



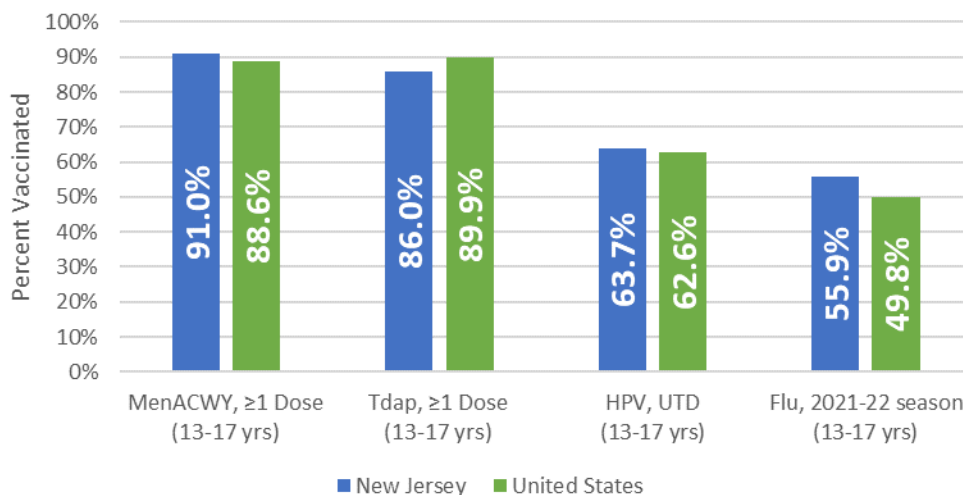
## Adolescent Immunization Coverage in New Jersey

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, risk may increase for certain diseases. Vaccines may be needed based on age, health conditions, job, lifestyle, or travel habits.<sup>1</sup>

In addition to an annual flu 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.<sup>2</sup> Data is retrieved from CDC National Immunization Survey (NIS) Teen, which provides data for New Jersey as an overall rate and also provides data by certain demographic characteristics, including poverty level, race/ethnicity, and urbanicity.

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

Estimated Adolescent Vaccination Coverage by Antigen, New Jersey and United States, NIS-Teen 2022 and FluVaxView 2021-22



**Data Source:** National Immunization Survey - Teen (NIS-Teen) [cdc.gov/vaccines/imz-managers/coverage/teenvaxview/index.html](https://www.cdc.gov/vaccines/imz-managers/coverage/teenvaxview/index.html) and FluVaxView [cdc.gov/flu/fluview/interactive.htm](https://www.cdc.gov/flu/fluview/interactive.htm). Date Accessed: August 25, 2023.

Note: Some antigens were reported in previous year by CDC by ages 13-15. All data is now reported by ages 13-17.

\*Additional details on the Healthy People objectives and targets can be found at: [healthypeople.gov](https://www.healthypeople.gov).

## Key Findings

- New Jersey’s adolescent vaccination rates are below the national average for Tdap vaccination and above national average for MenACWY and flu vaccination during the 2021-22 flu season. NJ rates are slightly above the national average for HPV up-to-date vaccinations.

## Data Notes

- National and state data were collected through the CDC National Immunization Survey (NIS). The NIS-Teen provides a “report card” to let us know how well we are doing in protecting our nation’s teens against vaccine-preventable diseases. The NIS-Teen is a random telephone survey of parents or guardians of teens 13–17 years old and, in 2021, included data for more than 20,000 adolescents. The telephone survey is followed by a questionnaire mailed to vaccination providers to obtain the teen’s vaccination history.

## 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.



# NEW JERSEY DEPARTMENT OF HEALTH DATA BRIEF: ADOLESCENT VACCINATION

## Tdap Vaccination

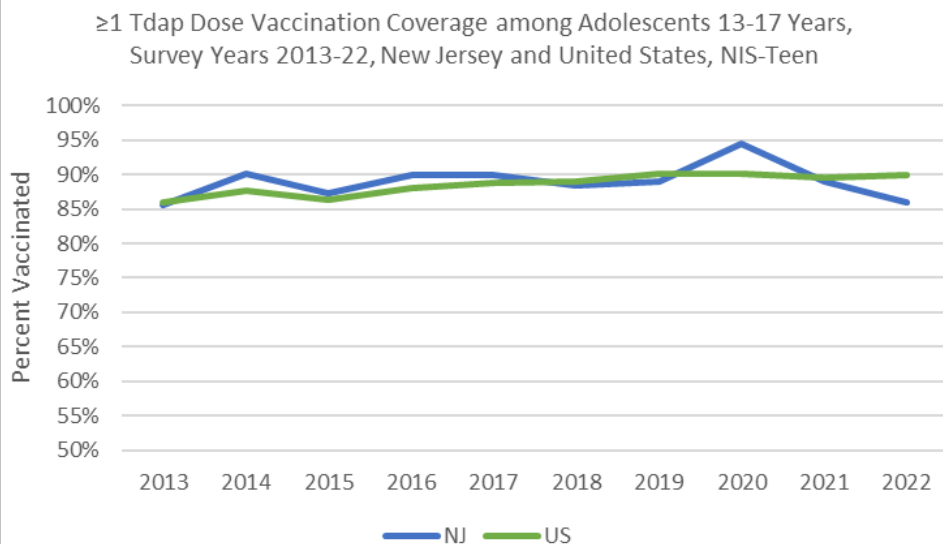
One dose of Tdap vaccination is routinely recommended at ages 11-12 years. The Tdap vaccine protects against tetanus, diphtheria, and pertussis. Following the dose at ages 11-12 years, a booster dose of any tetanus-containing vaccine is recommended every 10 years.

The graph below presents trends in national and state vaccination estimates for ages 13-17 years for years 2013 to 2022 and data for selected demographics represents years 2018 through 2022.

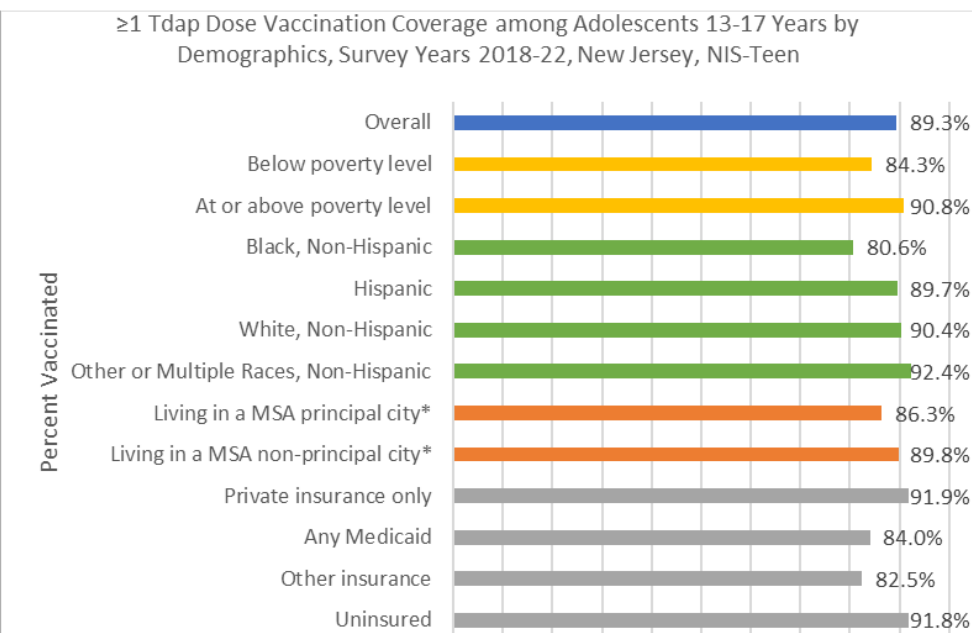
## Key Findings

- Tdap vaccination rates in 2022 for adolescents ages 13-17 years were slightly lower in New Jersey (**86.0%**) compared to national (**89.9%**) averages. Rates have increased slightly since 2013.
- New Jersey has a school requirement<sup>4</sup> for Tdap vaccination, which has helped to maintain high immunization rates.
- Tdap vaccination rates vary by poverty level, race/ethnicity, urbanicity, and insurance status.
- Black, Non-Hispanic adolescents had the lowest level of Tdap vaccination rates (**80.6%**), compared to Hispanic (**89.7%**), White (**90.4%**), and other or multiple races (**92.4%**).
- Adolescents below poverty level had lower Tdap vaccination rates (**84.3%**) as compared to those living at or above poverty level (**90.8%**).
- Adolescents living in an MSA principal city had slightly lower Tdap vaccination rates (**86.3%**) as compared to those in a non-principal city (**89.8%**).
- Adolescent with private insurance (**91.9%**) had similar vaccination rates to those who are uninsured (**91.8%**) and higher than those who have other insurance (**82.5%**) or on Medicaid (**84.0%**).

### TREND DATA



### SELECTED DEMOGRAPHICS



\*Metropolitan Statistical Area (MSA) status was determined based on household-reported county and city of residence and was grouped into three categories: MSA principal city, MSA non-principal city, and non-MSA. MSA and principal city were as defined by the U.S. Census Bureau. Non-MSA areas include urban populations not located within an MSA as well as completely rural areas.

Data Source: National Immunization Survey—Teen (NIS-Teen). Data can be accessed via TeenVaxView portal at: [cdc.gov/vaccines/imz-managers/coverage/teenvaxview/index.html](https://cdc.gov/vaccines/imz-managers/coverage/teenvaxview/index.html). Date Accessed: August 25, 2023.



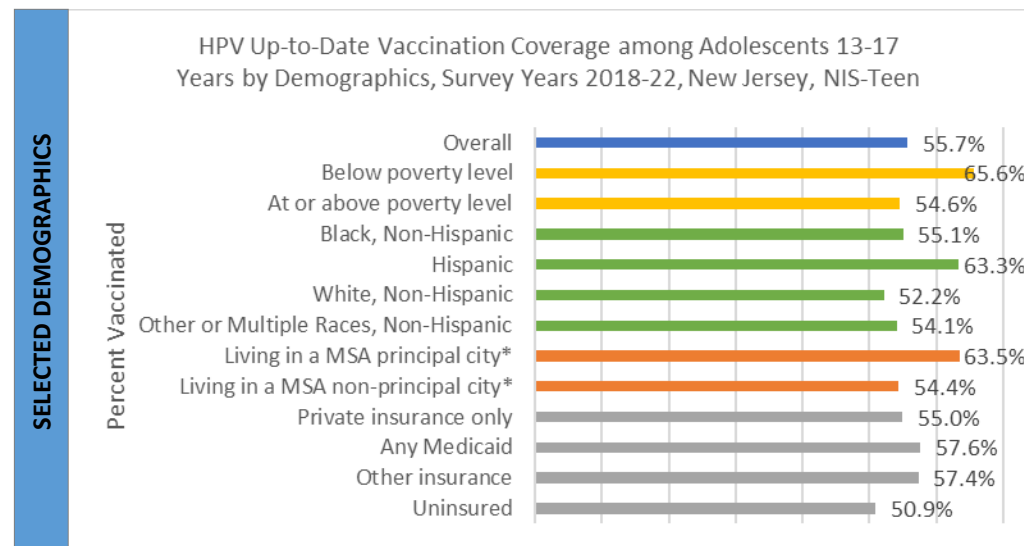
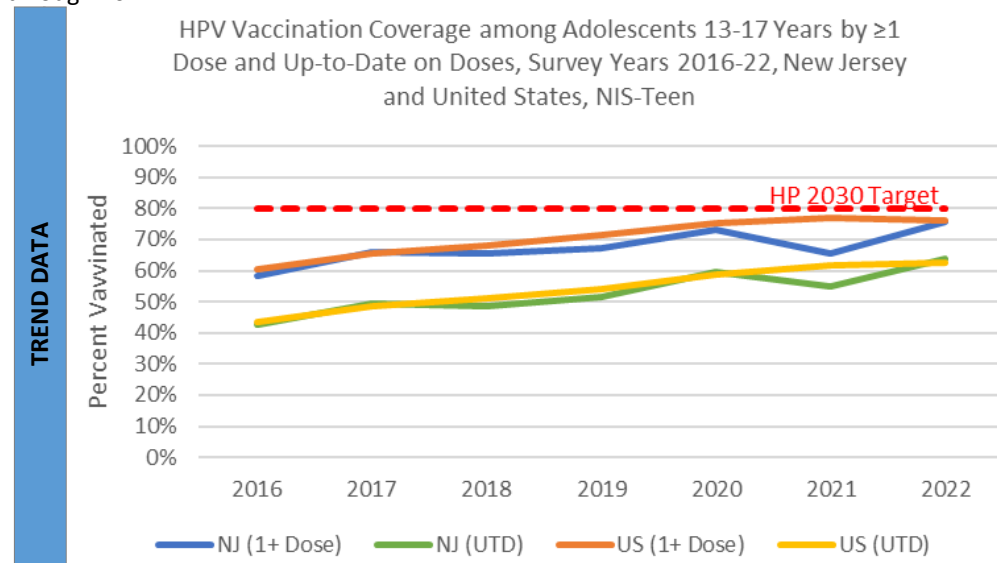
# NEW JERSEY DEPARTMENT OF HEALTH DATA BRIEF: ADOLESCENT VACCINATION

## 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.<sup>5</sup>

All pre-teens ages 11 or 12 should receive two doses of HPV vaccine six to 12 months apart. The HPV vaccine is advised for pre-teens at ages 11 or 12, and 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 2016 to 2022 and data for selected demographics represents years 2018 through 2022.



## Key Findings

- Up-to-date HPV vaccination for 13-17-year-olds in New Jersey has increased from **42.8%** in 2016 to **63.7%** in 2022, and are slightly above the national average of **62.6%**. This is below the Healthy People 2030 target of **80%**.
- Variances in up-to-date HPV vaccination are present by poverty level, race/ethnicity, urbanicity, and insurance status.
- Adolescents below poverty level (**65.6%**) had higher HPV vaccination rates than those at or above the poverty level (**54.6%**).
- Hispanic adolescents (**63.3%**) had higher HPV vaccination rates compared to Black (**55.1%**), White (**52.2%**), and other or multiple races (**54.1%**).
- Adolescents living in an MSA principal city had higher HPV vaccination rates (**63.5%**) as compared to those in a non-principal city (**54.4%**).
- Adolescent who are uninsured (**50.9%**) had the lowest rates of HPV vaccination compared to those who have private insurance (**55.0%**), any Medicaid (**57.6%**), or other insurance (**57.4%**).

## Targets

### Healthy People 2030 Objective

[IID-08] Increase the proportion of adolescents who receive recommended doses of the human papillomavirus (HPV) vaccine

**U.S. Target: 80%**

Data Source: National Immunization Survey—Teen (NIS-Teen). Data can be accessed via TeenVaxView portal at: [cdc.gov/vaccines/imz-managers/coverage/teenvaxview/index.html](https://cdc.gov/vaccines/imz-managers/coverage/teenvaxview/index.html). Date Accessed: August 25, 2023.

For more information on HPV immunization, please see the HPV Data brief at: [nj.gov/health/cd/topics/hpv.shtml](https://nj.gov/health/cd/topics/hpv.shtml)



# NEW JERSEY DEPARTMENT OF HEALTH DATA BRIEF: ADOLESCENT VACCINATION

## 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 to receive one dose of MenACWY vaccine at ages 11-12 years old and to 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.

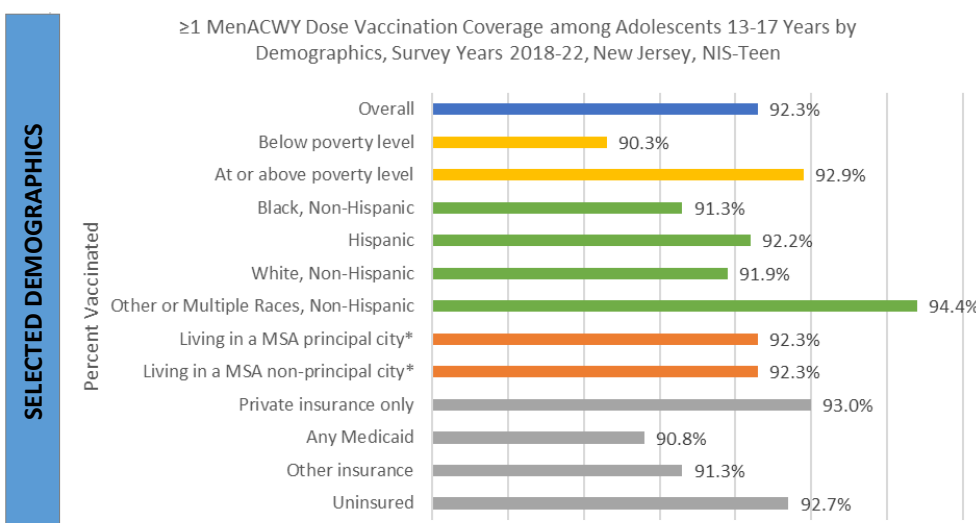
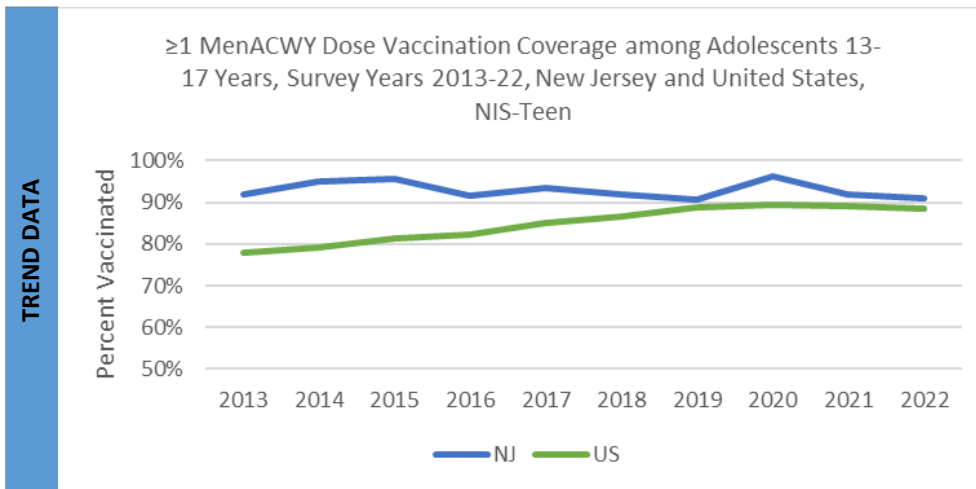
The graph below presents trends in national and state vaccination estimates for ages 13-17 years for years 2013 to 2022 and data for selected demographics represents years 2018 through 2022.

## Key Findings

- In 2022, the CDC reported that nationally, **88.6%** of teens ages 13-17 years received one or more doses of MenACWY vaccine as compared to **91.0%** in New Jersey.
- New Jersey has a school requirement<sup>4</sup> for MenACWY vaccination, which has helped to maintain high immunization rates.
- New Jersey does not have MenACWY booster dose coverage rates; however national rates for 2022 estimate **60.8%** of 17-year-olds have received two or more doses of MenACWY.\*
- National MenACWY vaccination estimates vary by poverty level, race/ethnicity, urbanicity, and insurance coverage.

## Data Notes

- 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.



### Data Sources:

National Immunization Survey—Teen (NIS-Teen). Data can be accessed via TeenVaxView portal at: [cdc.gov/vaccines/imz-managers/coverage/teenvaxview/index.html](https://cdc.gov/vaccines/imz-managers/coverage/teenvaxview/index.html). Date Accessed: August 25, 2023.

\*Pingali C, Yankey D, Elam-Evans LD, et al. Vaccination Coverage Among Adolescents Aged 13–17 Years — National Immunization Survey—Teen, United States, 2022. MMWR Morb Mortal Wkly Rep 2023;72:912–919. DOI: [dx.doi.org/10.15585/mmwr.mm7234a3](https://doi.org/10.15585/mmwr.mm7234a3).

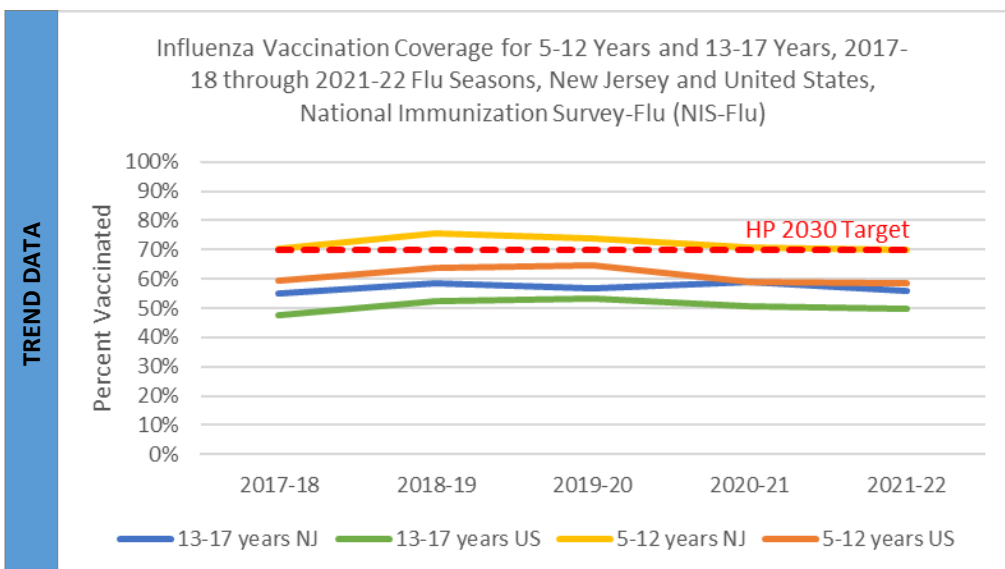


# NEW JERSEY DEPARTMENT OF HEALTH DATA BRIEF: ADOLESCENT VACCINATION

## 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.<sup>6</sup>

The graph below presents trends in national and state influenza vaccination estimates for ages 5-12 years and 13-17 years. New Jersey data is represented with the blue lines and national data is represented with the gray lines. Solids lines indicate ages 13-17 years and dashed lines show estimates for 5-12 years of age.



## Key Findings

- Approximately **55.9%** of New Jersey's adolescents ages 13-17 years received a flu vaccination in the 2021-2022 flu season. This was slightly above the national average (**49.8%**) for this age group.
- Approximately **70.0%** of New Jersey's youth ages 5-12 years received a flu vaccination in the 2021-2022 flu season. Flu vaccination for this age group remains above the national average (**58.4%**).

## Targets

### Healthy People 2030 Objective<sup>3</sup>

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

**U.S. Target: 70%**

## 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 or COVID-19. Visit [protectmewith3.com](http://protectmewith3.com) to learn more about the campaign and to view previous winning submissions.



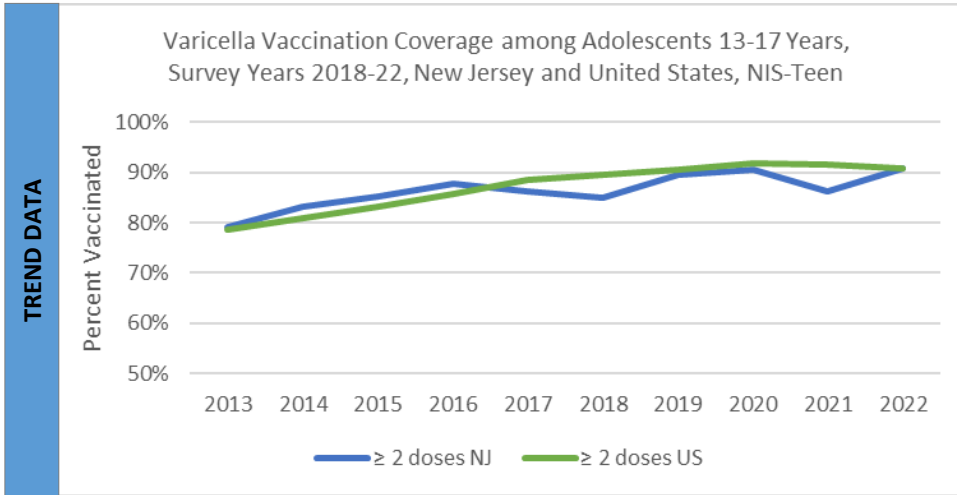
Data Source: National Immunization Survey-Flu (NIS-Flu). Data can be accessed via the FluVaxView portal at: [cdc.gov/flu/fluvoxview/interactive-general-population.htm](https://cdc.gov/flu/fluvoxview/interactive-general-population.htm). Date Accessed: August 25, 2023.



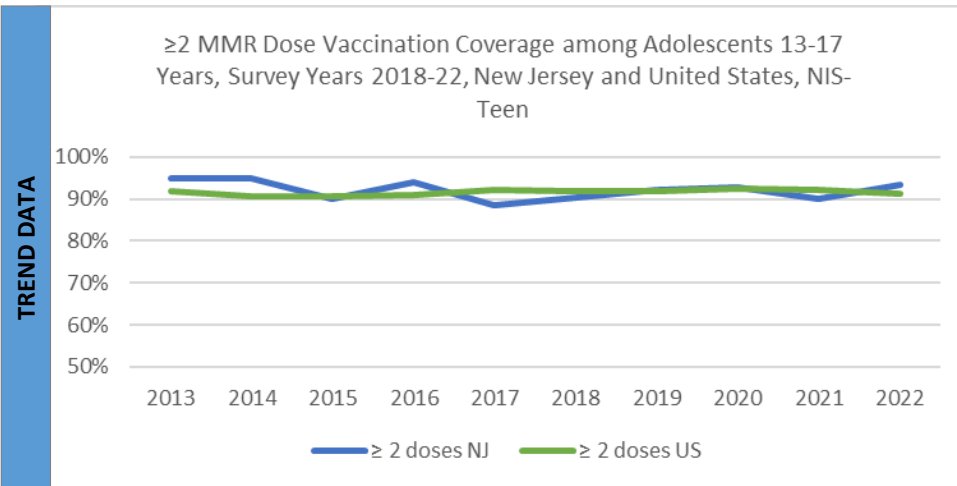
# NEW JERSEY DEPARTMENT OF HEALTH DATA BRIEF: ADOLESCENT VACCINATION

## 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 catch-up vaccination if they have not yet received the vaccine.



## Key Findings

- Approximately **90.9%** of adolescents ages 13-17 years in New Jersey have received two or more doses of varicella vaccine according to the 2022 NIS-Teen. This is similar to the national average (**90.8%**).
- Varicella vaccination rates both nationally and in New Jersey have trended upward since 2013.
- Approximately **93.5%** of adolescents ages 13-17 years in New Jersey have received two or more doses of MMR vaccine according to the 2022 NIS-Teen, which is slightly above the national average (**91.2%**).
- MMR vaccination rates have remained relatively consistent since 2013.

Data Source: National Immunization Survey—Teen (NIS-Teen). Data can be accessed via TeenVaxView portal at: [cdc.gov/vaccines/imz-managers/coverage/teenvaxview/index.html](https://cdc.gov/vaccines/imz-managers/coverage/teenvaxview/index.html). Date Accessed: August 25, 2023.

## New Jersey Immunization Information System (NJiIS)

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](https://njiis.nj.gov) to learn more about New Jersey's immunization registry.



## NEW JERSEY DEPARTMENT OF HEALTH DATA BRIEF: ADOLESCENT VACCINATION

### Immunization Standards

The most essential immunization practices are outlined in the Standards for Child and Adolescent Immunization Practice.<sup>7</sup> 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/vdpdp/imm\\_standards\\_guide.pdf](https://nj.gov/health/cd/documents/vdpdp/imm_standards_guide.pdf).

Standards for  
Immunization Practice  
Self-Assessment Guide & Job Aids



### RECOMMENDATIONS

- Health care professionals should **use a strong recommendation** 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.<sup>8,9</sup>
  - 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 Children (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.<sup>10</sup>

### REFERENCES

- 1 CDC. Vaccines at 11-12 years. Available at: [cdc.gov/vaccines/parents/by-age/years-11-12.html](https://cdc.gov/vaccines/parents/by-age/years-11-12.html).
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- 3 Healthy People 2030. Available at: [health.gov/healthypeople](https://health.gov/healthypeople).
- 4 NJDOH. NJ School Immunization Requirements. Available at: [nj.gov/health/cd/documents/imm\\_requirements/k12\\_parents.pdf](https://nj.gov/health/cd/documents/imm_requirements/k12_parents.pdf).
- 5 CDC. HPV Infection. Available at: [cdc.gov/hpv/parents/about-hpv.html](https://cdc.gov/hpv/parents/about-hpv.html).
- 6 CDC. Flu Symptoms and Complications. Available at: [cdc.gov/flu/symptoms/symptoms.htm](https://cdc.gov/flu/symptoms/symptoms.htm).
- 7 Standards for Child and Adolescent Immunization Practices. National Vaccine Advisory Committee. Pediatrics Oct 2003, 112 (4) 958-963.
- 8 Reminder Systems and Strategies for Increasing Childhood Vaccination Rates. Available at: [cdc.gov/vaccines/hcp/admin/reminder-sys.html](https://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](https://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](https://njiis.nj.gov/docs/VFCBrochure.pdf).

To view the *Adult Vaccination Data Brief*, visit our website at: [nj.gov/health/cd/vdpdp.shtml](https://nj.gov/health/cd/vdpdp.shtml)