

Washington State Department of Health Annual Immunization School Reporting Data Technical Notes



Data Sources

These data are submitted by all public and private schools each school year in accordance with Revised Code of Washington (RCW) 28A.210-110 and Washington Administrative Code (WAC) 246-105-060. The reporting deadline was November 1st prior to the 2020-21 school year, January 15th in the 2020-21 school year, and December 1st in the 2021-2022 through the current school years.

Once submitted, data are assessed for accuracy and completeness. Data is not imputed or changed by the Washington State Department of Health (DOH). Where obviously erroneous data are submitted, schools are asked to re-submit their data or are counted as non-reporters.

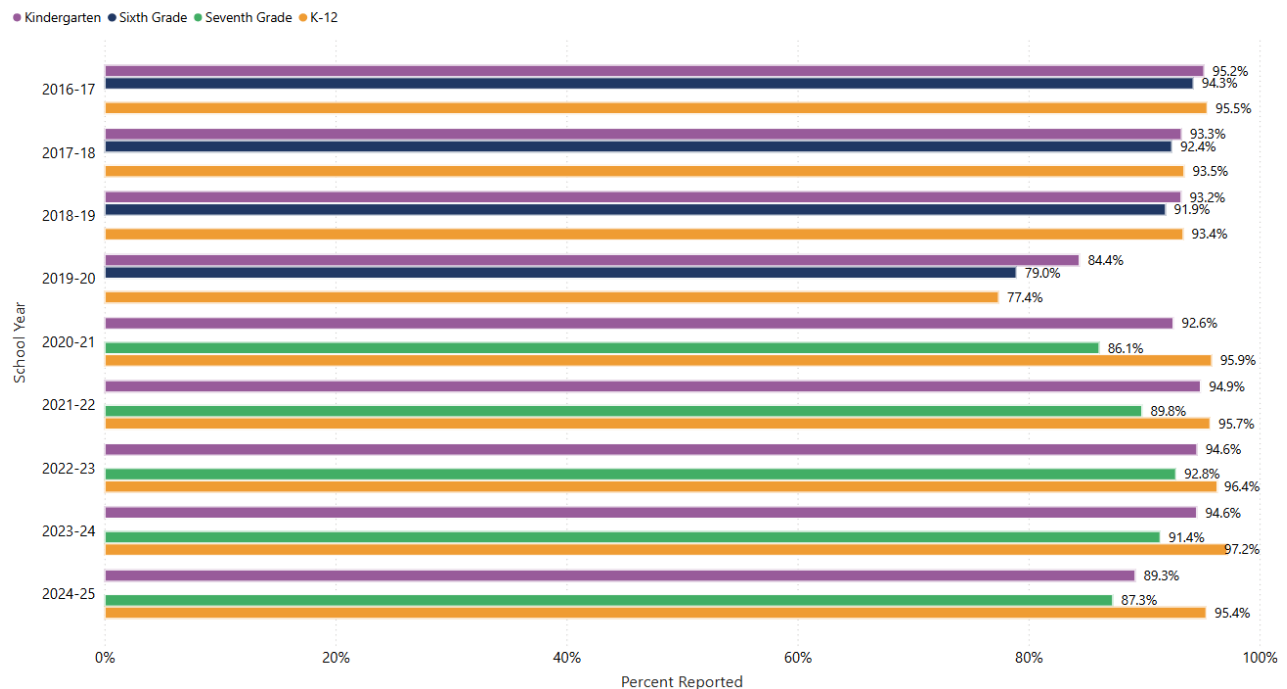
Each report requires school nurses or administrative staff to count information received from families attesting to the student's immunization status. For a complete description of the forms, status, and immunization requirements, please see the School and Child Care Immunization page at www.doh.wa.gov/SCCI.

Data Collection

- Each year, the Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC) recommends changes to the immunization schedule. In addition, legislative and rule changes may affect the forms and required signatures for each form. Each of these affects the comparability of these reports from year to year. These changes in data collection over time are demonstrated in the 'Data Collection' page on the data dashboard.
 - Notable school immunization requirement changes include:
 - Separate Certificate of Exemption (COE) required starting in the 2008-09 school year
 - Health care provider signature required on COE starting in the 2011-12 school year
 - Two doses of varicella required for all grades starting in the 2016-17 school year
 - Personal exemptions for measles, mumps and rubella no longer accepted starting in the 2019-20 school year
 - Tdap booster requirement changed from 6th to 7th grade starting in the 2020-21 school year resulting in data collection of 7th grade instead of the 6th grade cohort.
 - Medically verified immunizations records required for all new enrolling students starting in the 2020-21 school year
 - Conditional status definition changed, removing the 30-day grace period from the first day of attendance starting in the 2020-21 school year.
 - Prior to the 2019-20 school year, overall immunization status was only collected for kindergarten and sixth grade cohorts. For K-12, only complete and exempt statuses were collected. Starting in the 2019-20 school year, overall immunization status and status of documentation of disease immunity was collected for all cohorts.

- Prior to the 2019-20 school year, kindergarten and 6th grade vaccine-specific data measures count the percentage of students who are "incomplete," meaning they are in conditional, out of compliance, or exempt status for a vaccine series. The K-12 vaccine specific data measures count the percentage of students' "exempt" from a vaccine.
 - Beginning in the 2019-20 school year, DOH started collecting immunization status (complete, conditional, out of compliance, and exempt by type) by disease.
 - The schools required to report have shifted over time. Prior to the 2021-22 school year, online schools were not required to report immunization information and schools were not required to report on students who did not share air space with other students.
 - Prior to the 2023-24 school year, for the School Module data, DOH worked with our WAIS vendor to classify student compliance. The 2023-24 school year was the first year that DOH independently determined student compliance. This switch to assessing compliance in-house reduces misclassification of student immunization status and allows DOH more control and flexibility going forward.
- Data collection through the School Module, a feature within the Washington State Immunization Information System (WAIS), began in 2016. School districts and private schools new to the school module can experience higher out of compliance rates as they gather documentation needed to transition to the new record keeping system. For a list of School Module schools and more information, please visit www.doh.wa.gov/SchoolModule.
 - The total number of schools and total enrollment represented in the data may differ from official Office of the Superintendent for Public Instruction (OSPI) data. Some schools are not required to report, such as prison-based or tribal schools. Tribal schools that chose to report only have their data included with Tribal approval. Schools that report but have an enrollment of less than 10 students have their data suppressed at the school building level but are included in the aggregation of data at the school district, county, and state level. Some schools fail to report their immunization data for various reasons. Additionally, several schools not yet registered with OSPI may also submit reports. This variance in the total number of schools and total enrollment from official OSPI data should be noted and considered when comparing these data.
 - The percentage of schools that report varies each year. This variance has not been studied to determine if specific sub-groups of schools are under- or over-represented. Although the average reporting percentage is above 90%, the users of this data should be aware of missing data in the summaries.

Percent of Required Schools that Report by School Year



The chart above demonstrates the percent of schools that reported their students' immunization status every school year out of all of the schools required to report under the Revised Code of Washington (RCW) 28A.210-110 and Washington Administrative Code (WAC) 246-105-060. In the 2019-20 school year data collection shifted to seventh grade instead of sixth grade due to the ACIP change in age requirements for Tdap.

2016-17 through 2018-19 school year data collection:

- Data was collected through various formats such as PDF, Excel submissions and, beginning in the 2016-17 school year, through the IIS School Module
- Data was collected on compliance to immunizations required for school entry – DT (diphtheria, tetanus), pertussis, MMR (measles, mumps, rubella), polio, hepatitis B, varicella
- Schools reported on three cohorts of students at their school: kindergarten, sixth grade, and overall K-12
 - The sixth-grade cohort was selected due to the requirement of a Tdap (tetanus, diphtheria, pertussis booster) vaccination for sixth grade entry
 - For kindergarten and sixth grade, the following information was collected:
 - Number of students enrolled
 - The overall immunization status of students (a student can only have one overall immunization status):
 - Number of students complete/immune (has a signed Certificate of Immunization Status (CIS) form showing they have all required vaccinations for their grade or showing proof of immunity)
 - Number of students exempt (has a completed Certificate of Exemption on file for least one required immunization)
 - Number of students conditional for at least one required immunization and are not exempt for any other required

immunization (has a signed CIS showing they are making satisfactory progress to obtain documentation of immunity within the allowed timeframes, are in the first 30 days of school attendance or waiting for the next vaccinations to come due and obtains vaccination within 30 after the next dose comes due. If the conditional time period expires without providing documentation of the vaccine dose or a completed COE, then the student's status changes to out of compliance.)

- Number of students out of compliance (not complete/immune, not exempt, or not conditional as defined above)
 - Number of students with a personal, medical, religious, and religious membership exemption. Students with multiple exemption types are counted more than once.
 - Number of students exempt, out of compliance, or conditional for each individual vaccination (incomplete) – DT, pertussis, MMR, polio, hepatitis B, varicella
- For K-12, the following information was collected:
 - Number of students enrolled
 - Number of students complete/immune (has a signed Certificate of Immunization Status (CIS) form showing they have all required vaccinations for their grade or showing proof of immunity).
 - Number of students exempt (has a completed Certificate of Exemption on file for least one required immunization).
 - Number of students with a personal, medical, religious, and religious membership exemption. Students with multiple exemption types are counted more than once.
 - Number of students exempt for each individual immunization requirement: DT, pertussis, MMR, polio, hepatitis varicella

2019-20 school year through present data collection:

- Data was collected either through the submission of an aggregate survey in REDCap or through the IIS School Module.
- Data was collected for each individual disease for which documentation of immunity is required for school entry: diphtheria, tetanus, pertussis, measles, mumps, rubella, polio, hepatitis B, and varicella.
- Schools reported on three cohorts of students: kindergarten, sixth (2019-20 cohort) or seventh (starting in 2020-21 cohort) grade, and overall K-12
- For all three cohorts the following information was collected:
 - Number of students enrolled
 - The overall immunization status of students (a student can only have one overall immunization status):
 - Number of students complete (have a CIS on file and have documented immunity to all of the required vaccine-preventable diseases. Documented immunity includes vaccination at the appropriate ages and intervals or documentation by a health care provider of immunity by titer or history of disease.)

- Number of students out of compliance (does not have documentation of immunity for any one or more of the diseases for which documentation of immunization is required, and they are not in a temporary conditional period, and they do not have a completed Certificate of Exemption (COE) exempting them from the requirement for immunization against the disease/s missing documentation of immunity.)
- Number of students exempt (has a completed COE for any one or more of the immunization requirements and are not out of compliance for any other of the immunization requirements.)
- Number of students conditional (are in the process of obtaining documentation of immunity within the allowed timeframes. They cannot be out of compliance or have an exemption for any other of the diseases for which full immunity is required. Conditional status is defined as a student missing the required documentation of immunity who is waiting for the next dose in a vaccination series. These students are given 30 days after their vaccination due date to turn in immunization paperwork. Conditional status continues until all of the doses in the series are complete. If the conditional time period expires without providing documentation of the vaccine dose or a completed COE, then the student's status changes to out of compliance.)
- Number of students who have a personal/philosophical, medical, religious, or a religious membership exemption for one or more of the immunization requirements. Students with more than one type of exemption are counted more than once.
- Status of each individual immunization requirement; diphtheria, tetanus, pertussis, hepatitis B, measles, mumps, rubella, polio, varicella.
 - Number of students complete/immune for each individual disease (the student has documented immunity to the disease. Documented immunity includes vaccination at the appropriate ages and intervals or documentation by a health care provider of immunity by antibody titer or history of disease.)
 - Number of students with a personal/philosophical, religious, medical or religious membership exemption for each individual disease (has a completed COE exempting them from the requirement for full immunization against the disease, and they do not have documentation of immunity to the disease.)
 - Number of students conditional for each individual disease (are in the process of obtaining documentation of immunity within the allowed timeframes. See definition of conditional for overall status)
 - Number of students out of compliance for each individual disease (does not have documentation of immunity to the disease, and they are not in a temporary conditional period, and they do not have a completed Certificate of Exemption (COE) exempting them from the requirement for full immunization against the disease.)

Statistics

Percentages in this report are calculated using the count of students divided by the student enrollment as reported by the school. Using an arithmetic average provides an unbiased estimate of how well the population of students are immunized. Because school percentage rates are characterized by outliers, using this average may be a biased estimator of how well *schools* are immunized.