

Immunization Newsletter

Fall 2018

2018 – 2019 Influenza Vaccination Kickoff

On Monday, September 24 the North Dakota Department of Health (NDDoH) partnered with Bismarck Burleigh Public Health and Capital Ice Synchronized Skating to hold a press conference for the 2018 - 2019 influenza vaccination season. Spokespeople from each organization spoke at the news conference to highlight the importance of flu vaccination and why it's important to protect yourself and those around you during influenza season. The news conference concluded with two of the skaters receiving their influenza vaccination on camera.



Two years ago, several skaters nearly missed a national competition when they came down with flu. Ever since, team members and their families work with Bismarck-Burleigh Public Health to get vaccinated to make sure the athletes stay healthy and active throughout the winter and spring months.

For more information about influenza and vaccination, please visit www.ndflu.com.

Flumist® Recommendations

The Advisory Committee of Immunization Practices (ACIP) and the American Academy of Pediatrics (AAP) issued differing recommendations for the use of live attenuated influenza vaccine (LAIV).

- ACIP:
 - For the 2018–19 U.S. influenza season, providers may choose to administer any licensed, age-appropriate influenza vaccine (IIV, recombinant influenza vaccine [RIV], or LAIV4).
 - LAIV4 is an option for those whom it is otherwise appropriate.
 - No preference is expressed for any influenza vaccine product. ACIP will continue to review data concerning the effectiveness of LAIV4 as they become available.
 - Providers should be aware that the effectiveness of the updated LAIV4 containing A/Slovenia/2903/2015 against currently circulating influenza A(H1N1)pdm09-like viruses is not yet known.
- American Academy of Pediatrics (AAP):
 - Prefers injectable influenza vaccine over Flumist®.
 - LAIV4 may be used for children who would not otherwise receive a vaccine (e.g., refusal of IIV) and for whom it is appropriate by age (2 years of age and older) and health status (healthy, without any underlying chronic medical condition).
 - The effectiveness of LAIV4 was inferior against A/H1N1 during past seasons and is unknown against A/H1N1 for this upcoming season.

- Further details can be found in [AAP's press release](#).

The Vaccines for Children (VFC) Program will not provide LAIV this influenza season, because prebooking occurred after the ACIP recommendation for LAIV. Providers may choose to use LAIV for privately insured children.

State-Supplied Adult Influenza Vaccine

For the first time, the NDDoH Immunization Program will be offering a state-supplied adult influenza vaccine program. This special prebook was only available to local public health units (LPHUs). State-supplied adult influenza vaccine can only be used by LPHUs for uninsured and underinsured adults. The goal of the program is to reach uninsured, at-risk adults such as those who stay in homeless shelters, inpatient drug treatment facilities, or county jails. During the last influenza season there were two influenza outbreaks at homeless shelters in North Dakota. Depending on vaccine uptake, this is a program that the NDDoH would like to continue to offer and potentially expand outside of LPHUs in future influenza seasons.



Raising Adult Influenza Immunization Rates

The 2017-2018 North Dakota Immunization Information System (NDIIS) seasonal adult influenza immunization rates range from 19.4 percent for individuals 18 – 49 years of age to 52.6 percent for individuals 65 years of age and older, leaving many adults susceptible to influenza.

Health care providers can implement strategies to increase adult influenza vaccination rates. Strategies to help increase immunization rates include:

1. Assign a lead staff member to plan an influenza immunization campaign. The campaign may include: signage in both the front office and exam rooms, include flu messaging in appointment reminders and patient mailings, and implement/update immunization standing orders to ensure all patients receive the vaccine(s) they are due for at the time of the appointment.
2. Utilize the NDIIS to develop an influenza immunization forecasting report for all patients. Forecasting reports can be used by staff to screen missing immunizations for current patient appointments, discuss missing immunizations during patient check-in, flag patients that are due for the influenza vaccine, and serve as a tool to contact patients currently due for the influenza vaccine.
3. Develop and implement an immunization reminder/recall program. Utilize the NDIIS reminder/recall functionality to distribute immunization letters and/or postcards to patients currently due for an immunization.
4. Monitor monthly immunization rates using the NDIIS compliance report. The compliance report provides an immunization rate overview which can serve as an indicator for effectiveness of a provider's immunization policy and activities.
5. Require or encourage flu vaccination for clinic staff. Health care workers are likely to be exposed to influenza during the clinic day. Implementing an influenza immunization requirement or recommendation will help protect health care workers from influenza and can lead to increased immunization rates among your patients.
6. Go to worksites and offer influenza vaccination to employees.

For more information regarding the flu vaccine, immunization rates, education, or strategies to increase influenza immunization rates, see www.cdc.gov/flu/index.htm.

National Immunization Survey (NIS) Coverage Estimates for Children during the 2017-2018 Influenza Season

The NIS released coverage estimates for influenza vaccine during the 2017-2018 season for children on September 27, 2018. The table below compares North Dakota (ND) rates to the United States rates. ND has higher rates than the nation for the past season, but our rates are lower than the 2016-2017 season. For more information, go to [FluVaxView](#).

Age Group	United States %	% Change from 2016-2017 season	North Dakota %	% Change from 2016-2017 season
6 months-17 years	57.9	-1.1	62.4	-2.9
6 months-4 years	67.8	-2.2	73.5	-2.7
5-12 years	59.5	-0.4	63.7	-2.0
13-17 years	47.4	-1.4	51.8	-0.6

HPV FDA License Expansion

The U.S. Food and Drug Administration (FDA) expanded its approval for the Gardasil®9 (Human Papillomavirus (HPV) 9-valent Vaccine, Recombinant) to include women and men ages 27 through 45 years on October 5, 2018.

The expanded age approval is based on a study of 3,200 women 27 through 45 years of age. Gardasil was 88 percent effective in the prevention of persistent infection, genital warts, vulvar and vaginal precancerous lesions, cervical precancerous lesions, and cervical cancer related to HPV types covered by the vaccine. The effectiveness of Gardasil®9 in men ages 27 through 45 years is inferred from this study; as well as data from a clinical trial in which 150 men, ages 27 through 45 years, received a 3-dose regimen of Gardasil® over six months.



The ACIP has not yet made recommendations for the use of HPV vaccine in people ages 27 – 45 years. Therefore, most insurance will not cover Gardasil®9 in this age group. State-supplied HPV vaccine may not be used for this age group.

Measles Case Reported in Burleigh County

On Tuesday, September 4, 2018, a case of measles was reported to the NDDoH. The case met the clinical case definition, had an unknown vaccination or immune status, and was serologically positive for measles. The individual resided in Burleigh County and had a history of out-of-state travel and exposure to foreign individuals reporting illness during the incubation period. Subsequently, the NDDoH initiated a contact investigation and mitigation strategies.

While potentially contagious, the reported measles case traveled between numerous locations in the Bismarck area, prior to being diagnosed with

measles. People who were at certain locations in Bismarck on specific dates and times were notified of their exposure and encouraged to watch for symptoms and contact a health care provider if symptoms developed. A news release and health alert were distributed on Wednesday, September 5 to notify the public and health care providers about the case, potential public exposures, and prevention activities. Based on CDC recommendations and in accordance with North Dakota Century Code 23-07-17, children who did not have two doses of MMR when exposed and who attended schools in the Bismarck area where the measles case had been while infectious, were notified they should be

excluded from school and other activities for 21 days from the date of exposure.

On Thursday, September 6, 2018, the NDDoH was notified by the CDC that their testing found the individual with measles in Burleigh County to be negative. After receiving negative measles test results from the CDC, the NDDoH distributed a health alert and news release to notify the public and health care providers that the case was negative and that excluded children may return to school.

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. It generally takes eight to 12 days, but can be as long as 21 days, from exposure to the first symptom, usually fever. The measles rash usually appears two to three days after the fever begins. Measles is highly contagious and spreads easily by coughing, sneezing or even being in the same room with someone who has measles. People with measles are contagious from four days before to four days after rash onset.



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. Currently, North Dakota's rate for MMR vaccination of infants is 95.7 percent, compared to the United States average of 91.6 percent. North Dakota's rates for MMR vaccination for kindergarten entry for the 2017-2018 school year was 94.24 percent. The goal is at least 95 percent.

Although this reported measles case ended up being negative and not a case, health care providers are encouraged to maintain a heightened awareness for measles, especially in international travelers with an unknown or no MMR vaccination history.

If measles is suspected in a patient, airborne infection control precautions should be followed stringently. IgM and PCR testing for measles is available from the NDDoH Division of Laboratory Services. IgM acute serum testing and a nasopharyngeal swab and urine collection for PCR testing should be sent to the lab at the onset of symptoms. These should be sent along with a completed laboratory slip indicating vaccination history. Specimens for rubella testing should be ordered simultaneously, as measles and rubella are clinically indistinguishable.

As with other tests for infectious diseases, interpretation of measles IgM testing should be evaluated in conjunction with the clinical findings and epidemiologic risks, including vaccination or immune status. Both false positive and false negative IgM results can occur in the presence or absence of a febrile rash illness.

Health care providers should not wait for laboratory results to report suspected cases of measles. Timely reporting of suspected measles cases allows the NDDoH to investigate cases and contacts and as needed and make recommendations to reduce transmission in the community. As required by North Dakota law, any incidence of measles must immediately be reported to the NDDoH by phone at 701.328.2378, toll-free at 800.472.2180 or by confidential fax at 701.328.0355.

As of September 8, 2018, the United States has had 137 cases of measles. The last case of measles reported in North Dakota was from Cass County in 2011.

For more information about measles or immunizations, contact the NDDoH at 701.328.2378 or visit our [website](#).

Immunization Rates for the MCV4 Booster Dose

In January of this year, there were some changes made to North Dakota Administrative Rule 33-06-01 regarding school immunization requirements. One of these changes was a new requirement stating that children are required to have a second dose of meningococcal conjugate vaccine (MCV4) before being admitted to eleventh and twelfth grades. Immunization coverage rates for the second dose of MCV4 have been historically low (< 40%) in North Dakota, so there was a large portion of the adolescent population in need of their booster dose prior to the start of the current school year.

With the implementation of the school module functionality in the NDIIS, the immunization program was able to assess school coverage at the grade level. There are approximately 15,225 students currently enrolled in 11th and 12th grades in North Dakota. The NDDoH was able to match 89 percent (13,606) of those students to a record in the NDIIS using exact first and last name and date of birth. Approximately 86.8 percent of those students were completely UTD with MCV4 vaccine prior to the October 1 exclusion date and met the school immunization requirement.

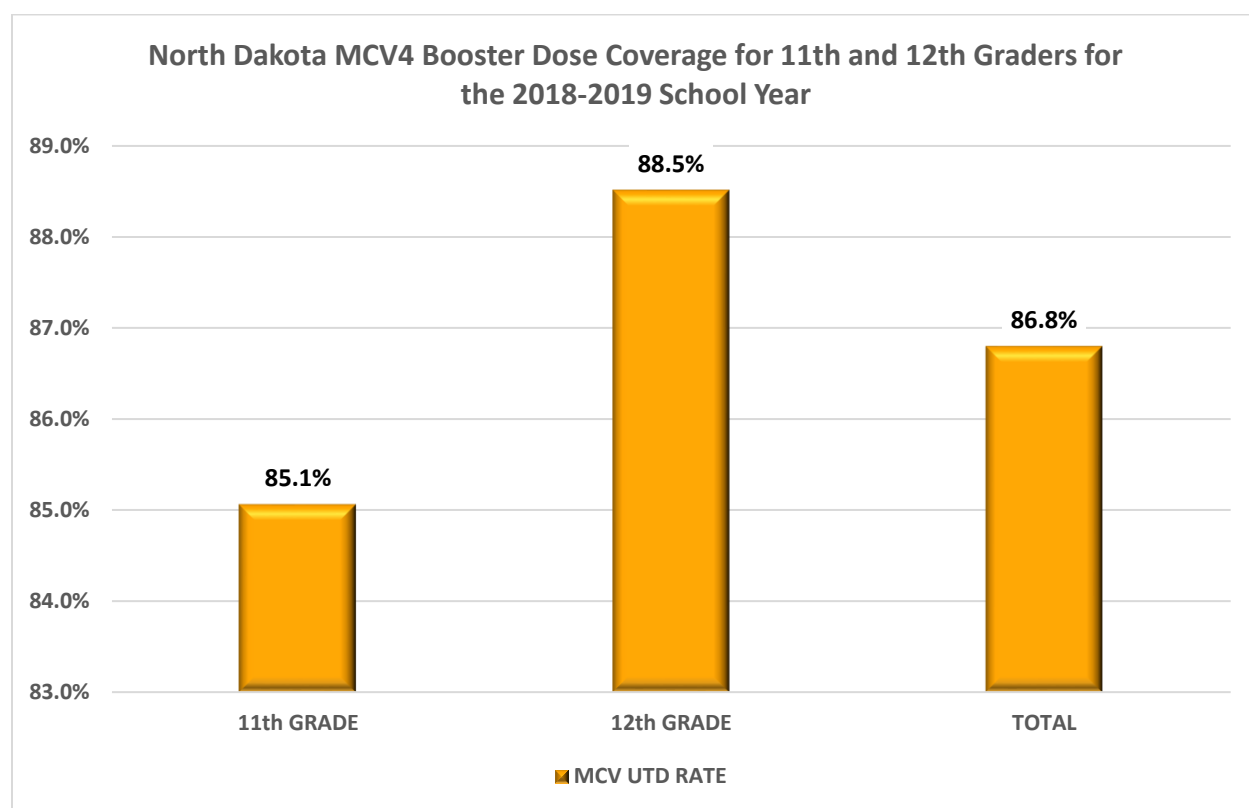


Figure 1. The percent of 11th and 12th graders up-to-date for MCV4 vaccine in NDIIS by September 30th.

Additionally, less than 0.5 percent of 11th and 12th graders have a documented medical, religious or moral/philosophical exemption to MCV4 vaccine in the NDIIS. That means that there are still roughly 13 percent of kids not up-to-date with the new school requirement for MCV4 vaccine.

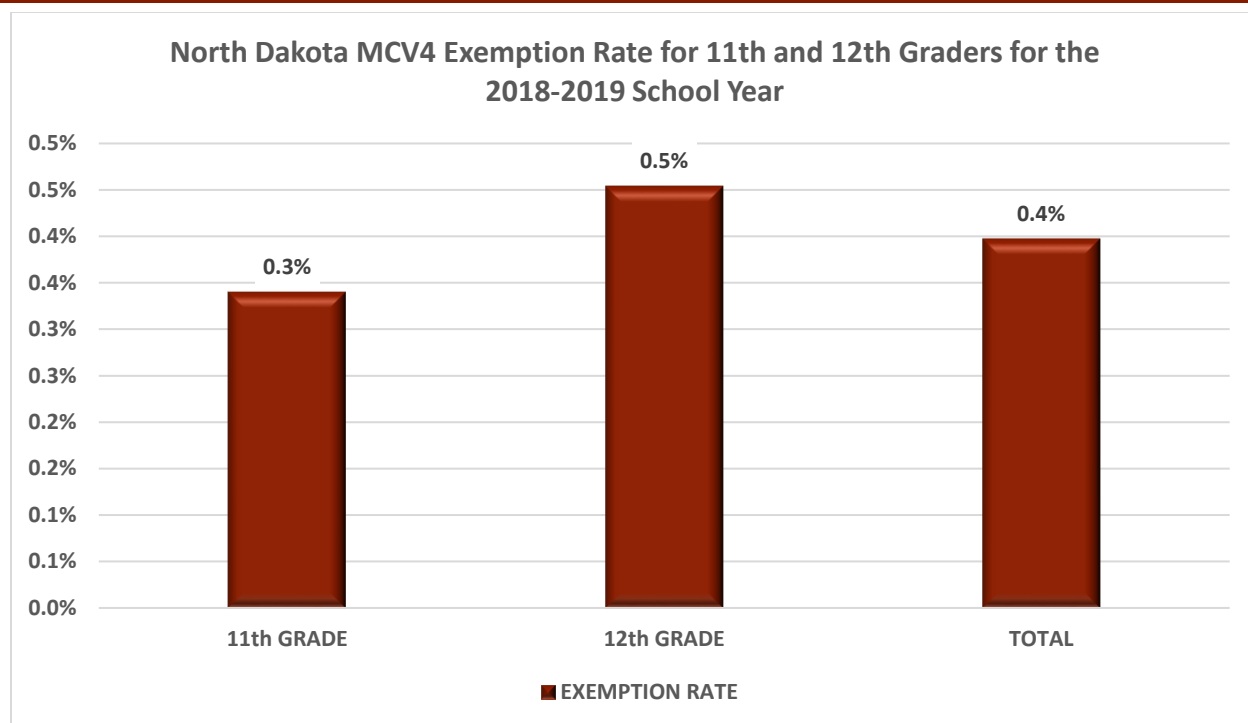


Figure 2. The percent of 11th and 12th graders with a documented exemption in NDIIS for MCV4 vaccine.

The school immunization survey is due to the NDDoH by November 9, 2018. The NDDoH will compare NDIIS school coverage rates to rates reported by schools after that date.

2017 NIS Results for Adolescents Ages 13 – 17 Years

On Thursday, August 23, 2018, adolescent immunization coverage rates from the NIS, a random digit dialing survey, were published in Morbidity and Mortality Weekly Report (MMWR). North Dakota's immunization coverage rates for all adolescent vaccines were above the national average.

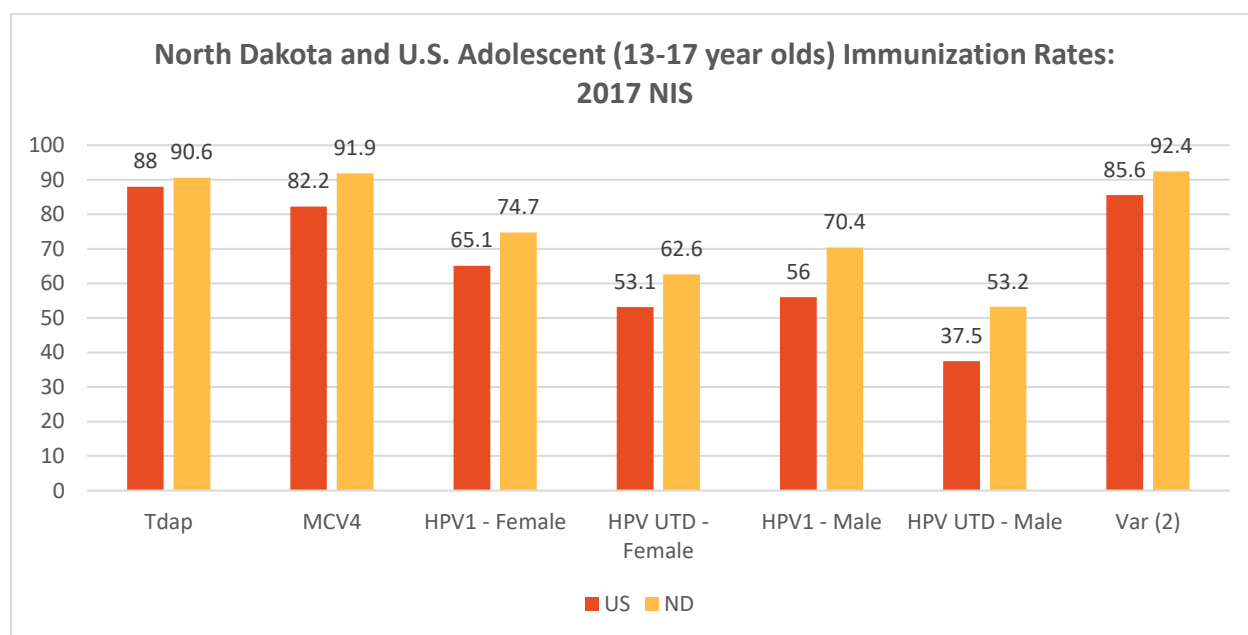


Figure 3. The percent of ND and U.S. adolescents up-to-date for vaccines according to the NIS

Immunization coverage rates in 2017 for Tdap, MCV4, and varicella remained similar to the previous year. HPV vaccine coverage rates increased for both females and males starting and completing the series.

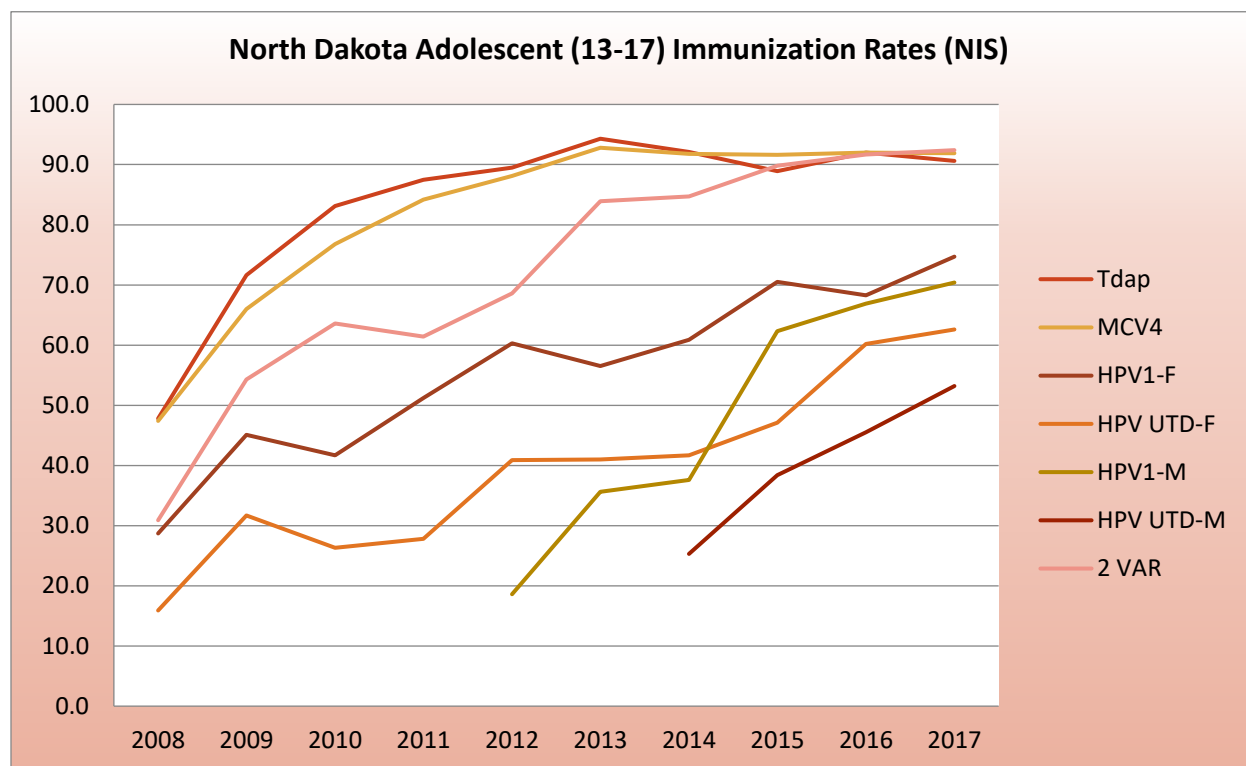


Figure 4. The percent of ND adolescents up-to-date for vaccines for the past ten years according to the NIS

For more information about NIS adolescent immunization coverage rates, please visit CDC's [TeenVaxView](https://www.cdc.gov/teenvaxview/).

2017 National Immunization Survey Results for Infants Ages 19 – 35 Months

On Thursday, October 12, 2018, infant immunization coverage rates from the NIS were published in MMWR. North Dakota infant immunization coverage rates were above the national average for all vaccines and the seven-vaccine series, 4:3:1:3:3:1:4.

Vaccine or Series	North Dakota %	United States %
4 DTaP	86.1	83.2
3 or 4 Hib	89.6	80.7
3 Hepatitis B	97.7	91.4
1 MMR	95.7	91.5
3 Polio	96.2	92.7
1 Varicella	95.0	91.0
4 PCV	88.1	82.4
2 Hepatitis A	73.3	59.7
Hepatitis B Birth Dose	84.0	73.6
2 or 3 Rotavirus	83.1	73.2
4:3:1:3:3:1:4	78.8	70.4

In North Dakota, infant immunization coverage rates increased for all vaccines, compared to 2016.

Immunization Rates (4:3:1:3:3:1:4) of Children 19 - 35 Months: North Dakota vs. U.S. (NIS Data)

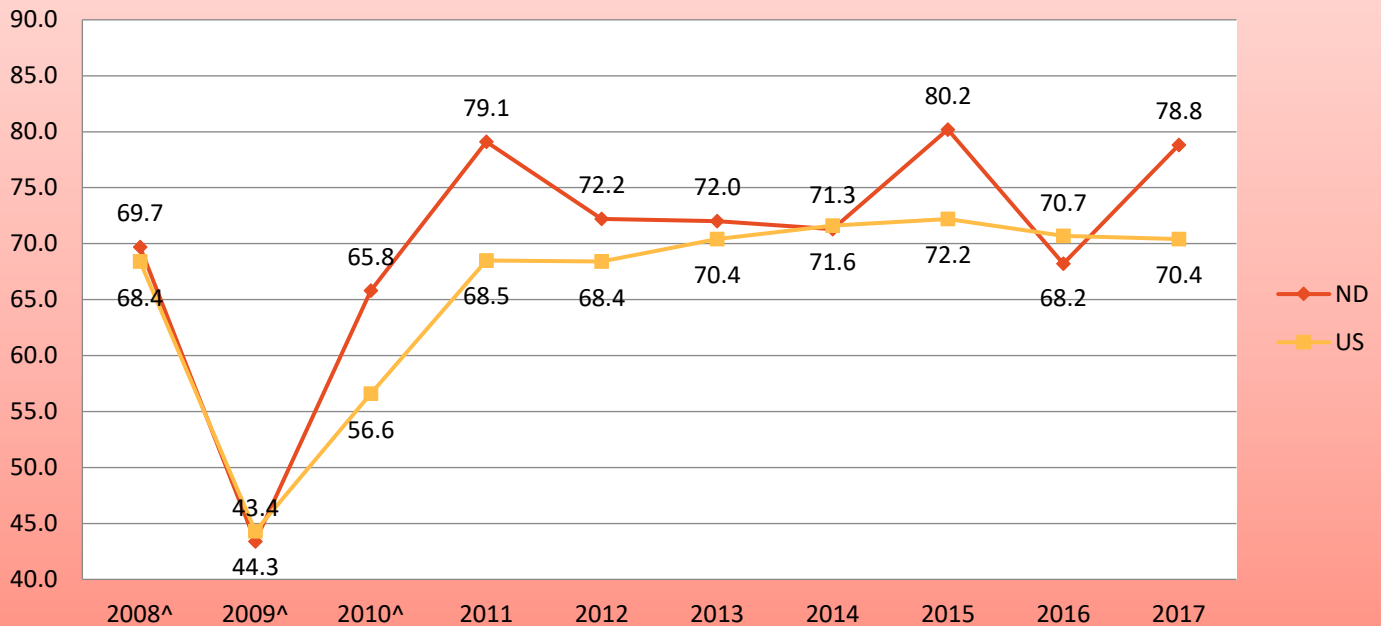


Figure 5. The percent of ND infants up-to-date for the 4:3:1:3:3:1:4 series for the past ten years according to the NIS (^Hib shortage)

For more information on NIS infant immunization coverage rates, please visit CDC's [ChildVaxView](#) site.

It is important to note that the NIS for both adolescents and infants has large confidence intervals for state-level data due to the small sample size. According to the NDIIS, infant immunization coverage rates have remained fairly stable from 2016 to 2017. NDIIS immunization coverage rates are posted on the [immunization program website](#).

NDIIS Updates

Training Materials

The NDIIS team has been working on updating the training materials and tip sheets available on our [website](#). Recent updates have been made to reflect minor changes to the NDIIS and address new school user functionality. If there are detailed tip sheets or additional training materials that you feel would be helpful for NDIIS users, please contact Mary Woinarowicz at mary.woinarowicz@nd.gov.

Certificate of Immunization

The NDIIS team has been working to update the North Dakota Official Certificate of Immunization. These changes include updating the North Dakota state seal and updating the language regarding history of disease, medical and personal belief exemptions. When the changes were made to the exemption language, the signature box got larger and will get pushed to a second page if the immunization record covers more than half a page. When the certificate has a second page, there is a header that marks that page as the Official Certificate of Immunization and includes the patient's name and birthdate. We always recommend that multi-page certificates

be printed on the front and back of the same paper whenever possible. This will ensure that the signature and immunization record sections of the certificate stay together.

VAERS

Effective October 15, 2018, some NDIIS users are seeing a new icon when they log in to the NDIIS. This icon will take NDIIS users to the national, Health and Human Services (HHS) Vaccine Adverse Events Reporting System (VAERS) [data entry page](#). VAERS is used to report “clinically important adverse events that occur after vaccination of adults and children, even if you are not sure whether the vaccine caused the adverse event. VAERS accepts all reports, including reports of vaccination errors.”¹ The link to VAERS was added to the NDIIS because providers will need information from the patient’s NDIIS immunization record to complete the VAERS report and to provide ease of access to the VAERS form.



If using Google Chrome to access the NDIIS, users may have to bypass an internet security warning to get the VAERS webpage to open on their computer. Please note that the HHS VAERS page is completely secure and confidential, and it is completely safe to enter vaccine adverse event and patient information on this website. There are no issues accessing the VAERS page from Internet Explorer, Microsoft Edge, Firefox or Apple Safari web browsers.

¹ <https://vaers.hhs.gov/reportevent.html>

NDIIS Record Matching Service

During its ongoing outreach and education program, the NDIIS team has received regular feedback from adult immunization providers on the barriers they face in successfully assessing patient and resident immunization needs. In addition, providers have also expressed significant challenges in fully and regularly reporting immunizations to the NDIIS. Many providers such as long-term care facilities and home health agencies struggle with limited resources, experience high staff turnover and staffing shortages, and often have less sophisticated electronic health record (EHR) systems that are not technically capable of reporting patient immunization data to the NDIIS electronically. These challenges make it difficult for providers to source complete patient immunization records, to find staff time needed to enter administered and historical immunizations into the NDIIS and to fully assess patient immunization needs.

To help address these challenges, the NDIIS team is offering a record matching service to interested adult facilities and immunization providers to assist in assessing their patients'/residents' immunization needs and to help reduce staff-time spent looking up individual records. To find out which residents have a record in NDIIS and which routinely recommended immunizations they are due for, along with the recommended dates, providers should contact the NDIIS coordinator to arrange to securely provide us with the list of their current patients or residents. The NDIIS team will match the list of individuals to NDIIS records and will provide participants with the immunization forecast information for their patients/residents with an NDIIS record. This project is intended to give providers a head-start on assessing immunization needs during the busy influenza season, obtaining more complete records in NDIIS, and assist in creating more reliable patient forecasts in the future.



Since the launch of the service, five long term care facilities have submitted their resident lists for matching and 12 have expressed interest in participation. The NDIIS-patient list match rate for records returned so far has been very high, ranging from 90 to 95 percent. For more information or to participate in the service, providers may get in touch with Dominick Fitzsimmons, NDIIS coordinator, at 701.328.4169 or dfitzsimmons@nd.gov.

New NDDoH Immunization Program Employee!



Hi! My name is Jenny Galbraith and I am the new Immunization Surveillance Coordinator for the NDDoH. I will be responsible for vaccine preventable disease surveillance, perinatal hepatitis B, and the school immunization assessment. Prior to this job, I was the West Nile Surveillance Coordinator and Epidemiology Assistant for the NDDoH. I have my undergraduate degree from the University of Mary in Biology. While in college I worked a variety of jobs, including coaching an academic team and stage managing for Sleepy Hollow Theatre & Arts Park.

I have lived in North Dakota for most of my life and graduated from Century High School in Bismarck. I spend most of my free time volunteering as an adult advisor for a girl's service organization called Rainbow Girls. The girls I work with vary in age from 6-16, so it is never a dull moment. In my time outside of Rainbow, I enjoy playing piano, reading, and attending musicals.

VIS Dates

Take a moment to review your vaccine information sheets (VIS) and make sure that they are up to date.

Vaccine	VIS Date	Vaccine	VIS Date
Adenovirus	6/11/2014	MMRV	2/12/2018
Anthrax	3/21/2018	Multi-Vaccine	11/05/2015
Chickenpox	2/12/2018	PCV13	11/5/2015
Cholera	7/6/2017	PPSV	4/24/2015
DTaP	8/24/2018	Polio	7/20/2016
Hib	4/02/2015	Rabies	10/06/2009
Hepatitis A	7/20/2016	Rotavirus	2/23/2018
Hepatitis B	10/12/2018	Shingles (live)	2/12/2018
HPV	12/02/2016	Shingles (Recombinant)	2/12/2018
Influenza (inactivated)	8/07/2015	Smallpox	12/01/2015
Influenza (live)	8/07/2015	Td	4/11/2017
J. encephalitis	1/24/2014	Tdap	2/24/2015
Meningococcal ACWY	8/24/2018	Typhoid	5/29/2012
Meningococcal B	8/09/2016	Yellow fever	3/30/2011
MMR	2/12/2018		

Offering a VIS for each vaccine at all immunization visits, including mass clinics, is a federal requirement. A VIS can be printed and laminated for each room as long as they are sterilized between patients, or paper copies can be provided at each immunization visit. The VIS must be offered prior to immunizations, not after. Check your VIS stock against this list. If you have outdated VIS forms, obtain the current version.

State Supplied Hepatitis B Doses to Birthing Hospitals



Birthing hospitals in North Dakota participate in the universal hepatitis B program. This means the NDDoH supplies the birth dose of hepatitis B vaccine for all children in North Dakota, including VFC and insured. Public lot numbers for hepatitis B are automatically added to the hospital's inventory in NDIIS. When private hepatitis B vaccine is used at a hospital on a newborn, it creates an issue with the doses being entered into the NDIIS from the birth certificate. Hospitals should store private hepatitis B vaccine away from their state supply to avoid any accidental use.

All infants are recommended to receive the birth dose of hepatitis B vaccine within 24 hours of birth. According to the 2017 NIS, birth dose rates in North Dakota are 85.6 percent, compared to the United States average at 71.4 percent.

North Dakota's Pharmacist Immunization Standing Orders

As a strategy to increase access to immunization services, the NDDoH has implemented pharmacist immunization standing orders through the State Health Officer. To apply for standing orders, the pharmacist must possess a valid North Dakota license and submit an up-to-date Board of Pharmacy Immunization Certificate, proof of adequate liability insurance (a claim limit of \$1 million and an aggregate limit of \$3 million), and a completed Authority to Immunize application to the NDDoH.



Immunization standing orders allow pharmacists to administer all ACIP recommended vaccines to individuals 11 and older and administer the influenza vaccine to all individuals five and older. All vaccines administered under North Dakota's standing orders must be entered in the NDIIS within 14 days of administration to ensure provider notification and patient immunizations records are complete.



Calendar of Events

HPV Vaccination Roundtable Webinar, Oct. 29, 2018

https://events-na8.adobeconnect.com/content/connect/c1/1120158576/en/events/event/private/1818251403/2070731239/event_registration.html?sco-id=2399937025& charset=utf-8

Pneumococcal Vaccines: Strategies to Increase Adult Immunization Rates Webinar, Oct. 30, 2018

<http://www.nfid.org/professional-education/online>

Got Your Shots? Immunization Conference, Nov. 1 – 2, 2018 in Minneapolis, MN

<http://www.health.state.mn.us/divs/idepc/immunize/conference/>

2018 Clinical Vaccinology Course, Nov. 9 – 10, 2018 in Bethesda, MD

<http://www.nfid.org/professional-education/conferences>

NDDoH Immunization Lunch and Learn, Nov. 14, 2018

www.ndhealth.gov/Immunize/

Children's Hospital of Philadelphia Vaccine Education Center Webinar, Nov. 14, 2018

<https://www.chop.edu/centers-programs/vaccine-update-healthcare-professionals>

CDC Current Issues in Immunization Netconference, Nov. 28, 2018

<https://www.cdc.gov/vaccines/ed/ciinc/index.html>

National Influenza Vaccination Week, Dec. 2 – 8, 2018

<https://www.cdc.gov/flu/resource-center/nivw/index.htm>

NDDoH Immunization Lunch and Learn, Dec. 12, 2018

www.ndhealth.gov/Immunize/

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