

ADOLESCENT IMMUNIZATION DATA BRIEF

New Jersey Department of Health

August 2024

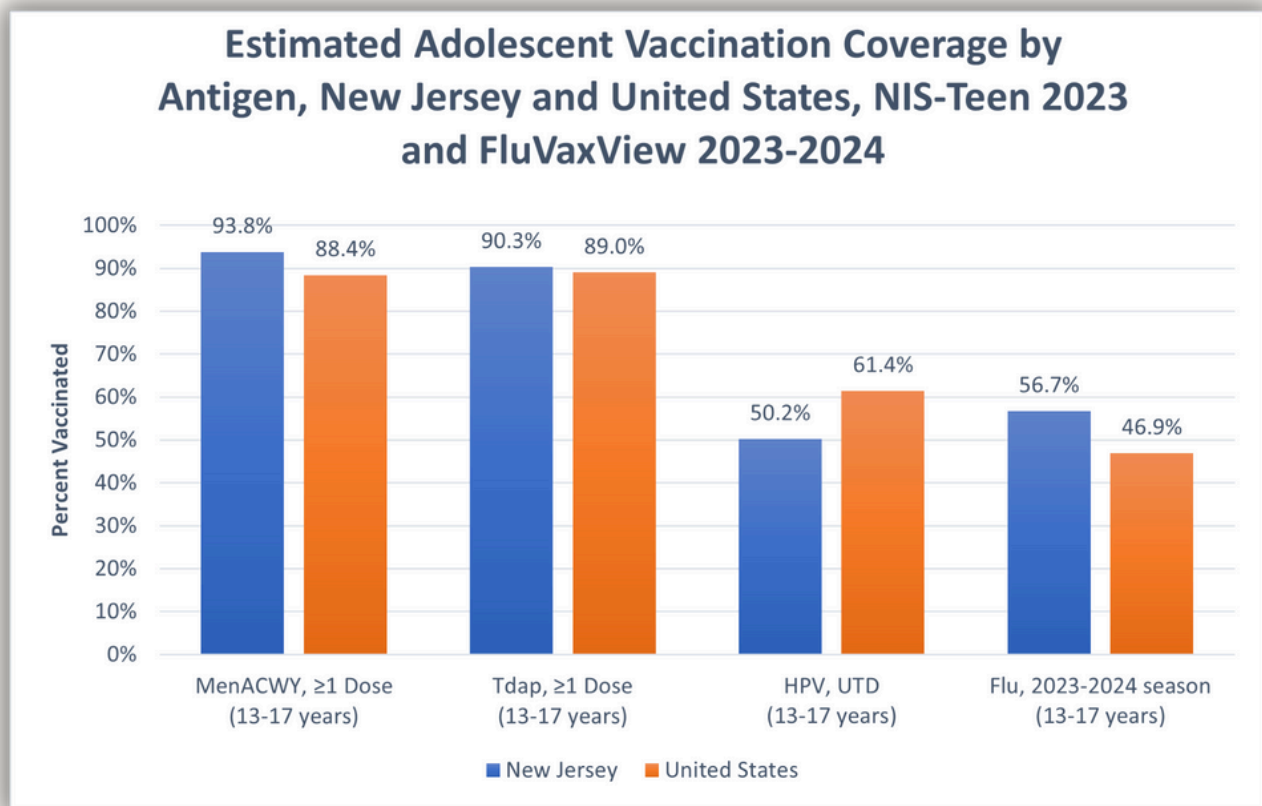


ADOLESCENT IMMUNIZATION COVERAGE IN NEW JERSEY

Vaccination is one of the most convenient and safest preventive care measures available. Vaccines are needed across the lifespan, including in adolescence. As people age, immunity from some childhood vaccines can wear off. In addition, the risk may increase for certain diseases. Vaccines may be needed based on age, health conditions, job, lifestyle, or travel habits.¹

In addition to an annual flu vaccine and COVID-19 vaccine, three vaccines are routinely recommended for adolescents to prevent diseases that include pertussis, meningococcal disease, and cancers caused by human papillomavirus (HPV). Additional vaccines may be recommended as catch-up if doses were missed in earlier years. This data brief provides current immunization estimates for adolescents in New Jersey and the United States.² Data is retrieved from the Centers for Disease Control and Prevention (CDC) National Immunization Survey (NIS) Teen, which provides data for New Jersey as an overall rate and also provides data by certain demographic characteristics such as race/ethnicity and gender.

Presented below is a summary graph of New Jersey adolescent immunization rates as compared to national data. Subsequent pages of this data brief present more detailed views of immunization estimates for specific vaccines. Healthy People 2030 objectives* are included, where applicable. The Healthy People objectives and targets are national measurable 10-year objectives for improving health and well-being.³



Key Findings

- New Jersey’s adolescent vaccination rates was significantly lower than the national average for HPV up to date vaccination.
- All the other vaccinations are above national average for 2023.
- NJ rates for flu vaccine during 2023-2024 flu season were significantly above the national average.



Data Notes

- National & State data collected through CDC National Immunizations Survey (NIS).
- Provides a “report card” of how well the nation is doing in protecting teens against vaccine preventable diseases.
- NIS-Teen is a random telephone survey of parents/guardians of teens 13-17 years old.
- The telephone survey is followed by a questionnaire mailed to vaccination providers to obtain the teen’s vaccination history.
- Data includes more than 20,000 adolescents.



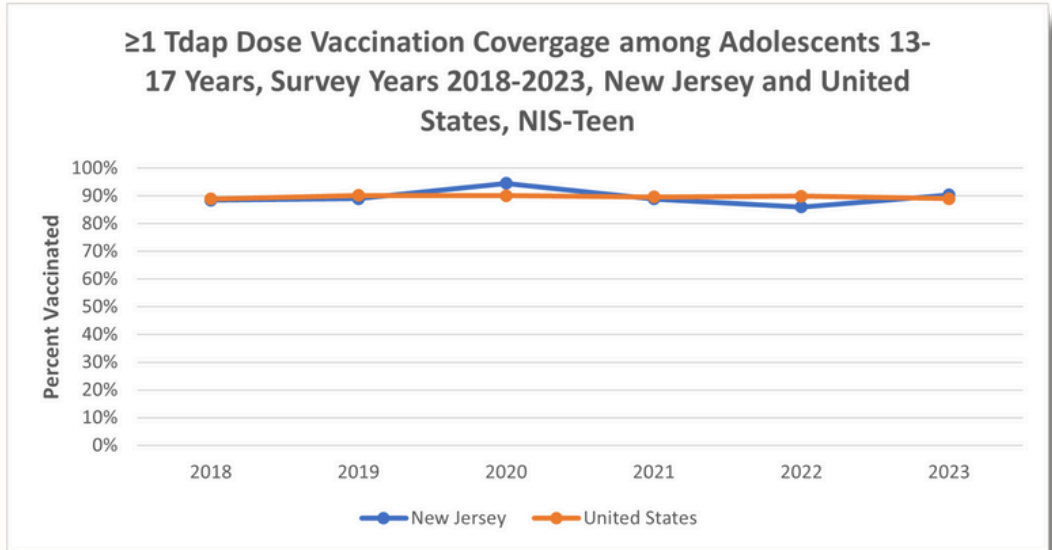
Limitations

- Due to sample size constraints, data are not available for small geographic areas.
- Small sample sizes do not allow for detailed sociodemographic breakdowns for some of the vaccine types.

TDAP VACCINATION

One dose of Tdap vaccination is routinely recommended at ages 11-12 years. The Tdap vaccine protects against tetanus, diphtheria, and pertussis. Following the dose at ages 11-12 years, a booster dose of any tetanus-containing vaccine is recommended every 10 years.

The graph below presents trends in national and state vaccination estimates for ages 13-17 years for years 2018 to 2023 and data for race/ethnicity represents years 2018 through 2023.

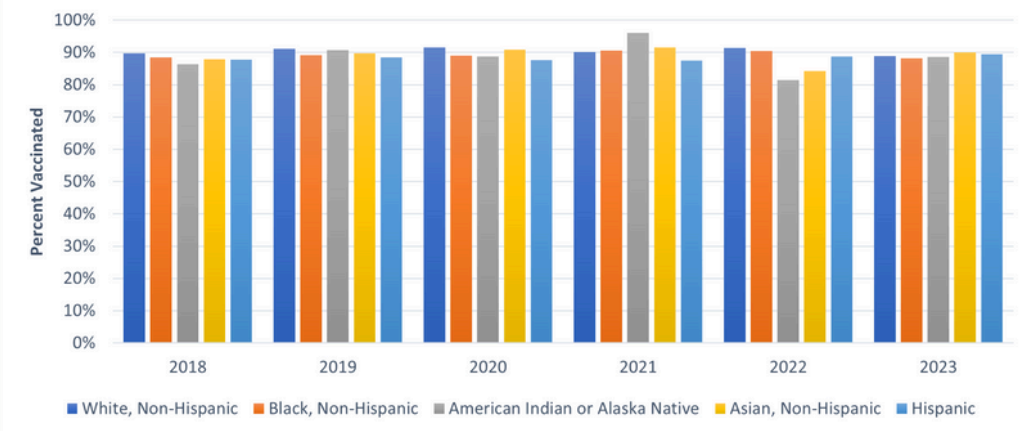


Key Findings

- Tdap vaccination rates in 2023 for adolescents ages 13-17 years were slightly higher in New Jersey (90.3%) compared to national (89.0%) averages. Rates have been slightly steady since 2018.
- Black, Non-Hispanic adolescents had the lowest level of Tdap vaccination rates (88.1%) amongst the other races in 2023.
- American Indian or Alaska Native adolescents Tdap vaccination rate increased significantly from 81.4% to 88.6%. Similarly, Asian, Non-Hispanic adolescents increased significantly from 84.3% to 90% in 2023.*

*Note the sample size for American Indian or Alaska Native population were significantly smaller compared to other race/ethnicity populations.

≥1 Tdap Dose Vaccination Coverage among Adolescent Age by Demographics, Survey Years 2018-2023, United States, NIS-Teen



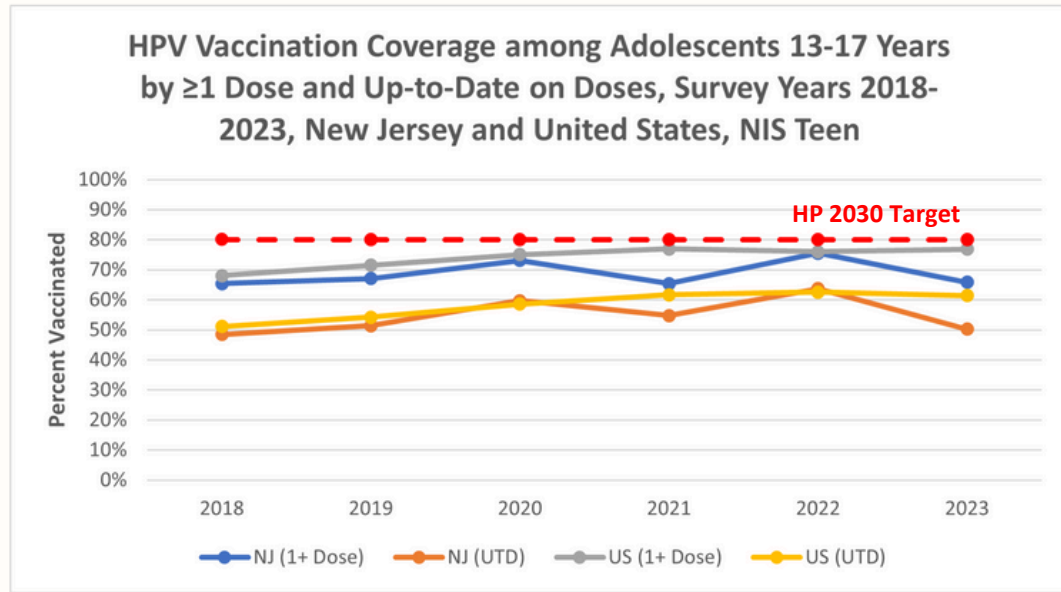
New Jersey has a school requirement for Tdap vaccination, which has helped to maintain high immunization rates.

HUMAN PAPILLOMAVIRUS (HPV) VACCINATION

More than 42 million Americans are currently infected with human papillomavirus (HPV) types that cause disease and about 13 million Americans, including teens, become infected with HPV each year. The HPV vaccine has the potential to prevent more than 90% of HPV-attributable cancers.⁵

All pre-teens ages 11-12 should receive two doses of HPV vaccine 6 to 12 months apart. It can be administered as early as age 9. Dosing of the HPV vaccine depends on age and health condition. Catch-up vaccination is advised through age 26. Vaccination may be administered to persons 27 through 45 years of age by shared clinical decision-making.

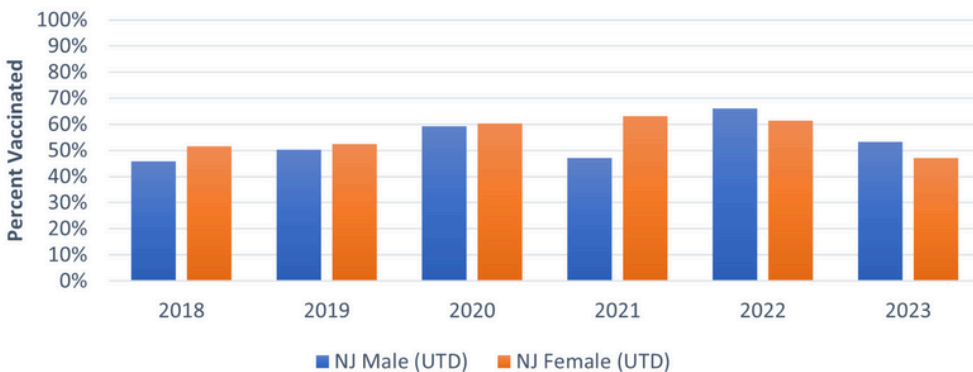
The graph below presents trends in national and state vaccination estimates for ages 13-17 years for years 2018 to 2023 and data for up to date by gender represents years 2018 through 2023.



Key Findings

- Up to date HPV vaccination for 13-17-year-olds in New Jersey has drastically decreased from 63.7% in 2022 to 50.2% in 2023, and this is significantly below the national average of 61.4%.
- Both NJ and US vaccination rates are below the Healthy People 2030 target of 80%.
- Up to date HPV vaccination for females in New Jersey was significantly lower (47%) compared to the US rate (64%).

HPV Up-to-Date Dose Vaccination Coverage among Adolescent Age by Gender, Survey Years 2018-2023, New Jersey, NIS-Teen



Healthy People 2030 Objective:

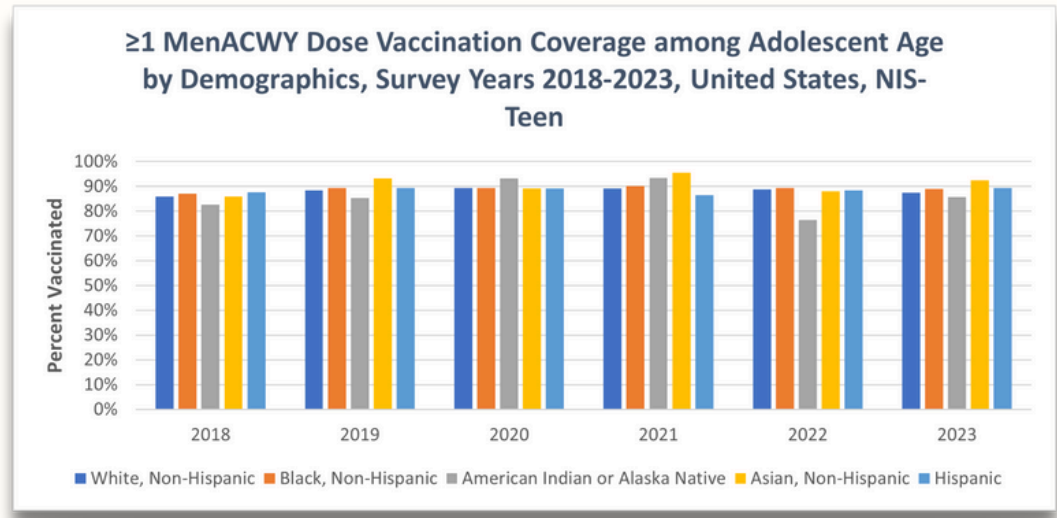
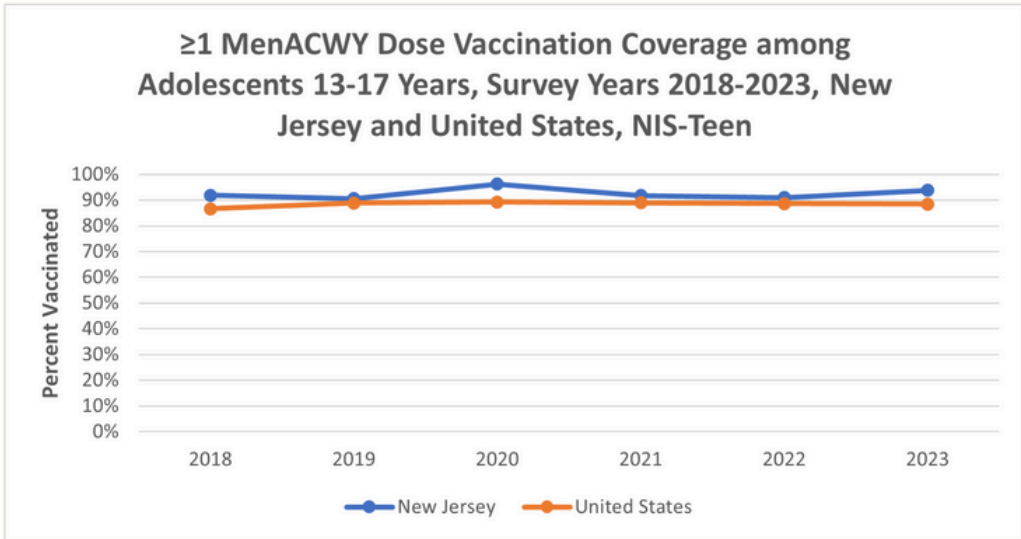
Increase the proportion of adolescents who receive recommended doses of the HPV vaccine. [IID-08]

U.S. Target: 80%

MENINGOCOCCAL VACCINATION

Meningococcal disease is any type of illness caused by *Neisseria meningitidis* bacteria. There are two types of meningococcal vaccines available in the United States, meningococcal conjugate (MenACWY) vaccine and serogroup B meningococcal (MenB) vaccines. The CDC currently recommends all preteens receive one dose of MenACWY vaccine at ages 11-12 years old and receive a booster dose at age 16 years. CDC recommends MenB vaccines for people ages 10 and older at increased risk for meningococcal disease. Teens and young adults (ages 16-23 years) may also get a MenB vaccine.

The graph below presents trends in national and state vaccination estimates for ages 13-17 years for years 2018 to 2023 and data for race/ethnicity represents years 2018 through 2023.



Key Findings

- In 2023, CDC reported that nationally, 88.4% of teens ages 13-17 years received one or more doses of MenACWY vaccine as compared to 93.8% in New Jersey.
- New Jersey has a school requirement for MenACWY vaccination, which has helped to maintain high immunization rates.⁴
- National MenACWY vaccination coverage rates stayed consistent amongst the race/ethnicity demographic; however, there was a significant increase within the American Indian/Alaska Native population with rates going from 76.5% in 2022 to 85.7% in 2023.*

*Note the sample size for American Indian or Alaska Native population were significantly smaller compared to other race/ethnicity populations.

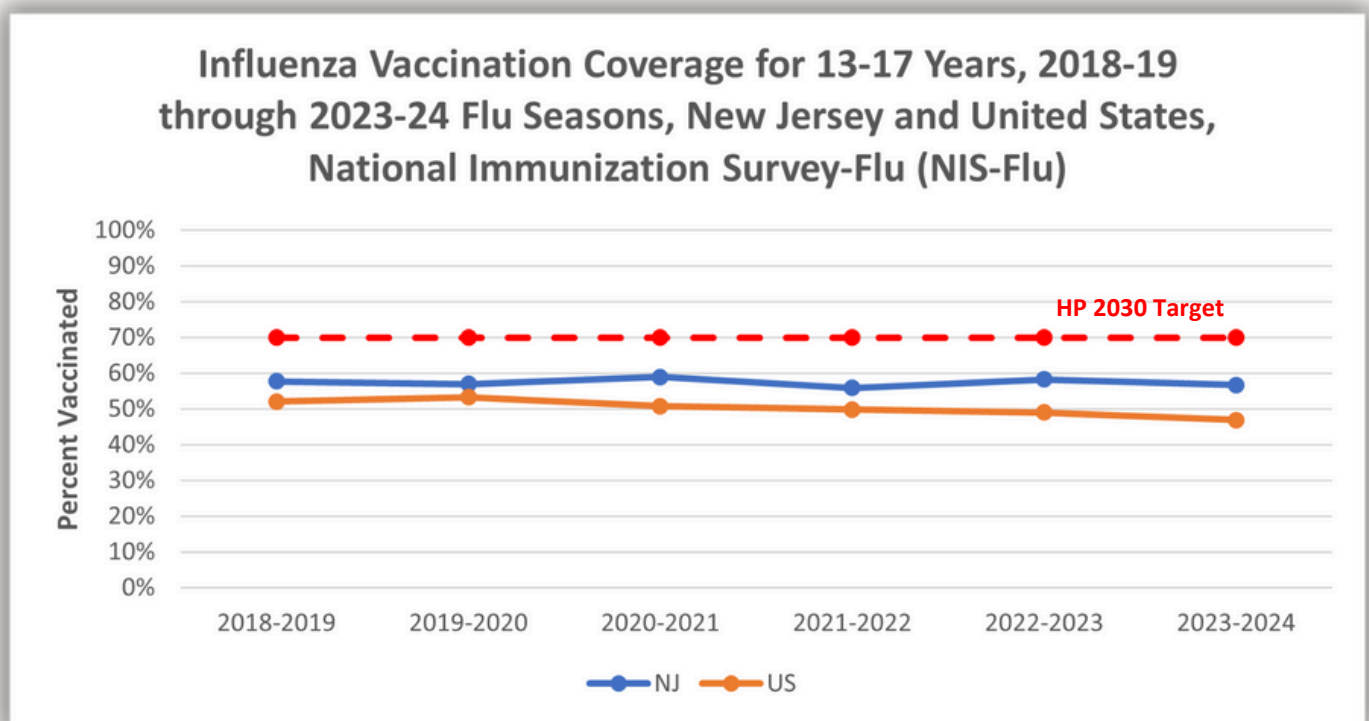


Currently, there are no coverage estimates either nationally or statewide for MenB vaccines. New Jersey level data are also not available for MenACWY booster doses.

INFLUENZA VACCINATION

An annual influenza vaccine is recommended for everyone 6 months of age and older. Vaccination is particularly important for people who are at high risk of serious complications from influenza. High-risk persons can include those ages 65 years and older, those with certain chronic medical conditions (such as asthma, diabetes, or heart disease), pregnant women, and children under 5 years of age.⁶

The graph below presents trends in national and state influenza vaccination estimates for 13-17 years. New Jersey data is represented with the blue line and national data is represented with the orange line.



Healthy People 2030 Objective:

Increase the proportion of people who get the flu vaccine every year. [IID-09]

U.S. Target: 70%

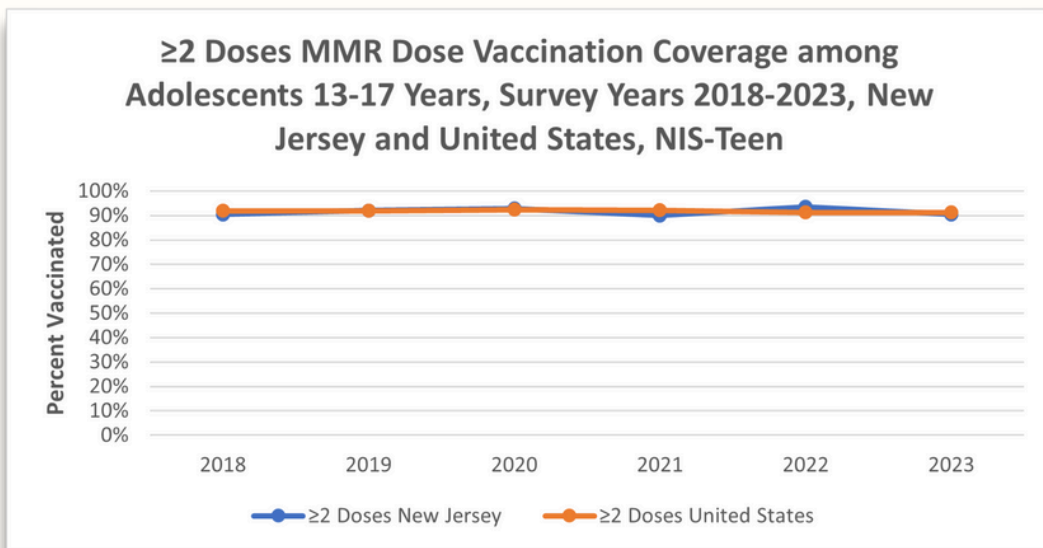
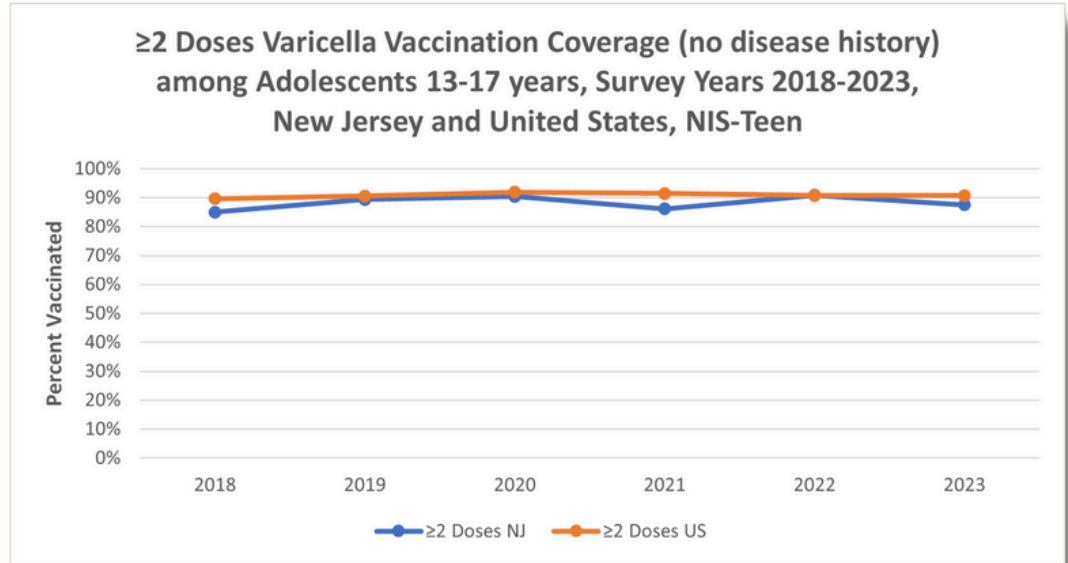


Key Findings

- Approximately **56.7%** of New Jersey's adolescents ages 13-17 years received a flu vaccination in the 2023-2024 flu season. This was significantly above the national average (**46.9%**) for this age group.

VARICELLA AND MMR VACCINATION

Varicella vaccination protects against chickenpox disease. Two doses of the vaccine are about 90% effective at preventing chickenpox. While varicella is a routine childhood immunization, catch-up vaccination can be administered to adolescents if they do not have evidence of immunity via a history of infection or prior vaccination.



MMR vaccination protects against three diseases: measles, mumps, and rubella. MMR is also a routine childhood immunization that can be administered to adolescents as a catch-up vaccination if they have not yet received the vaccine.



Key Findings

- Approximately 87.5% of adolescents ages 13-17 years in New Jersey have received two or more doses of varicella vaccine according to the 2023 NIS-Teen. This is lower than the national average (90.8%).
- Varicella vaccination rates both nationally and in New Jersey were trending upward since 2013, however there was decrease in varicella vaccination coverage in New Jersey in 2023.
- Approximately 90.4% of adolescents ages 13-17 years in New Jersey have received two or more doses of MMR vaccine according to the 2023 NIS-Teen, which is slightly below the national average (91.3%). MMR vaccination rates have remained relatively consistent since 2013.

RESOURCES

Protect Me With 3+

The annual Protect Me With 3+ campaign is an adolescent immunization awareness campaign hosted by the Partnership for Maternal and Child Health of Northern New Jersey in collaboration with the New Jersey Department of Health. Students in middle and high school are encouraged to submit posters or videos about one of the routine adolescent immunizations.

Visit protectmewith3.com to learn more about the campaign and to view previous winning submissions.



NJIIS

(New Jersey Immunization Information System)



Immunization registries are confidential, population-based, computerized information systems that collect and consolidate vaccination data within a geographic area. In New Jersey, the NJIIS is the established statewide immunization information system serving as the official repository of immunizations administered to its residents.

Visit njiis.nj.gov to learn more about New Jersey's immunization registry.

Immunization Standards

The most essential immunization practices are outlined in the Standards for Child and Adolescent Immunization Practice.⁷ Among the standards are criteria that outline best practices to assess patient vaccination status at every clinical encounter, strongly recommend needed vaccines, either offer needed vaccines or refer patients to another provider who can administer the recommended vaccines, and document vaccinations received by patients in an immunization information system.

The New Jersey Department of Health, Vaccine Preventable Disease Program, developed an immunization standards guide to assist in routine implementation of the standards. This guide provides a self-assessment job aid, instructions, and tips on how to improve upon self-identified gaps. The guide can be accessed at: nj.gov/health/cd/documents/vpdp/imm_standards_guide.pdf.



RECOMMENDATIONS

- Health care professionals should use strong recommendations when patients are due for vaccines.
 - Clinicians are the most trusted source of vaccine information for parents and patients.
 - A strong recommendation from a health care professional is the best predictor of whether parents decide to vaccinate their child.
- Health care providers should use evidence-based strategies to increase immunization rates.
 - Establish a 16-year-old platform to help ensure adherence to receiving recommended vaccines at this age, as well as offering an opportunity for catching up on any missed vaccines.
 - Provide educational materials in waiting rooms. Materials should be in plain language and should meet patients' social, cultural, and linguistic needs.
 - Assess patient immunization records at every visit and provide education on the importance of vaccination. Plan to continue the conversation if a patient is hesitant.
 - Use NJIIS to conduct reminder/recall reports to view patients who are due for vaccination, or have missed vaccinations. Outreach to those patients to set up follow-up appointments.^{8 9}
 - Recommend patients to download the Docket App and utilize it to provide proof of vaccination status as needed. The Docket App also has built-in reminders about when the patient is due for their next immunizations.
 - Implement standing orders to allow other members of the health care team to administer immunizations.
 - Consider hiring or working with a partner organization to provide community outreach and education to diverse populations.
- Decrease barriers to immunizations. Patients should be aware that most health insurance plans cover the cost of recommended vaccines. Certain patients may be eligible to receive vaccines at no cost through the Vaccines For Children¹⁰ (VFC) program through VFC-enrolled doctors. The VFC program helps ensure that all children have a better chance of getting their recommended vaccines by providing vaccines at no cost to children who might not otherwise be vaccinated because of inability to pay.



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- 4.NJDOH. NJ School Immunization Requirements. Available at: nj.gov/health/cd/documents/imm_requirements/k12_parents.pdf.
- 5.CDC. HPV Infection. Available at: [cdc.gov/hpv/vaccines/index.html](https://www.cdc.gov/hpv/vaccines/index.html).
- 6.CDC. Flu Symptoms and Complications. Available at: [cdc.gov/flu/symptoms/symptoms.htm](https://www.cdc.gov/flu/symptoms/symptoms.htm).
- 7.NJDOH. Standards for Child and Adolescent Immunization Practices. Available at: nj.gov/health/cd/documents/vpdp/imm_standards_guide.pdf
- 8.Reminder Systems and Strategies for Increasing Childhood Vaccination Rates. Available at: [cdc.gov/vaccines/hcp/admin/reminder-sys.html](https://www.cdc.gov/vaccines/hcp/admin/reminder-sys.html).
- 9.NJIIS Reminder Recall Help Guide. Available at: njiis.nj.gov/docs/ReminderRecall/Reminder_Recall_Help_Guide.pdf.
- 10.NJDOH. New Jersey Vaccines for Children Brochure. Available at: njiis.nj.gov/docs/VFCBrochure.pdf.

DATA SOURCES

National Immunization Survey - Teen (NIS-Teen). Data accessed via TeenVaxView portal at: [cdc.gov/teenvaxview/index.html](https://www.cdc.gov/teenvaxview/index.html)

National Immunization Survey-Flu (NIS-Flu). Data accessed via the FluVaxView portal at: [cdc.gov/fluvoxview/index.html](https://www.cdc.gov/fluvoxview/index.html)

To view the Adolescent Data Brief, visit our website at:
nj.gov/health/cd/vpdp.shtml