Annual School Survey Process and Data

Nimmi Lavu, MPH, Epidemiologist

August 2024







Agenda

- What?
- Why?
- Who?
- **W** How?
- Outcomes
- **CDC** Renewed Call to Action
- Results
- Improvements

What?

- The annual public and private school kindergarten, seventh grade, and eleventh grade Immunization Survey is conducted by the Kentucky Department of Public Health (KDPH) Immunization Branch.
- The purpose of this survey is to identify children entering kindergarten, seventh grade, and eleventh grade who are not protected against vaccine preventable diseases and to ensure that they are properly immunized according to state requirements.
- Immunization schedules required for attending child day care centers, certified family childcare homes, other licensed facilities that care for children, preschool programs, and public and private primary and secondary schools
 - Kentucky State Requirement- regulation <u>902 KAR 2:060, Section 2</u>



Why?

- In accordance with Kentucky Regulation <u>KRS 158.037 and 902 KAR 2:055</u>
 - No child shall be eligible to enroll as a student in any public or private elementary or secondary school without first presenting a certificate from a medical physician, osteopathic physician, or advanced practice registered nurse licensed in any state.
 - ♥ Kindergartens and public and private elementary and secondary schools shall submit to the local health department in their area immunization results for Kindergarten; Seventh grade; and Eleventh grade



- Monitors vaccination coverage
- Used to identify areas where vaccination rates may be low
- Identifies schools/communities where children may be at risk for VPDs
- Used to target resources to improve vaccination coverage
- Determines the impact of vaccination policies and programs
- Accurate reporting is critical



Who?

- 902 KAR 2:055 states all public and private elementary and secondary schools shall submit immunization results annually for:
 - Kindergarten
 - Seventh grade
 - Eleventh grade



- Students in the grade surveyed
- Missing immunization records
- Religious objection declinations
- Medical exemptions
- Children who have received age-appropriate immunizations
- Vaccine specific exemptions



How?

Information on the annual school immunization surveys, including links and instructions to complete, can be found at:



- Immunization Branch Cabinet for Health and Family Services (ky.gov)
- The Kentucky Annual School Immunization Survey tools are distributed to the local health departments (LHDs) and all public and private schools by KDPH in electronic formats.
 - Aggregate counts are collected via REDCap; which is an online survey.
 - All survey data is extracted into Excel where it is reviewed, and duplicates are removed.
 - The information is analyzed, interpreted, and organized into a report by the school survey immunization coordinator (epidemiologist).

Outcomes

- The Annual School Immunization Survey Data can be found at: School Immunizations Survey HEALTHTRACKING (ky.gov)
 - The data submitted by schools is compiled into summary reports and data files each year. The reports measure compliance with the school immunization law across Kentucky and by local jurisdictions.
- Each year the CDC publishes reports and other documents based on school vaccination surveys and other data sources in the MMWR (The Morbidity and Mortality Weekly Report)
- Last years MMWR report can be found here: <u>Coverage with Selected Vaccines and Exemption from School Vaccine Requirements Among Children in Kindergarten United States, 2022–23 School Year | MMWR (cdc.gov)</u>

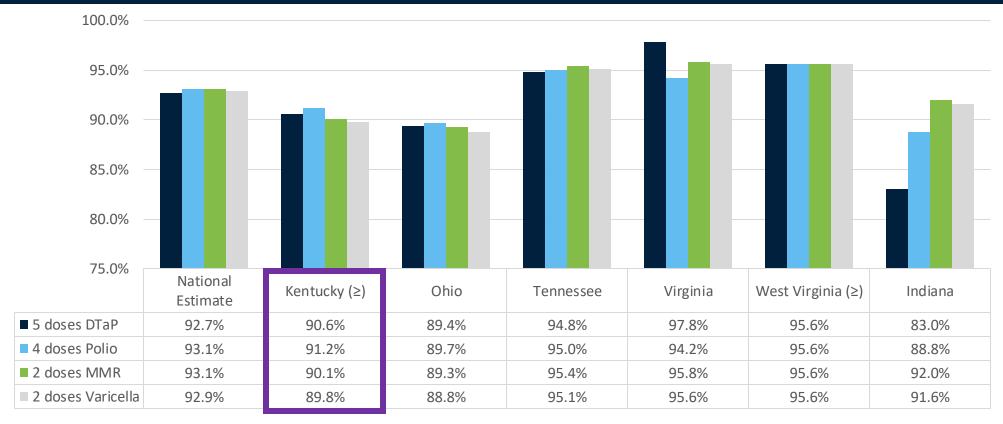




Kindergarten Assessment 2022-2023 School Year

(MMWR Report November 10, 2023)

Kentucky vaccination coverage data compared to surrounding states and US national estimate



The reported coverage estimates for Kentucky represent the percentage of kindergartners with ≥ 4 doses of DTaP, ≥ 3 doses of Polio, ≥ 2 doses of MMR and ≥ 2 doses of Varicella coverage regardless of appropriate time intervals or ages.

Coverage with Selected Vaccines and Exemption from School Vaccine Requirements Among Children in Kindergarten — United States, 2022–23 School Year | MMWR (cdc.gov)

CDC Renewed Call to Action

- Add Routine Vaccinations to the Back-to-School Checklist
- With a near-complete return to in-person learning, efforts must be made to ensure:
 - All school-aged children are up to date on all Advisory Committee on Immunization Practices (ACIP) recommended routine vaccines, including vaccines not required for school entry such as flu, HPV and COVID-19 vaccines.

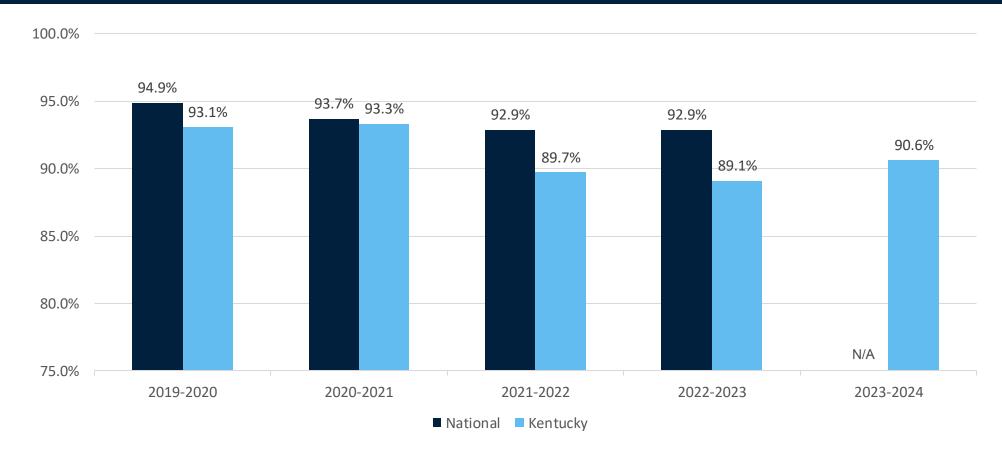
CDC-Renewed-Call-to-Action-providers.pdf

The Link Between School Attendance and Good Health

- In 2019, more than 6.5 million children in the United States, approximately 13% of all students, miss 15 or more days of school each year.
- Infectious diseases, such as flu, COVID-19, pertussis and other vaccine preventable diseases, contribute to school absenteeism.
- Early chronic absenteeism
 - Future absenteeism
 - Poor academic achievement: particularly for social skills and reading
- Students with poor attendance
 - Score lower on national skills assessments
 - Predictor of school failure/dropping out of school
- Poor school performance
 - Poor adult health outcomes
 - » Not having a HS diploma is associated with increased mortality risk and lower life expectancy
 - Adult unemployment or underemployment
 - Decreased social support or control

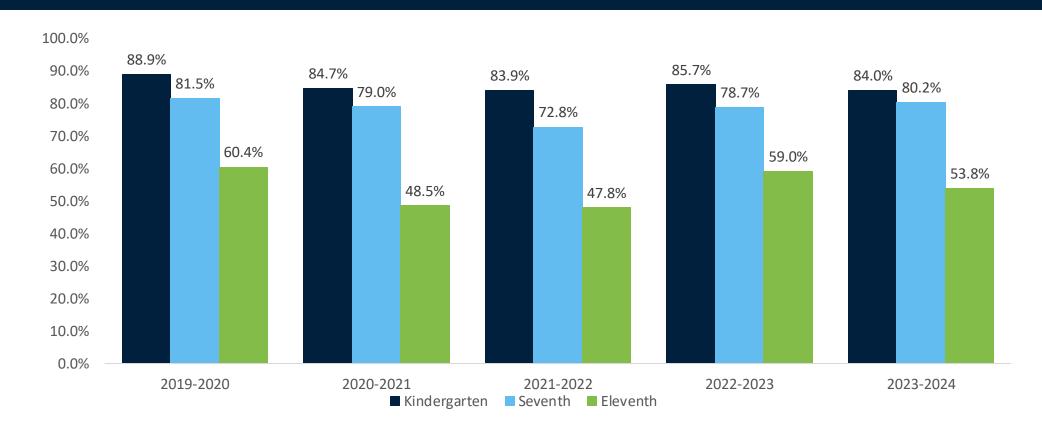
The Link Between School Attendance and Good Health | Pediatrics | American Academy of Pediatrics (aap.org)

Average Vaccination Coverage (DTaP, Polio, MMR, and Varicella) among Kindergarteners by School Year Compared to National



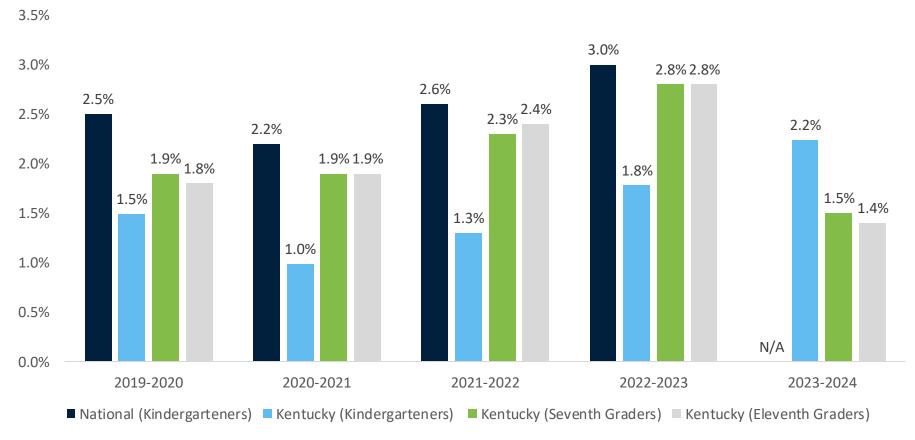
The reported coverage estimates for Kentucky represent the percentage of kindergartners with ≥ 4 doses of DTaP, ≥ 3 doses of Polio, ≥ 2 doses of MMR and ≥ 2 doses of Varicella coverage regardless of appropriate time intervals or ages .

Fully Vaccinated Students by School Year and Grade



The reported coverage estimate represents the percentage of kindergartners with 5 doses of DTaP, 4 doses of Polio, 2 doses of MMR, 2 doses of Varicella, 2 doses of Hep A, and 3 doses of Hep B coverage at the appropriate time intervals and ages. Current year data for fully vaccinated is collected from up to date/compliant for all required vaccines for age versus previous year data which was collected using valid/expired certificates. Using the best possible logic we were able to show a weighted representation of fully vaccinated status for historical data. Does not include students with any exemptions/objections. Only schools (public and private) who submitted the annual survey as of February 1st, 2024, have been used to calculate percentages.

Vaccination Exemptions for One or More Vaccines by School Year and Grade

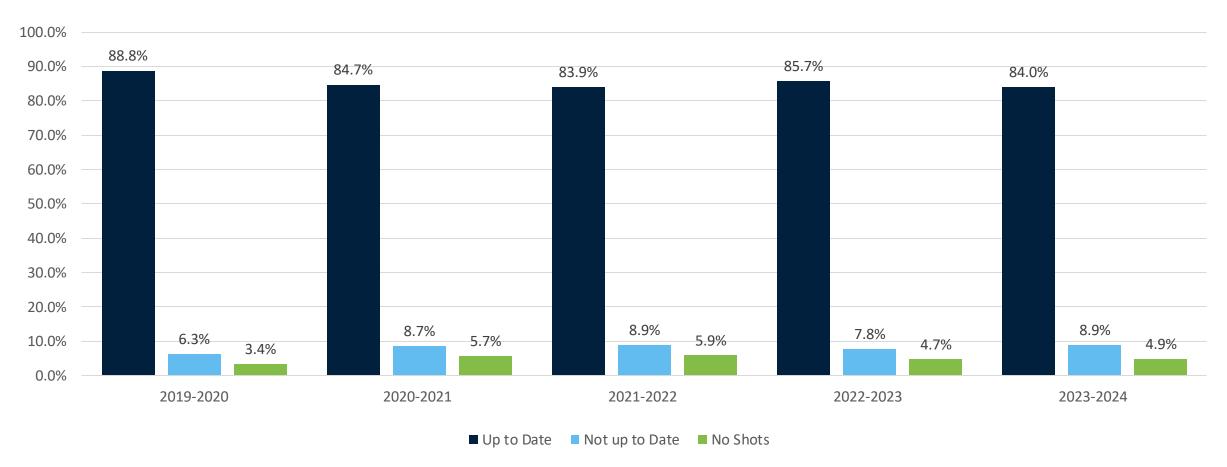


Only schools (public and private) who submitted the annual survey as of February 1st, 2024, have been used to calculate percentages.

Exemptions include both medical exemptions and religious objections.

CDC releases annual school data in November. Current school year national data is not yet available.

Percent of Vaccinated Kindergarten Students by School Year

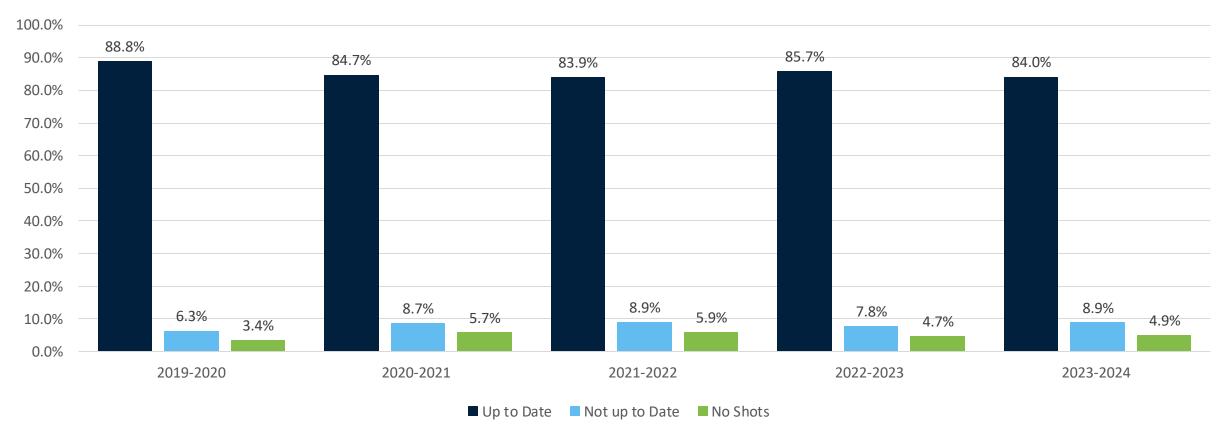


Only schools (public and private) who submitted the annual survey as of February 1st, 2024, have been used to calculate percentages.

Immunization status is calculated by fully immunized students with the Kentucky mandated Kindergarten vaccines.

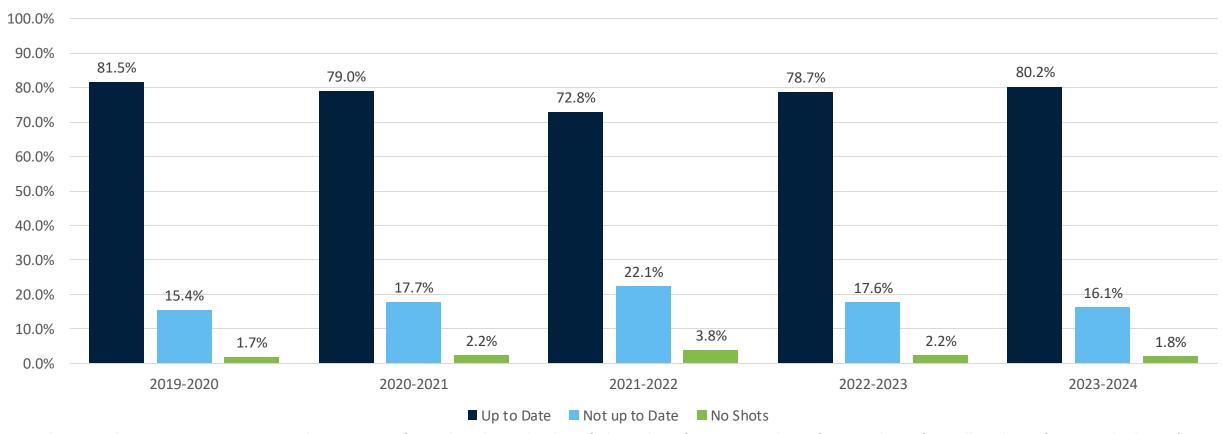
Does not include students with any exemptions/objections.

Percent of Vaccinated Kindergarten Students by School Year



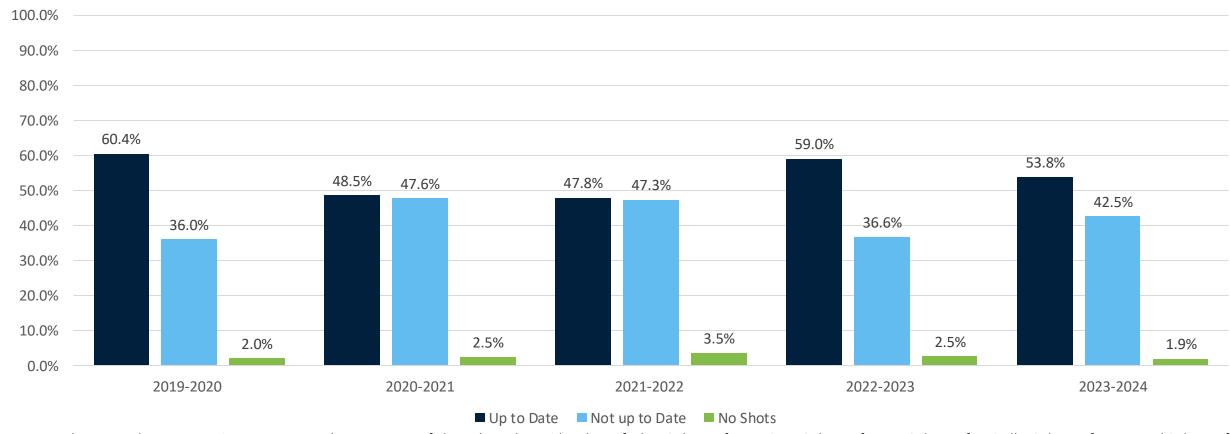
The reported coverage estimate represents the percentage of kindergartners with 5 doses of DTaP, 4 doses of Polio, 2 doses of MMR, 2 doses of Varicella, 2 doses of Hep A, and 3 doses of Hep B coverage at the appropriate time intervals and ages. Current year data for fully vaccinated is collected from up to date/compliant for all required vaccines for age versus previous year data which was collected using valid/expired certificates. Using the best possible logic we were able to show a weighted representation of fully vaccinated status for historical data. Does not include students with any exemptions/objections. Only schools (public and private) who submitted the annual survey as of February 1st, 2024, have been used to calculate percentages.

Percent of Vaccinated Seventh Grade Students by School Year



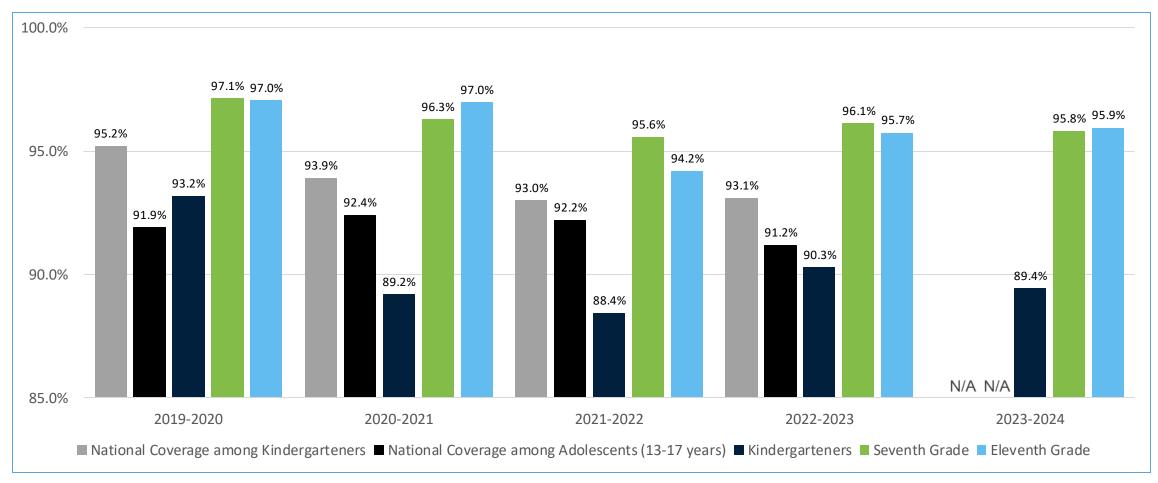
The reported coverage estimate represents the percentage of seventh graders with 1 dose of Tdap, 1 dose of MenACWY, 2 doses of MMR, 2 doses of Varicella, 2 doses of Hep A, and 3 doses of Hep B coverage at the appropriate time intervals and ages. Current year data for fully vaccinated is collected from up to date/compliant for all required vaccines for age versus previous year data which was collected using valid/expired certificates. Using the best possible logic we were able to show a weighted representation of fully vaccinated status for historical data. Does not include students with any exemptions/objections. Only schools (public and private) who submitted the annual survey as of February 1st, 2024, have been used to calculate percentages.

Percent of Vaccinated Eleventh Grade Students by School Year



The reported coverage estimate represents the percentage of eleventh graders with 1 dose of Tdap, 2 doses of MenACWY, 2 doses of MMR, 2 doses of Varicella, 2 doses of Hep A, and 3 doses of Hep B coverage at the appropriate time intervals and ages. Current year data for fully vaccinated is collected from up to date/compliant for all required vaccines for age versus previous year data which was collected using valid/expired certificates. Using the best possible logic we were able to show a weighted representation of fully vaccinated status for historical data. Does not include students with any exemptions/objections. Only schools (public and private) who submitted the annual survey as of February 1st, 2024, have been used to calculate percentages.

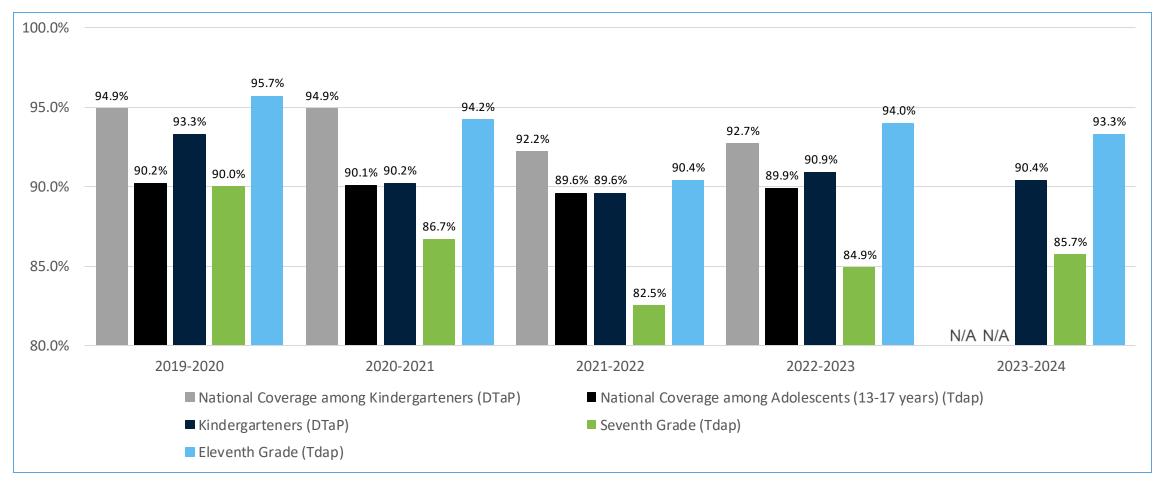
MMR (≥ 2 doses) Vaccination Coverage by School Year Compared to National



Dose counts are counted regardless of appropriate time intervals or ages.

Source: National Center for Immunization and Respiratory Diseases

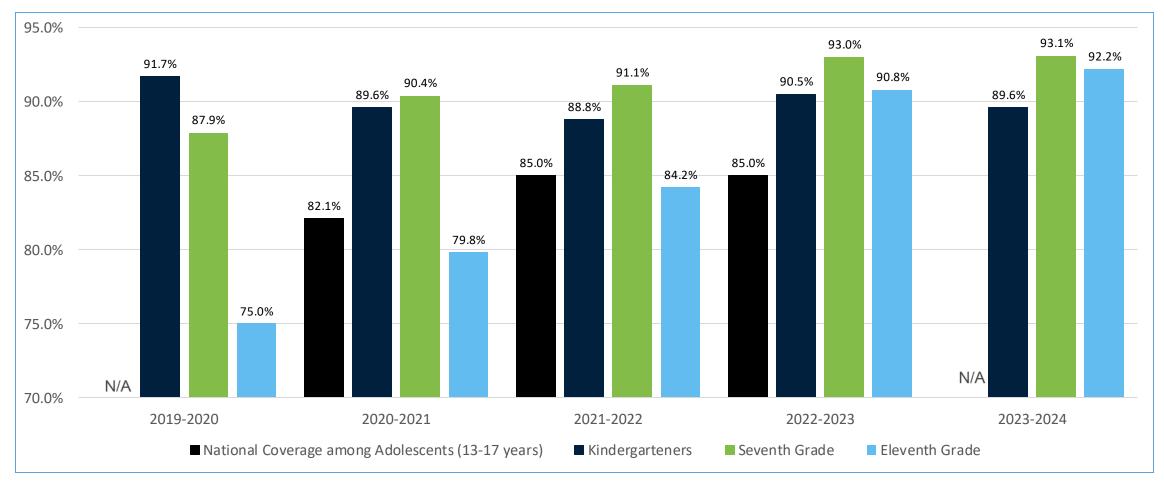
DTaP (≥4 doses)/Tdap (≥ 1 dose) Vaccination Coverage by School Year Compared to National



Dose counts are counted regardless of appropriate time intervals or ages.

Source: National Center for Immunization and Respiratory Diseases

Hep A (≥ 2 doses) Vaccination Coverage by School Year Compared to National



Dose counts are counted regardless of appropriate time intervals or ages.

Source: National Center for Immunization and Respiratory Diseases

Improvements

- Surveys reviewed for reliability and validity. Opportunities were given to resubmit if errors are identified.
 - Valid data represents the metrics that we are trying to measure
 - » In this case that would be the accurate representation of students who have the required vaccines and doses.
- Field staff reached out to specific schools to conduct validation on a sample size of students.
 - This process will help us identify challenges school staff are encountering and identify students who are not up to date with their immunizations to do outreach.
- Outreach to unresponsive schools.

Kentucky School Immunization Survey (2024-2025)

- They new REDCap survey will most likely being out to all school personnel and be posted on our website before Labor Day.
- The deadline to complete this survey will be December 31st, 2024.
- Important Updates and Changes have been made to this years REDCap Survey

Thank you.

Nimmi Lavu, MPH

nimmi.lavu@ky.gov

502-564-6142





