Immunization Newsletter
Fall 2019

2019 – 2020 Influenza Vaccination Kick-Off

On September 24, 2019, the North Dakota Department of Health (NDDoH) held its annual influenza vaccination press conference at the State Capitol. The NDDoH was joined by Governor Doug Burgum, Brad Hawk from the Bureau of Indian Affairs, Bismarck Burleigh Public Health and Angie Wehrkamp, a mother who lost her child to influenza in 2015. The purpose of the event was to remind all North Dakotans to get vaccinated against influenza. Governor Burgum highlighted the importance of vaccination, stating, “Getting the flu vaccine is the easiest way to protect yourself, as well as your friends and family, from the flu.”

The event served as a reminder that everyone six months and older should receive the flu vaccine. Anyone can get the flu, including healthy individuals. When more people get the flu vaccine, the virus does not spread as easily and quickly to those who are vulnerable to serious complications from the flu. Those who are more likely to face serious complications include infants and young children, pregnant women, people older than 65, American Indians or Alaskan Natives, and those with chronic medical conditions. By getting the flu vaccine you are not only protecting yourself, but you are protecting your community as well. “Flu vaccination is not an individual choice, but a

societal one," said Wehrkamp. "It's an opportunity for us as parents to show that we not only care about our children, but we care about other children and our communities in general."

North Dakotans were encouraged to contact their health care provider, local public health unit, or pharmacist for information about influenza vaccine availability in their area.

Thank you to all who participated in the event! The event was recorded and can be seen on the NDDoH Facebook page.

New Influenza Vaccine PSAs

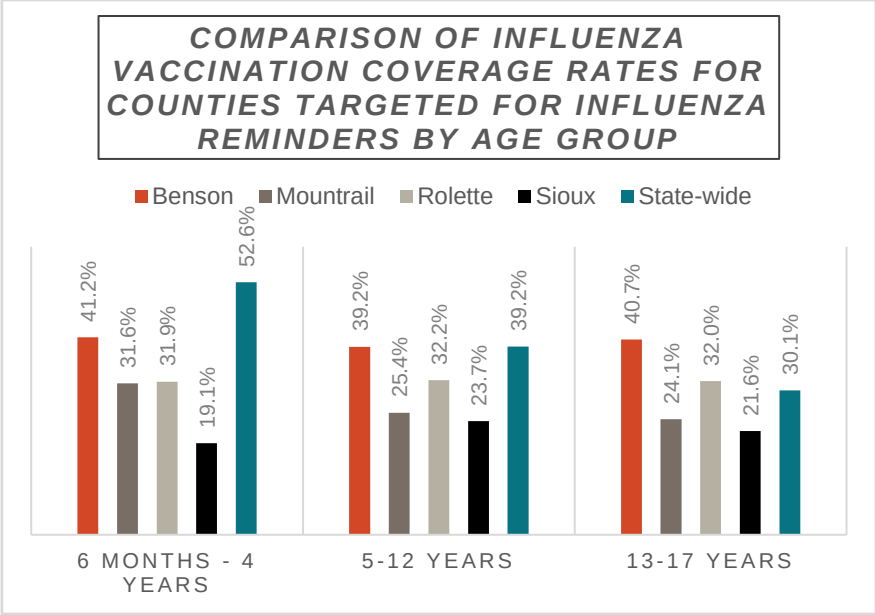
The NDDoH is busy working on some new social media influenza vaccine campaigns! This influenza season people will see three new influenza vaccine public service announcements (PSAs). Two are being produced through a contract and will highlight the importance of influenza vaccination through a parent perspective. These will be geared at parents of babies, toddlers and children. The tag line is "Hate the Flu? Vaccines do too." This campaign will be mostly in social media, but there will also be some print work done.

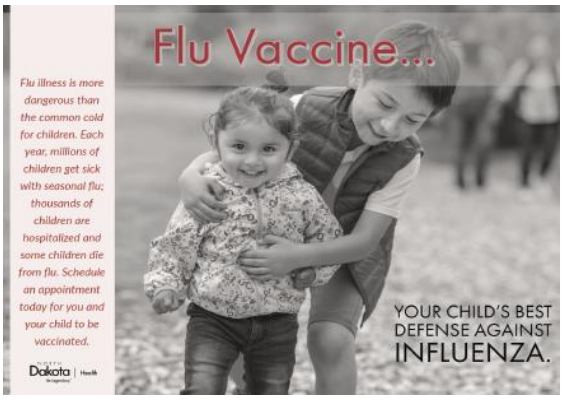
In September a mother who lost their healthy two-year child to influenza spoke at the NDDoH' s influenza vaccine press conference. While in Bismarck, the mother recorded a PSA on the importance of influenza vaccine. This PSA will also air on social media this fall.

Please go to the NDDoH and NDDoH Immunization Facebook pages to find these videos. Please share them on your own social media pages so we can get the word out on how important flu vaccines are!

Influenza Reminder/Recall Effort

Influenza (flu) is a serious disease. Every flu season is different, and influenza infection can affect people differently. Millions of people get the flu, hundreds of thousands are hospitalized every year and tens of thousands of people die from flu-related illness. According to the Centers for Disease Control and Prevention, approximately 6,000 - 26,000 children younger than five years of age are hospitalized because of influenza every flu season. Annual flu vaccination is the best way to reduce the risk of getting sick with seasonal influenza, to reduce the severity of illness, and to prevent the spread of influenza to others. Flu vaccination is recommended for everyone six months of age and older. In North Dakota, children six months through four years of age and adults 65 years of age and older have the highest influenza vaccination rates each flu season, according to the North Dakota Immunization Information System (NDIIS). NDIIS data also shows that coverage rates for the 2018-2019 flu season were higher for every age group than the previous two flu seasons. Although we have seen a state-wide increase in influenza vaccination rates, some counties in North Dakota have continued to see coverage lower than the rest of the state. Counties with higher American Indian populations often have low influenza vaccination coverage despite the fact that American Indians are at increased risk for serious illness and other health complications from influenza.





In an effort to increase influenza vaccination rates in counties with high American Indian populations, the NDDoH immunization program sent influenza reminder post cards to the parents of children 6 months through 17 years of age who live in Benson, Mountrail, Rolette, and Sioux counties. The postcards were sent to all kids living in these counties, not just American Indian children. Increased immunization rates in these counties will lead to better protection against influenza for others in the community who may be more vulnerable to serious flu illness, like babies and young children, older people, and people suffering with long-term health problems.

New Families Fighting Flu Resources Available

The NDDoH has some new influenza resources available from Families Fighting Flu. As always, all of our resources are available free of charge and are available to any facility that is interested, it is not just limited to those who are enrolled in the Vaccines for Children (VFC) program.

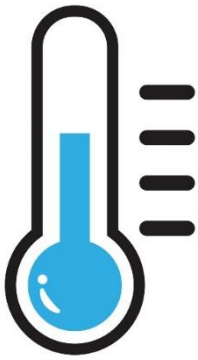
Go to our website to view all our resources and place an order today! You can also download these materials at the Families Fighting Flu website.

Do You Know the Flu? (11x17 Poster) 	Learn the Facts About Flu Vaccine (8.5x11) 
Flu Vaccine Communication 101 (8.5x11) 	Flu Fact Sheet (8.5x11) 

Vaccine Transport

The CDC defines transport as the movement of vaccine between providers or other locations over a shorter distance and time frame and is appropriate for events such as an emergency, off-site clinic, or to ensure vaccines that are about to expire can be used rather than wasted. It is always best to have the vaccines delivered directly to the provider facility, when able.

If transporting vaccine off-site, vaccines should be transported using the proper transport equipment. Appropriate materials include: portable vaccine refrigerator/freezer unit, qualified containers and packouts, and transport digital data logger. In emergency situations a hard-sided insulated container or Styrofoam can be used, the guidelines for use of these materials can be found on CDC's website.



Food and beverage coolers should never be used for vaccine transport. Frozen gel packs/ice packs should not be used, as this can lead to frozen vaccine. Vaccines should not be stored in packouts/coolers for more than eight hours. Temperatures should be monitored every hour and documented on vaccine transport temperature logs. The data logger should be downloaded after each transport and all data logger temperature logs should be submitted monthly with the regular data logger temperature logs.

The NDDoH has a vaccine transport recommendation guide that can be used as guidance. The CDC Storage and Handling Toolkit can also be used as a transport reference.

Frequently Asked Influenza Vaccine Questions

Q: If a dose was Flumist® was administered all in one nostril would it be considered valid and not need to be repeated?

A: The dose does count and does not need to be repeated.

This is considered a vaccine administration error. Please encourage staff to determine how the error occurred and to take appropriate actions to put strategies in place to prevent it from happening in the future. In addition, we encourage providers to report all vaccine administration errors—even those not associated with an adverse event — to the Vaccine Adverse Event Reporting System (VAERS).

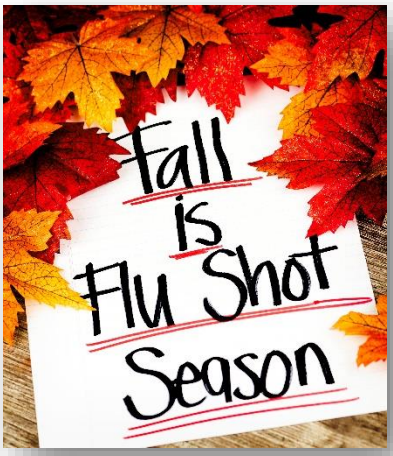
Q: Our facility only carries the Flulaval® influenza vaccine, can this be used on a 6-month-old? If so, what dose should they receive?

A: Flulaval is indicated for those patients ages 6 months and older. The patient would receive a standard 0.5mL dose of the Flulaval®.

An influenza vaccine dosage chart can be found on our website.

Q: Can Fluzone ® high dose influenza vaccine be administered at the same time as Shingrix®?

A: Yes, the only influenza vaccine that should not be administered concomittantly with Shingrix ® is Fluad®, which is an adjuvanted influenza vaccine for use in adults 65 years and older. There is not a lot of data surrounding giving two adjuvanted vaccines at the same time, so the current recommendation is to separate them.



Q: Which children should receive two doses of influenza vaccine this season?

A: Children ages 6 months through 8 years require two doses of influenza vaccine administered a minimum of four weeks apart during their first season of vaccination for optimal protection. Those who have previously received ≥2 total doses of trivalent or quadrivalent influenza vaccine ≥4 weeks apart before July 1, 2019, require only one dose for 2019–20. The two previous doses of influenza vaccine do not need to have been administered in the same season or consecutive seasons. Those who have not previously received ≥2 doses of trivalent or quadrivalent influenza vaccine ≥4 weeks apart before July 1, 2019, or whose previous influenza vaccination history is unknown, require two doses for 2019–20. The interval between the two doses should be ≥4 weeks. Two doses are recommended even if the child turns age 9 years between receipt of dose 1 and dose 2.

Q: Is live attenuated influenza vaccine (LAIV or Flumist®) contraindicated for patients with asthma?

A: Asthma is a precaution for LAIV in people 5 years of age and older.

Q: Is influenza vaccine recommended for pregnant women?

A: Yes. It is especially important to vaccinate pregnant women because of their increased risk for influenza-related complications and their baby's increased risk of influenza-related illness and hospitalizations during the first six months of life.

Influenza vaccination during pregnancy reduces mothers' risk of influenza illness, preterm labor, and their infants' risk of influenza and influenza-related hospitalization in the first 6 months of life.

Q: Can a patient with an egg allergy receive influenza vaccine?

A: ACIP recommends that people with a history of egg allergy who have experienced only hives after exposure to egg should receive influenza vaccine without specific precautions. Any age-appropriate vaccine may be used. People who report having had an anaphylactic reaction to egg (more severe than hives) may also receive any age-appropriate influenza vaccine. The vaccine for those individuals should be administered in a medical setting, such as a physician office or health department clinic. Vaccine administration should be supervised by a health care provider who is able to recognize and manage severe allergic conditions. Providers may administer an egg-free inactivated vaccine (Flucelvax® Quadrivalent, Seqirus, licensed for people age 4 years and older) or recombinant vaccine (Flublok®, Sanofi Pasteur, licensed for people age 18 years and older) with severe egg allergy. A previous severe allergic reaction to influenza vaccine, regardless of the component suspected to be responsible for the reaction, is a contraindication to future receipt of the vaccine.

Do You Know How to Recommend Vaccines to Pregnant Women?

The CDC released the MMWR (Morbidity and Mortality Weekly Report) and Vitalsigns on October 8, 2019 reviewing burden of disease and immunization rates for influenza and Tdap vaccines during pregnancy. For several years, CDC has recommended that influenza and Tdap vaccines be offered and given to women who are pregnant and others as appropriate. Pregnant women should receive Tdap early in the third trimester of pregnancy and the influenza vaccine any time during their pregnancy. Despite these recommendations, only 1 in 3 (35%) of pregnant

women get both vaccines per a recent report. 55% received Tdap and 54% received the influenza vaccine.

Reasons to recommend both vaccines include:

- Vaccination of pregnant women is the best way to protect young babies from influenza and whooping cough.
- Women vaccinated during pregnancy pass protective antibodies to their babies.
- Influenza vaccination during pregnancy lowers the risk of hospitalization by 40% in the women and in the babies less than 6 months old by 72%.
- Tdap vaccination during pregnancy lowers the risk of whooping cough in babies less than 2 months old by 78%. Keep in mind, babies usually receive their first DTaP at 2 months old. They need protection from birth to 2 months of age.
- Tdap vaccination of pregnant women lowers hospitalization due to whooping cough in babies less than 2 months old by 91%.
- 38% of pregnant women who didn't get Tdap stated that they didn't know the vaccine was needed in each pregnancy.

To protect pregnant women and the youngest members of our communities, strongly recommend Tdap and influenza vaccines. Make a declarative statement: "Today you will be receiving Tdap and influenza vaccines." Give the vaccines at the appropriate time during the pregnancy. If you do not have these vaccines, recommend the vaccines and refer the patients to a provider who has access to vaccines. Share the importance of all vaccines for disease prevention with every pregnant woman in your practice.

October 2019 ACIP Meeting

The Advisory Committee on Immunization Practices met October 23-24 in Atlanta, GA. The committee discussed numerous immunization-related topics. They approved the 2020 adult and childhood/adolescent immunization schedules. The committee voted in favor of using either Td or Tdap for the 10-year tetanus booster, wound management, and catch-up vaccination. Previously only one lifetime dose of Tdap was recommended, with the exception of Tdap being recommended during each pregnancy. Tdap continues to be routinely recommended at age 11-12. A tetanus-toxoid containing vaccine is indicated as part of wound management if more than five years have passed since the last tetanus toxoid-containing vaccine. If tetanus-toxoid is indicated, Tdap is preferred for patients who have not previously received a dose of Tdap. If pregnant, Tdap should be used. For all non-pregnant patients who have previously received a dose of Tdap, either Tdap or Td can be used if tetanus-toxoid is indicated. For patients ages 7 and older who have never been vaccinated against tetanus, diphtheria, or pertussis, a series of three tetanus and diphtheria-containing vaccines is recommended, which includes at least one dose of Tdap. The preferred schedule is a dose of Tdap, followed by a dose of Td or Tdap four weeks later and another dose of Td or Tdap six to 12 months later.

Vaccine Information Statements (VISs)

VISs are documents produced by CDC to inform recipients of the benefits and risks of the vaccines they are receiving. All providers are required by law to give this information to each patient, regardless of age, prior to the administration of a vaccine. The VIS can be printed, laminated to enable multiple uses, or read off a monitor screen or app on their phone.

Current VISs can be found on CDC's website. VISs are available in different languages on the Immunization Action Coalition website.

All providers are encouraged to use the newest version as soon as it is available, but you are allowed to use your current stock for a maximum of six months. All new versions need to be implemented within six months of the date released. The interim version is to be used until the final version is available. VISs are updated whenever there is a change in ACIP recommendations that affects the vaccine's adverse event profile, indications, or contraindications. Due to possible changes, a provider should print limited numbers of the current version to allow immediate use of new versions as they are announced.

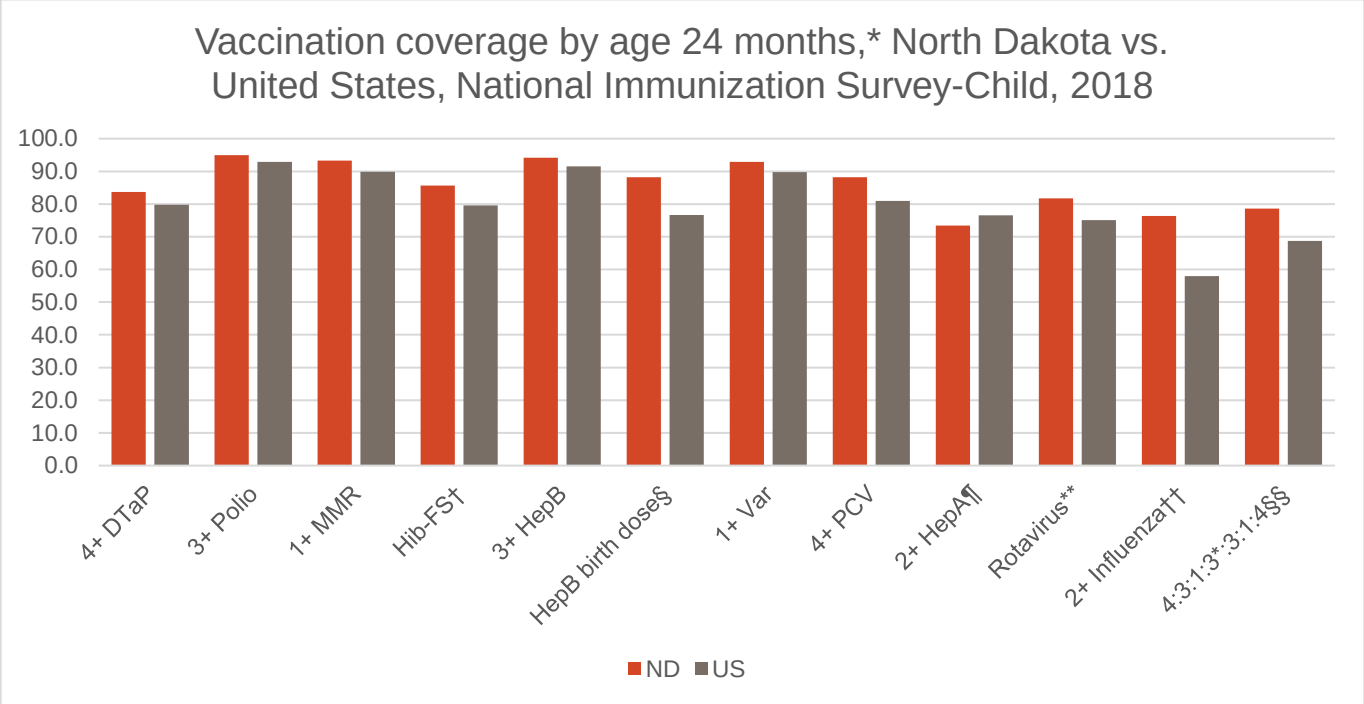
Here are the current version dates. Version dates are checked during VFC visits.

Vaccine	Version Date (* indicates interim version)
DTaP	8-24-18*
Hepatitis A	7-20-16
Hepatitis B	8-15-19*
Hib	10-30-19*
HPV - Gardasil-9	10-30-19*
Influenza – Live, intranasal	8-15-19*
Influenza – Inactivated	8-15-19*
MMR	8-15-19*
MMRV	8-15-19*
Meningococcal ACWY	8-15-19*
Meningococcal B	8-15-19*
Multiple Vaccines**	11-5-15
Pneumococcal Conjugate (PCV13)	10-30-19*
Pneumococcal Polysaccharide (PPSV23)	10-30-19*
Polio	10-30-19*
Rotavirus	10-30-19*
Tdap	2-24-15
Td	4-11-17
Varicella	8-15-19*
Zoster/Shingles (Live)	10-30-19*
Zoster/Shingles (Recombinant)	10-30-19*

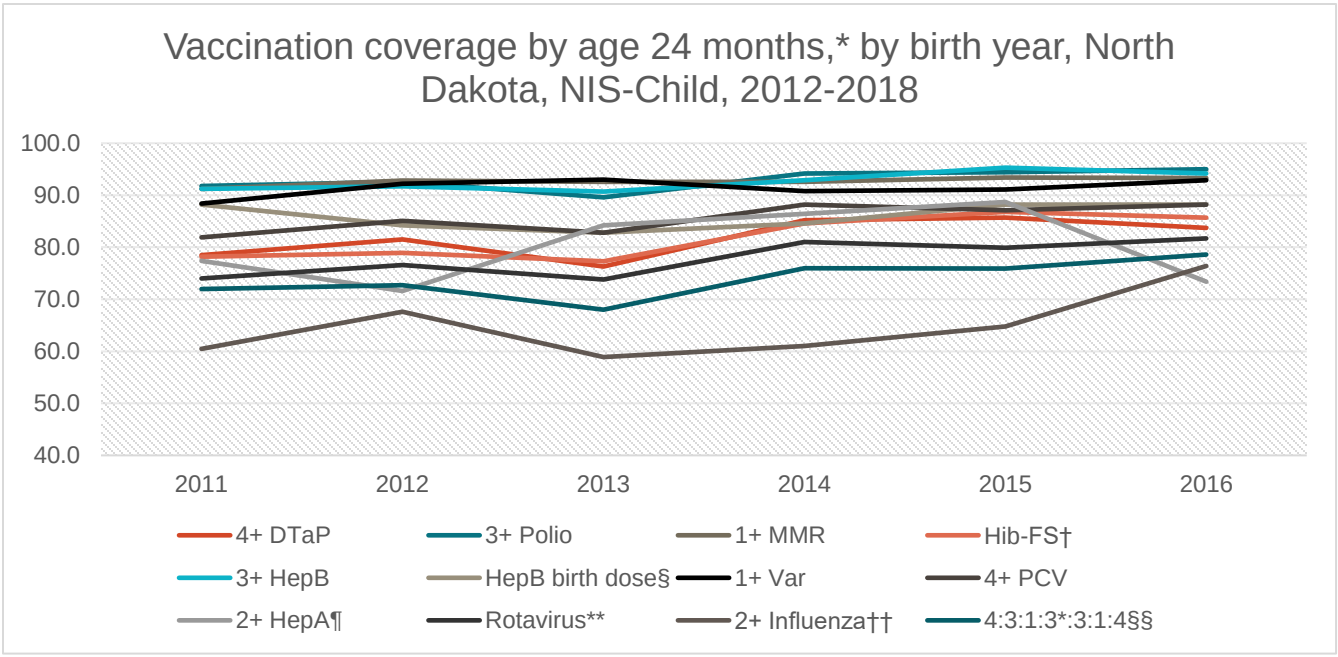
**This document may be used in place of individual VISs when 2 or more of these vaccines are administered at the same visit. It may be use for infants through children receiving their routine 4-6 year vaccines. The vaccines in this version are: DTaP, Hib, Hepatitis B, Polio and PCV13.

National Immunization Survey (NIS) Infant Rates

The 2018 infant NIS rates were released in MMWR on October 17, 2019. Infant immunization rates were above the national average for all vaccines with the exception of the two-dose hepatitis A series.



Rates for most vaccines increased or remained level in comparison to the previous year, with the exception of hepatitis A vaccine.



* Vaccinations received before the day the child turns 24 months of age. Calculated using the Kaplan-Meier method.

† 3 or 4 doses of *Haemophilus influenzae* type b conjugate vaccine, depending on vaccine type

§ One dose HepB administered from birth through age 3 days.

¶ Coverage by 35 months.

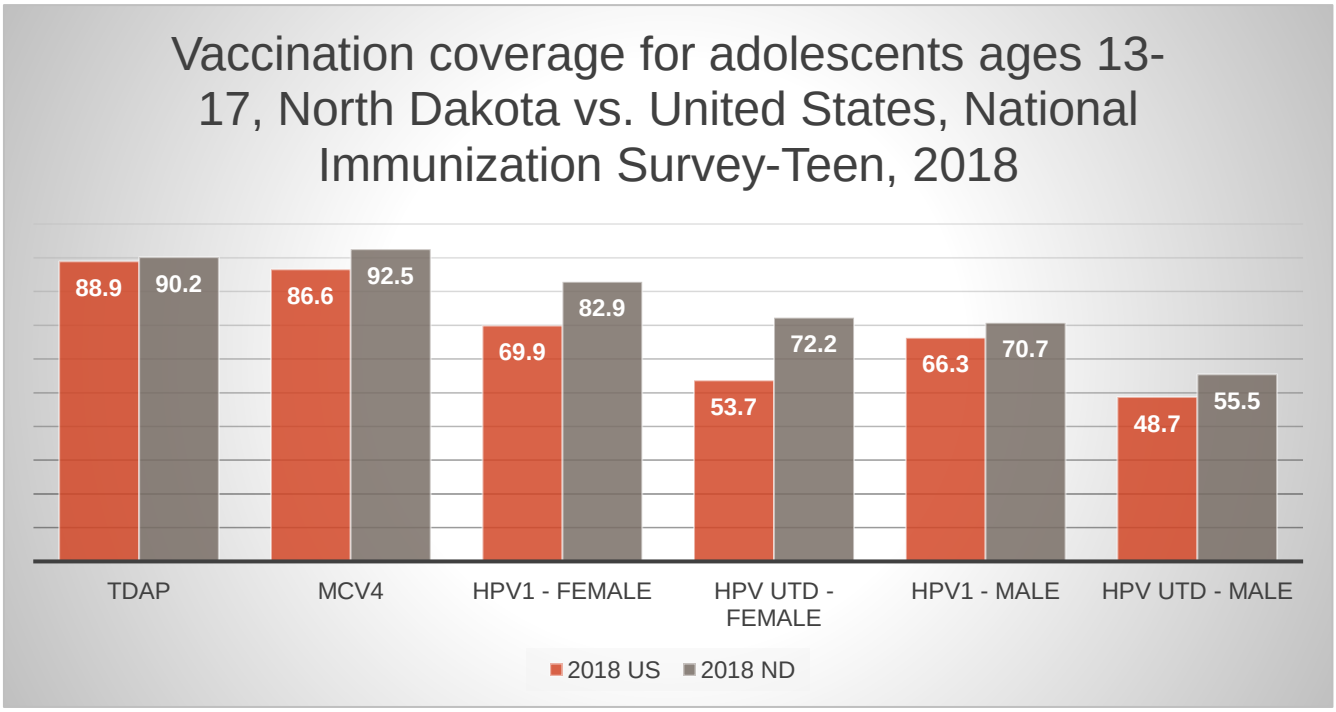
** 2 or 3 doses, depending on vaccine type, by 8 months of age.

†† Doses must be at least 24 days apart (four weeks with a four-day grace period).

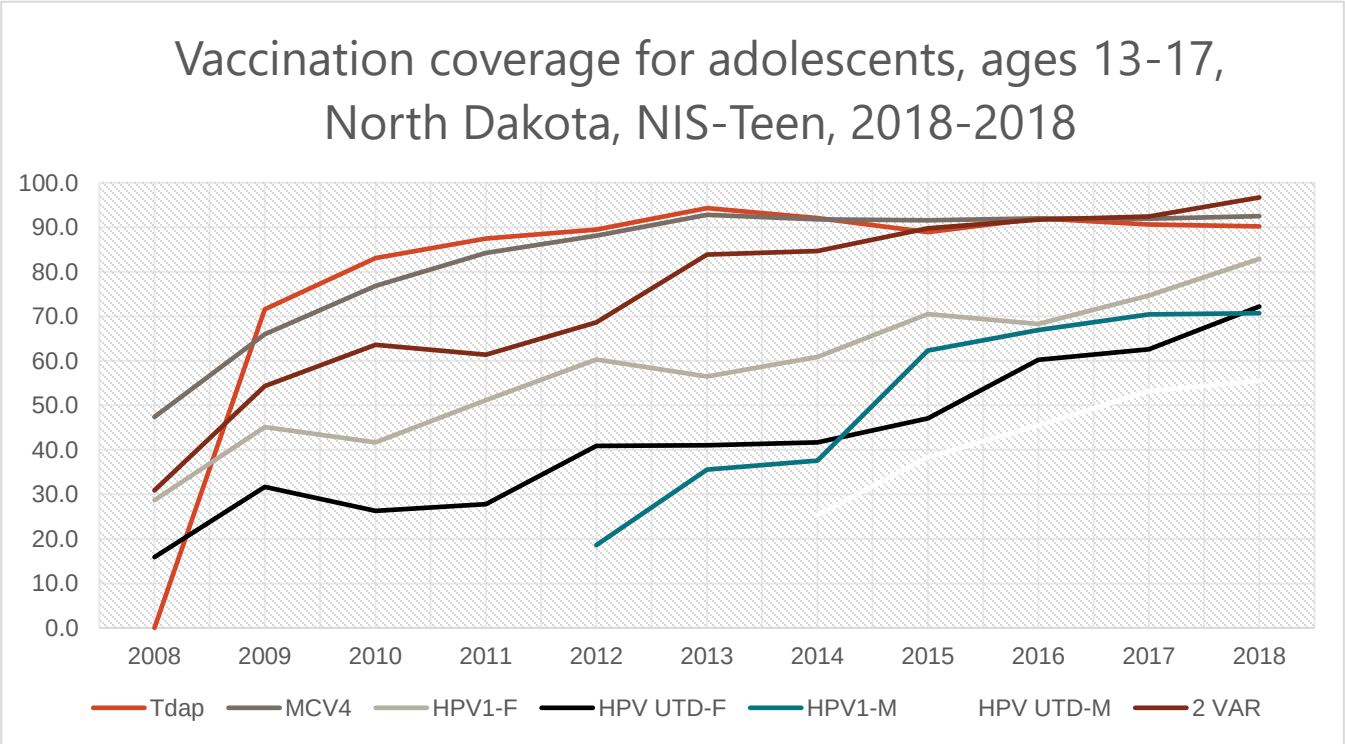
§§ 4+ DTaP, 3+ polio, 1+ MMR, 3 or 4 doses Hib, depending on vaccine type, 3+ HepB, 1+ varicella, and 4+ PCV.

National Immunization Survey Teen Rates

The 2018 NIS teen rates were published in MMWR on August 23. According to the NIS, North Dakota's teen (ages 13 – 17) immunization rates were above the national average for all vaccines.



Human papillomavirus (HPV) vaccination rates have continued to increase in North Dakota for both males and females.



Thank you, North Dakota immunization providers, for all of your hard work to ensure North Dakota teens are protected against vaccine preventable diseases.

Meningitis in North Dakota

Two cases of Meningococcal meningitis have been reported to the NDDoH so far in 2019. The last reported cases of meningococcal meningitis were in 2014.

Meningococcal meningitis is a severe infection of the bloodstream and meninges (the thin lining covering the brain and spinal cord) caused by the bacteria, *Neisseria meningitidis*. It is a relatively rare disease and usually occurs as a single isolated event. Clusters of cases or outbreaks are rare in the United States.

Meningococcal meningitis is spread through the exchange of respiratory and throat secretions like spit (e.g., by living in close quarters, kissing, sharing drinks). Many people carry meningococcal bacteria in the nose and throat without any signs of illness, while others may develop serious symptoms. High risk contacts of a diagnosed individual should receive proper chemoprophylaxis to prevent the spread of the disease.

Getting vaccinated is the most effective way to prevent oneself against meningococcal meningitis. There are two types of meningococcal vaccines. Meningococcal conjugate vaccine (MCV4) protects against four serogroups (A, C, Y, and W-135) of *Neisseria meningitidis* and is recommended for all children 11 to 12 years of age. Adolescents should receive a booster dose at age 16. In North Dakota, all children entering seventh through tenth grade are required to be vaccinated with one dose of MCV4. Children entering eleventh through twelfth grades are required to be vaccinated with two doses of MCV4. North Dakota colleges and universities also require MCV4 vaccine. Vaccines that protect against *Neisseria meningitidis* serogroup B (Men B) are also available. These vaccines are recommended for people ages 10 and older known to be at increased risk for meningococcal disease. Healthy people ages 16 – 23 may also be vaccinated if they wish. Men B vaccine is not required for school entry. Younger children and adults usually do not need meningococcal vaccines. However, the CDC recommends one or both types of meningococcal vaccines for people with certain medical conditions, travel plans, or jobs.

For more information about meningococcal meningitis and who should be vaccinated, please visit CDC's website.

Measles in the U.S.

According to the CDC, as of October 3, 2019, 1,250 cases of measles have been reported in the United States. The high number of cases is a result of several outbreaks that have occurred across the United States. The outbreaks in New York City and New York State were among the largest and longest lasting since measles elimination in 2000. Both outbreaks have been declared over. These outbreaks started when unvaccinated travelers visited a country where there are cases of measles and became infected with the disease.

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 as 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%.

Health System IQIP

On July 1 the NDDoH began conducting IQIP (immunization quality improvement for providers) visits in place of what used to be AFIX (assessment, feedback, incentive and exchange) visits. This transition and the details have been explained in a previous newsletter article. With the introduction of the new format, the NDDoH is now able to do health system level IQIP visits. Instead of visiting each clinic within a health system individually, covering just that facility's immunization rates and having each site select their own quality improvement (QI), we are now meeting with all facilities within a health system in one visit. This allows for identification of QI projects to implement across the entire health system instead of each clinic picking different strategies and working on these projects independently. The NDDoH is also hoping that by involving the entire health system we can include more physicians and decision makers in the immunization QI process. Because this is the first year that health system level visits are being implemented only three health systems will be piloted. We hope to expand that number to include more and more health systems each year.

We look forward to this exciting new QI process and can't wait to share the improvements in immunization rates we are seeing from this important collaborative!

Two New Faces in the Immunization Program

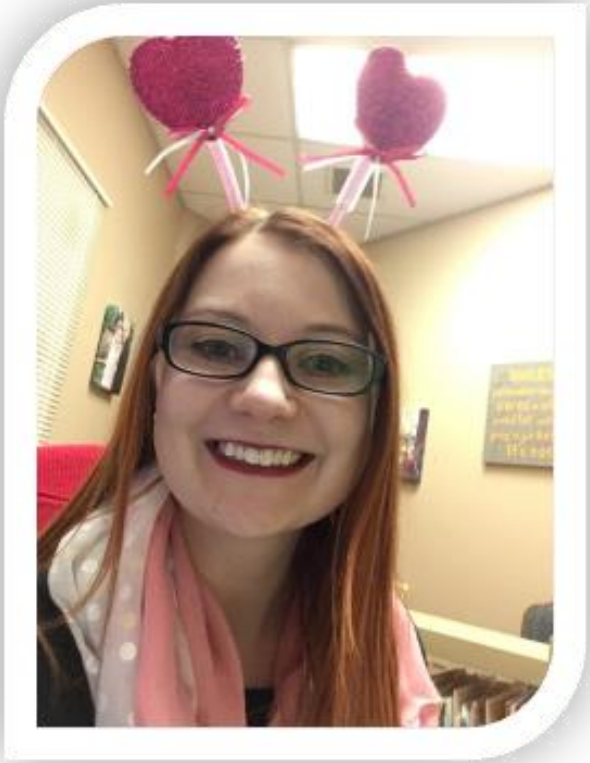
Carmen Cardenas, MPH: NDIIS Data Quality Coordinator

I received my undergraduate in Public Health with a concentration in Epidemiology & Disease Control from the University of Texas at San Antonio, and my master's in public health with a concentration in Health Promotion and Behavioral Sciences from the University of Texas Health Science Center at Houston.

For the last five years, I have worked in clinical research. I was a Data Coordinator at a Safety Net Hospital, and most recently was a Research Specialist for a multi-million-dollar weight management clinical trial funded by the NIH. I recently moved here from San Antonio, Texas (first time out of the Lone Star State!) – eager to begin my new journey in North Dakota (Not sure about the winters yet!)

I'm here with my soon-to-be husband (too bad I cropped him out the pic!). Here we were on the Sea to Sky Gondola in Canada. We enjoy traveling the world! International travel mostly. Some fun places we've been to include: Australia, Bali, Hawaii, Italy, U.K., Germany, France, Netherlands, and numerous small islands across the Caribbean – my favorite being St. Lucia. Cruising is the way to go! If you ever have any questions about cheap travels – feel free to reach out. I'm also really into murder mystery podcasts, if that's your kinda thing highly recommend listening to My Favorite Murder or Crime Junkie! I'm not all that strange, I do also take some time to listen to Dave Ramsey and Rachel Cruz – trying to reach financial freedom sooner than later! Feel free to reach out if there's anything I can do for you, work related or not.

Rachel Goebel, MPH: NDIIS Coordinator



Hello! My name is Rachel Goebel, and I have joined the NDDoH team as the new NDIIS Coordinator. I'll be staying busy putting all that NDIIS data to good use- compiling reports, working on analysis projects, and learning all the ins and outs of the immunization program! While my undergraduate degree is in Social Work from Concordia College, years of medical social work led me to an interest in improving public and community health. I received my MPH, specializing in Population Health Analytics, from the University of North Dakota in 2018. Prior to joining the NDDoH, I was employed at a nursing home in Grand Forks, ND. I am very excited to be part of the team here!

I grew up on a farm in southwest Iowa but have made North Dakota my home- snow and all! Dance has been a big part of my life for many years, and I am part of a local ballet company. When I'm not dancing or working, you can find me baking, reading, and over-decorating for holidays. My puppy Maggie and I are a volunteer team at a local nursing home, and we love to make the elders smile! I also speak Norwegian, and love finding opportunities to converse with others på Norsk!

Welcome them both to the NDDoH Immunization Program!

Also, goodbye to Andy Noble, CDC Public Health Advisor. Andy left the NDDoH in September to work for the Pennsylvania Immunization Program.

Calendar of Events

November 8:
North Dakota School Immunization Survey Due

November 11:
Veterans' Day – North Dakota Department of Health Closed

November 13, noon – 1 pm (CST);
Immunization Lunch and Learn Webinar

November 13 – 15:
National Conference for Immunization Coalitions and Partnerships, Honolulu, HI

November 16 and 17:
2019 Clinical Vaccinology Course, Washington D.C.

December 1 – 7:
National Influenza Vaccination Week

December 11, 11 am – noon (CST);
CDC Netconference

December 11, noon – 1 pm (CST);
Immunization Lunch and Learn Webinar

December 11:
Children's Hospital of Philadelphia Vaccine Education Center Webinar

January 8, noon – 1 pm (CST);
Immunization Lunch and Learn Webinar

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Published by the North Dakota Department of Health Division of Disease Control,
2365 E. Main Ave., P.O. Box 5520, Bismarck, N.D. 58506-5520
Publication is available in alternative forms; for more information, contact Brandy Chap, editor, *Immunization Newsletter*.
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