### 2020-2021 and 2021-2022 Seventh Grade Immunization Assessment

### Executive summary

Immunization requirements for school entry help protect children and communities from vaccinepreventable 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 7<sup>th</sup> grade in the 2020-2021 and 2021-2022 school years and at 8<sup>th</sup> 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 7<sup>th</sup> grade students reported to have received Tdap immunization was 97.3% in 2019-2020 and 95.9% in 2021-2022. An interim 7<sup>th</sup> 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 8<sup>th</sup> grade in 2021-2022 was 97.1%. Reported rate of Varicella immunizations among 7<sup>th</sup> graders was 97.1% in 2019-2020 and 97.2% in 2021-2022. The proportion of 7<sup>th</sup> 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 7<sup>th</sup> 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 7<sup>th</sup> graders. In 2021-2022, an additional reporting requirement was added for 8<sup>th</sup> 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, <u>California Department of Education data</u> show that 7<sup>th</sup> 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:

- <u>Required doses</u>: Since 2019, students entering 7<sup>th</sup> grade are required to receive two doses of Varicella (chickenpox) vaccine due to changes in the <u>California Code of Regulations</u>.
- <u>Medical exemptions to required immunization</u>: Starting January 1, 2021, Senate Bills (SB) 276 and <u>SB 714</u> 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 <u>SB 277</u>.

### Methods

California schools registered with the California Department of Education reported to CDPH data on enrolled 7<sup>th</sup> grade students during the winter of the 2020-2021 and 2021-2022 school years. In 2021-2022, schools reporting 7<sup>th</sup> grade enrollment were also required to report the immunization status of 8<sup>th</sup> 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:
  - o 1 or more doses of Tetanus, diphtheria and pertussis booster (Tdap) vaccine
  - 2 or more doses of Varicella vaccine ['2+ Var'].
- <u>Conditional entrants</u> 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 <u>permanent medical exemption</u> (PME) to either Tdap or Varicella vaccine. For Varicella vaccine, PMEs were further distinguished between
  - Physician (MD/DO) verification of varicella disease
  - Medical reasons other than varicella disease
- <u>Other students lacking required immunizations</u>: 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 <u>overdue</u> for required immunizations and subject to exclusion from school until the overdue requirement has been met.

Under SB 277, <u>personal belief exemptions</u> (PBEs) have no longer been an option for 7<sup>th</sup> 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 7<sup>th</sup> grade that reported decreased by 2% in 2021-2022. The number of 7<sup>th</sup> 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 7<sup>th</sup> 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 7<sup>th</sup> grade education and 92% of all reported 7<sup>th</sup> grade students in 2021-2022. Among nonreporting schools in 2021-2022, 78% (153 out of 195) were private schools.

<u>Immunized with Tdap</u>: Among 463,512 7<sup>th</sup> 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 7<sup>th</sup> grade students in 2020-2021 was 88.6% while the rate for this cohort in 8<sup>th</sup> grade in 2021-2022 increased to 97.1% (Table 2).

Immunized with Varicella vaccine: In 2021-2022, 97.2% of 7<sup>th</sup> 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 7<sup>th</sup> grade students in 2020-2021 was 96.3% while the rate for this cohort in 8<sup>th</sup> grade in 2021-2022 was 97.7% (Table 2).

<u>Permanent Medical Exemptions</u>: Both public and private schools reported fewer PMEs in 2021-2022 than previous years (Table 1, Figures 3 and 4). The proportion of 7<sup>th</sup> grade students reported with PMEs for Tdap vaccine has decreased from a peak of 0.5% in 2018-2019 to 0.1% in 2021-2022.

The proportion of 7<sup>th</sup> graders with PMEs for Varicella decreased from 0.9% in 2019-2020 to 0.4% in 2021-2022. Among 1,687 PMEs for Varicella, 58% (980) reported physician verification of varicella disease and 42% (707) reported other medical reasons for exemption.

Among 8<sup>th</sup> grade students in 2021-2022, 769 students (0.2%) were reported with PMEs for Tdap and 2,157 students (0.4%) with PMEs for Varicella.

<u>Conditional entrants</u>: The proportion of 7<sup>th</sup> 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 7<sup>th</sup> 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  $8^{th}$  graders in 2021-2022 reported as conditional entrants was 0.1% for Varicella immunization and <0.1% for Tdap immunization.

<u>Other students lacking required immunizations</u>: 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 7<sup>th</sup> 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 8<sup>th</sup> grade in 2021-2022 were 1.6% for lacking Tdap and 1.1% for lacking Varicella.

<u>Overdue</u>: The percentage of 7<sup>th</sup> 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 8<sup>th</sup> graders in 2021-2022 reported as overdue for Tdap immunization was 1.1%, decreased from 8.5% in the corresponding 7<sup>th</sup> 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 8<sup>th</sup> graders in 2021-2022 reported as overdue for Varicella immunization was 0.7%, decreased from 1.8% in the corresponding 7<sup>th</sup> grade cohort in 2020-2021.

<u>County-level immunization rates</u>: 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 7<sup>th</sup> 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 7 <sup>th</sup> g	raders with Tdap	immunization in 2	021-2022	
County	All Schools Based in County	Classroom- Based Schools	Virtual Schools*	For Schools Based in County, % of pupils reported as enrolled in 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 8<sup>th</sup> grade students in 2021-2022 were higher than rates in the corresponding 7<sup>th</sup> 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 7<sup>th</sup> graders counted in <u>CDE public school enrollment data</u> 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 <u>CDE private school enrollment data</u>.

The Tdap immunization rate among 7<sup>th</sup> 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 7<sup>th</sup> graders in 2020-2021 was followed by a rate of 97.1% among 8<sup>th</sup> graders in 2021-2022. Data on 8<sup>th</sup> 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 7<sup>th</sup> 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 7<sup>th</sup> 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 7<sup>th</sup> graders in 2020-2021 was followed by a rate of 97.7% among 8<sup>th</sup> graders in 2021-2022. In California during 2021-2022, varicella immunization rates were higher among 7<sup>th</sup> graders than <u>kindergarteners</u> in public schools (7<sup>th</sup> grade 97.4%; kindergarten 96.1%), but not private schools (7<sup>th</sup> grade 95.0%; kindergarten 95.3%).

The proportion of 7<sup>th</sup> grade students with PMEs has decreased after implementation of <u>SB 276</u> and <u>SB 714</u>, 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 <u>kindergarteners</u>. By contrast, the proportion of students exempted from

immunization requirements per criteria in <u>SB 277</u> has been increasing among 7<sup>th</sup> graders. Most of these 7<sup>th</sup> 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 7<sup>th</sup> 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 <u>SB 276</u> and <u>SB 714</u> 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 <u>7th Grade Immunization Assessment Summary data workbook</u> for more information (XLS)

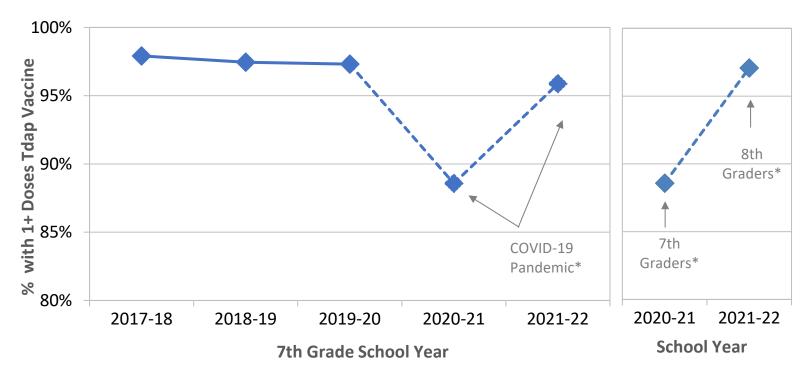
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- 2. Percentage of Students with 2+ Doses of Varicella Vaccine by School Year
- 3. Percentage of All 7<sup>th</sup> Grade and 8<sup>th</sup> Grade Students with Permanent Medical Exemptions (PMEs) to Tdap Vaccine by School Year
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#### Tables

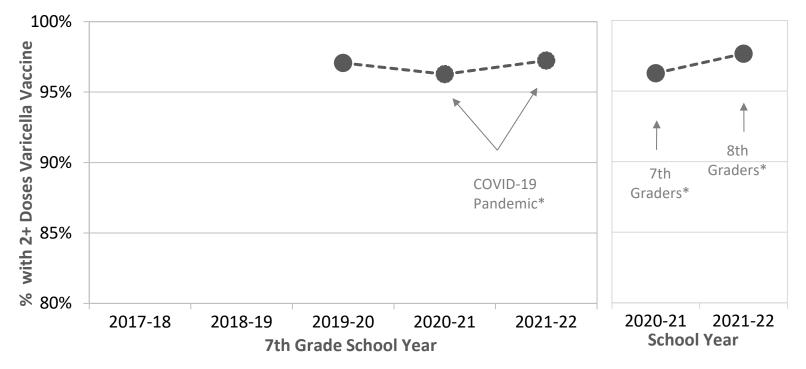
- 1. 7<sup>th</sup> Grade Immunization Assessment Summary, 2019-2020 through 2021-2022 School Years
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- 3. Total Enrollment and Tdap Immunization Status of 7<sup>th</sup> Grade, 2021-2022, 2020-2021 and 2019-2020 School Years and 8<sup>th</sup> Grade, 2021-2022 School Year, by County
- 4. Total Enrollment and Varicella Immunization Status of 7<sup>th</sup> Grade, 2021-2022, 2020-2021 and 2019-2020 School Years and 8<sup>th</sup> 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: 7<sup>th</sup> Graders in the 2017-2018 to 2021-2022 School Years Right: 7<sup>th</sup> Graders in the 2020-2021 School Year and 8th Graders in the 2021-2022 School Year



→ 1+ Doses Tdap Vaccine





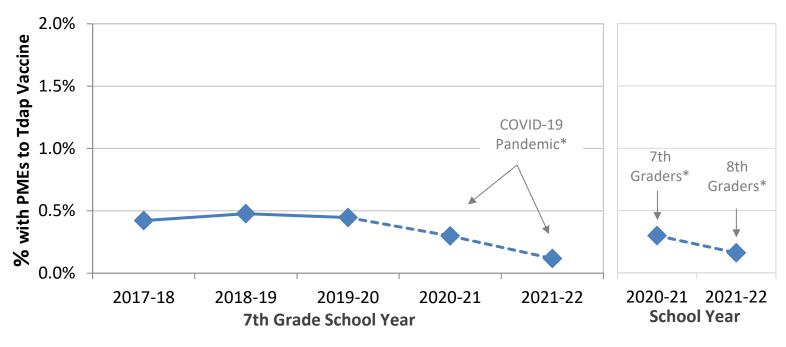
\*Immunization and data collection potentially affected by the COVID-19 Pandemic.

Figure 3. Top: Percentage of All 7th Grade and 8<sup>th</sup> Grade Students with Permanent Medical Exemptions (PMEs) to Tdap Vaccine, by School Year

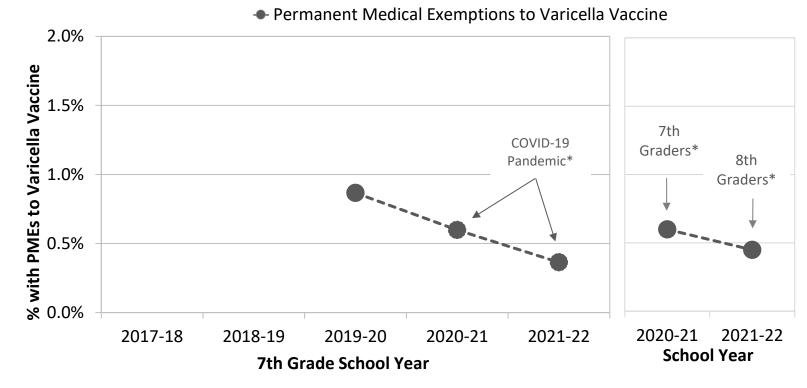
Figure 4. Bottom: Percentage of All 7th Grade and 8<sup>th</sup> Grade Students with Permanent Medical Exemptions (PMEs) to Varicella Vaccine by School Year, by School Year.

Left: 7<sup>th</sup> 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

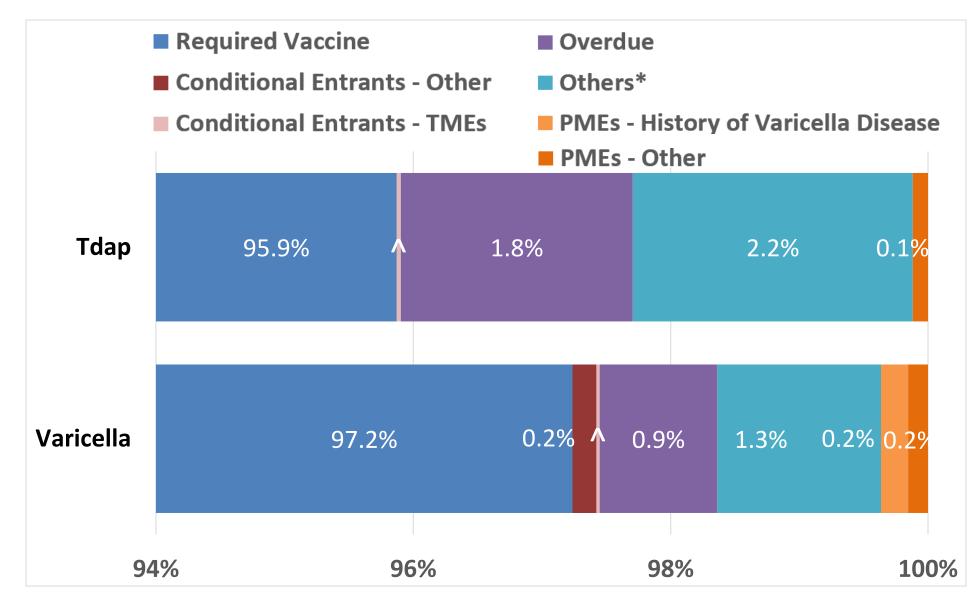


#### Permanent Medical Exemptions to Tdap Vaccine



\*Immunization and data collection potentially affected by the COVID-19 Pandemic.

Figure 5. Percentage of All 7<sup>th</sup> Grade Students by Reported Admission Status, Tdap and Varicella Vaccine, 2021-2022 School Year<sup>†</sup>

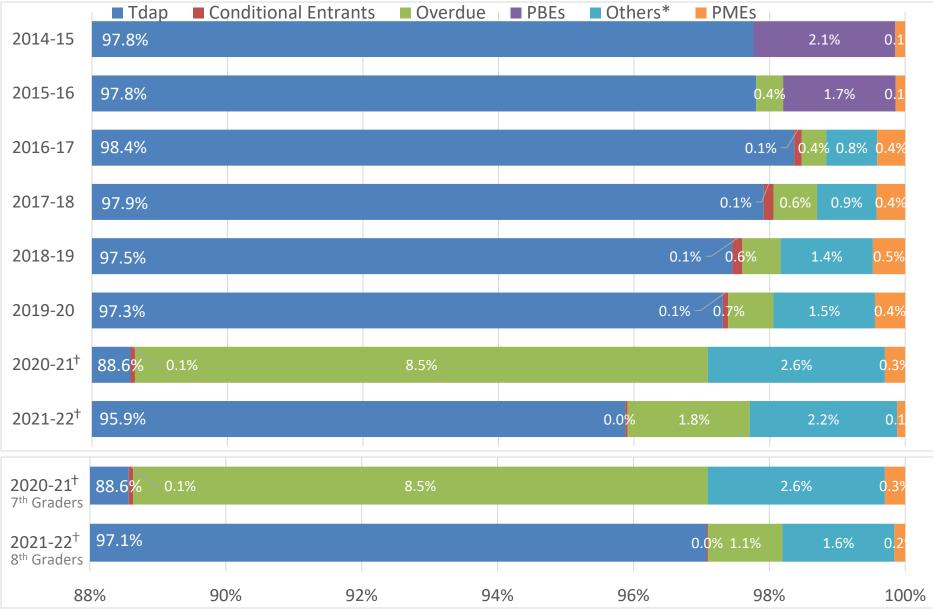


<sup>+</sup> Immunization and data collection potentially affected by the COVID-19 Pandemic.

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

^ Conditional Entrants – TMEs <0.1%

Figure 6. Percentage of 7<sup>th</sup> Grade Students with 1+ Doses of Tdap Vaccine, by Reported Admission Status by School Year, 2014-2015 to 2021-2022

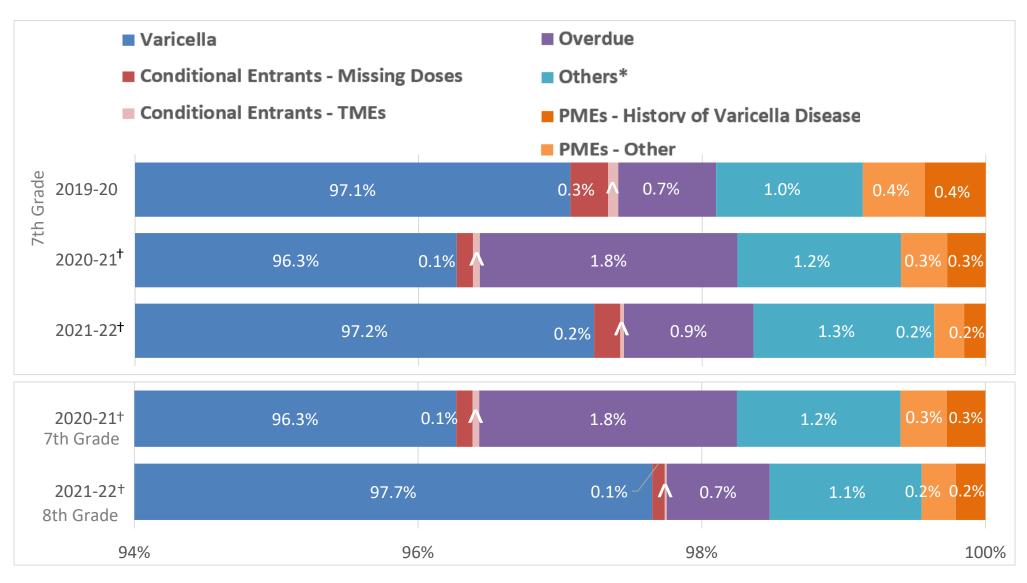


\*Other children lacking required immunizations under criteria specified in SB 277.

+ Immunization and data collection potentially affected by the COVID-19 Pandemic.

Figure 7. Percentage 7<sup>th</sup> Grade Students with 2+ Doses of Varicella Vaccine, by Reported Admission Status by School Year, 2019-20 to 2021-22 Top: 7<sup>th</sup> Graders in the 2019-2020 to 2021-2022 School Years

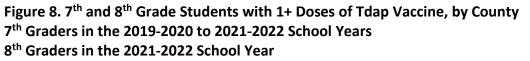
Bottom: 7<sup>th</sup> Graders in the 2020-2021 School Year and 8th Graders in the 2021-2022 School Year

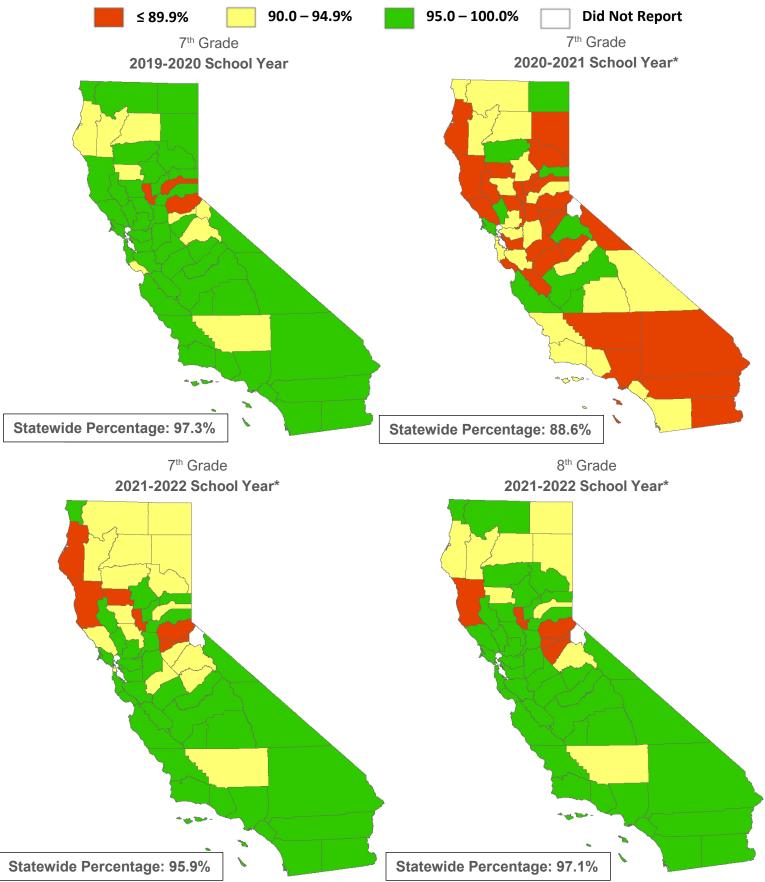


<sup>+</sup> Immunization and data collection potentially affected by the COVID-19 Pandemic.

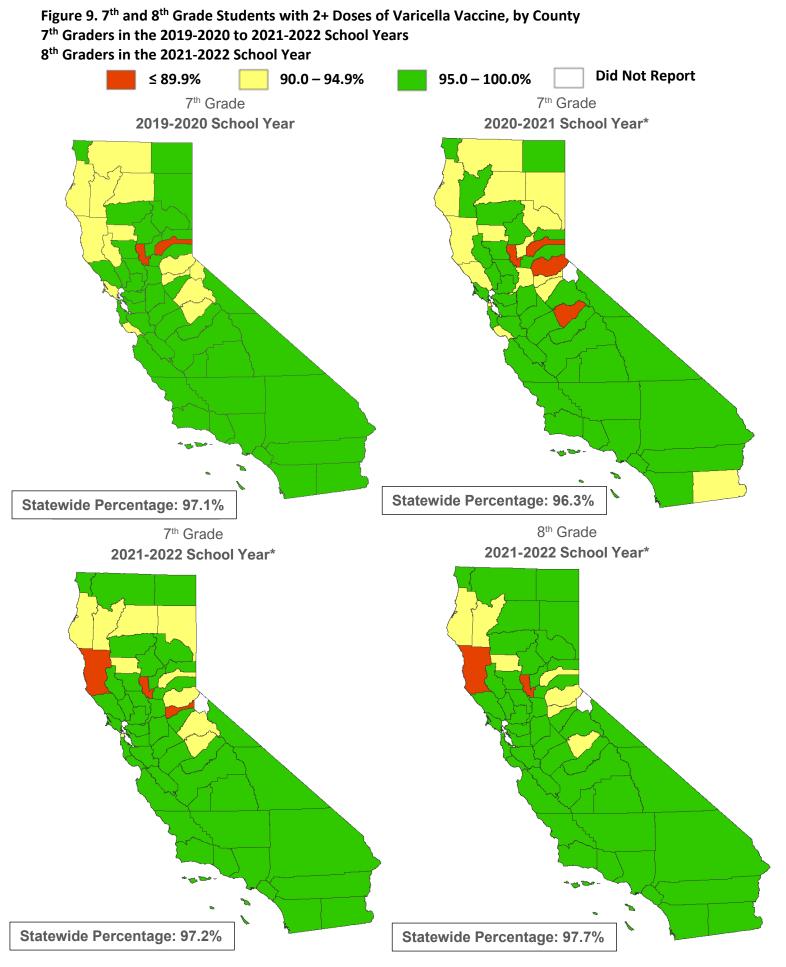
\* Other children lacking required immunizations under criteria specified in SB 277

^ Conditional Entrants – TMEs <0.1%





\*Immunization and data collection potentially affected by the COVID-19 pandemic



\*Immunization and data collection potentially affected by the COVID-19 pandemic

Table 1. 7th Grade Immunization Assessme		7th Grade: 2021-22		2021-22								
					7th Grade	1				and 2019-20		
	2	2021-2022			2020-2021	L	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 <i>,</i> 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 <sup>^</sup>	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 <sup>+</sup>	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.

							8th Gr	ade 2021-2	22 and
	8th Grade			7th Grade			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 <sup>+</sup>	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 <sup>+</sup>	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%

 Table 2. Immunization Assessment Summary of 7th Grade in 2020-21 and Subsequent 8th Grade in 2021-2022

\* Received pertussis-containing immunization on or after 7th birthday.

<sup>+</sup> 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.

	School Year	Grade	Total Students Number	Entrants with Tdap Vaccine Percent	Conditional Entrants Percent	Entrants with PME Percent	Others Lacking Tdap Vaccine† Percent	Overdue for Tdap Vaccine^ Percent
State Total		8	480,613	97.1%	0.0%	0.2%	1.6%	1.1%
	2021-22 2020-21 2019-20	7 7 7 7	463,512 480,713 505,017	95.9% 88.6% 97.3%	0.0% 0.1% 0.1%	0.2% 0.1% 0.3% 0.4%	2.2% 2.6% 1.5%	1.1% 1.8% 8.5% 0.7%
Alameda	2021-22 2020-21 2019-20	8 7 7 7	17,728 17,351 18,393 18,849	97.7% 95.9% 89.8% 98.0%	0.0% 0.0% 0.1% 0.1%	0.1% 0.0% 0.2% 0.3%	0.6% 0.8% 1.1% 0.2%	1.6% 3.2% 8.7% 1.5%
Alpine	2021-22 2020-21	8 7 7	* * *	* * *	* * *	* * *	* * *	* * *
	2019-20	7	*	*	*	*	*	*
Amador	2021-22 2020-21 2019-20	8 7 7 7	334 293 328 325	85.3% 57.3% 78.4% 94.2%	0.0% 1.7% 0.0% 0.0%	0.0% 0.0% 1.5% 1.8%	3.3% 10.9% 6.1% 3.4%	11.4% 30.0% 14.0% 0.6%
Butte	2021-22 2020-21 2019-20	8 7 7 7	2,214 2,208 2,172 2,396	96.9% 96.2% 92.7% 97.3%	0.0% 0.0% 0.0% 0.2%	0.4% 0.1% 0.6% 0.6%	2.3% 2.6% 3.0% 1.3%	0.5% 1.0% 3.7% 0.6%
Calaveras	2021-22 2020-21 2019-20	8 7 7 7	395 411 368 403	89.9% 93.4% 84.0% 95.0%	0.0% 0.0% 0.3% 0.0%	0.8% 0.2% 0.8% 1.5%	8.9% 4.9% 14.1% 2.7%	0.5% 1.5% 0.8% 0.7%
Colusa	2021-22 2020-21 2019-20	8 7 7 7	423 336 406 394	97.9% 94.3% 92.4% 98.5%	0.0% 0.0% 0.0% 0.0%	0.0% 0.0% 0.0% 0.0%	0.5% 0.3% 0.0% 0.0%	1.7% 5.4% 7.6% 1.5%
ContraCosta	2021-22 2020-21 2019-20	8 7 7 7	13,513 13,353 14,209 14,765	98.6% 96.1% 90.8% 98.3%	0.0% 0.1% 0.0% 0.0%	0.1% 0.1% 0.2% 0.3%	0.5% 0.7% 1.0% 0.5%	0.8% 3.1% 8.1% 0.8%
Del Norte	2021-22 2020-21 2019-20	8 7 7 7	301 290 305 331	96.0% 97.9% 93.1% 97.3%	0.0% 0.0% 0.0% 0.0%	0.7% 0.0% 0.7% 0.0%	2.7% 1.4% 3.3% 0.3%	0.7% 0.7% 3.0% 2.4%
El Dorado	2021-22 2020-21 2019-20	8 7 7 7	2,336 2,253 2,161 2,644	88.4% 83.3% 86.2% 88.8%	0.0% 0.1% 0.3% 0.7%	0.4% 0.4% 0.6% 1.5%	10.1% 12.8% 11.5% 8.9%	1.0% 3.4% 1.4% 0.2%

	School Year	Grade	Total Students Number	Entrants with Tdap Vaccine Percent	Conditional Entrants Percent	Entrants with PME Percent	Others Lacking Tdap Vaccine† Percent	Overdue for Tdap Vaccine^ Percent
Fracha		0						
Fresno	2021-22 2020-21 2019-20	8 7 7 7	15,770 15,423 16,082 15,839	98.7% 98.1% 96.9% 98.3%	0.0% 0.0% 0.0% 0.0%	0.1% 0.0% 0.1% 0.1%	1.1% 1.4% 1.2% 1.3%	0.1% 0.4% 1.7% 0.2%
Glenn	2021-22 2020-21 2019-20	8 7 7 7	494 472 484 442	91.5% 89.4% 87.2% 94.3%	0.0% 0.0% 0.0% 0.0%	0.2% 0.0% 0.0% 0.0%	7.3% 9.5% 9.5% 5.0%	1.0% 1.1% 3.3% 0.7%
Humboldt	2021-22 2020-21 2019-20	8 7 7 7	1,442 1,347 1,427 1,380	91.7% 89.3% 86.9% 90.7%	0.1% 0.2% 0.0% 0.7%	1.6% 1.3% 2.2% 3.2%	1.7% 2.8% 2.8% 1.5%	4.9% 6.4% 8.1% 3.9%
Imperial	2021-22 2020-21 2019-20	8 7 7 7	2,881 2,830 2,905 2,935	97.5% 96.6% 87.1% 99.1%	0.0% 0.0% 0.0% 0.1%	0.0% 0.0% 0.0% 0.0%	0.4% 1.0% 0.5% 0.2%	2.0% 2.4% 12.4% 0.5%
Inyo	2021-22 2020-21 2019-20	8 7 7 7	190 233 192 213	97.4% 97.9% 92.7% 98.6%	0.0% 0.0% 0.0% 0.0%	0.0% 0.0% 0.0% 0.9%	0.0% 0.0% 0.0% 0.5%	2.6% 2.1% 7.3% 0.0%
Kern	2021-22 2020-21 2019-20	8 7 7 7	15,738 15,067 15,505 15,219	93.7% 91.8% 87.2% 94.0%	0.0% 0.0% 0.0% 0.0%	0.2% 0.3% 0.2% 0.2%	5.4% 6.9% 6.6% 5.2%	0.6% 0.9% 6.0% 0.5%
Kings	2021-22 2020-21 2019-20	8 7 7 7	2,341 2,274 2,364 2,294	99.4% 98.2% 98.3% 98.7%	0.0% 0.0% 0.1% 0.2%	0.0% 0.0% 0.0% 0.0%	0.6% 1.4% 1.0% 1.0%	0.0% 0.4% 0.6% 0.1%
Lake	2021-22 2020-21 2019-20	8 7 7 7	579 768 755 736	96.0% 95.8% 86.4% 95.4%	0.2% 0.0% 0.1% 0.1%	0.2% 0.3% 0.5% 1.1%	1.9% 2.7% 2.5% 2.2%	1.7% 1.2% 10.5% 1.2%
Lassen	2021-22 2020-21 2019-20	8 7 7 7	300 275 299 288	94.3% 92.4% 88.6% 95.1%	0.0% 0.0% 0.0% 0.0%	2.7% 0.7% 2.7% 3.8%	2.7% 4.0% 3.7% 1.0%	0.3% 2.9% 5.0% 0.0%
Los Angeles	2021-22 2020-21 2019-20	8 7 7 7	112,288 106,833 109,967 119,392	97.0% 95.6% 85.1% 98.0%	0.0% 0.0% 0.0% 0.1%	0.1% 0.1% 0.3% 0.3%	1.2% 1.7% 2.0% 0.9%	1.7% 2.5% 12.5% 0.7%

	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 2020-21 2019-20	8 7 7 7	2,491 2,295 2,556 2,014	98.3% 98.1% 94.5% 96.9%	0.0% 0.0% 0.0% 0.0%	0.0% 0.0% 0.1% 0.2%	0.6% 0.5% 0.7% 1.1%	1.0% 1.4% 4.7% 1.7%
Marin	2021-22 2020-21 2019-20	8 7 7 7	3,016 2,885 3,075 3,245	99.2% 98.7% 96.9% 97.7%	0.0% 0.1% 0.1% 0.4%	0.3% 0.2% 0.4% 1.3%	0.1% 0.1% 0.4% 0.3%	0.4% 0.8% 2.2% 0.4%
Mariposa	2021-22 2020-21 2019-20	8 7 7 7	165 142 154 130	95.2% 93.7% 84.4% 98.5%	0.0% 0.0% 0.0% 0.0%	0.6% 1.4% 0.6% 0.8%	1.8% 1.4% 7.8% 0.8%	2.4% 3.5% 7.1% 0.0%
Mendocino	2021-22 2020-21 2019-20	8 7 7 7	971 1,030 1,003 1,039	86.2% 85.9% 79.7% 95.0%	0.0% 0.0% 0.2% 0.5%	0.4% 0.1% 0.6% 1.1%	2.2% 2.4% 4.5% 1.6%	11.2% 11.6% 15.1% 1.8%
Merced	2021-22 2020-21 2019-20	8 7 7 7	4,463 4,483 4,453 4,597	97.2% 95.6% 86.2% 98.5%	0.0% 0.0% 0.0% 0.0%	0.2% 0.0% 0.1% 0.1%	1.6% 2.1% 2.4% 0.9%	1.0% 2.3% 11.3% 0.5%
Modoc	2021-22 2020-21 2019-20	8 7 7 7	118 102 123 102	94.9% 90.2% 99.2% 96.1%	0.0% 0.0% 0.0% 0.0%	0.0% 0.0% 0.0% 1.0%	0.0% 3.9% 0.0% 0.0%	5.1% 5.9% 0.8% 2.9%
Mono	2021-22 2020-21 2019-20	8 7 7 7	111 100 109 125	100.0% 100.0% 88.1% 97.6%	0.0% 0.0% 0.0% 0.0%	0.0% 0.0% 0.0% 2.4%	0.0% 0.0% 0.0% 0.0%	0.0% 0.0% 11.9% 0.0%
Monterey	2021-22 2020-21 2019-20	8 7 7 7	6,044 5,799 6,042 6,397	98.9% 98.6% 95.1% 99.2%	0.1% 0.0% 0.1% 0.0%	0.1% 0.1% 0.2% 0.4%	0.4% 0.4% 0.5% 0.2%	0.6% 0.9% 4.1% 0.3%
Napa	2021-22 2020-21 2019-20	8 7 7 7	1,606 1,641 1,591 1,682	97.8% 97.4% 97.3% 98.5%	0.0% 0.0% 0.0% 0.0%	0.1% 0.1% 0.3% 0.3%	1.2% 1.3% 1.9% 0.9%	0.9% 1.2% 0.5% 0.4%
Nevada	2021-22 2020-21 2019-20	8 7 7 7	833 843 806 842	90.2% 90.2% 82.5% 89.2%	0.0% 0.2% 0.0% 0.7%	2.3% 0.5% 5.5% 5.5%	6.0% 7.2% 6.1% 4.3%	1.6% 1.9% 6.0% 0.4%

	School Year	Grade	Total Students	Entrants with Tdap Vaccine	Conditional Entrants	Entrants with PME	Others Lacking Tdap Vaccine†	Overdue for Tdap Vaccine^
Orenaa		0	Number	Percent	Percent	Percent	Percent	Percent
Orange	2021-22 2020-21 2019-20	8 7 7 7	38,554 36,105 38,419 39,699	98.1% 97.3% 94.2% 97.9%	0.0% 0.0% 0.1% 0.1%	0.2% 0.1% 0.3% 0.5%	1.1% 1.5% 1.6% 1.0%	0.6% 1.0% 3.8% 0.5%
Placer	2021-22 2020-21 2019-20	8 7 7 7	5,220 5,778 5,618 5,990	96.2% 95.9% 94.7% 95.9%	0.0% 0.0% 0.1% 0.1%	0.8% 0.2% 1.1% 1.4%	2.4% 2.6% 1.2% 2.0%	0.7% 1.3% 2.9% 0.6%
Plumas	2021-22 2020-21 2019-20	8 7 7 7	175 171 174 197	97.1% 94.2% 87.4% 98.0%	0.0% 0.0% 0.6% 0.0%	0.6% 0.0% 1.7% 1.0%	2.3% 4.7% 9.8% 1.0%	0.0% 1.2% 0.6% 0.0%
Riverside	2021-22 2020-21 2019-20	8 7 7 7	33,475 32,331 33,652 35,413	97.6% 96.5% 80.5% 97.6%	0.0% 0.0% 0.0% 0.0%	0.1% 0.1% 0.2% 0.3%	1.6% 2.2% 5.7% 1.5%	0.6% 1.2% 13.6% 0.5%
Sacramento	2021-22 2020-21 2019-20	8 7 7 7	19,002 18,232 19,321 19,967	97.1% 95.6% 89.3% 96.9%	0.0% 0.0% 0.3% 0.1%	0.2% 0.2% 0.2% 0.6%	1.8% 2.6% 3.0% 2.1%	1.0% 1.6% 7.2% 0.4%
San Benito	2021-22 2020-21 2019-20	8 7 7 7	893 834 900 955	98.3% 97.2% 78.2% 99.7%	0.0% 0.0% 0.0% 0.0%	0.2% 0.4% 0.6% 0.2%	0.2% 0.6% 0.2% 0.1%	1.2% 1.8% 21.0% 0.0%
San Bernardino	2021-22 2020-21 2019-20	8 7 7 7	31,290 30,777 30,092 32,605	96.8% 96.0% 79.4% 96.6%	0.0% 0.0% 0.0% 0.0%	0.1% 0.1% 0.3% 0.2%	1.7% 2.0% 3.4% 2.4%	1.4% 1.9% 16.9% 0.8%
San Diego	2021-22 2020-21 2019-20	8 7 7 7	38,574 37,579 38,918 41,159	96.5% 95.3% 93.1% 96.2%	0.0% 0.0% 0.1% 0.1%	0.2% 0.1% 0.3% 0.7%	2.8% 3.6% 3.4% 2.8%	0.5% 1.0% 3.0% 0.2%
San Francisco	2021-22 2020-21 2019-20	8 7 7 7	5,509 5,440 5,621 6,118	95.0% 92.7% 90.4% 96.7%	0.0% 0.0% 0.0% 0.1%	0.1% 0.1% 0.1% 0.3%	0.5% 0.8% 1.3% 0.5%	4.4% 6.4% 8.2% 2.4%
San Joaquin	2021-22 2020-21 2019-20	8 7 7 7	11,920 11,433 11,807 12,155	97.2% 96.7% 93.7% 97.6%	0.0% 0.0% 0.0% 0.0%	0.1% 0.1% 0.1% 0.2%	2.3% 2.7% 2.8% 1.6%	0.4% 0.5% 3.3% 0.5%

	School Year	Grade	Total Students Number	Entrants with Tdap Vaccine Percent	Conditional Entrants Percent	Entrants with PME Percent	Others Lacking Tdap Vaccine† Percent	Overdue for Tdap Vaccine^ Percent
San Luis Obispo		8	2,676	98.2%	0.0%	0.3%	1.0%	0.4%
	2021-22 2020-21 2019-20	7 7 7 7	2,570 2,661 3,151	98.2% 98.1% 92.0% 97.3%	0.0% 0.1% 0.0%	0.2% 0.5% 1.0%	1.0% 3.5% 1.0%	0.4% 0.7% 3.9% 0.7%
San Mateo	2021-22 2020-21 2019-20	8 7 7 7	7,555 7,486 8,047 8,234	98.3% 97.6% 94.5% 97.8%	0.0% 0.0% 0.0% 0.1%	0.1% 0.1% 0.1% 0.3%	0.6% 0.7% 0.4% 0.5%	1.0% 1.5% 4.9% 1.3%
Santa Barbara	2021-22 2020-21 2019-20	8 7 7 7	5,608 5,298 5,582 5,670	97.7% 98.0% 94.1% 98.1%	0.1% 0.0% 0.1% 0.1%	0.3% 0.2% 0.4% 0.9%	1.0% 0.8% 0.8% 0.7%	0.9% 1.0% 4.6% 0.2%
Santa Clara	2021-22 2020-21 2019-20	8 7 7 7	21,781 20,367 22,414 22,852	98.4% 97.9% 92.8% 98.7%	0.0% 0.0% 0.1% 0.1%	0.1% 0.0% 0.2% 0.3%	0.6% 0.8% 1.1% 0.3%	0.9% 1.3% 5.9% 0.6%
Santa Cruz	2021-22 2020-21 2019-20	8 7 7 7	3,211 3,224 3,278 3,539	96.2% 96.2% 86.7% 91.5%	0.1% 0.0% 0.1% 0.0%	0.3% 0.2% 1.0% 1.5%	3.1% 3.1% 7.7% 6.3%	0.3% 0.6% 4.5% 0.7%
Shasta	2021-22 2020-21 2019-20	8 7 7 7	2,164 1,984 2,080 2,130	94.2% 92.3% 90.7% 93.3%	0.1% 0.2% 0.1% 0.4%	0.7% 0.4% 1.2% 1.7%	4.0% 4.8% 6.8% 3.5%	0.9% 2.4% 1.2% 1.0%
Sierra	2021-22 2020-21 2019-20	8 7 7 7	37 40 33 28	97.3% 100.0% 97.0% 100.0%	0.0% 0.0% 0.0% 0.0%	0.0% 0.0% 0.0% 0.0%	0.0% 0.0% 3.0% 0.0%	2.7% 0.0% 0.0% 0.0%
Siskiyou	2021-22 2020-21 2019-20	8 7 7 7	448 446 467 499	97.5% 93.0% 93.4% 96.8%	0.0% 0.0% 0.0% 0.2%	0.2% 0.2% 0.6% 0.6%	2.2% 4.9% 4.9% 1.6%	0.0% 1.8% 1.1% 0.8%
Solano	2021-22 2020-21 2019-20	8 7 7 7	4,534 4,359 4,610 5,130	99.6% 98.6% 94.3% 98.8%	0.0% 0.0% 0.2% 0.0%	0.0% 0.0% 0.2% 0.4%	0.2% 0.7% 0.6% 0.1%	0.2% 0.7% 4.7% 0.6%
Sonoma	2021-22 2020-21 2019-20	8 7 7 7	5,288 5,234 5,452 5,422	96.2% 94.4% 82.8% 95.9%	0.0% 0.0% 0.1% 0.2%	0.3% 0.2% 0.6% 1.4%	1.7% 3.1% 1.9% 1.6%	1.7% 2.3% 14.7% 0.9%

	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 2020-21 2019-20	8 7 7 7	8,576 8,150 8,565 8,837	96.7% 94.7% 84.8% 97.6%	0.0% 0.0% 0.0% 0.0%	0.1% 0.1% 0.2% 0.4%	1.8% 2.5% 1.8% 0.3%	1.5% 2.7% 13.1% 1.6%
Sutter	2021-22 2020-21 2019-20	8 7 7 7	1,819 1,703 1,899 1,927	83.8% 79.9% 74.1% 82.8%	0.0% 0.0% 0.0% 0.0%	0.5% 0.4% 0.3% 0.4%	14.8% 18.7% 17.8% 16.7%	0.8% 1.1% 7.8% 0.2%
Tehama	2021-22 2020-21 2019-20	8 7 7 7	899 798 659 870	96.3% 93.5% 95.8% 98.0%	0.0% 0.0% 0.0% 0.0%	0.4% 0.0% 0.6% 0.7%	0.9% 1.5% 1.4% 0.2%	2.3% 5.0% 2.3% 1.0%
Trinity	2021-22 2020-21 2019-20	8 7 7 7	112 100 103 115	92.9% 93.0% 93.2% 92.2%	0.0% 0.0% 0.0% 0.0%	3.6% 0.0% 2.9% 4.3%	0.0% 0.0% 1.9% 2.6%	3.6% 7.0% 1.9% 0.9%
Tulare	2021-22 2020-21 2019-20	8 7 7 7	7,676 7,529 7,663 8,232	98.7% 98.1% 92.0% 98.2%	0.0% 0.0% 0.0% 0.0%	0.1% 0.0% 0.1% 0.6%	0.9% 1.3% 1.8% 0.9%	0.3% 0.6% 6.1% 0.2%
Tuolumne	2021-22 2020-21 2019-20	8 7 7 7	489 466 398 481	94.1% 91.2% 95.0% 93.8%	0.2% 0.0% 0.3% 0.2%	0.2% 0.0% 0.3% 1.5%	3.3% 4.3% 2.0% 3.3%	2.2% 4.5% 2.5% 1.2%
Ventura	2021-22 2020-21 2019-20	8 7 7 7	10,546 10,229 10,512	96.9% 96.1% 91.8% 97.0%	0.0% 0.0% 0.0% 0.2%	0.2% 0.2% 0.4% 0.8%	2.3% 2.6% 1.8% 1.2%	0.6% 1.1% 6.0% 0.8%
Yolo	2021-22 2020-21 2019-20	8 7 7 7	2,389 2,405 2,429 2,416	95.1% 92.4% 89.3% 96.9%	0.1% 0.0% 0.0% 0.1%	0.2% 0.3% 0.4% 0.7%	1.5% 2.8% 2.1% 0.6%	3.1% 4.5% 8.2% 1.7%
Yuba	2021-22 2020-21 2019-20	8 7 7 7	1,108 1,107 1,105 1,194	95.0% 95.0% 77.1% 96.9%	0.2% 0.1% 0.2% 0.0%	0.0% 0.0% 0.3% 0.2%	2.9% 2.3% 4.8% 1.6%	1.9% 2.6% 17.6% 1.3%

<sup>+</sup> 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

				Entrants		Entrants	Others	Overdue
	School	e	Total	with 2+	Conditional	with	Lacking 2+	for 2+
		Grade	Students	Varicella	Entrants		Varicella	Varicella
	Year	ŋ		Vaccine		PME	Vaccine <sup>+</sup>	Vaccine <sup>^</sup>
			Number	Percent	Percent	Percent	Percent	Percent
State Total	2024.22	8	480,613	97.7%	0.1%	0.4%	1.1%	0.7%
	2021-22	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%
	2019-20	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%
	2021-22	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%
	2019-20	7	18,849	97.1%	0.3%	0.7%	0.1%	1.8%
Alpine	2021-22	8	*	*	*	*	*	*
		7	*	*	*	*	*	*
	2020-21	7	*	*	*	*	*	*
	2019-20	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%
	2019-20	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%
	2019-20	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%
	2019-20	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%
	2019-20	-	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%
<b>-</b>	2019-20	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%
	2019-20	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 2019-20	7	2,161	89.6%	0.6%	0.9%	8.0%	1.0%
	2019-20	7	2,644	91.7%	0.8%	1.6%	5.4%	0.5%

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				Entrants		Entrants	Others	Overdue
	School	e	Total	with 2+	Conditional	with	Lacking 2+	for 2+
		Grade	Students	Varicella	Entrants		Varicella	Varicella
	Year	Ð		Vaccine		PME	Vaccine <sup>+</sup>	Vaccine <sup>^</sup>
			Number	Percent	Percent	Percent	Percent	Percent
Fresno	2024.22	8	15,770	98.9%	0.0%	0.2%	0.8%	0.1%
	2021-22	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%
	2019-20	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%
	2021-22	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%
	2019-20	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%
	2019-20	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%
-	2021-22	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%
	2019-20	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%
,	2021-22	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%
	2019-20	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%
	2021-22	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%
	2019-20	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%
0	2021-22	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%
	2019-20	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%
	2021-22	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%
	2019-20	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%
	2021-22	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%
	2019-20	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%
J	2021-22	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%
	2019-20	7	119,392	97.4%	0.3%	0.7%	0.7%	0.9%

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				Entrants		Entrants	Others	Overdue
	School	е	Total	with 2+	Conditional	with	Lacking 2+	for 2+
		Grade	Students	Varicella	Entrants		Varicella	Varicella
	Year	Ū		Vaccine		PME	Vaccine <sup>+</sup>	Vaccine <sup>^</sup>
			Number	Percent	Percent	Percent	Percent	Percent
Madera		8	2,491	98.6%	0.0%	0.0%	0.5%	0.8%
inducia	2021-22	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%
	2019-20	7	2,014	97.4%	0.1%	0.3%	0.7%	1.4%
Marin	2024 22	8	3,016	98.1%	0.2%	1.2%	0.1%	0.4%
	2021-22	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%
	2019-20	7	3,245	94.9%	1.1%	3.3%	0.3%	0.4%
Mariposa	2024 22	8	165	92.1%	0.6%	2.4%	1.8%	3.0%
	2021-22	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%
	2019-20	7	130	94.6%	3.1%	1.5%	0.8%	0.0%
Mendocino	2024 22	8	971	86.9%	0.1%	0.8%	2.0%	10.2%
	2021-22	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%
	2019-20	7	1,039	94.1%	1.1%	1.6%	1.3%	1.9%
Merced		8	4,463	98.7%	0.2%	0.3%	0.6%	0.3%
	2021-22	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%
	2019-20	7	4,597	99.1%	0.3%	0.2%	0.2%	0.2%
Modoc		8	118	96.6%	0.0%	0.0%	0.0%	3.4%
in oute	2021-22	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%
	2019-20	7	102	96.1%	1.0%	1.0%	0.0%	2.0%
Mono		8	111	98.2%	0.0%	1.8%	0.0%	0.0%
	2021-22	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%
	2019-20	7	125	97.6%	0.0%	2.4%	0.0%	0.0%
Monterey		8	6,044	99.1%	0.0%	0.4%	0.1%	0.3%
Monterey	2021-22	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%
	2019-20	7	6,397	98.6%	0.3%	0.7%	0.1%	0.4%
Napa		8	1,606	97.8%	0.1%	0.3%	1.2%	0.7%
	2021-22	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%
	2019-20	7	1,682	97.3%	0.2%	1.2%	1.0%	0.3%
Nevada		8	833	91.8%	0.5%	2.8%	4.3%	0.6%
	2021-22	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%
	2019-20	7	842	88.6%	1.5%	6.3%	3.0%	0.6%

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				Entrants		Entrants	Others	Overdue
	School be Year b	Grade	Total Students	with 2+	Conditional	with PME	Lacking 2+	for 2+
				Varicella	Entrants		Varicella	Varicella
				Vaccine			Vaccine <sup>+</sup>	Vaccine <sup>^</sup>
		Number	Percent	Percent	Percent	Percent	Percent	
Orange		8	38,554	98.2%	0.2%	0.6%	0.6%	0.3%
e	2021-22	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%
	2019-20	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%
	2021-22	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%
	2019-20	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%
	2021-22	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%
	2019-20	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%
	2021-22	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%
	2019-20	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%
	2021-22	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%
	2019-20	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%
	2021-22	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%
	2019-20	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%
	2021-22	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%
	2019-20	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%
	2019-20	7	41,159	96.4%	0.4%	1.2%	1.9%	0.2%
San Francisco	2021-22	8	5 <i>,</i> 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%
	2019-20	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%
	2019-20	7	12,155	97.7%	0.1%	0.4%	1.1%	0.8%

				Entrants		Entrants	Others	Overdue
	School Per Year	Grade	Total Students	with 2+	Conditional Entrants	with PME	Lacking 2+	for 2+
				Varicella			Varicella	Varicella
				Vaccine			Vaccine <sup>+</sup>	Vaccine <sup>^</sup>
			Number	Percent	Percent	Percent	Percent	Percent
San Luis Obispo	2024.22	8	2,676	98.8%	0.0%	0.3%	0.5%	0.4%
	2021-22	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%
	2019-20	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%
	2019-20	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 <i>,</i> 582	97.6%	0.2%	0.8%	0.4%	0.9%
	2019-20	7	5 <i>,</i> 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%
	2019-20	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%
	2021-22	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%
	2019-20	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%
	2021-22	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%
	2019-20	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%
	2021-22	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%
	2019-20	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%
	2021-22	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%
	2019-20	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%
	2019-20	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%
	2021-22	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%
	2019-20	7	5,422	95.3%	0.8%	2.0%	1.0%	0.9%

				Entrants		Entrants	Others	Overdue	
	School Year	Grade	Total	with 2+	Varicella Entrants	with PME	Lacking 2+	for 2+	
			Students	Varicella			Varicella	Varicella	
				Vaccine			Vaccine <sup>+</sup>	Vaccine <sup>^</sup>	
			Number	Percent	Percent	Percent	Percent	Percent	
Stanislaus	2024 22	8	8,576	98.3%	0.1%	0.2%	0.9%	0.6%	
	2021-22	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%	
	2019-20	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%	
	2021-22	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%	
	2019-20	7	1,927	88.0%	0.2%	0.5%	11.2%	0.2%	
Tehama	2024 22	8	899	97.9%	0.0%	0.6%	0.3%	1.2%	
	2021-22	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%	
	2019-20	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%	
,	2021-22	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%	
	2019-20	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%	
	2021-22	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%	
	2019-20	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%	
	2021-22	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%	
	2019-20	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%	
	2021-22	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%	
	2019-20	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%	
	2021-22	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%	
	2019-20	7	2,416	96.0%	0.4%	1.7%	0.6%	1.2%	
Yuba	2024 22	8	1,108	97.3%	0.2%	0.1%	1.3%	1.2%	
	2021-22	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%	
	2019-20	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