

Immunization Newsletter

Spring 2019

2019-2020 School Immunization Requirements



The start of a new school year is quickly approaching. Now is a great time to ensure students are up to date on their immunizations. School immunization requirements for students entering kindergarten have remained the same. Students in all grades should be compliant with immunization requirements before starting school. All students must be compliant by October 1 or be excluded from school. Health care providers should ensure their patients are up-to-date on all recommended vaccinations, not only school requirements. Information regarding the 2019-2020 school immunization requirements can be found on our [website](#).

Measles in the United States

According to the Centers for Disease Control and Prevention (CDC), as of May 17, 2019, 880 cases of measles have been reported in the United States. Ninety percent of cases have been unvaccinated or have an unknown vaccination status. The high number of cases is a result of several outbreaks, many due to importation when a U.S. traveler brings measles back from another country. The outbreaks in New York City and New York State are among the largest and longest lasting since measles elimination in 2000.



Measles is a serious disease that can lead to hospitalization and even death. Symptoms include a high fever, cough, runny nose and watery eyes followed by a rash that typically spreads from the head to the rest of the body. The incubation period is generally eight to 12 days, but can be up to 21 days, with fever generally being the first symptom. The measles rash usually appears two to three days

after the fever begins, and people are contagious from four days before, to four days after rash onset. Measles is highly contagious and spreads easily by coughing, sneezing or even being in the same room with someone who has measles.

All children are recommended to be vaccinated against measles at ages 12 to 15 months and 4 to 6 years. Measles is included in a combination vaccine with mumps and rubella (known as MMR vaccine). All adults born in 1957 or later should have at least one dose of MMR vaccine. All health care workers should have two doses of MMR vaccine. Data shows that North Dakota's rate for MMR vaccination for kindergarten entry for the 2018-2019 school year was 93.63, and the goal is at least 95 percent.

Meaningful Use of the NDIIS for All of your Patients

Almost all North Dakota residents, infants, children, adolescents and adults, have a record of immunizations in the North Dakota Immunization Information System (NDIIS). As of the end of 2018, 95.4% of children ages four months to five years are in the NDIIS with at least two doses in their record; 90.2% of adolescents ages 11-17 years are in the NDIIS with at least two adolescent (administered after age 9) doses; and 97% of adults ages 19 years and older have at least one adult-administered dose in the NDIIS. All children are entered into the NDIIS at birth from North Dakota Vital Records and North Dakota state law mandates that immunizations administered to kids ages 18 younger are entered in the NDIIS.



It is important that all providers who administer immunizations, regardless of the age of their patients/customers, are meaningfully using the NDIIS by looking up individual immunization histories and reviewing the immunization forecaster prior to administering any new immunizations. The NDIIS is electronically connected to the electronic health record (EHR) system of 361 individual provider locations across the state, including 44 retail pharmacies and 30 local public health unit locations. With these electronic connections, the NDIIS received almost 80% of its immunization data electronically and almost 90% of immunization data is entered within one day of administration. Looking up patient immunization histories and reviewing the immunization forecaster will help ensure they are receiving the right immunizations at the right time and will help avoid over-immunizing. Additionally, some insurance companies may not reimburse for immunizations that were already given. For example, if an adult older than 65 already received their routinely recommended pneumococcal vaccines, but are given another, unnecessary dose, Medicare may not reimburse the provider who gave the second dose. Another example seen often is an adult receiving a dose of seasonal influenza vaccine at a local pharmacy and then being given an additional dose in the same flu season by their primary care provider. Private insurance may not pay for the second influenza vaccine. This can lead to additional cost burden on the provider and their patients.

The NDIIS has high provider and patient participation with the majority of North Dakotans having an immunization record in the NDIIS and with the majority of data being entered almost immediately after administration. Meaningful use of the NDIIS by all providers for all of their patients will help reduce over immunizations and financial burden caused by over immunization.

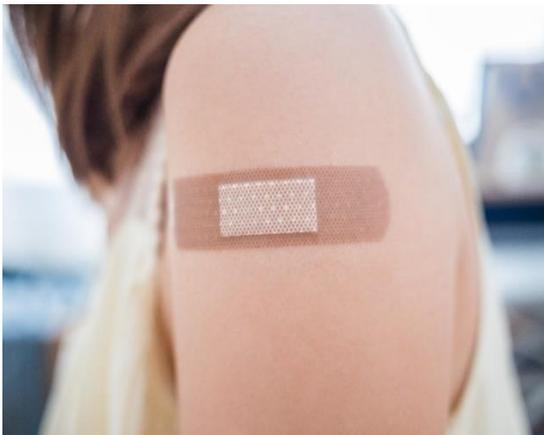
Adult Immunization Recall



The Advisory Committee on Immunization Practices (ACIP) recommends adults 65 years of age and older receive both pneumococcal conjugate (PCV13) and pneumococcal polysaccharide (PPSV23) vaccines. Currently, North Dakota's pneumococcal immunization rates are 55.3% for PCV13 and 47.6% for PPSV23; both below North Dakota's immunization goal of 90%.

As a strategy to increase adult immunization rates, the North Dakota Department of Health (NDDoH) Immunization Program will begin utilizing the NDIIS to conduct a quarterly statewide adult immunization recall program for people 65 years of age and older that are 30 or more days past due for a pneumococcal vaccine (PCV13 and/or PPSV23). Adults who no longer wish to receive recall notices should visit the Immunization Program website at: www.ndhealth.gov/immunize/ and complete the Immunization Recall Exclusion Form. Health care providers are encouraged to use the NDIIS forecaster to determine which vaccines an adult is due for and provide all vaccines recommended, not just pneumococcal. The first statewide adult immunization recall postcards will be distributed in late May 2019. If you any questions, please contact the NDDoH Immunization Program.

Vaccine Wastage in North Dakota Due to Expiration of Vaccine



Good storage and handling practices are important to prevent the wastage of increasingly expensive vaccines. Also, unnecessary ordering of vaccine each month can lead to excessive vaccine expiration. In 2018, North Dakota providers ordered \$7,942,433 worth of vaccine from the NDDoH, for a total of 142,808 doses of vaccine. In 2018, North Dakota providers reported wasting \$338,959.27 (4.3%) worth of vaccine, for a total of 8,507 doses of vaccine. This is only the reported wastage for publicly purchased vaccine. There is no way to know how much privately-purchased vaccine was wasted. Currently, 59% of North Dakota providers wasted more than 5% of the total vaccine they ordered in 2018. The goal for vaccine wastage in North Dakota is 5% or less. Providers should take vaccine wastage into account when they are ordering vaccine. Providers are allowed to order vaccines once per calendar month, and if providers are ordering once per calendar month, providers should only be ordering the vaccines that are needed for your facility at that time. This will help to cut down on vaccine that is expiring and not being administered or that could potentially be exposed to a temperature excursion.

North Dakota Ryan White Immunization Coverage Rates

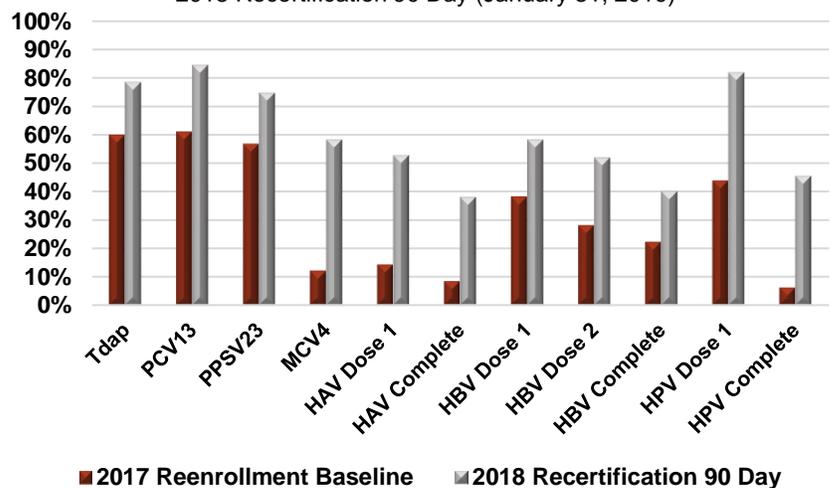
The NDDoH Immunization and the Ryan White Programs have been collaborating to increase immunization rates among North Dakota's Ryan White participants. For this collaboration the immunization program provides recall letters for each Ryan White client to regional case managers. The recall letter includes both ACIP routinely recommended immunizations and immunizations recommended for persons living with HIV. Ryan White case managers then screen each client immunization record, provide the immunization recall letter, education, immunization services and/or referrals to each client during the enrollment and recertification period.

As a result of this collaboration, immunization rates for all ACIP recommended vaccines have increased among Ryan White clients.

- Tdap – Increase of 18%
- PCV13– Increase of 23%
- PPSV23– Increase of 18%
- MCV4– Increase of 46%
- Hepatitis A complete series– Increase of 30%
- Hepatitis B complete series– Increase of 18%
- HPV complete series– Increase of 39%

North Dakota Statewide Ryan White Immunization Rates

2017 Reenrollment Baseline (February 1, 2017)
2018 Recertification 90 Day (January 31, 2019)



Childhood Immunization Champion 2019

Kris Kluth, RN Clinical Supervisor, at Sanford Southwest Children's Clinic in Fargo, is our state Childhood Immunization Champion. She was nominated by Kristi, her supervisor and Brittany, a clinical care supervisor. Kris does many things that make her a champion. She provides education, promotes adherence to vaccination schedules and is a patient advocate for all vaccines. She willingly answers any questions that coworkers might have about immunization.

Ms. Kluth has implemented new work-flows within the clinic to improve vaccine rates. Schedulers go into the exam room before the patient leaves so that the next nurse visit can be scheduled before they leave the office. Kris has educated her coworkers on the correct way to reconcile vaccines within their medical record

prior to each visit, discuss the vaccines due and ensure the provider knows which vaccines are due. A new staff goal is having no missed opportunities for immunizations.

She is a member of the Sanford VAX Champ program which provides information on updated vaccine practices. She brings information back and provides it to the physicians and nurses to allow the immunization rates to continue to rise. She has a spark for vaccines. At the mention of vaccines, Kris lights up. Her passion and enthusiasm for vaccines are contagious among staff. This has resulted in higher immunization rates and a reduction in missed opportunities.

Congratulations Kris. Thank you for all you do to immunize children in North Dakota.

Long Term Care Use and the NDIIS

Since 2015, the NDDoH immunization program been conducting NDIIS and adult immunization education and training to long term care (LTC) providers across North Dakota. The goal of this targeted outreach was to increase the reporting and recording of adult immunizations in the NDIIS. Starting with the first quarter of 2017, the NDIIS coordinator has been tracking immunization data entry by LTC providers and providing a detailed assessment for each facility. Out of over 100 facilities that received an outreach visit, 50 have been regularly receiving an assessment of their immunization data entry.



According to NDIIS data, for routinely recommended adult immunizations (PCV13, PPSV23, Td/TDaP, zoster and influenza), the number of adult doses entered by outreach program participants has increased by 392.6%. The reporting of just influenza doses has increased by 437.5% and the reporting of PPSV23 doses has increased by 554.8% in the past two years.

The assessments show that LTC providers have been working hard to enter their residents' data into the NDIIS. Often-times, LTC and other adult health care providers do not have an electronic health record (EHR) system in place that is capable of connecting directly with the NDIIS to submit data electronically. This means that many facilities must dedicate their limited staff time and resources to complete dual data entry of immunization records into both the NDIIS and their own EHR. Provider feedback from the outreach program has identified this as the primary barrier to entry of adult immunizations in the NDIIS. To help overcome this and other barriers, the NDIIS is offering an ongoing NDIIS record matching service to interested facilities that are struggling to identify their patients' or residents' records in the NDIIS, or who have not yet completed much data entry. To participate, LTC providers need to securely send their current patient/resident listing (i.e. first name, middle name, last name, birthdate information) to the NDIIS Coordinator, who will match that list

against the NDIIS to identify individual immunization records along with the current immunization forecast results. At this time, participating facilities have seen a resident/patient record match rate of roughly 95%. For more information, please get in contact with Dominick Fitzsimmons at Tel: 701-328-4169 or email at dfitzsimmons@nd.gov.

The NDDoH immunization program is continuing to encourage LTC providers to request individual access to the NDIIS for their staff and to consider designating staff members to work on immunization record data entry for newly administered immunizations and catch-up data entry (i.e., entry of last season's influenza doses) *. LTC provider staff may also benefit from reviewing the basic NDIIS training information that is available on the immunization program website**. To further assist adult immunization providers, the NDIIS is offering training on basic and advanced functionalities of the system as well as quality improvement methods at regional trainings being held around North Dakota. The announcements and registration links for these trainings are posted to the NDIIS news and bulletins board prior to each training session.

*<https://www.ndhealth.gov/Immunize/NDIIS/>

**<https://www.ndhealth.gov/Immunize/NDIIS/Training.aspx>

North Dakota's 2018-2019 Kindergarten Vaccine Rates Remain Level



Data from the 2018-2019 school immunization assessment indicates that North Dakota's kindergarten immunization rates remain similar to the previous year. The school immunization assessment is conducted annually by the NDDoH.

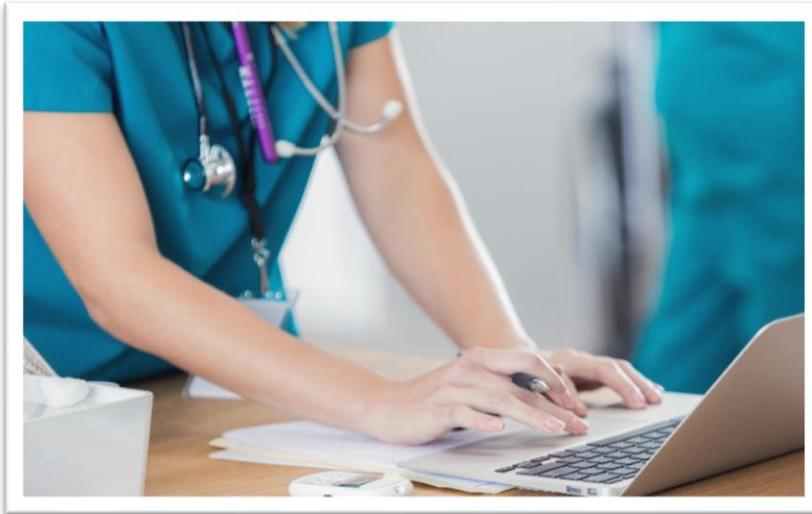
Thanks to the hard work of North Dakota schools, health care providers, local public health units, North Dakota State University, the NDDoH, and the North Dakota Department of Public Instruction, school immunization rates have been increasing for the last few years.

This year, rates did not increase, but remained around 94%. Exact rates and county breakdowns can be found on the NDDoH Immunization [website](#). The percent of North Dakota parents claiming an exemption due to reasons of personal belief increased from 3.1% to 3.9%. Approximately 400 kindergarten students are exempt from immunizations due to a parental personal belief.

Before entering school in North Dakota, children must have five doses of DTaP, four doses of IPV (polio), three doses of HBV (hepatitis B), two doses of MMR, and two doses of varicella vaccine. Students entering seventh through twelfth grade need one dose of Tdap, which protects against tetanus, diphtheria, and pertussis (Tdap). Students in grades 7 through 10 need one dose of meningococcal conjugate vaccine (MCV4) and students entering grades 11 and 12 need a second dose of MCV4. The exclusion date for students not compliant with requirements is October 1.

Children can be vaccinated at local public health units or private health care providers. For more information on school immunization requirements, contact Jenny Galbraith, North Dakota Department of Health, at 701.328.2335, or visit the website at www.ndhealth.gov/immunize.

ACOG Toolkit



The American College of Obstetricians and Gynecologists (ACOG) has developed a new health care provider resource, [Optimizing Immunization Programs in Obstetric-Gynecologic Practices Toolkit](#). The toolkit provides information and resources for women's health care providers as they implement strategies to improve immunization processes and increase patient immunization rates. This toolkit can assist ob-gyn practices in effectively integrating immunizations into workflow and routine practice.

ACOG has included the following immunization resources for providers within the toolkit:

- Immunization Implementation Strategies for Obstetrician-Gynecologists **Committee Opinion 772**
- Strategies for Effectively Integrating Immunizations into Routine Obstetric-Gynecologic Care **tip sheet**
- Seasonal Influenza Vaccination Programs: Tips for Optimizing Practice Management **tip sheet**
- Developing an Immunization Referral System **tip sheet**
- 2019 Immunization Coding for Obstetrician-Gynecologists **quick reference coding card**

Additional immunization resources, including clinical guidance and practice management tools, can be found at ACOG's Immunization for Women website: <http://immunizationforwomen.org/>.

Influenza Vaccine Recommendations for 2019-2020 Flu Season



The American Academy of Pediatrics (AAP) has slightly changed their influenza vaccine recommendations for the 2019-2020 flu season. They had recommended the injectable vaccine over the nasal spray for the 2018-2019 flu season. They are now recommending any licensed influenza vaccine for the next flu season.

This change in recommendation will match the ACIP for the 2019-2020 flu season. Any licensed presentation of the influenza vaccine is acceptable for use in patients who do not have a contraindication.

February ACIP Meeting Update

The ACIP met in February of 2019. The following recommendations were made regarding Japanese Encephalitis (JE) and Anthrax vaccines.

- JE vaccine
 - JE vaccine is recommended for persons moving to a JE-endemic country to take up residence, longer-term (e.g., ≥ 1 month) travelers to JE-endemic areas, and frequent travelers to JE-endemic areas. JE vaccine also should be considered for shorter-term (e.g., < 1 month) travelers with an increased risk of JE based on planned travel duration, season, location, activities, and accommodations. Vaccination also should be considered for travelers to endemic areas who are uncertain of specific duration of travel, destinations, or activities. JE vaccine is not recommended for travelers with very low risk itineraries, such as shorter-term travel limited to urban areas or travel that occurs outside of a well-defined JE virus transmission season.
 - In adults aged 18–65 years, the primary vaccination schedule is two doses administered on days 0 and 7–28.
 - For adults and children, a booster dose (i.e., third dose) should be given at ≥ 1 year after completion of the primary JE vaccine series if ongoing exposure or re-exposure to JE virus is expected.
- Anthrax Vaccine
 - A booster dose of anthrax vaccine absorbed (AVA) may be given every 3 years to persons not currently at high-risk of exposure to *B. anthracis* who have been previously primed with AVA and wish to maintain protection.



The ACIP also discussed other vaccines at the meeting. A summary of their discussion is below.

- Influenza Vaccine:
 - ACIP was presented data that the flu vaccine is not associated with an increased risk of miscarriage during pregnancy. The findings are based on an examination of the 2012-13, 2013-14, and 2014-15 flu seasons. Results showed no link between flu vaccine during pregnancy and spontaneous abortion within 28 days.
 - For the 2018-2019 season, flu vaccines have been 47% effective for the general population and 61% effective for children, according to [interim data](#) from the CDC.
 - There was not data specifically for live attenuated influenza vaccine (LAIV).
 - ACIP will discuss its recommendations for 2019-'20 when it meets again in June.
- HPV vaccine:
 - ACIP will vote in June on recommendations for mid-adults (27-45).
 - Most of the HPV workgroup would like to see male and female age recommendations harmonized to the upper age limit. They would also like to see a permissive recommendation through age 45.

Travel Vaccines and the CDC Travel Site

Individuals planning travel are recommended see a health care provider or local public health to ensure they are protected from vaccine-preventable diseases based on their travel destination and activities. Travelers may be recommended to receive vaccines not routinely recommended in the United States based age and increased risk of exposure i.e. measles, yellow fever, malaria, typhoid, cholera, etc. To ensure travelers are protected from vaccine-preventable diseases prior to travel, immunization screening should be completed at least six months prior to travel. For a complete list of travel immunization recommendations based on destination and locations of North Dakota's travel clinics visits the following pages:



- CDC's Travelers' Health: <https://wwwnc.cdc.gov/travel/destinations/list>
- North Dakota Travel Clinics: <https://www.ndhealth.gov/immunize/yellow/>

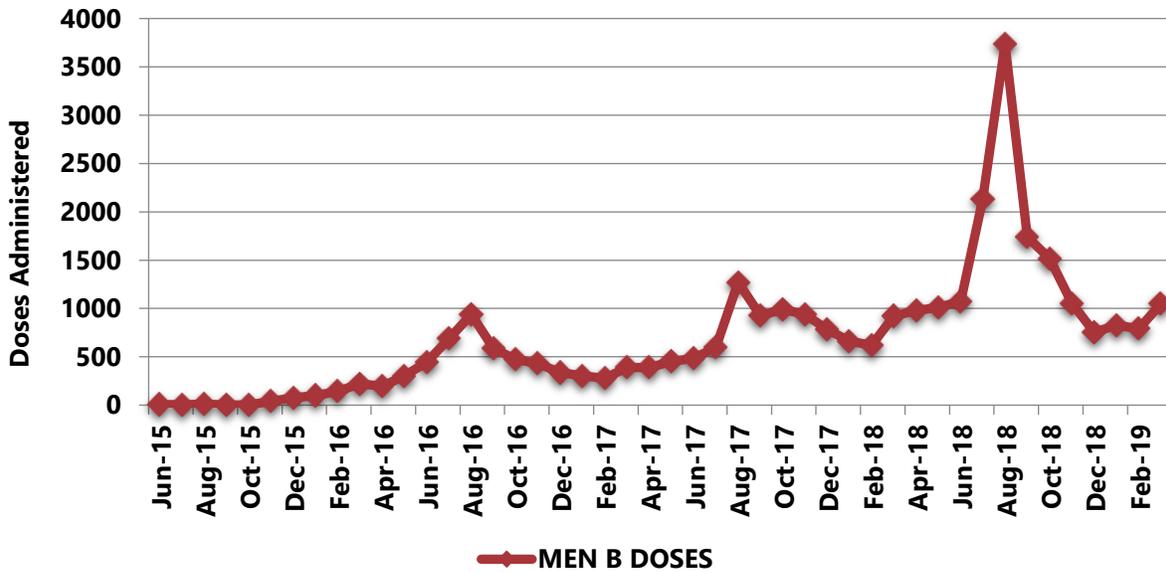
Use of Meningococcal B Vaccine by North Dakota Providers

There are currently two meningococcal group B vaccines licensed for use in the United States. Trumenba® was approved by the Food Drug Administration (FDA) in late 2014, followed by Bexsero® in early 2015. Both vaccines have been available to order through the Vaccines for Children (VFC) Program since May 2015. In June 2015, the ACIP made a category B recommendation for meningococcal B vaccine, which expanded the previous recommendation to only administer the vaccine to individuals with high risk conditions or in the case of an outbreak. The new recommendation to allow for providers to administer meningococcal B vaccines to healthy persons 16-23 years of age. The NDIIS forecaster is currently set up to recommend meningococcal B vaccine for all individuals starting at 16 years of age.



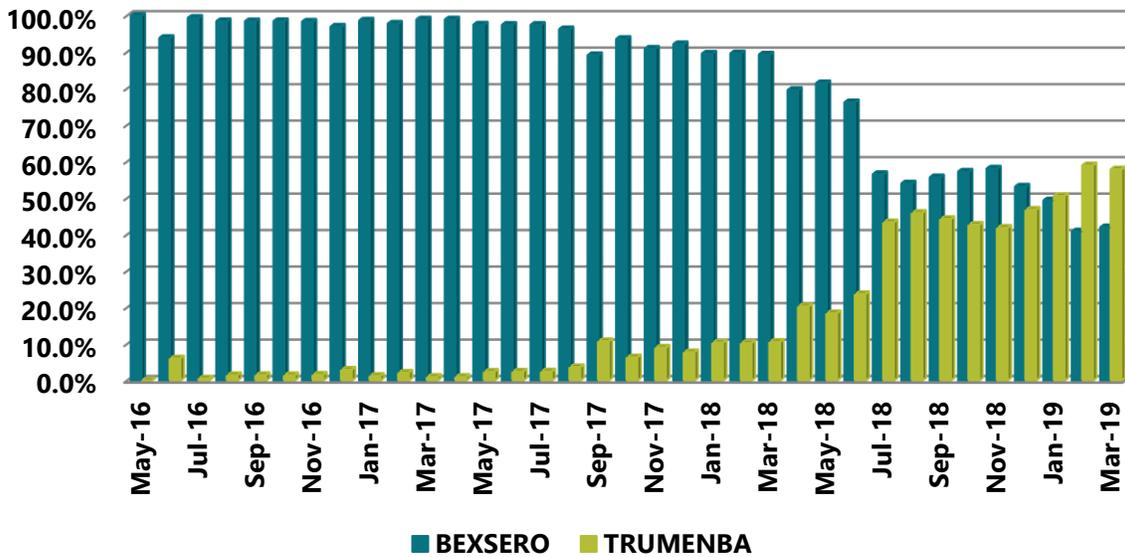
Since 2015, North Dakota has seen an increase in providers administering doses of meningococcal B vaccine. According to the NDIIS, a total of 31,674 doses were administered between June 1, 2015 and March 31, 2019. There is a peak in the number of doses administered in July and August of each year.

Meningococcal B Doses Administered According to the NDIIS

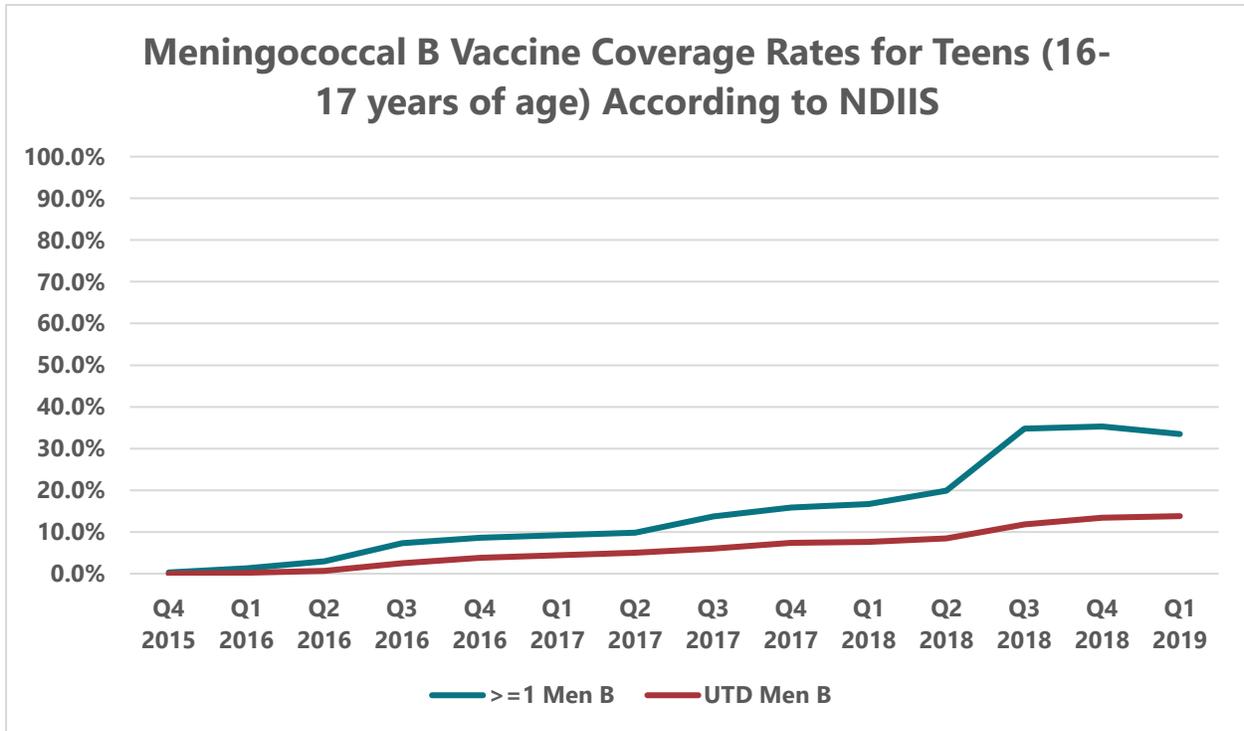


The two licensed vaccines cannot be used interchangeably. If an individual started the series with one vaccine, it must be finished with the same vaccine. The majority of North Dakota providers are using Bexsero®, which represents about 76% of all meningococcal B vaccine doses administered, although Trumenba® doses administered exceeded Bexsero® in January, February and March of 2019.

Percent of Meningococcal B Doses Administered by Type According to NDIIS



Since quarter four of 2015, there has been a steady increase in immunization coverage rates for meningococcal B vaccine. According to the NDIIS, 33.5% of adolescents 16-17 years of age have received at least one dose of meningococcal B vaccine as of the end of the first quarter of 2019. Additionally, 13.8% of adolescents have completed the series with either two valid doses of Bexsero® or two or three doses of Trumenba®. There was a large increase (14.9%) in the percent of teens who received at least one dose between quarter 2 and quarter 3 of 2018.



Dengue Vaccine Approved by FDA

Dengvaxia®, manufactured by Sanofi Pasteur, was approved by the FDA on April 29, 2019. Dengvaxia® can only be used in individuals ages 9 – 16 living in parts of the United States where the dengue virus is endemic – Puerto Rico and a few other offshore territories. The vaccine may only be given to children and teens who have had one previous laboratory-confirmed case of dengue. There are four serotypes of dengue viruses. Infection with one virus does not protect against the others and actually appears, for a time, to increase the risk that another dengue infection will trigger a severe form of the disease. Sanofi Pasteur’s post-marketing research showed that while the vaccine offers protection for people who have already had at least one bout of dengue, it increases the risk of severe infection in people who were dengue naïve. Dengvaxia® is licensed for use in 19 countries.





Calendar of Events

May 29, noon – 1 pm (CST):

[CDC Webinar – Adolescent Vaccines: How Pharmacists Can Make Strong Recommendations and Referrals](#)

Wednesdays, June 5 – September 25, 11 am – noon (CST)

[Pink Book Webinar Series](#)

June 12, noon – 1 pm (CST):

[Immunization Lunch and Learn Webinar](#)

June 26 and 27:

[ACIP Meeting](#), Atlanta, GA

July 10, noon – 1 pm (CST);

[Immunization Lunch and Learn Webinar](#)

August 13 – 15:

[American Immunization Registry Association Conference](#), Indianapolis, IN

August 14, noon – 1 pm (CST);

[Immunization Lunch and Learn Webinar](#)

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