medications prescribed, and the charges for services. Clinics perform similar audits.

Individual practitioners may be less inclined to do in-depth audits, but a random sample of records can reveal the percent of children who are up-to-date by their second birthday, identify missed opportunities for simultaneous immunization, and assess the quality of the records that are being kept. These are vital steps to assure quality care for your child. How do you know if your provider performs such audits? Ask the office nurse.

Standard 15: Providers maintain up-to-date, easily retrievable medical protocols at all locations where vaccines are administered.

A medical protocol is a detailed description of how a procedure will be done. Today's medical technology is changing at unprecedented speed, so health-care providers cannot rely entirely on memory or previous experience for how to use medical equipment or medications. They must have technical information at hand, either in a computer database or in printed "handbook" form that can be used by both experienced and new staff.

If you see your physician, nurse, or pharmacist checking for a dosage, the name of a medication, or other information, interpret it as a sign that this health professional is committed to accuracy, safety, and state-of-the-art care.

Standard 16: Providers operate with patient-oriented and community-based approaches.

Health-care workers spend the majority of their days indoors, working long and intensely focused days. Sometimes they become so attached to their routines that any suggestion that things should be done differently is viewed as an affront.

Nevertheless, if your provider is not asking you if things are going well, don't hesitate to speak up. If you are finding it difficult to bring your child in during the day for immunizations, say so. If the waits are so long that your child is becoming fussy and you are on the verge of walking out, your provider needs to know this.

Under this standard, providers in the public sector are especially obligated to look to the community to be sure that their services are reaching everyone, not just the people who come in routinely. They should be using a variety of methods to inform the public about immunizations and should be publicizing the places and times that these are available.

Standard 17: Vaccines are administered by properly trained individuals.

This does not mean that only a physician or nurse should administer vaccinations. In fact, specifying so may create barriers to immunization.

In emergency circumstances – for example, after a natural disaster – the need for typhoid or other immunizations may suddenly be in the thousands per day, and available medical personnel would not be able to meet this need. In the fall, the demand for flu shots can be very high, overwhelming normal office routines and resulting in long, tedious waits. In low-income neighborhoods, the demand for no-cost publicly funded immunizations may be high.

The tendency for meeting these needs today is to use non-traditional sites, even grocery stores, and to use non-traditional providers to administer vaccinations. In many states, pharmacists can routinely give immunizations. Few people would think of their dentist as an immunization provider, but why not? In each of these cases, immunizations can be safe as long as the people giving the vaccines have been appropriately trained and all other protocols, such as using sterile methods and keeping accurate records, are kept.

Standard 18: Providers receive ongoing education and training on current immunization recommendations.

Vaccines, immunization techniques, and vaccination schedules change periodically. For example, the recommended method of administering polio vaccine was recently changed from oral polio vaccine to a series of injections using the inactivated form of the vaccine.

The change is important because it establishes a safer method. Your health-care provider should be up-to-date on this and other changes in immunization recommendations.

Whom to call if you have specific vaccine safety questions

For additional information on your vaccine safety questions, call:

CDC/National Immunization Program Resource Center

1-800-232-2522 (English)

1-800-232-0233 (Spanish)

Footnotes

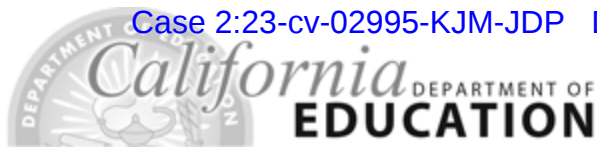
1. National Immunization Program. Standards for Pediatric Immunization Practices [monograph]. 7th printing. Washington, DC: Department of Health and Human Services, United States Public Health Service, Centers for Disease Control and Prevention, February 1996.

2. Food and Drug Administration. Vaccine adverse event reporting system [brochure]. Washington, DC: FDA, no date.

Content created by Office of Infectious Disease and HIV/AIDS Policy (OIDP)

Content last reviewed March 21, 2016

EXHIBIT 22



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Independent Study Frequently Asked Questions

Frequently asked questions (FAQs) and answers pertaining to independent study.

These FAQs reflect the 2022-23 changes to independent study and have been updated according to [Assembly Bill 181 \(Chapter 52, Statutes of 2022\)](#). [↗](#)

For information and requirements about average daily attendance (ADA), apportionment, ratio calculations, instructional time, attendance accounting, waivers, and Form J-13A refer to the California Department of Education (CDE) [Principal Apportionment](#) web page or contact the Instructional Time and Attendance Accounting office by email at attendanceaccounting@cde.ca.gov.

Independent study is governed by California *Education Code (EC)* sections [51744–51749.6](#) [↗](#) and *California Code of Regulations*, Title 5 (5 *CCR*) sections 11700–11705. Local educational agencies (LEAs) shall meet with their legal counsel and independent auditor for alignment of their independent study program with legal authority, regulations, and audit requirements.

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Admission

1. [Are LEAs required to offer an independent study program option? \(Updated 01-Jul-2022\)](#)
2. [Are all pupils eligible to participate in independent study? \(Updated 01-Jul-2022\)](#)
3. [Does a student who requests to participate in independent study due to in-person instruction posing a risk to their health have to provide a doctor's note or other medical authorization or can](#)

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4. Under what circumstances are LEAs required to provide learning devices to independent study pupils?
5. Is a LEA permitted to provide independent study to pupils in transitional kindergarten?
6. May pupils participate in independent study to complete work during travel? (Updated 01-Jul-2022)

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7. What is the course content in independent study? (Updated 01-Jul-2022)
8. How is the level of satisfactory educational progress determined for independent study pupils?
9. Are pupils permitted to study religious materials as a part of the independent study curriculum?
10. Are pupils required to do as much work in independent study as they would in the regular classroom? (Updated 01-Jul-2022)
11. Are independent study pupils required to complete their assigned work? (Updated 01-Jul-2022)
12. What is the timeframe for allowing independent study pupils to submit late work? (New 01-Jul-2022)

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Classroom Sessions

13. Are independent study pupils required to attend labs, classes, and other onsite classroom sessions? (Updated 01-Jul-2022)
14. Are LEAs required to provide opportunities for both synchronous instruction and live interaction for independent study pupils?
15. Does synchronous instruction have to be in-person?
16. Are classified staff permitted to provide the synchronous instruction? (Updated 01-Jul-2022)
17. If a pupil does not participate in a day of synchronous instruction, but still completes their assignments, are they marked as absent or nonparticipatory? (Updated 01-Jul-2022)

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Immunization

18. What are the immunization requirements for independent study pupils? (Updated 01-Jul-2022)

Effective January 1, 2016:

- Parents or guardians of pupils in any school or child-care facility, whether public or private, will no longer be allowed to submit a personal beliefs exemption to a currently-required vaccine.
- Pupils will no longer be required to have immunizations for entry if they attend:

- ◆ A home-based private school or

- For example, times on campus in the scenarios below to be classroom-based instruction and, thereby, would require pupil immunization:
 - ◆ A pupil is 99 percent virtual, but returns to campus to submit projects, and
 - ◆ A pupil completes academic instruction away from campus, but wants to participate in extracurricular activities on campus.

For additional immunization information, refer to the [Regulations FAQs \(2019 Changes\)](#) on the Shots for School website.

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Pupil-Parent-Educator Conference

19. [Are LEAs required to have a meeting with parents or guardians of a pupil interested in independent study? \(Updated 01-Jul-2022\)](#)

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20. [Do pupils have a right to return to a regular classroom setting? \(Updated 01-Jul-2022\)](#)

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22. [What are the specific requirements for transitional kindergarten teachers providing independent study instruction? \(New 01-Jul-2022\)](#)
23. [Do the federal requirements for highly qualified teachers apply to those teaching via independent study?](#)

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25. [How does tiered reengagement work in course-based independent study \(CBIS\)?](#)
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29. What are the required components of an independent study agreement? (Updated 01-Jul-2022)
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31. Is it permissible for some of the required signatures to be provided electronically?
32. Whose signatures are required on an independent study written agreement? (Updated 01-Jul-2022)
33. Is there a limit on how many days an independent study agreement can be in effect?
34. If a teacher leaves during the middle of a semester, how is the independent study agreement amended to reflect the new teacher? (Updated 01-Jul-2022)
35. What information should be included in the written agreement addressing the needs of pupils not performing at grade level or requiring other supports? (Updated 01-Jul-2022)
36. Are pupils allowed to start instruction before all required signatures are on the written agreement? (Updated 01-Jul-2022)
37. Are LEAs required to meet with a pupil's parent or guardian prior to signing an independent study agreement?

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39. How do schools keep attendance records for online courses?
40. Are LEAs allowed to claim ADA for apportionment for independent study pupils with an inter-district transfer agreement based on a parent's or guardian's employment? (New 01-Jul-2022)
41. Are there geographical limitations on generating attendance for independent study? (Updated 01-Jul-2022)

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42. Is it permissible to grant or accept partial credits?
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44. Are there programs that help independent study staff keep track of attendance, grades, and other records?
45. Will LEAs receive additional funding for digital assignment tracking systems to reduce the workload associated with accounting for pupil work? (Updated 01-Jul-2022).
46. How do LEAs record incomplete attendance in the California Longitudinal Pupil Achievement Data System (CALPADS) for independent study pupils who do not return any work? (New 01-Jul-2022).

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Instructional Minutes and Days

47. What are the required instructional minutes and required length of the school year for independent study? (Updated 01-Jul-2022).

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48. How long must pupils' independent study records be kept?

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49. Do truancy laws apply to pupils in independent study? (Updated 01-Jul-2022).
50. If a pupil is not completing assignments, not participating in synchronous instruction, not responding to interventions, or is otherwise in violation of the independent study agreement, can the pupil be referred to the school attendance review board (SARB)? (New 01-Jul-2022).

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52. Are the rules and regulations for charter school independent study the same as for regular public schools? (Updated 01-Jul-2022).
53. Are charter schools that do not have a classroom-based component exempt from the requirement to transition pupils to the regular classroom within five instructional days per EC sections 51747(f) and 51749.5(a)(9)? (New 01-Jul-2022).

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62. May independent study courses be offered online? (Updated 01-Jul-2022).

63. Is there a prohibition against using either recorded or live content/instruction provided by third-part content providers? (Updated 01-Jul-2022)
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Comprehensive/Targeted Support and Improvement

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68. What policies and procedures are required for compliance in offering independent study? (Updated 01-Jul-2022)

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Questions: Independent Study | independentstudy@cde.ca.gov | 916-319-0277

Last Reviewed: Friday, September 23, 2022

EXHIBIT 23

The Washington Post

Democracy Dies in Darkness

CDC data shows highest level yet of vaccine exemptions for kindergartners



By [Lena H. Sun](#)

November 9, 2023 at 2:06 p.m. EST

The percentage of kindergartners whose parents opted them out of state-required childhood vaccinations rose to the highest level yet during the 2022-2023 school year, according to [federal data released Thursday](#). The numbers mark a continued drop in routine immunization that increases the risk for highly contagious diseases, such as measles, to spread.

The report from the Centers for Disease Control and Prevention underscored the [coronavirus](#) pandemic's impact on routine immunization rates and the lingering consequences for school-age children.

The United States has experienced several measles outbreaks in recent years in communities where vaccination rates have been low. Last fall, a [measles outbreak in Columbus, Ohio](#), mostly involved children who were old enough to get the shots but whose parents chose not to have them vaccinated, health officials said. It was the country's largest outbreak of the highly infectious pathogen last year.

All states and the District of Columbia require schoolchildren to be vaccinated against certain diseases, including measles, whooping cough and polio. They must report yearly data to the CDC on the number of children in kindergarten who meet those requirements or who receive exemptions. All states grant exemptions based on medical reasons; a growing number also allow [religious or philosophical exemptions](#).

The overall percentage of children with a vaccination exemption increased from 2.6 percent during the 2021-2022 school year to 3 percent in 2022-2023, the highest exemption rate ever reported in the United States. The data includes estimated vaccination coverage for about 3.8 million public and private school kindergartners.

The report's authors said they did not assess why there is a continued drop in vaccination coverage. "It is not clear whether this reflects a true increase in opposition to vaccination, or if parents are opting for nonmedical exemptions because of barriers to vaccination or out of convenience," the report said.

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But even before the pandemic, more parents in an increasing number of states opted their children out of required immunizations because of vaccine hesitancy and anti-vaccine sentiment, according to data and experts. The pandemic magnified those concerns because of controversies and politicization around coronavirus vaccines and school vaccine mandates.

A 2022 survey by KFF, a health-care research nonprofit, found the debate over coronavirus vaccine mandates may have affected parents' attitudes. Among people who identify as Republicans or lean Republican, 44 percent said parents should be able to opt out of childhood vaccines for measles, mumps and rubella, even if remaining unvaccinated may create health risks for others. That's more than double the 20 percent who felt that way in 2019, the survey found.

Other factors are also probably playing a role. Early in the pandemic, many families had trouble scheduling well-child visits because doctors' offices were closed. Once children fall behind on their schedules, it's often harder for parents to find time to catch up, doctors have said. In some states, it may be more convenient for time-crunched parents to do the paperwork for an exemption than get a child vaccinated and submit proper documentation.

National coverage of childhood immunizations among kindergartners fell from 95 percent before the pandemic to 93 percent in the 2019-2020 and 2021-2022 school years, according to CDC data. Coverage remained about 93 percent during the last school year.

While a two percentage point drop may seem insignificant, even the smallest decline in vaccination coverage can compromise herd immunity and allow a virus to spread more quickly.

For measles, a drop below 95 percent vaccination coverage in a community means "you have enough people that an outbreak can start — you just need a spark," said Kelly Moore, chief executive of Immunize.org, a nonprofit advocacy group previously called the Immunization Action Coalition. Measles is so contagious that people who may not know they are being exposed can become infected and spread the virus to family members or other contacts before they show symptoms. Measles can cause serious complications, such as pneumonia, swelling of the brain called encephalitis, and death.

"This continuing erosion of immunization coverage rates in kindergarten is really alarming," Moore said. With the national coverage for the measles, mumps and rubella (MMR) vaccine falling to 93 percent, that translates to approximately 250,000 kindergartners who are at risk for measles infection, the report said.

The CDC recommends children get two doses of the MMR vaccine, with the first dose at 12 to 15 months and the second dose between 4 and 6 years old. One dose of the vaccine is about 93 percent effective in preventing measles. Two doses are about 97 percent effective.

School entry vaccination requirements have long been the safety net to make sure classrooms remain a safe and healthy learning environment for everyone, Moore said. When that safety net develops holes, viruses will get through. Susceptible children are the fuel for future outbreaks, she said.

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Vaccination exemptions increased in 41 states, and 10 states showed exemption rates exceeding 5 percent for kindergartners last school year. The states are Alaska, Arizona, Hawaii, Idaho, Michigan, Nevada, North Dakota, Oregon, Utah and Wisconsin.

In the past, states could close the gap and reach the 95 percent vaccination protection threshold against measles by making sure children who had fallen behind schedule — but did not have exemptions — got caught up. But in places where exemptions exceed 5 percent, that's no longer possible, Moore said.

The national numbers do not reflect the uneven vaccination landscape. In Mississippi, which has long had one of the highest vaccination rates for school-age children in the United States, more than 98 percent of kindergartners had received all doses of vaccines required for school entry. Less than 1 percent of kindergartners there received exemptions.

But in Idaho, where immunization of school-age children has been consistently low for many years, only 81.3 percent of kindergartners had received the required two doses of the MMR vaccine, according to data reported to the CDC. About 12 percent of kindergartners received exemptions from one or more vaccines, the highest rate in the United States.

With nearly 20 percent of kindergartners in Idaho not vaccinated against measles, "that is a wildfire waiting to happen," Moore said.

EXHIBIT 24

CALIFORNIA

More parents are delaying their kids' vaccines, and it's alarming pediatricians



Karla Benzl of Mission Viejo holds her 15-month-old son, Marcus, as medical assistant Shellee Rayl gives him his vaccinations at Southern Orange County Pediatric Associates in Ladera Ranch on Feb. 28. (Christina House / Los Angeles Times)

BY JENNY GOLD | STAFF WRITER

MARCH 11, 2024 3 AM PT

As measles cases pop up across the country this winter — including several in California — one group of children is stirring deep concerns among pediatricians: the babies and

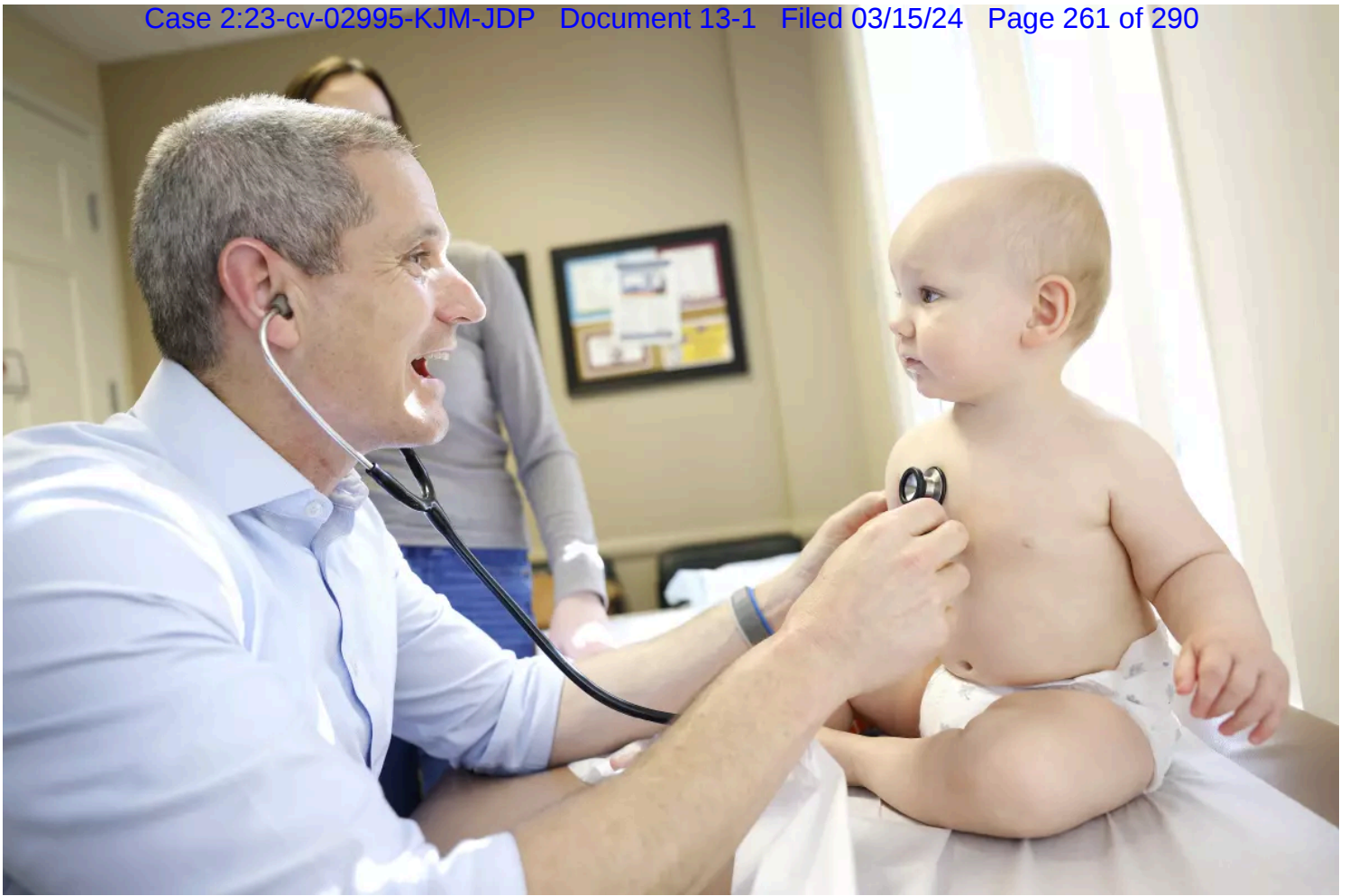
toddlers of vaccine-hesitant parents who are delaying their child's measles-mumps-rubella shots.

Pediatricians across the state say they have seen a sharp increase recently in the number of parents with concerns about routine childhood vaccinations who are demanding their own inoculation schedules for their babies, creating a worrisome pool of very young children who may be at risk of contracting measles, a potentially deadly yet preventable disease.

“Especially early on, when a parent is already feeling really vulnerable and doesn’t want to give something to their beautiful baby who was just born if they don’t need it, it makes them think, ‘Maybe I’ll just delay it and wait and see.’” said Dr. Whitney Casares, a pediatrician and author who [has written on vaccination](#) for the American Academy of Pediatrics. “What they don’t realize is if they don’t vaccinate according to the recommended schedule, that can really set their child up for a whole lot of risks.”

It is difficult to know how widespread such delays have become. California keeps careful track of the rate of kindergartners who have been vaccinated against measles, but does not have comprehensive data for children at younger ages.

Dr. Eric Ball has seen the shift firsthand. At his Orange County pediatric practice, Ball said, he has noticed an increase in parents asking about delays since the COVID-19 pandemic, as politicization of and misinformation about that vaccine has seeped into discussions about routine childhood vaccinations, including measles-mumps-rubella, known as MMR.



Dr. Eric Ball examines 9-month-old Noah at Southern Orange County Pediatric Associates in Ladera Ranch on Feb. 28. (Christina House / Los Angeles Times)

Rather than an outright refusal, however, these vaccine-hesitant parents express a softer kind of reluctance, asking if it's possible to use an "alternative schedule" of vaccines, rather than sticking to the Centers for Disease Control and Prevention's recommendations. Sometimes they seek to delay the shots by a few months, and sometimes by several years.

"I have patients who have three kids, and they vaccinated the first two kids on schedule. And then since COVID, with their third kid, they are like, 'I don't know if this is safe. I want to wait until the kids are older', or 'instead of doing two shots today, I want to do one shot,'" said Ball. "It just prolongs the time where you have a child who's unprotected and potentially can get sick from these diseases."



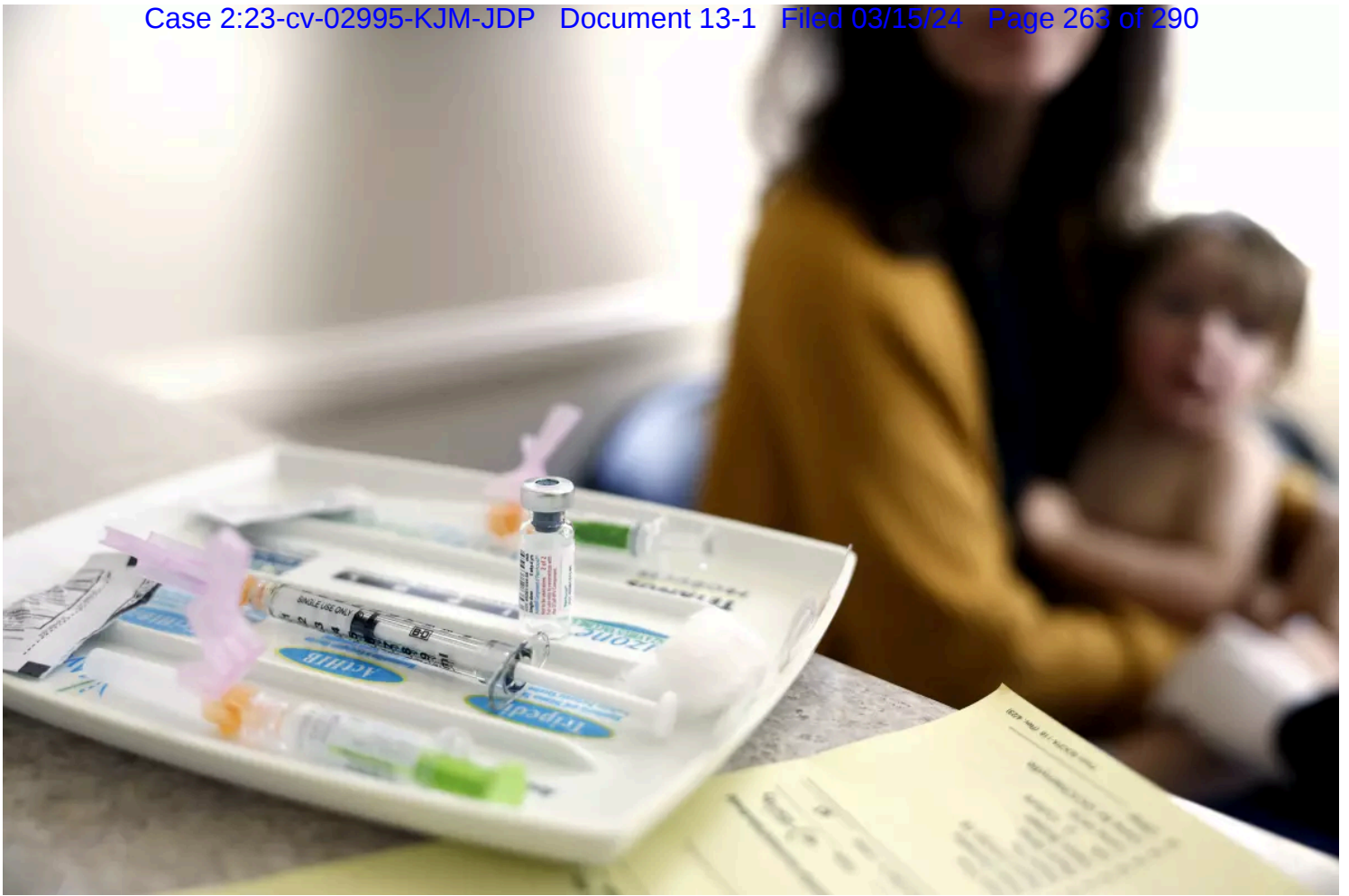
Hours on hold, limited appointments: Why California babies aren't going to the doctor

Feb. 26, 2024

He tries his best to explain to parents the importance and safety of vaccines, including MMR. He even brings out his own children's vaccine records to prove his point, and he is often successful. But not always.

At Children's Hospital Los Angeles, attending pediatrician Dr. Colleen Kraft said about half of parents are questioning the CDC's recommended vaccine schedule — a significant increase since the pandemic.

“Even my most reasonable parents ask questions. So it's definitely in the mainstream,” she said. She also worries about her patients who are behind on vaccines because they missed so many appointments during the pandemic and are only now returning to her office.



Karla Benzl holds her son, 15-month-old Marcus, before he gets vaccinated at Southern Orange County Pediatric Associates in Ladera Ranch on Feb. 28. (Christina House / Los Angeles Times)

In Marin County, parents' requests to delay vaccinations have become so frequent that Dr. Nelson Branco said last month his practice decided to tighten vaccine requirements as cases of both measles and pertussis have spread. Babies seen by doctors in the practice will need to have their first set of vaccines completed by 4 months of age. The primary series of vaccines against the most serious and common diseases, including measles, must be completed by 24 months.

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If parents don't agree, they must leave the practice.

"Kids are doing a lot of things that are high risk before they're 5 and are required to be vaccinated to attend kindergarten, said Branco. "They're getting on international flights, they're going to Disneyland where there are lots of kids," leaving young children vulnerable to measles when they could be protected.

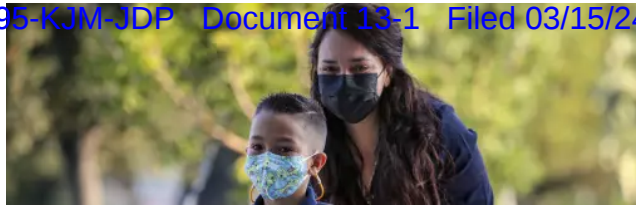
The CDC recommends that the first dose of MMR be given when a baby is 12 to 15 months old. Usually this happens at a child's 12-month well visit. A second dose is then given at 4 to 6 years of age.

At least 95% of people in a community must be vaccinated to achieve a level of "[herd immunity](#)" that protects everyone in a community, including those who cannot get the vaccine because they are too young or are immunocompromised, according to the World Health Organization.

Low vaccination rates have led to measles outbreaks in several states over the last decade, [most recently in Florida](#).

Nationally, the rate of kindergartners fully immunized against the measles dropped from 95% in the 2019-20 school year to 93% in 2022-23, [according to the CDC](#).

But there is overall good news in California. Since the state's 2015 ban on parents' personal beliefs as a reason to skip vaccinating children before school, the measles vaccination rate for kindergartners has grown from 92% in the 2013-2014 school year to 96.5% in 2022-2023.



Are you a SoCal mom?

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But those postponing vaccinations have created a potential vulnerability gap in a child's first four years.

[One in 5](#) unvaccinated people who get measles in the U.S. will be hospitalized. Since there is no good treatment for measles, doctors can often do little more than offer supportive care. One in 1,000 children with measles will develop brain swelling that can leave a child deaf or with an intellectual disability; 1 to 3 children in 1,000 will die, according to the CDC.

Measles is so contagious that 90% of people close to an infected person will catch it if they are not immune, [according to the CDC](#). The virus can remain contagious in a room or on a surface for up to two hours after the infected person has left.

In the Children's Hospital Orange County primary care network, which has more than 130 pediatricians, the share of 15-month-olds with an MMR vaccine has been dropping consistently over the past last few years, from 98% in 2019, down to 93.5% in 2023.

For years in the early 2000s, anti-vaccine sentiment was at an all-time high after the publication of a now-debunked and retracted study that falsely tied the MMR vaccine to autism. In December 2014, an unvaccinated 11-year-old was hospitalized with measles

following a visit to Disneyland. Over the next few months, measles spread to 125 people across seven states.

The outbreak helped [galvanize support](#) for vaccination nationwide. A year after the Disneyland outbreak, California passed its ban on personal exemption.

“The pendulum swung back the other way, and we had a few years where vaccination rates were really high,” said Ball. But the rumors and rhetoric surrounding the COVID vaccines have caused the pendulum to swing in the other direction. “We’re back to dealing with conspiracy theories, things that people heard on the internet, or something that their cousin’s neighbor’s roommate said. It’s really hard.”



Noah, who is 9 months old, gets his measurements taken by medical assistant Shellee Rayl at Southern Orange County Pediatric Associates in Ladera Ranch on Feb. 28. (Christina House / Los Angeles Times)

[A Pew Research poll](#) conducted in March 2023 found that 88% of Americans are confident that the benefits of an MMR vaccine outweigh the risks, a percentage that has remained fairly consistent since before the pandemic.

But support for all school-based vaccine mandates has fallen; 28% now say that parents should be able to decide not to vaccinate their children, even if it causes health risks for others, up from 16% in October 2019. Among Republicans, the share has more than doubled, from 20% in 2019 to 42% in 2023.

Support for the MMR vaccine was lower among parents with young children, the poll found. About 65% of parents with children under age 5 reported that the preventative health benefits of MMR were high — compared to 88% of all adults — and 39% said the risk of side effects was either medium or high; half said they worried about whether all childhood vaccines are necessary.



CALIFORNIA

California kids have some of the worst teeth in the nation. Here's why

Oct. 27, 2023

Tara Larson, a former ER nurse who lives in Santa Monica, said she became concerned about childhood vaccination when she was pregnant last year. She started watching anti-vaccine documentaries, reading vaccine safety inserts, and following several social media accounts “to make us an informed vaxxer. We’re not anti-vax,” she said.

Larson decided that she wanted to delay vaccinating her son until he was 3 months old, to limit him to just three vaccines in his first year that she felt were essential, and to spread them out so that he would only get one shot per month. “By the time he starts playing on the playground and goes to school, he’ll need to start his course of Hep B, but why overload his course of vaccines right now?” she said.

The first pediatrician she saw refused to follow her requested schedule. But, Larson said, “in my gut, I just felt like this is the right thing to be doing for our baby, and I left.” After weeks of searching, she found a holistic provider who charges a \$250 monthly fee and agreed with her approach.

She said she hasn't yet decided whether to give her son, who is now 8 months old, the MMR vaccine when he becomes eligible. “I think some doctors will say to wait until they're 3, but that was when there wasn't a resurgence of measles,” she said. “That's my next thing to dive into.”



Karla Benzl of Mission Viejo comforts her 15-month-old son, Marcus, after he received his vaccinations. (Christina House / Los Angeles Times)

But there's no scientific basis and no known benefits to delaying vaccines except in very rare medical circumstances, said Casares, whose pediatric practice is in Oregon.

Casares said the problem is that parents have an "exposure bias." They often consume an onslaught of information on social media about the risks, but very little about the benefits of vaccines or the enormous risks of the diseases themselves. She said in a country such as the United States, where vaccination rates are fairly high, most people don't see the ravages that the diseases can cause if rates fall.

This article is part of The Times' early childhood education initiative, focusing on the learning and development of California children from birth to age 5. For more information about the initiative and its philanthropic funders, go to latimes.com/earlyed.

MORE TO READ

Hundreds of people exposed to measles at California hospital, officials say

March 12, 2024



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Feb. 28, 2024



Health officials push to get schoolchildren vaccinated as more U.S. parents opt out

Dec. 21, 2023



Jenny Gold

Jenny Gold covers early childhood development and education for the Los Angeles Times. Before joining The Times in 2023, she spent nearly 14 years covering healthcare for radio and print as a senior correspondent at Kaiser Health News. Her

stories have appeared in the New York Times, the Washington Post, the Atlantic, NPR, Reveal and Marketplace, among others. A Berkeley native, she is a graduate of Brown University and was previously a Kroc fellow at NPR.

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EXHIBIT 25

Coverage with Selected Vaccines and Exemption from School Vaccine Requirements Among Children in Kindergarten — United States, 2022–23 School Year

Ranee Seither, MPH¹; Oyindamola Bidemi Yusuf, PhD^{1,2}; Devon Dramann, MPH^{1,3}; Kayla Calhoun, MS¹; Agnes Mugerwa-Kasujja, MD^{1,2}; Cynthia L. Knighton¹

Abstract

U.S. states and local jurisdictions set vaccination requirements for school attendance and conditions and procedures for exemptions from these requirements. States annually report data to CDC on the number of children in kindergarten who meet, are exempt from, or are in the process of meeting requirements. National- and state-level estimates for complete vaccination with measles, mumps, and rubella vaccine (MMR); diphtheria, tetanus, and acellular pertussis vaccine (DTaP); poliovirus vaccine (polio); and varicella vaccine (VAR); exemptions from vaccination; and legally allowed kindergarten attendance while meeting requirements were based on data reported by 49 states and the District of Columbia (DC) for the 2022–23 school year. This kindergarten class became age-eligible to complete most state-required vaccinations during the COVID-19 pandemic. National coverage remained near 93% for all vaccines; exemptions were low but increased to 3%, compared with those during the 2021–22 school year (2.6%). At the state level, coverage with MMR, DTaP, polio, and VAR decreased in 29, 31, 28, and 25 states, respectively, compared with coverage during the 2021–22 school year. Exemptions increased in 40 states and DC, with 10 states reporting an exemption from at least one vaccine for >5% of kindergartners. Schools and providers should work to ensure that students are vaccinated before school entry, such as during the enrollment process, which is often several months before school starts. State and local provisional enrollment periods that allow students to attend school while on a catch-up schedule also provide the opportunity to fully vaccinate students and to prevent non-medical exemptions resulting from lingering undervaccination due to COVID-19 pandemic-related barriers to vaccination, such as reduced access to vaccination appointments.

Introduction

State and local school vaccination requirements promote vaccination to protect students, schools, and communities against vaccine-preventable diseases (1). After 10 years of near 95% nationwide vaccination coverage, measles, mumps, and rubella

vaccine (MMR)*; diphtheria, tetanus, and acellular pertussis vaccine (DTaP)[†]; poliovirus vaccine (polio)[§]; and varicella vaccine (VAR)[¶] coverage declined approximately 1 percentage point during the 2020–21 school year and fell an additional percentage point during the 2021–22 school year, to approximately 93% (2). For both the 2020–21 and 2021–22 school years, states reported impacts of the COVID-19 pandemic and response for both vaccine administration and data collection (3,4). This analysis summarizes data collected and reported by state and local immunization programs** on vaccination coverage and exemptions to vaccination among kindergartners

* All states except Wyoming require 2 doses of a measles-containing vaccine. Seven states (Alaska, Georgia, New Jersey, New York, North Carolina, Oregon, and Virginia) require only 1 dose of rubella vaccine. Alaska, New Jersey, and Oregon require only 1 dose of mumps vaccine; mumps vaccine is not required in Iowa. Wyoming requires 1 dose of MMR for kindergarten entry, allowing students until the day before their seventh birthday to receive their second dose, but reported kindergarten coverage with 2 doses of MMR at the time of the assessment.

[†] Nebraska requires 3 doses of DTaP; Maryland and Wisconsin require 4 doses; Wyoming requires 4 doses of DTaP for kindergarten entry, allowing students until the day before their seventh birthday to receive their fifth dose; all other states require 5 doses, unless dose 4 was administered on or after the fourth birthday. The reported coverage estimates represent the percentage of kindergartners with the state-required number of DTaP doses, except for Kentucky, which requires 5 doses of DTaP by age 5 years, but reported 4-dose coverage for kindergartners, and Wyoming, which reported kindergarten coverage with 5 doses of DTaP at the time of the assessment.

[§] Two states (Maryland and Nebraska) require only 3 doses of polio; Wyoming requires 3 doses of polio for kindergarten entry, allowing students until the day before their seventh birthday to receive their fourth dose; all other states require 4 doses unless the last dose was given on or after the fourth birthday. The reported coverage estimates represent the percentage of kindergartners with the state-required number of polio doses, except for Kentucky, which requires ≥4 but reports ≥3 doses of polio, and Wyoming, which reported kindergarten coverage with 4 doses of polio at the time of the assessment.

[¶] Five states require 1 dose of VAR; 44 states and DC require 2 doses. Wyoming requires 1 dose of VAR for kindergarten entry, allowing students until the day before their seventh birthday to receive their second dose, but reported kindergarten coverage with 2 doses of VAR at the time of the assessment.

** Federally funded immunization programs are in 50 states and DC, five cities, and eight U.S. territories and freely associated states. Two cities (Houston and New York City) reported data to CDC, which were also included in data submitted by their state. State-level data were used to calculate national estimates and medians. Immunization programs in U.S. territories reported vaccination coverage and exemptions; however, these data were not included in national calculations.

in 49 states^{††} and the District of Columbia (DC), and provisional enrollment or grace period status for kindergartners in 28 states^{§§} for the 2022–23 school year.

Methods

Data Collection and Reporting

As mandated by state and local school entry requirements, either parents provide children's vaccination or exemption documentation to schools, or schools obtain records from state immunization information systems. Federally funded immunization programs work with departments of education, local health departments, school nurses, and other school personnel to assess the vaccination and exemption status of children enrolled in public and private kindergartens and to report unweighted counts, aggregated by school type, to CDC via a questionnaire in the Secure Access Management System, a federal, web-based platform that provides authorized personnel with secure access to public health applications operated by CDC. CDC uses these data to produce state- and national-level estimates of vaccination coverage among children in kindergarten. During the 2022–23 school year, 49 states and DC reported coverage with all state-required vaccines and exemption data for public school kindergartners; 48 states and DC reported coverage with all state-required vaccines and exemption data for private school kindergartners.^{¶¶} Data from cities were included with their state data. State-level, national, and median coverage with the state-required number of DTap, MMR, polio, and VAR doses are reported. Hepatitis B vaccination coverage is not included in this report but is available at SchoolVaxView (2). Twenty-eight states reported the number of kindergartners who were attending school under a grace period (attendance without proof of complete vaccination or exemption during a set number of days) or provisional enrollment (school attendance while completing a catch-up vaccination schedule). All counts were current as of the time of the assessment by the state immunization program.^{***}

^{††} Montana did not report school vaccination data. Utah changed the way data were reported between the 2021–22 and 2022–23 school years and is excluded from year-to-year comparisons.

^{§§} Arkansas, California, Colorado, Florida, Georgia, Hawaii, Idaho, Iowa, Michigan, Mississippi, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Washington, Wisconsin, and Wyoming reported data on the number of students within a grace period or provisionally enrolled at the time of assessment.

^{¶¶} Twelve states reported coverage and exemption data for at least some homeschooled kindergartners, either separately, or included with data from public or private schools.

^{***} Assessment date varied by state and area. Three states assessed schools on the first day of school; nine states assessed schools by December 31; 17 states and DC assessed schools by some other date, ranging from October 1, 2022, to May 15, 2023; and 20 states assessed schools on a rolling basis.

Data Analyses

National estimates, medians, and summary measures include only U.S. states and DC. Vaccination coverage and exemption estimates were adjusted on the basis of survey type and response rate.^{†††} National estimates measure coverage and exemptions among all kindergartners, whereas medians indicate the midpoint of state-level coverage, irrespective of population size. During the 2022–23 school year, immunization programs reported 3,832,381 children enrolled in kindergarten in 49 states and DC.^{§§§} Reported estimates are based on 3,559,366 (92.9%) children who were surveyed for vaccination coverage, 3,711,948 (96.9%) surveyed for exemptions, and 2,683,880 (70.0%) surveyed for grace period and provisional enrollment status. Potentially achievable coverage with MMR (the sum of the percentage of children who were up to date with 2 doses of MMR and those not up to date but nonexempt) was calculated for each state. Nonexempt students (those who do not have medical or nonmedical exemptions and who are not up to date) include those who were provisionally enrolled in kindergarten, in a grace period, or otherwise without documentation of complete vaccination. Vaccination assessments varied by state because of differences in required vaccines and required numbers of doses, vaccines assessed, methods of data collection, and data reported (Supplementary Table 1, <https://stacks.cdc.gov/view/cdc/134738>). Kindergartners were considered up to date with a given vaccine if they received all doses for that vaccine required for school entry, except in nine states^{¶¶¶} that reported kindergartners as up to date for any vaccine only if they had received all doses of all vaccines required for school entry. All but four states reported the number of kindergartners with an exemption for at least one vaccine.^{****} SAS software (version 9.4; SAS Institute)

^{†††} Immunization programs that used census or voluntary response provided CDC with data aggregated at the state or local (city or territory) level. Estimates based on these data were adjusted for nonresponse using the inverse of the response rate, stratified by school type (public, private, and homeschool, where available). Programs that used complex sample surveys provided CDC with data aggregated at the school or county level for weighted analyses. Weights were calculated to account for sample design and adjusted for nonresponse.

^{§§§} These totals are the sums of the kindergartners surveyed among programs reporting data for coverage, exemptions, grace periods, and provisional enrollment. Data from cities and territories were not included in these totals.

^{¶¶¶} Alabama, Florida, Georgia, Iowa, Mississippi, New Hampshire, New Jersey, and West Virginia considered kindergartners up to date only if they had received all doses of all vaccines required for school entry. In Kentucky, public schools reported numbers of children up to date with specific vaccines, and most private schools reported numbers of children who received all doses of all vaccines required for school entry.

^{****} Colorado, Illinois, Minnesota, and Missouri did not report the number of kindergartners with an exemption but instead reported the number of exemptions for each vaccine, which could have counted some children more than once. For these states, the percentage of kindergartners exempt from the vaccine with the highest number of exemptions by exemption type (the lower bound of the potential range of exemptions) was included in the national and median exemption rates.

was used for all analyses. This activity was reviewed by CDC, deemed not research, and was conducted consistent with applicable federal law and CDC policy.^{††††}

Results

Vaccination Coverage

Nationally, 2-dose MMR coverage was 93.1% (range = 81.3% [Idaho] to ≥98.4% [Mississippi]), with coverage of ≥95% reported by 13 states and <90% by 12 states and DC (Table). DTaP coverage was 92.7% (range = 81.0% [Idaho] to ≥98.4% [Mississippi]); ≥95% coverage was reported by 11 states and <90% by 14 states and DC. Polio coverage was 93.1% (range = 81.8% [Idaho] to ≥98.4% [Mississippi]), with ≥95% coverage reported by 13 states and <90% by 12 states and DC. VAR coverage was 92.9% (range = 80.7% [Idaho] to ≥98.4% [Mississippi]), with 11 states reporting ≥95% coverage and 12 states and DC reporting <90% coverage. Coverage during the 2022–23 school year decreased in most states for all vaccines compared with the 2021–22 school year. (Supplementary Figure, <https://stacks.cdc.gov/view/cdc/134740>).

Vaccination Exemptions, Grace Period, and Provisional Enrollment

Overall, 3.0% of kindergartners had an exemption (0.2% medical and 2.8% nonmedical^{§§§§}) from one or more required vaccines (not limited to MMR, DTaP, polio, and VAR) during 2022–23 (range = <0.1% [West Virginia] to 12.1% [Idaho]), compared with 2.6% reported during the 2021–22 school year (Supplementary Table 2, <https://stacks.cdc.gov/view/cdc/134739>). Exemptions from receipt of one or more vaccines increased in 40 states and DC and increased by at least 1 percentage point in seven states (Figure 1). Nonmedical exemptions account for >90% of reported exemptions, and approximately 100% of the increase in the national exemption rate. Provisional enrollment or grace period attendance in kindergarten was 2.5% among 28 states reporting these data (range = 0.5% [Georgia and Hawaii] to 9.2% [Arkansas]). Nationwide, 3.9% of kindergarten students were not fully vaccinated with MMR and nonexempt. Among the 36 states and DC with MMR coverage <95% during the 2022–23 school year, 10 states reported that >5% of kindergartners were exempt. All but these 10 states could potentially achieve ≥95%

MMR coverage if all nonexempt, not up-to-date children were vaccinated, compared with all but four states during the 2021–22 school year (Figure 2).

Discussion

During the 2022–23 school year, nationwide vaccination coverage among kindergarten children remained approximately 93% for MMR, DTaP, polio, and VAR, similar to that in the 2021–22 school year, lower than the 94% coverage in the 2020–21 school year, and lower still than the 95% coverage during the 2019–20 school year, when children were vaccinated before the COVID-19 public health emergency (2–4). National MMR coverage among kindergarten students remained below the Healthy People 2030 target of 95% (5) for the third consecutive year. Coverage with all four vaccines declined in a majority of states. To address pandemic-related declines in routine immunization coverage across the lifespan, CDC launched the Let's RISE^{¶¶¶¶} initiative earlier in 2023 and is providing a broad range of communication and enhanced technical assistance, including back-to-school campaigns, to jurisdictions to get routine vaccination coverage back to pre-pandemic levels as quickly and equitably as possible.

The overall percentage of children with an exemption increased from 2.6% during the 2021–22 school year to 3.0% during the 2022–23 school year, the highest exemption rate ever reported in the United States (2). The percentage of children with an exemption increased in 40 states and DC. To achieve the Healthy People 2030 target of 95% MMR coverage, exemptions cannot exceed 5%. State-level exemption rates in excess of 5% prevent 10 states from potentially achieving ≥95% MMR coverage even if all nonexempt kindergartners in 2022–23 were vaccinated, up from four states in 2021–22. National MMR coverage of 93.1% during the 2022–23 school year translates to approximately 250,000 kindergartners who are at risk for measles infection.

Limitations

The findings in this report are subject to at least four limitations. First, comparisons among states are limited because of variation in state requirements: which vaccines are required, the number of doses required, the date required, the type of documentation accepted, data collection methods, allowable exemptions, definitions of grace period, and provisional enrollment. Second, representativeness might be negatively affected by data collection methods that assess vaccination status at different times, or miss some schools or students (e.g., homeschooled students). Third, vaccination coverage, exemption rates, grace

^{¶¶¶¶} <https://www.cdc.gov/vaccines/partners/routine-immunizations-lets-rise.html>

^{††††} 45 C.F.R. part 46.102(l)(2), 21 C.F.R. part 56; 42 U.S.C. Sect. 241(d); 5 U.S.C. Sect. 552a; 44 U.S.C. Sect. 3501 et seq.

^{§§§§} Washington was unable to deduplicate data for students with both religious and philosophical exemptions; therefore, the nonmedical exemption type with the highest number of kindergartners (the lower bound of the potential range of nonmedical exemptions) was included in the national and median exemption rates for nonmedical exemptions.

TABLE. Estimated* coverage† with measles, mumps, and rubella; diphtheria, tetanus, and acellular pertussis; poliovirus; and varicella vaccines; grace period or provisional enrollment§; and any exemption¶,*** among kindergartners, by immunization program — United States,†† 2022–23 school year

Immunization program	Percentage							PP change in any exemption from 2021–22 school year	
	Kindergarten population ^{§§}	Surveyed ^{¶¶}	2 doses of MMR ^{***}	5 doses of DTaP ^{†††}	4 doses of polio ^{§§§}	2 doses of VAR ^{¶¶¶}	Grace period or provisional enrollment		Any exemption
National estimate****	3,832,381	92.9	93.1	92.7	93.1	92.9	2.5	3.0	0.4
Median****	—	—	92.1	91.9	92.2	92.7	2.0	3.3	0.6
U.S. state/Jurisdiction									
Alabama ^{†††,§§§§}	59,113	100.0	≥93.9	≥93.9	≥93.9	≥93.9	NP	2.0	0.3
Alaska ^{§§§§,¶¶¶¶}	9,650	88.8	83.6	83.8	84.4	81.8	NR	5.7	1.1
Arizona ^{*****}	80,814	97.7	89.9	89.6	90.3	94.1	NR	7.4	0.6
Arkansas	38,358	95.8	91.9	90.6	90.7	91.1	9.2	3.1	0.6
California ^{§§§§,*****,††††}	541,132	>99.9	96.5	95.6	96.3	96.1	1.5	0.2	-0.1
Colorado	65,576	97.2	87.0	87.2	87.0	85.9	≥0.6	≥4.3	1.1
Connecticut ^{††††,§§§§}	35,580	100.0	97.3	97.3	97.3	97.0	NP	0.8	-1.5
Delaware ^{§§§§,††††}	10,674	9.7	95.1	93.8	94.0	94.0	NR	2.1	0.9
District of Columbia ^{††††,§§§§}	8,064	100.0	87.5	85.0	87.8	86.8	NR	1.3	0.8
Florida ^{§§§§}	230,309	97.7	≥90.6	≥90.6	≥90.6	≥90.6	4.7	4.5	0.6
Georgia ^{††††,§§§§}	123,771	100.0	≥88.1	≥88.1	≥88.1	≥88.1	0.5	3.8	-0.9
Hawaii ^{§§§§}	13,195	8.1	86.4	87.0	87.0	84.4	0.5	6.4	3.0
Idaho	23,721	99.3	81.3	81.0	81.8	80.7	1.9	12.1	2.3
Illinois ^{††††,§§§§}	135,332	100.0	91.7	91.5	91.4	91.3	NR	≥2.1	0.4
Indiana ^{§§§§,§§§§§}	81,307	87.5	92.0	83.0	88.8	91.6	NR	2.8	0.4
Iowa ^{††††,§§§§}	39,178	100.0	≥89.9	≥89.9	≥89.9	≥89.9	5.3	3.0	0.6
Kansas ^{§§§§,††††,§§§§§,¶¶¶¶¶}	35,543	30.8	91.6	90.5	92.2	90.8	NP	2.9	0.6
Kentucky ^{§§§§,†††††,§§§§§}	54,742	96.9	≥90.1	≥90.6	≥91.2	≥89.8	NR	1.7	0.4
Louisiana ^{††††}	54,314	100.0	92.2	93.1	98.3	93.6	NP	2.3	1.2
Maine	12,403	93.9	96.8	96.6	96.8	96.6	NR	0.9	-0.9
Maryland ^{††††,§§§§,†††††}	59,684	100.0	96.7	96.9	97.2	96.6	NR	1.9	0.4
Massachusetts ^{††††,§§§§,†††††}	66,041	100.0	96.5	96.2	96.3	96.0	NP	1.4	0.4
Michigan ^{††††}	113,678	100.0	92.9	93.1	93.7	92.9	1.0	5.4	0.9
Minnesota	68,152	97.9	87.6	88.3	88.6	87.9	NR	≥4.5	0.8
Mississippi ^{††††,§§§§,*****}	36,048	100.0	≥98.4	≥98.4	≥98.4	≥98.4	1.0	0.2	0.1
Missouri ^{††††,§§§§}	69,126	100.0	91.3	91.1	91.5	90.8	NR	≥3.8	0.8
Montana	NR	NR	NR	NR	NR	NR	NR	NR	NA
Nebraska ^{††††,§§§§,†††††}	23,176	100.0	95.1	95.7	97.0	94.9	2.6	2.6	0.1
Nevada ^{§§§§}	34,333	89.1	92.8	92.2	92.8	92.6	1.7	5.6	0.8
New Hampshire ^{††††,§§§§,§§§§§}	11,332	100.0	≥89.4	≥89.4	≥89.4	≥89.4	4.5	3.4	0
New Jersey ^{††††,§§§§,§§§§§}	104,468	100.0	≥94.3	≥94.3	≥94.3	≥94.3	1.1	3.2	0.6
New Mexico ^{††††,§§§§}	21,068	100.0	94.9	94.7	95.0	94.4	2.0	1.5	0.1
New York (including NYC) ^{§§§§,*****}	205,906	96.6	97.9	97.2	97.5	97.5	2.3	0.1	0
NYC ^{§§§§,*****}	85,379	97.6	97.3	96.3	96.6	96.7	2.3	0.1	0
North Carolina ^{§§§§,†††††,§§§§§}	125,679	83.1	93.8	93.7	93.9	93.6	1.6	2.4	0.5
North Dakota	10,554	99.4	92.0	91.8	91.9	91.4	NR	5.1	-0.2
Ohio	134,893	93.7	89.3	89.4	89.7	88.8	5.9	3.8	0.8
Oklahoma ^{†††††}	52,548	89.5	89.6	90.0	91.0	94.6	NR	4.7	1.2
Oregon ^{††††,†††††}	40,963	100.0	91.9	90.9	91.5	94.1	NR	8.2	1.2
Pennsylvania	137,259	97.2	94.0	94.3	94.1	93.7	2.3	3.8	0.5
Rhode Island ^{§§§§,†††††,§§§§§}	10,532	96.5	96.9	96.9	96.9	96.3	0.9	1.5	0.3
South Carolina ^{§§§§,¶¶¶¶¶}	58,878	28.1	93.2	92.1	92.4	92.8	4.7	4.1	0.7
South Dakota ^{††††,§§§§}	12,081	100.0	92.5	92.2	92.3	92.0	NR	4.1	0.6
Tennessee ^{††††,§§§§,§§§§§}	79,692	100.0	95.4	94.8	95.0	95.1	2.0	3.2	0.8
Texas (including Houston) ^{†††††,§§§§§}	381,680	98.0	94.2	93.8	94.1	93.7	1.9	3.5	0.6
Houston ^{†††††,§§§§§}	37,664	98.8	91.3	90.7	91.0	90.6	2.6	2.3	0.8
Utah ^{††††,*****}	46,635	100.0	90.0	89.7	89.9	89.6	3.7	8.1	NA
Vermont ^{††††,§§§§}	5,816	100.0	93.1	92.8	92.8	92.6	6.3	3.6	0.3
Virginia ^{§§§§,¶¶¶¶¶}	93,271	1.6	95.8	97.8	94.2	95.6	NR	2.2	0.4
Washington ^{§§§§§}	86,284	97.9	91.4	90.1	90.2	90.1	1.6	4.0	0.3
West Virginia ^{§§§§,*****,§§§§§,†††††}	19,175	86.1	≥95.6	≥95.6	≥95.6	≥95.6	NR	<0.1	0
Wisconsin ^{†††††}	63,593	93.9	86.5	87.0	88.2	85.9	5.7	7.2	0.9
Wyoming ^{††††,§§§§}	7,060	100.0	90.8	89.4	90.1	90.5	2.4	4.8	0.9

See table footnotes on the next page.

TABLE. (Continued) Estimated* coverage[†] with measles, mumps, and rubella; diphtheria, tetanus, and acellular pertussis; poliovirus; and varicella vaccines; grace period or provisional enrollment[§]; and any exemption^{¶,} among kindergartners, by immunization program — United States, ^{††} 2022–23 school year**

Immunization program	Kindergarten population ^{§§}		Percentage				Grace period or provisional enrollment		PP change in any exemption from 2021–22 school year
	Surveyed ^{¶¶}		2 doses of MMR ^{***}	5 doses of DTaP ^{†††}	4 doses of polio ^{§§§}	2 doses of VAR ^{¶¶¶}	Any exemption		
Territories and freely associated states									
American Samoa ^{††††}	NR	NR	NR	NR	NR	NR	NR	NR	NA
Federated States of Micronesia ^{††††}	1,595	100.0	92.2	77.6	82.7	NReq	NR	NR	NA
Guam ^{††††,§§§§}	2,079	100.0	91.0	86.0	89.1	NReq	NR	NR	NA
Marshall Islands ^{††††, §§§§,*****}	860	100.0	98.1	89.2	90.3	NReq	NR	NR	NA
Northern Mariana Islands ^{††††}	791	100.0	93.4	98.0	97.5	91.8	NR	0	0
Palau ^{††††}	261	100.0	≥81.2	≥81.2	≥81.2	NReq	NR	0	NA
Puerto Rico ^{§§§§}	21,255	9.3	92.8	95.2	96.7	92.9	NR	1.1	-0.7
U.S. Virgin Islands	NR	NR	NR	NR	NR	NR	NR	NR	NA

Abbreviations: DTaP = diphtheria, tetanus, and acellular pertussis vaccine; DTP = diphtheria and tetanus toxoids and pertussis vaccine; MMR = measles, mumps, and rubella vaccine; polio = poliovirus vaccine; NA = not available; NP = no grace period or provisional policy; NR = not reported to CDC; NReq = not required; NYC = New York City; PP = percentage point; VAR = varicella vaccine.

* Estimates adjusted for nonresponse and weighted for sampling where appropriate.

[†] Estimates based on a completed vaccination series (i.e., not vaccine specific) use the “≥” symbol. Coverage might include history of disease or laboratory evidence of immunity. In Kentucky, public schools reported numbers of children up to date with specific vaccines, and most private schools reported numbers of children who received all doses of all vaccines required for school entry.

[§] A grace period is a set number of days during which a student can be enrolled and attend school without proof of complete vaccination or exemption. Provisional enrollment allows a student without complete vaccination or exemption to attend school while completing a catch-up vaccination schedule. In states with one or both of these policies, the estimates represent the number of kindergartners who were within a grace period, were provisionally enrolled, or were in a combination of these categories.

[¶] Some programs did not report the number of children with exemptions, but instead reported the number of exemptions for each vaccine, which could count some children more than once. Lower bounds of the percentage of children with any exemptions were estimated using the individual vaccines with the highest number of exemptions. Estimates based on vaccine-specific exemptions use the “≥” symbol.

^{**} Exemptions, grace period or provisional enrollment, and vaccine coverage status might not be mutually exclusive. Some children enrolled under a grace period or provisional enrollment might be exempt from one or more vaccinations, and children with exemptions might be fully vaccinated with one or more required vaccines.

^{††} Includes five territories and three freely associated states.

^{§§} The kindergarten population is an approximation provided by each program.

^{¶¶} The number surveyed represents the number surveyed for coverage. Exemption estimates are based on 30,224 kindergartners for Kansas, 58,878 for South Carolina, and 92,424 for Virginia.

^{***} Most states require 2 doses of MMR; Alaska, New Jersey, and Oregon require 2 doses of measles, 1 dose of mumps, and 1 dose of rubella vaccines. Georgia, New York, New York City, North Carolina, and Virginia require 2 doses of measles and mumps vaccines and 1 dose of rubella vaccine. Iowa requires 2 doses of measles vaccine and 2 doses of rubella vaccine. Wyoming requires 1 dose of MMR for kindergarten entry, allowing students until the day before their seventh birthday to receive their second dose, but reported kindergarten coverage with 2 doses of MMR at the time of the assessment.

^{†††} Pertussis vaccination coverage might include some DTP doses if administered in another country or by a vaccination provider who continued to use DTP after 2000. Most states require 5 doses of DTaP for school entry, or 4 doses if the fourth dose was received on or after the fourth birthday; Maryland and Wisconsin require 4 doses; Nebraska requires 3 doses. The reported coverage estimates represent the percentage of kindergartners with the state-required number of DTaP doses, except for Kentucky, which requires ≥5 but reports ≥4 doses of DTaP. Wyoming requires 4 doses of DTaP for kindergarten entry, allowing students until the day before their seventh birthday to receive their fifth dose, but reported kindergarten coverage with 5 doses of DTaP at the time of the assessment.

^{§§§} Most states require 4 doses of polio vaccine for school entry, or 3 doses if the fourth dose was received on or after the fourth birthday; Maryland and Nebraska require 3 doses. The reported coverage estimates represent the percentage of kindergartners with the state-required number of polio doses, except for Kentucky, which requires ≥4 but reports ≥3 doses of polio. Wyoming requires 3 doses of polio for kindergarten entry, allowing students until the day before their seventh birthday to receive their fourth dose, but reported kindergarten coverage with 4 doses of polio at the time of the assessment.

^{¶¶¶} Most states require 2 doses of VAR for school entry; Alabama, Arizona, New Jersey, Oklahoma, and Oregon require 1 dose. Reporting of VAR status for kindergartners with a history of varicella disease varied within and among states; some kindergartners were reported as vaccinated against varicella and others as medically exempt. Wyoming requires 1 dose of VAR for kindergarten entry, allowing students until the day before their seventh birthday to receive their second dose, but reported kindergarten coverage with 2 doses of VAR at the time of the assessment.

^{****} National coverage and exemption estimates and medians were calculated using data from 49 states and the District of Columbia (i.e., did not include American Samoa, Federated States of Micronesia, Guam, Houston, Marshall Islands, Montana, Northern Mariana Islands, NYC, Palau, Puerto Rico, and the U.S. Virgin Islands). National grace period or provisional enrollment estimates and medians were calculated using data from the 28 states that have either a grace period or provisional enrollment policy and reported relevant data to CDC. Data reported from 3,559,366 kindergartners were assessed for coverage, 3,711,948 for exemptions, and 2,683,880 for grace period or provisional enrollment. Estimates represent rates for populations of coverage and exemptions (3,832,381), and grace period or provisional enrollment (2,763,250).

^{††††} The proportion surveyed is reported as 100% but might be <100% if based on incomplete information about the actual current enrollment.

^{§§§§} Philosophical exemptions were not allowed.

^{¶¶¶¶} Reported public school data only.

^{*****} Religious exemptions were not allowed.

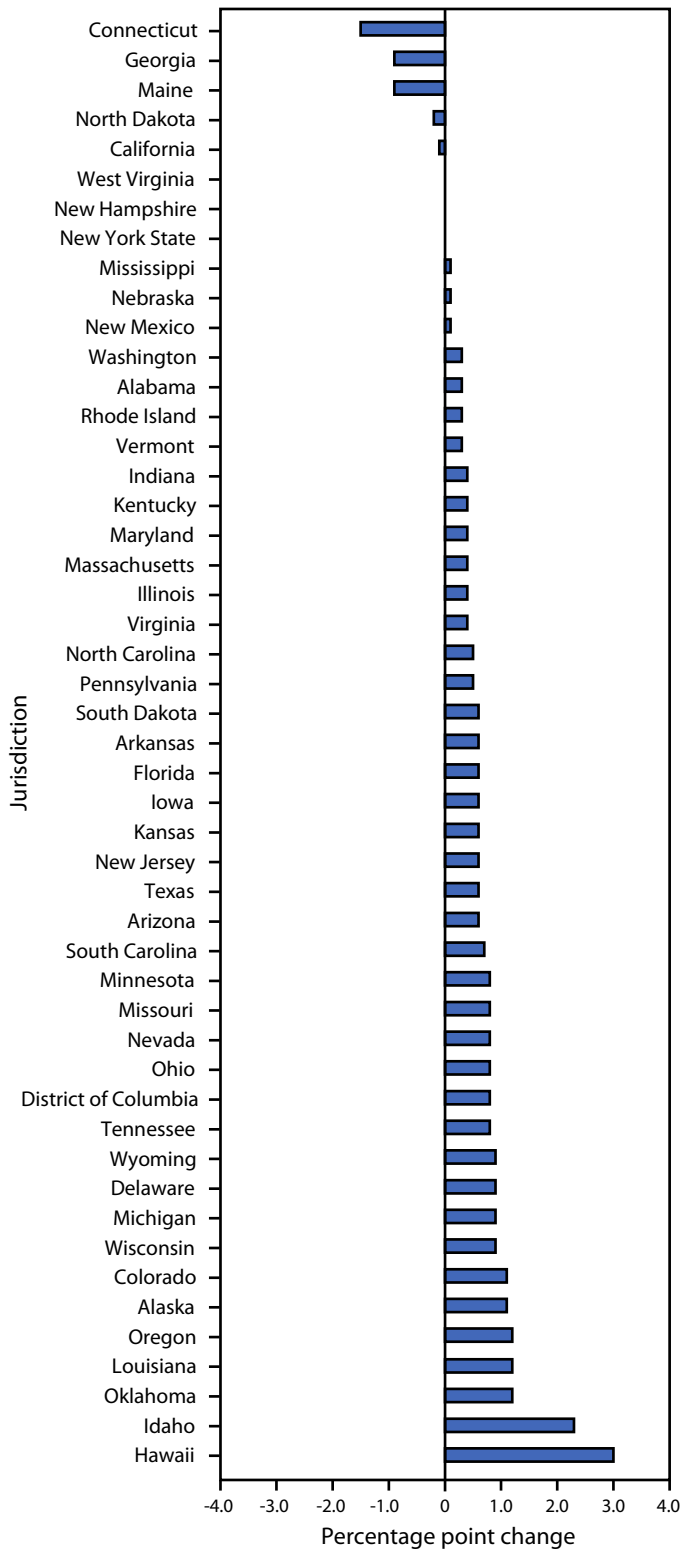
^{†††††} Counted some or all vaccine doses received regardless of Advisory Committee on Immunization Practices–recommended age and time interval; vaccination coverage rates reported might be higher than those for valid doses.

^{§§§§§} Did not include certain types of schools, such as kindergartens in child care facilities, online schools, correctional facilities, or those located on military bases or tribal lands.

^{¶¶¶¶¶} Vaccination coverage data were collected from a sample of kindergartners; exemption data were collected from a census of kindergartners.

^{*****} Utah changed the way data were reported between the 2021–22 and 2022–23 school years and is excluded from this analysis.

FIGURE 1. Change in percentage* of kindergartners exempt from one or more vaccinations, by jurisdiction — United States, 2021–22 and 2022–23 school years



* Montana did not report kindergarten vaccination coverage for the 2021–22 and 2022–23 school years and is excluded from this analysis. Utah changed the way data were reported between the 2021–22 and 2022–23 school years and is excluded from this analysis.

Summary

What is already known about this topic?

From the 2019–20 to the 2021–22 school year, national coverage with state-required vaccines among kindergartners declined from 95% to approximately 93%, ranging from 92.7% for diphtheria, tetanus, and acellular pertussis vaccine (DTaP) to 93.1% for polio.

What is added by this report?

During the 2022–23 school year, coverage remained near 93% for all reported vaccines, ranging from 92.7% for DTaP to 93.1% for measles, mumps, and rubella and polio. The exemption rate increased 0.4 percentage points to 3.0%. Exemptions increased in 41 states, exceeding 5% in 10 states.

What are the implications for public health practice?

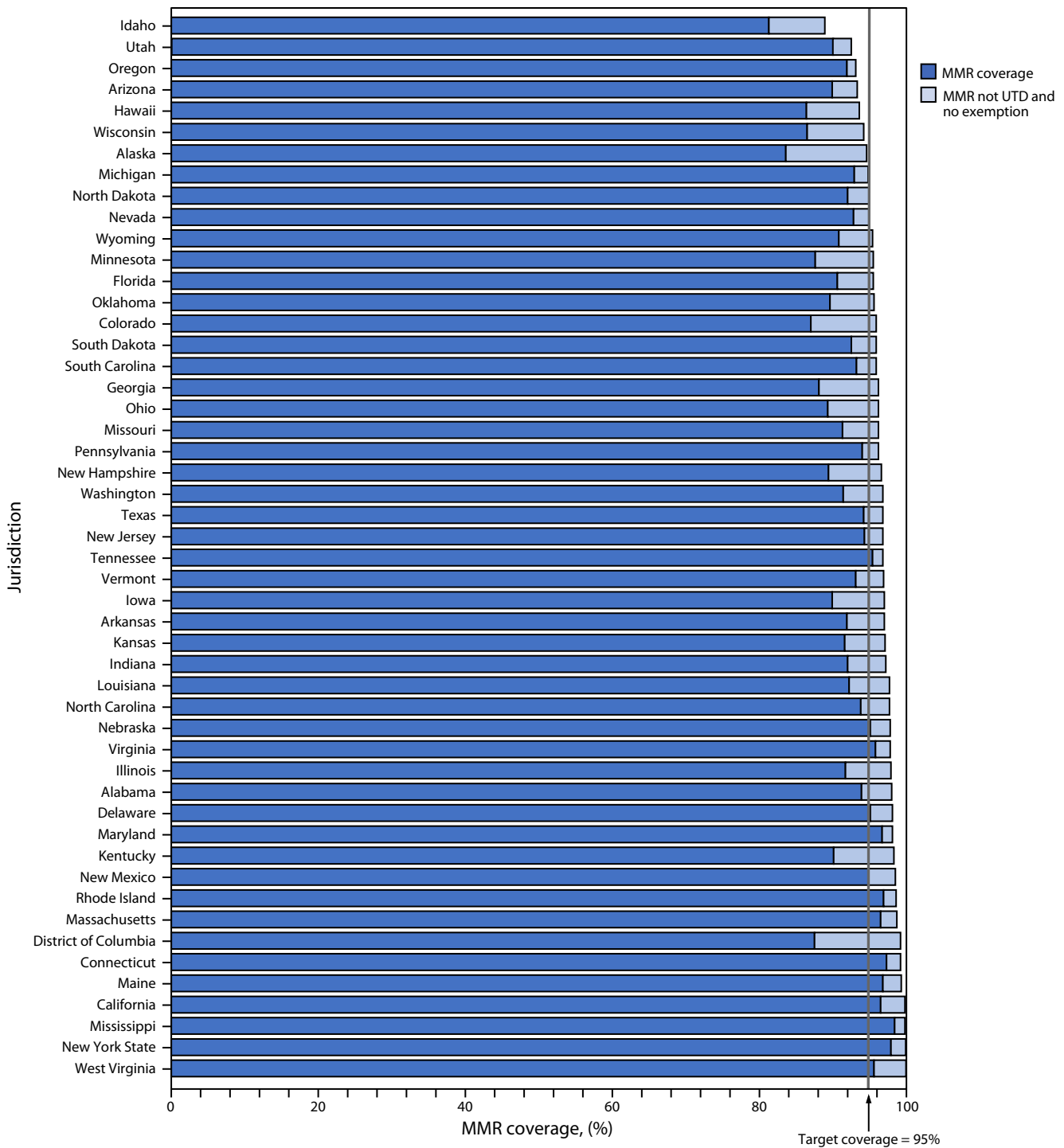
Exemptions >5% limit the level of achievable vaccination coverage, which increases the risk for outbreaks of vaccine-preventable diseases. Vaccination before school entry or during provisional enrollment periods could reduce exemptions resulting from barriers to vaccination during the COVID-19 pandemic.

period, or provisional enrollment might be under- or overestimated because of inaccurate or absent documentation. Finally, national coverage estimates for the 2022–23 school year include only 49 of 50 states and DC, and nine states use lower bound estimates; exemption estimates include 49 states and DC, and five states use lower bound estimates.

Implications for Public Health Practice

Nationwide vaccination coverage among kindergarten students remains below pre-pandemic levels, and exemptions have increased. Because clusters of undervaccinated children can lead to outbreaks (6–8), it is important for immunization programs, schools, and providers to make sure children are fully vaccinated before school entry, or before provisional enrollment periods expire. In previous years, nearly all states had the potential to achieve ≥95% coverage if all nonexempt students were vaccinated, but increases in state-level exemptions have reduced that number by 17%, from 48 in 2020–21 to 40 in 2022–23. Exemptions in excess of 5% limit the level of vaccination coverage that can be achieved, which increases the risk of outbreaks of vaccine-preventable diseases. It is not clear whether this reflects a true increase in opposition to vaccination, or if parents are opting for nonmedical exemptions because of barriers to vaccination or out of convenience. Whether because of an increase in hesitancy or barriers to vaccination, the COVID-19 pandemic affected childhood routine vaccination (9). Enforcement of school vaccination requirements, school-based vaccination clinics, reminder and recall systems, and follow-up with undervaccinated students

FIGURE 2. Potentially achievable coverage^{*,†,§} with measles, mumps, and rubella vaccine among kindergartners, by jurisdiction — United States, 2022–23 school year



Abbreviations: MMR = measles, mumps, and rubella vaccine; UTD = up to date.

* Jurisdictions are ranked from lowest to highest potentially achievable coverage. Potentially achievable coverage is estimated as the sum of the percentage of students with UTD MMR and the percentage of students without UTD MMR and without a documented vaccine exemption. Montana did not report kindergarten vaccination coverage for the 2021–22 and 2022–23 school years and is excluded from this analysis.

† The exemptions used to calculate the potential increase in MMR coverage for Alaska, Arizona, Arkansas, Colorado, Delaware, District of Columbia, Idaho, Illinois, Maine, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, Nevada, New York, North Carolina, Oklahoma, Oregon, Rhode Island, Texas, Utah, Vermont, Washington, Wisconsin, and Wyoming are the number of children with exemptions specifically for MMR. For all other jurisdictions, numbers are based on an exemption for any vaccine.

§ Potentially achievable coverage in Alaska, Arizona, Hawaii, Idaho, Michigan, Nevada, North Dakota, Oregon, Utah, and Wisconsin is <95%.

have already been shown to be effective in increasing vaccination coverage (10). A better understanding of the reasons behind nonmedical exemptions increasing in 40 states and DC, and their impact, could help develop policies that would complement those interventions, to bring higher vaccination coverage and protection against vaccine-preventable diseases within reach of more states.

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EXHIBIT 26



Morbidity and Mortality Weekly Report (MMWR)

Measles Outbreak — California, December 2014–February 2015

Please note: An erratum has been published for this article. To view the erratum, please click [here](#).

Weekly

February 20, 2015 / 64(06);153-154

On February 13, 2015, this report was posted as an MMWR Early Release on the MMWR website (<http://www.cdc.gov/mmwr>).

Jennifer Zipprich, PhD1, Kathleen Winter, MPH1, Jill Hacker, PhD1, Dongxiang Xia, MD, PhD1, James Watt, MD1, Kathleen Harriman, PhD1 (Author affiliations at end of text)

On January 5, 2015, the California Department of Public Health (CDPH) was notified about a suspected measles case. The patient was a hospitalized, unvaccinated child, aged 11 years with rash onset on December 28. The only notable travel history during the exposure period was a visit to one of two adjacent Disney theme parks located in Orange County, California. On the same day, CDPH received reports of four additional suspected measles cases in California residents and two in Utah residents, all of whom reported visiting one or both Disney theme parks during December 17–20. By January 7, seven California measles cases had been confirmed, and CDPH issued a press release and an Epidemic Information Exchange (Epi-X) notification to other states regarding this outbreak. Measles transmission is ongoing ([Figure](#)).

As of February 11, a total of 125 measles cases with rash occurring during December 28, 2014–February 8, 2015, had been confirmed in U.S. residents connected with this outbreak. Of these, 110 patients were California residents. Thirty-nine (35%) of the California patients visited one or both of the two Disney theme parks during December 17–20, where they are thought to have been exposed to measles, 37 have an unknown exposure source (34%), and 34 (31%) are secondary cases. Among the 34 secondary cases, 26 were household or close contacts, and eight were exposed in a community setting. Five (5%) of the California patients reported being in one or both of the two Disney theme parks during their exposure period outside of December 17–20, but their source of infection is unknown. In addition, 15 cases linked to the two Disney theme parks have been reported in seven other states: Arizona (seven), Colorado (one), Nebraska (one), Oregon (one), Utah (three), and Washington (two), as well as linked cases reported in two neighboring countries, Mexico (one) and Canada (10).

Among the 110 California patients, 49 (45%) were unvaccinated; five (5%) had 1 dose of measles-containing vaccine, seven (6%) had 2 doses, one (1%) had 3 doses, 47 (43%) had unknown or undocumented vaccination status, and one (1%) had immunoglobulin G seropositivity documented, which indicates prior vaccination or measles infection at an undetermined time. Twelve of the unvaccinated patients were infants too young to be vaccinated. Among the 37 remaining vaccine-eligible patients, 28 (67%) were intentionally unvaccinated because of personal beliefs, and one was on an alternative plan for vaccination. Among the 28 intentionally unvaccinated patients, 18 were children (aged <18 years), and 10 were adults. Patients range in age from 6 weeks to 70 years; the median age is 22 years. Among the 84 patients with known hospitalization status, 17 (20%) were hospitalized.

The source of the initial Disney theme park exposure has not been identified. Specimens from 30 California patients were genotyped; all were measles genotype B3, which has caused a large outbreak recently in the Philippines, but has also been detected in at least 14 countries and at least six U.S. states in the last 6 months (1).

Annual attendance at Disney theme parks in California is estimated at 24 million (2), including many international visitors from countries where measles is endemic. The December holiday season coincides with the exposure period of interest. Since 2011, six confirmed measles cases have been reported to CDPH in persons whose notable exposure was to large theme parks that attract international tourists. International travel to countries where measles is endemic is a well-known risk factor for measles, and measles importations continue to occur in the United States; the number of measles cases reported to CDC is updated weekly at <http://www.cdc.gov/measles/cases-outbreaks.html>. However, U.S. residents also can be exposed to measles in the United States at venues with large numbers of international visitors, such as other tourist attractions and airports. This outbreak illustrates the continued importance of ensuring high measles vaccination coverage in the United States.

Acknowledgments

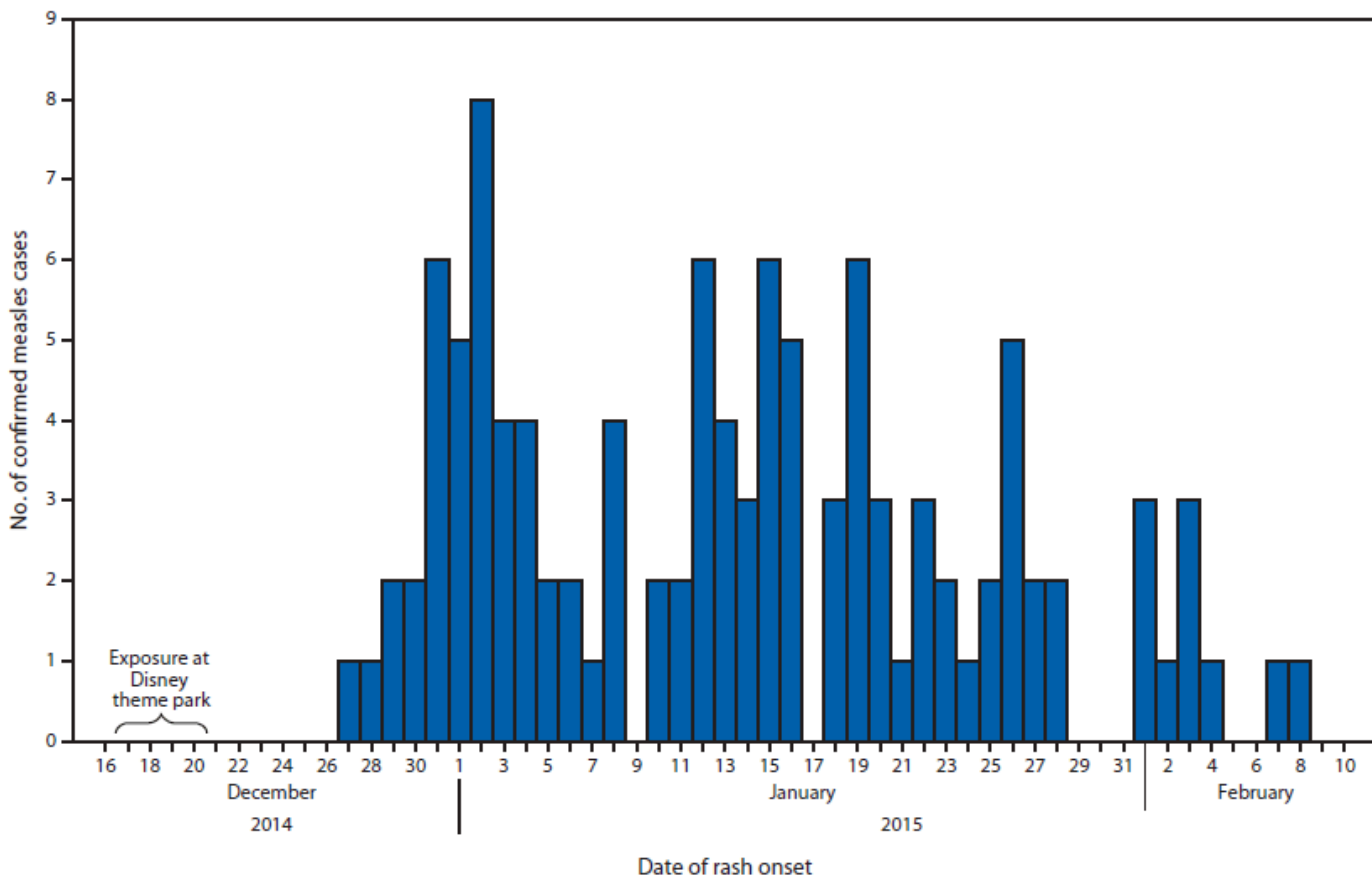
California local health jurisdictions. Regina Chase, Giorgio Cosentino, Alex Espinosa, Natasha Espinosa, Ashraf Fadol, Carlos Gonzalez, Kristina Hsieh, Ruth Lopez, Chris Preas, Maria Salas, Diana Singh, Abiy Tadesse, Patricia Stoll, Kim Hansard,

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FIGURE. Number of confirmed measles cases (N = 110),* by date of rash onset — California, December 2014–February 2015



* Reported to the California Department of Public Health as of February 11, 2015.

Alternate Text: The figure above is a histogram showing the number of confirmed measles cases (N = 110), by date of rash onset in California during December 2014–February 2015.

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EXHIBIT 27

[CDC Newsroom Home](#)

Nearly 40 million children are dangerously susceptible to growing measles threat

Press Release

Embargoed Until: Wednesday, November 23, 2022, 1:00 p.m. ET/Atlanta – 7 p.m. CET/Geneva

Contact:

At WHO: [WHO Media Inquiries](#)

At CDC: [CDC Media Relations](#), (404) 639-3286

Measles vaccination coverage has steadily declined since the beginning of the COVID-19 pandemic. In 2021, a record high of nearly 40 million children missed a measles vaccine dose: 25 million children missed their first dose and an additional 14.7 million children missed their second dose, a joint publication by the World Health Organization (WHO) and the United States Centers for Disease Control and Prevention (CDC) reports. This decline is a significant setback in global progress towards achieving and maintaining measles elimination and leaves millions of children susceptible to infection.

In 2021, there were an estimated 9 million cases and 128,000 deaths from measles worldwide. Twenty-two countries experienced large and disruptive outbreaks. Declines in vaccine coverage, weakened measles surveillance, and continued interruptions and delays in immunization activities due to COVID-19, as well as persistent large outbreaks in 2022, mean that measles is an imminent threat in every region of the world.

“The paradox of the pandemic is that while vaccines against COVID-19 were developed in record time and deployed in the largest vaccination campaign in history, routine immunization programs were badly disrupted, and millions of kids missed out on life-saving vaccinations against deadly diseases like measles,” said WHO Director-General Dr Tedros Adhanom Ghebreyesus. “Getting immunization programs back on track is absolutely critical. Behind every statistic in this report is a child at risk of a preventable disease.”

The situation is grave: measles is one of the most contagious human viruses but is almost entirely preventable through vaccination. Coverage of 95% or greater of 2 doses of measles-containing vaccine is needed to create herd immunity in order to protect communities and achieve and maintain measles elimination. The world is well under that, with only 81% of children receiving their first measles-containing vaccine dose, and only 71% of children receiving their second measles-containing vaccine dose. These are the lowest global coverage rates of the first dose of measles vaccination since 2008, although coverage varies by country.

Urgent global action needed

Measles anywhere is a threat everywhere, as the virus can quickly spread to multiple communities and across international borders. No WHO region has achieved and sustained measles elimination. Since 2016, 10 countries that had previously eliminated measles experienced outbreaks and reestablished transmission.

“The record number of children under-immunized and susceptible to measles shows the profound damage immunization systems have sustained during the COVID-19 pandemic,” said CDC Director Dr. Rochelle P. Walensky. “Measles outbreaks illustrate weaknesses in immunization programs, but public health officials can use outbreak response to identify

communities at risk, understand causes of under-vaccination, and help deliver locally tailored solutions to ensure vaccinations are available to all.”

In 2021, nearly 61 million measles vaccine doses were postponed or missed due to COVID-19-related delays in immunization campaigns in 18 countries. Delays increase the risk of measles outbreaks, so the time for public health officials to accelerate vaccination efforts and strengthen surveillance is now. CDC and WHO urge coordinated and collaborative action from all partners at global, regional, national, and local levels to prioritize efforts to find and immunize all unprotected children, including those who were missed during the last two years.

Measles outbreaks illustrate weaknesses in immunization programs and other essential health services. To mitigate risk of outbreaks, countries and global stakeholders must invest in robust surveillance systems. Under the Immunization Agenda 2030 global immunization strategy, global immunization partners remain committed to supporting investments in strengthening surveillance as a means to detect outbreaks quickly, respond with urgency, and immunize all children who are not yet protected from vaccine-preventable diseases.

More Information on Measles

For more information on CDC’s global measles vaccination efforts, visit [cdc.gov/globalhealth/measles](https://www.cdc.gov/globalhealth/measles).

For more information on WHO’s measles response and support, visit [who.int/factsheet/measles](https://www.who.int/factsheet/measles) .

Quotes from our partners

“Since 2001 the American Red Cross has mobilized volunteers in 47 countries around the world to reach vulnerable communities with lifesaving vaccines. The global COVID-19 pandemic has reinforced just how critical vaccines are to preventing the spread of deadly diseases. We and our partners in the global Red Cross Movement are committed to averting needless deaths. It is imperative we work together to close existing immunity gaps and ensure that no one suffers from vaccine preventable diseases.” – Gail McGovern, President and CEO of the American Red Cross.

“The significant decline in measles coverage is alarming. Gavi is supporting lower-income countries to get routine immunization programs back on track and continues to fund global outbreak response through the MR&I’s Outbreak Response Fund. As an Alliance we are also pushing further, with targeted efforts to reach zero dose children and communities that consistently miss out on immunization and other essential services. This is fundamental to reducing outbreaks and keeping health systems strong and resilient in the face of other threats.” Dr. Seth Berkley, Gavi CEO.

“Plummeting measles vaccination rates should set off every alarm. Tens of millions of children are at risk of this deadly, yet entirely preventable disease until we get global vaccination efforts back on track. There is no time to waste. We must work urgently to ensure life-saving vaccines reach every last child.” Elizabeth Cousens, President and CEO, United Nations Foundation

“For three years, we have been sounding the alarm about the declining rates of vaccination and the increasing risk to children’s health globally. Widening gaps in immunization coverage are letting measles – the most contagious yet vaccine-preventable killer disease – spread and cause illness and death. We have a short window of opportunity to urgently make up for lost ground in measles vaccination and protect every child. The time for decisive action is now.” Ephrem Tekle Lemango, UNICEF Chief of Immunization.

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Last Reviewed: November 23, 2022

EXHIBIT 28

CALIFORNIA

Hundreds of people exposed to measles at California hospital, officials say



As many as 300 people were exposed to a child who was confirmed to have measles at UC Davis Medical Center's emergency department in Sacramento. (Justin Sullivan / Getty Images)

BY RONG-GONG LIN II | STAFF WRITER

MARCH 12, 2024 UPDATED 3:35 PM PT

Hundreds of people were exposed to measles after a child with the virus was seen at a Northern California hospital, officials said.

As many as 300 people were exposed to the child, who was evaluated at UC Davis Medical Center's emergency department and confirmed to have measles, according to health officials in Sacramento and [El Dorado](#) counties.

The child was seen between noon and 5 p.m. March 5 at the Sacramento hospital. People who are unvaccinated or don't know their measles vaccination status "are at risk of developing measles from seven to 21 days after being exposed," the Sacramento County Public Health Department said in a [statement](#).

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Rong-Gong Lin II

Rong-Gong Lin II is a Metro reporter based in San Francisco who specializes in covering statewide earthquake safety issues and the COVID-19 pandemic. The Bay Area native is a graduate of UC Berkeley and started at the Los Angeles Times in 2004.