Immunization Newsletter

Winter 2019

Influenza Vaccination Pre-Book

The Vaccines For Children Program (VFC) influenza vaccine pre-book was emailed out in early January for providers to pre-book influenza vaccine for the upcoming 2019-2020 influenza season. As a reminder, the VFC Program provides vaccine for children, ages 18 and younger, who are American Indian, Medicaid-eligible, uninsured and/or underinsured. All enrolled providers may prebook influenza vaccine for VFC children.

Local public health units (LPHUs) and Federally Qualified Health Centers (FQHCs) are also able to pre-book influenza vaccine for uninsured and/or underinsured adults (i.e., homeless population). Influenza vaccine that was pre-booked by LPHUs and FQHCs for VFC-eligible patients should not be used for the adult population.

Flumist® Recommendation:

For the 2019-2020 season, live attenuated influenza vaccine (LAIV or Flumist®) will most likely be recommended as an option for influenza vaccination for persons for whom it is otherwise appropriate. Providers may prebook any licensed, age-appropriate influenza vaccine. Efficacy of any influenza vaccine will not be known at the time of the pre-book, but if providers are planning on administering Flumist® during the upcoming influenza season, the vaccine will need to be pre-booked now.

Fluzone® Age Recommendation Change:

The U.S. Food and Drug Administration's (FDA) expanded the age indication for Fluzone® Quadrivalent influenza 0.5 mL vaccine to include use in persons six months and older. Prior to this, the vaccine was only approved in persons three years of age and older. Fluzone® influenza 0.25 mL vaccine for those children six to 36 months will also be available. Education should be conducted with staff about both presentations being available and to administer the correct dosage. There are now three types of influenza vaccine available for persons 6 months and older.

2019 VFC Enrollment-Coming Soon!!

Clinics who receive vaccine through the VFC Program must enroll annually. The 2019 enrollment cycle will begin in February!

The enrollment survey will be due a few weeks after it is sent out. As with all other enrollment cycles, providers will need to complete an online form and have their Medical Director sign the form acknowledging the VFC program requirements and return it to the Immunization Program. Also, two contacts from each facility will need to review the VFC educational module and pass a post-test. Once these steps are taken, the 2019 enrollment cycle is complete.

For any questions or concerns, please contact the Immunization Program at 701.328.3386 or toll-free at 800.472.2180.

Shoulder Injury Related to Vaccine Administration

Shoulder injury related to vaccine administration (SIRVA) is believed to be caused by an immune response following inadvertent direct injection of a vaccine into and around the deltoid bursa or joint space. Patients with SIRVA experience a shoulder injury that is more severe than would be expected from needle trauma.

The presentation of SIRVA typically includes rapid onset of severe, long-lasting shoulder pain following vaccination in the deltoid muscle, resulting limited range of motion and may require ongoing medical intervention.

To avoid SIRVA, make sure clinic staff who administer vaccines recognize the anatomic landmarks for identifying the deltoid muscle and use proper intramuscular administration technique.

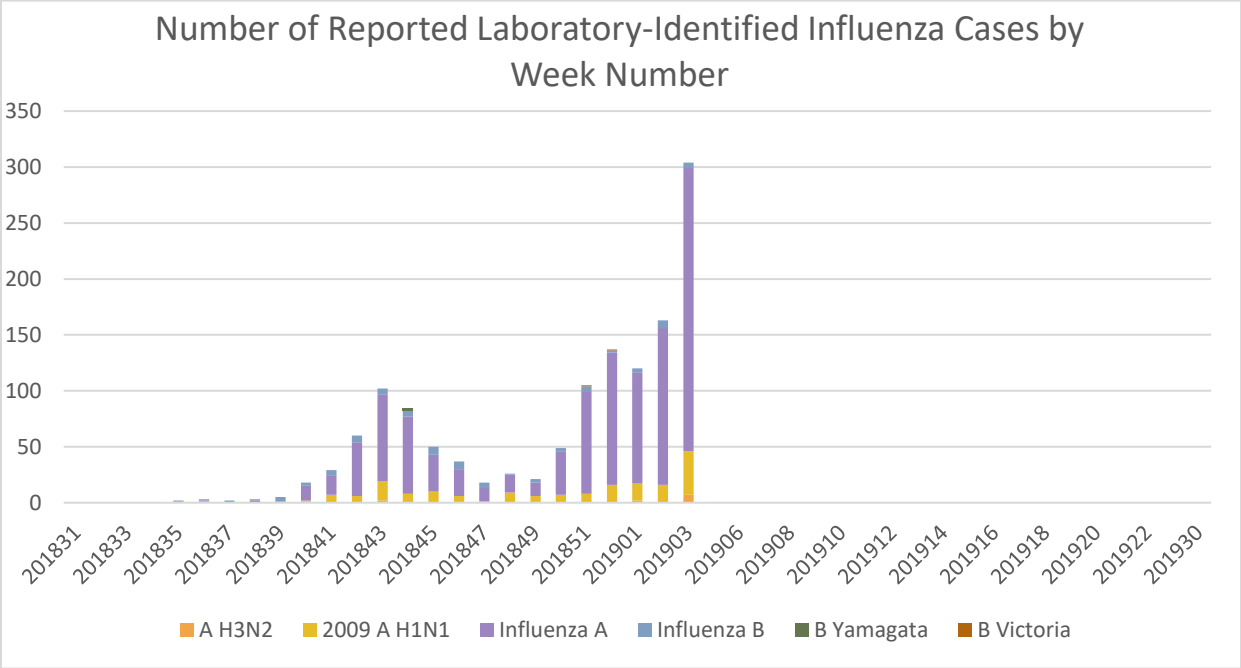
Cases of SIRVA should be reported to the Vaccine Adverse Events Reporting System, VAERS.

Vaccine Administration Resources:

- CDC You Call the Shots Know the Site is Right
- IAC How to Administer Intramuscular and Subcutaneous Vaccines
- IAC Administering Vaccines to Adults: Doses, Site, and Needle Size
- IAC Administering Vaccines: Doses, Site, and Needle Size

2018-2019 Influenza Update

Influenza cases in the 2018-19 season continue to increase, with 1,810 laboratory confirmed influenza cases reported to the NDDoH as of January 26, 2019. Nationwide, most flu activity is due to influenza A H1N1 infections. It is too soon to tell if this strain will predominate for the entire season. The "typical" peak for a North Dakota influenza season occurs anytime between January to March. It is likely we will continue to see an increase in influenza cases being reported. A total of 255,879 doses of 2018-19 influenza vaccine have been entered into the NDIIS so far this season. For more information on influenza and current influenza statistics, visit www.ndflu.com.



New Educational Materials

There are many valuable immunization resources available through the NDDoH's immunization program. We have recently added a few new vaccine safety resources from the Children's Hospital of Philadelphia (CHoP). The new resources cover common concerns from parents such as vaccine ingredients, vaccines and Autism, thimerosal and much more. They are offered as 1-page resources which are easy for parents to understand. Each resource comes as a 50-page tear pad, when ordering please know that you are ordering a full tear pad and that they will not be broken up.

Providers may also notice that our forms order page looks differently. We have moved our forms ordering to Qualtrics. Providers will use the same ordering link but will then be directed to this website. All functionality is the exact same it just looks slightly different.

For any questions or concerns, please contact the Immunization Program at 701.328.3386 or toll-free at 800.472.2180.

Vaccine Wastage Due to Storage and Handling

Proper vaccine storage and handling is critical to ensure the viability of vaccines, and temperature excursions can be costly. The NDDoH requires providers to submit data logger temperatures monthly. Providers should immediately contact the NDDoH and vaccine manufacturers when temperature excursions occur to determine viability of vaccines.

Data logger temperature logs are reviewed by an administrative assistant for any immediate alarms, and if there are alarms, they are sent directly to the VFC/AFIX Coordinator for review. This is done to prevent excursions before they happen based on current temperatures in provider storage units. Data logger temperature logs are reviewed by NDDoH staff each month looking for temperature excursions. Data was collected on the frequency of excursions, vaccine viability, revaccination and whether the excursions were reported to the NDDoH starting on October 1, 2016.

From October 1, 2016 through September 30, 2017, North Dakota VFC providers reported sixty-two temperature excursions, resulting in 999 doses of wasted vaccine worth $50,402. Through monthly review of data logger temperatures, 68 unreported temperature excursions were identified by the NDDoH. The unreported temperature excursions resulted in 522 doses of vaccine worth $19,481 being wasted. During the same time period, there were five VFC providers that needed to revaccinate patients due to unreported temperature excursions and nonviable vaccine being administered to patients. 104 patients needed to be revaccinated due to nonviable vaccine, to-date only 79 (76%) of these patients have been fully revaccinated.

From October 1, 2017 through September 30, 2018, North Dakota VFC providers reported 70 temperature excursions, resulting in 434 doses of wasted vaccine worth $23,187. There were 37 unreported temperature excursions that were identified by NDDoH staff. The unreported temperature excursions resulted in 82 doses of vaccine worth $3,622 being wasted. No revaccination was needed during this time period. This project has proven to be a cost savings process. The total savings from year one to year two was $43,022 and 985 doses of vaccine and no revaccinations were needed. When providers follow up on temperature excursions when they are discovered, the loss of vaccine was less which was shown to be cost effective.

Deceased Patient Records in the NDIIS

If you find an active NDIIS record for someone you know is deceased, type the word "DECEASED" into the second address line of the client demographics page. Please make sure that you do NOT delete any demographic information from the record. The Immunization Program runs a report once a week that pulls a list of the records flagged as deceased and marks the records as inactive in the NDIIS. We also ask that you do not write "DECEASED" on the demographics page if the patient is still living, but the patient's mother is deceased. This will result in the patient's record being incorrectly marked as inactive.

HPV Vaccine Cancer Prevention Champion

The CDC partnered with the Association of American Cancer Institutes (AACI) and the American Cancer Society (ACS) to establish the *HPV Vaccine Is Cancer Prevention Champion* Award Program to recognize leaders in health care, who are going above and beyond to promote or foster HPV vaccination among adolescents in their communities. The program also serves to reinforce for parental audiences that HPV vaccination is an important part of cancer prevention, and to motivate clinicians to adopt effective recommendation practices.

North Dakota's champion for 2018 is Patricia Flohr from Sanford Health Pediatrics in Bismarck, ND. Patricia "Patty" Flohr is a North Dakotan born and raised. She attended nursing school at Bismarck Hospital School of Nursing and has been a Pediatric Registered Nurse for more than four decades. Patty currently works at Sanford Pediatrics in Bismarck, North Dakota and is certified in Pediatric Nursing by the American Nurses Credentialing Center.

Patty inspires physicians, nurses and pediatric staff to continuously discuss and offer the HPV vaccine at every relevant patient encounter. Patty is a strong HPV vaccine educator, and coordinates guest speakers and online lectures at pediatric clinic meetings. Sanford Pediatrics works hard to ensure patients are receiving recommended vaccines by using staff reminders, educational materials, and appointment reminder calls to patients. Patty also encourages the nurses to get involved in the vaccination process. The nurses write down which vaccines are due on the patient's chart at every visit to remind physicians to discuss vaccines with patients. Nurses also document why patients refuse the HPV vaccine and discuss it again at the patient's next visit.

Patty's hard work helped lead Sanford Pediatrics to an impressive 64 percent HPV vaccine series completion rate for 13-15-year-old patients. This is why Patty Flohr is North Dakota's 2018 *HPV Vaccine Is Cancer Prevention Champion*!

Adult Immunization Missed Opportunities in North Dakota

The NDDoH established a vaccination goal of 90 percent for the following adult immunizations: tetanus, diphtheria, and pertussis (Tdap) for individuals 19+ years of age, recombinant zoster vaccine (RZV, Shingrix®) for individuals 50+ years of age, pneumococcal conjugate (PCV13) and pneumococcal polysaccharide (PPSV23) vaccines for individuals 65+ years of age and influenza vaccination for all ages. Currently, NDIIS immunization rates are below North Dakota's goal of 90 percent for all adult vaccinations.

- 55.4% - Tetanus, diphtheria, pertussis (Tdap) for 19+ years of age
- 6.0% - Shingles recombinant vaccine (RZV, Shingrix®) dose 1 for 50+ years of age

- 54.9% - Pneumococcal Conjugate (PCV13) for 65+ years of age
- 47.3% - Pneumococcal polysaccharide (PPSV23) for 65+ years of age
- 52.6% - Influenza for 65+ years of age

Immunization missed opportunities are a contributing factor to North Dakota's low adult immunization rates and leave many adults susceptible to vaccine-preventable diseases. A missed opportunity for vaccination is when a patient receives one or some of the vaccines that are recommended, but not all vaccines the patient is eligible for. An example of a missed opportunity would be a patient receiving only influenza vaccine, but was due for Tdap and pneumococcal conjugate vaccines. As of December 31, 2018, immunization missed opportunities have occurred in all North Dakota primary care settings when administering the influenza vaccine. Clinic-based NDIIS missed opportunity reports demonstrate there are sites with 0 – 1,664 missed opportunities for adults who received the influenza vaccination in their medical home.

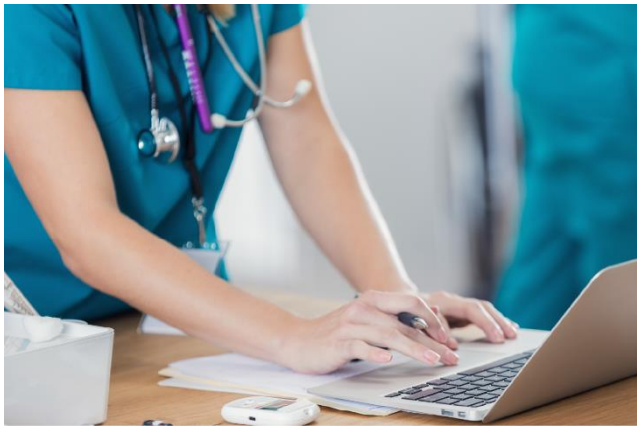
Common reasons for missed opportunities include lack of knowledge about the patient's immunization status, lack of comprehensive adult immunization screening processes and standing orders and use of inappropriate contraindications. To decrease adult missed opportunities and increase adult immunization rates, providers should implement immunization best practices such as:

- Provide staff education
- Immunization standing orders that are consistent with ACIP recommendations
- Screen patient's immunization records during each visit
- Administer all vaccines that are due or past due at the time of the visit
- Perform regular immunization assessments to identify patients that are not up-to-date
- Implement an immunization reminder/recall process

Adult Immunization Resources: Immunization Action Coalition: Adult Immunization Standing Orders - http://www.immunize.org/standing-orders/

CDC: Adult Vaccination Resources - https://www.cdc.gov/vaccines/hcp/adults/for-practice/index.html

How to Handle Vaccine Exemptions in the NDIIS



If you have a patient with a medical, religious, moral/philosophical or history of disease exemption, make sure those exemptions are correctly documented in the NDIIS. Most electronic health records (EHRs) do not submit exemption information to the NDIIS electronically, so exemptions need to be entered directly in the NDIIS. When an exemption is entered in the NDIIS, the forecaster will no longer recommend the vaccines the patient exempted from. Additionally, if a patient previously claimed an exemption but is now being vaccinated, it is important that the exemption be deleted from the NDIIS. All NDIIS users are able to delete any vaccine exemption, regardless of how it was entered. This will allow the forecaster to recommend future doses and makes it much easier for the NDIIS and Immunization Program to calculate coverage rates. Patients with a documented history of disease exemption are counted as up-to-date when calculating coverage rates. Patients with a documented medical, religious or moral/philosophical exemption are considered not up-to-date.

FDA Approval of VAXELIS™

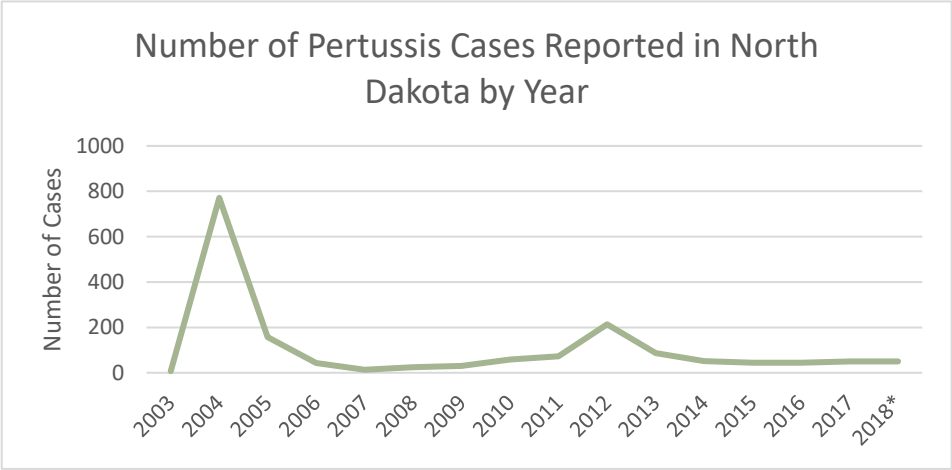
On December 26, 2018, the FDA approved VAXELIS™ for use in children from 6 weeks through 4 years old. To clarify, the vaccine needs to be administered prior to the 5th birthday. This vaccine was developed as a joint-partnership between Sanofi and Merck.

VAXELIS™ is designed to prevent children from contracting diphtheria, tetanus, pertussis, polio, hepatitis B and invasive disease due to *Haemophilus influenzae* type b. It was approved for use as a 3-dose series to children in the recommended age group. The dosage is 0.5mL given as an intramuscular injection at 2, 4, and 6 months of age. Children who have received a 3-dose series of VAXELIS™ need an additional dose of pertussis-containing vaccine to complete the primary series.

The product insert lists precautions and contraindications. The vaccine should be stored at 2°C to 8°C (36°F to 46°F). The companies are working to maximize production of this new vaccine to meet anticipated demand in the United States. Commercial supply will not be available prior to 2020.

2018 Preliminary Vaccine Preventable Disease Data

With the exception of influenza, chickenpox, pertussis and mumps are the most common vaccine preventable diseases (VPDs) seen in North Dakota. The following data are preliminary. During 2018, 50 cases of pertussis were reported to the NDDoH. The ages of these cases ranged from younger than 12 months to older than 60 years, and cases were seen throughout the state. The number of cases reported in North Dakota have remained between 44 and 51 for the past five years. Pertussis outbreaks tend to occur every 3-5 years. The last major peak of pertussis in North Dakota was in 2012 with 214 pertussis cases.



There were 49 cases of chickenpox reported to the NDDoH in 2018. Very few of these cases were confirmed with a laboratory test. With the increase in vaccination, chickenpox is becoming more difficult to diagnose based on clinical symptoms. The NDDoH strongly recommends laboratory testing when chickenpox is suspected. The majority of cases seen in 2018 were in children younger than 18, although the ages ranged from younger than 12 months to older than 40 years. The cases were seen throughout the state.

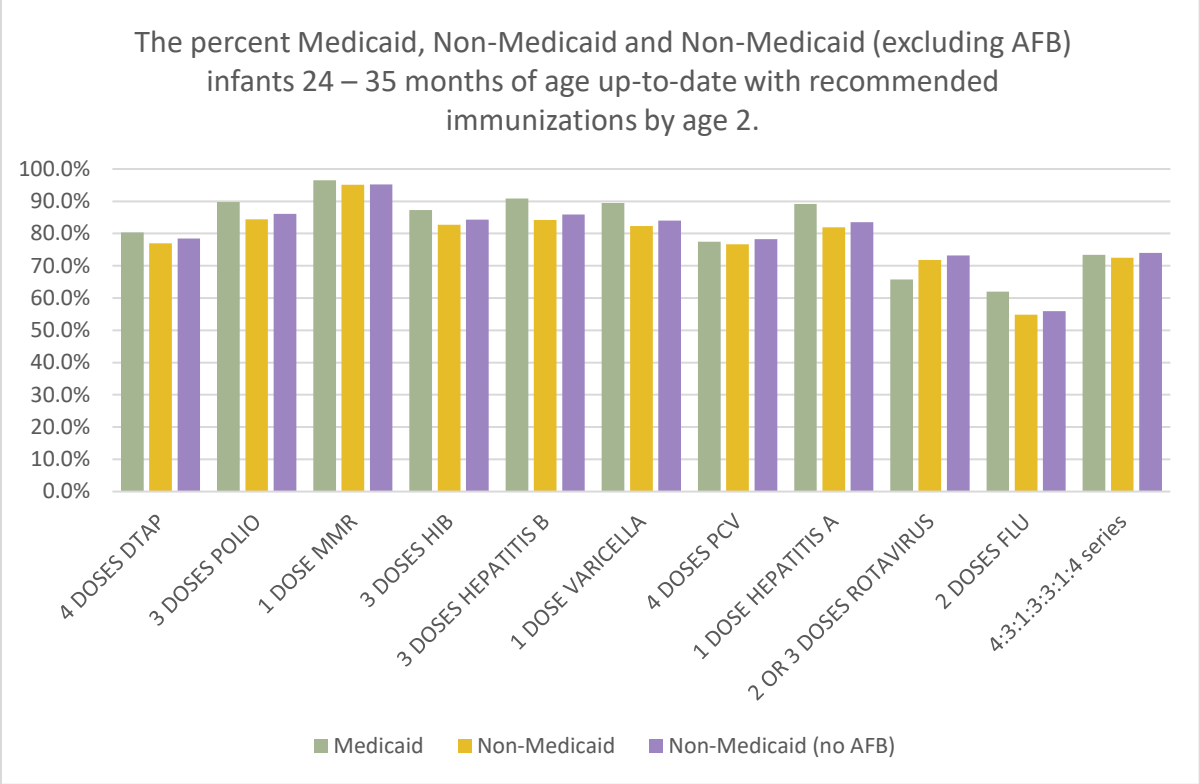
There were no confirmed or probable mumps cases in 2018. The NDDoH also follows up on all reports of suspect mumps cases. In 2018, there were 14 suspect mumps cases reported to the NDDoH. These suspect cases were reported across the state and reported in individuals under four to individuals older than 40.

North Dakota Medicaid Immunization Rates

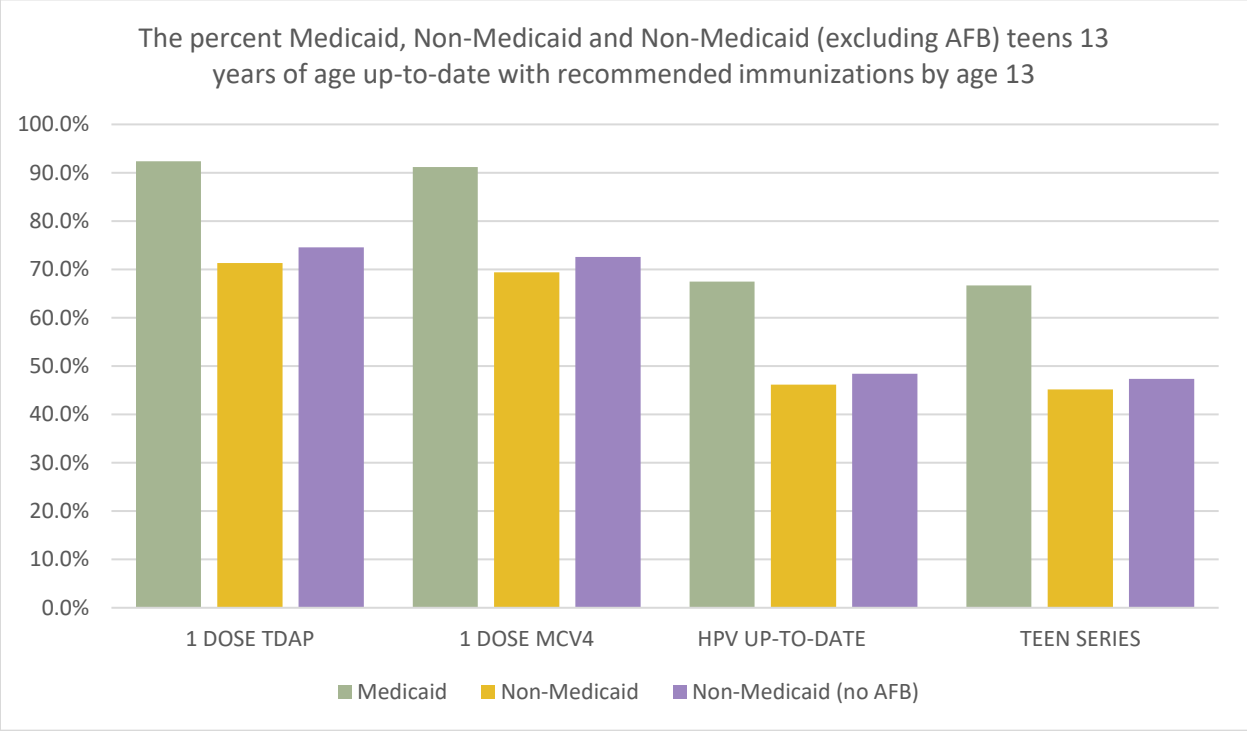
In November 2018, ND Medicaid requested data from the NDIIS to assess their infant and adolescent immunization coverage rates. ND Medicaid provided the list of infants ages 24-35 months and adolescents age 13 years that receive Medicaid benefits. The Medicaid kids were matched to their NDIIS record (99% match rate) and their immunization coverage rates were assessed. After assessing rates for the Medicaid population, both Medicaid and the Immunization Program were interested to see how Medicaid immunization rates compared to the non-Medicaid population. Excluding the set list of Medicaid infants and adolescents, coverage rates for non-Medicaid kids were also assessed, first as a complete population and second excluding kids with an address on one of the two U.S. Air Force Bases (AFB) located in North Dakota. AFB kids were excluded because immunizations administered on the base are not reported to the NDIIS.

The two graphs below show the comparison of coverage rates for Medicaid and non-Medicaid infants and adolescents.

For infants (by age 2), ND Medicaid rates were higher than those for non-Medicaid infants for DTaP, polio, MMR, Hib, hepatitis B, varicella, hepatitis A and influenza. Non-Medicaid rates are higher for rotavirus vaccine, and the non-Medicaid (excluding AFB) rates are higher for pneumococcal vaccine and the complete infant series.



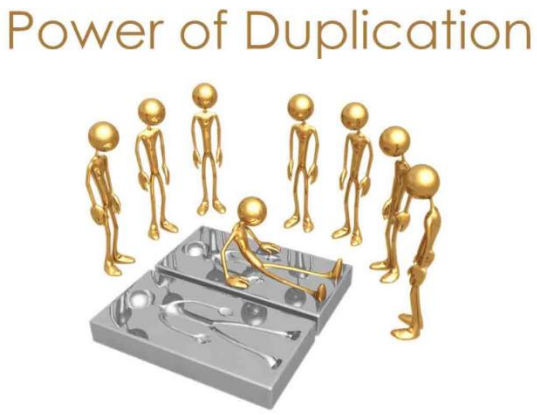
For adolescents (by age 13), ND Medicaid rates were significantly higher than non-Medicaid for all vaccines.



There are some limitations to this data. Medicaid has a fixed population and known denominator. The non-Medicaid denominator may include duplicates or kids who have moved out-of-state. The data that includes AFB children has children in the denominator for which we don't have an immunization record. Denominator inflation may make rates appear lower than they actually are.

Duplicate Patient Records in NDIIS

When you find a duplicate patient record in the NDIIS, you do not need to call the NDDoH Immunization Program to report the duplicate, even if there are more than two records for a single patient. Instead of calling or emailing, we ask that you flag the record as a duplicate by typing the word "DUPLICATE" into the second address line of the demographics page of the NDIIS record. Please make sure that you do NOT delete any demographic information from the record. The NDDoH Immunization Program runs a report once a week that pulls a list of the records flagged as duplicates and we merge the duplicates by the end of that week.



Updating Patient Status in NDIIS

Updating the Moved or Gone Elsewhere (MOGE) status of patients that should no longer be associated with your NDIIS provider site is an important way to manage both your patient population and the larger NDIIS population. In order to change a patient's MOGE status, a provider must be the last provider visited excluding influenza for that patient, meaning your provider site was the last provider to enter a non-influenza vaccine in the patient's NDIIS record. LPHU and NDDoH users can change the MOGE status of any NDIIS record, regardless of the last provider visited. If a provider changes a patient's MOGE status from MOGE or Lost to Follow-up to Current Client, that provider will default as the last provider visited. If a patient's MOGE status is set to MOGE or Lost to Follow-up and a provider enters an immunization for that patient, the status will automatically change back to Current Client and that provider will then become the last provider visited for that patient.

When changing a patient's status in the NDIIS, it is important that you select the most appropriate status and MOGE reason. When the record is set to Lost to Follow-up or MOGE with a selected MOGE reason of "Received documentation that the client has moved with no forwarding address provided" or "Received documentation that the client moved out of North Dakota" that patient will be excluded from all provider, county and state-level reports and coverage rates. When a record is set to MOGE with a selected MOGE reason of "Received documentation of a forwarding address out of the immediate area" or "Received notification or request for records indicating the child has transferred to another provider" that patient will be excluded from all provider-level reports and coverage rates but will still be included in county and state-level reports and coverage rates. Additionally, if you are not able to change a patient's MOGE status because you are not the last provider visited, please contact the immunization program to have the record updated. Writing "MOGE," "MOVED" or some other variation or just changing the patient's address to "UNKNOWN" does not remove the patient from NDIIS coverage rate calculations and incorrectly leaves the record as part of the NDIIS population.

The new Provider Patient List report will pull a complete list of all patients' that are currently set as belonging to your NDIIS patient population and should be used to help identify any patients that need to have their MOGE status changed. Complete instructions on how to run and use the Patient List Report and how to change a patient's MOGE status are available on the immunization program website.

Hepatitis A Health Advisory

The NDDoH recently received a report of a confirmed case of hepatitis A in Ward County, North Dakota. The case is not associated with international travel. The case recently moved from an area of the United States currently experiencing a hepatitis A outbreak occurring among homeless individuals and people using injection and non-injection drugs. The NDDoH is reminding providers to consider hepatitis A as a diagnosis in anyone with jaundice and clinically compatible symptoms. **Providers should not wait for laboratory results to report suspected hepatitis A cases to the NDDoH** (701.328.2378). For additional information and recommendations please see the health advisory.

NDIIS Regional Trainings

In October, the NDDoH Immunization Program launched a series of new regional NDIIS trainings geared towards adult immunization providers. These trainings are designed to provide practical and useful education and training to healthcare professionals working in long term care facilities, pharmacies, home health agencies, public health and other adult-providers. The training offered covers the following topics in detail:

- Current ACIP adult and healthcare worker immunization recommendations.
- Basic NDIIS functionality training (e.g. looking up and adding records, running the forecaster, vaccine inventory management).
- Advanced NDIIS functionality training (e.g. creating patient immunization and inventory data reports, running reminder-recall).
- NDIIS and adult immunization FAQs
- Data quality improvement strategies (e.g. understanding and addressing client record status issues and increasing the quantity and quality of your patients' records in the NDIIS)

The NDIIS will be posting upcoming regional training dates and locations on the *Bulletins and News* board on the NDIIS login landing page, and the schedule for 2019 is below:

Location (Facility)	**Date**
Dickinson (Dickinson State University)	February 12
Bismarck (Bismarck Burleigh Public Health)	March 5
Minot (Minot State University)	March 20
Williston (Williston State College)	April 10
Jamestown (Central Valley Health)	April 24
Devils Lake (Lake Region State College)	April (*TBD*)
Bismarck (United Tribes Technical College)	May (*TBD*)

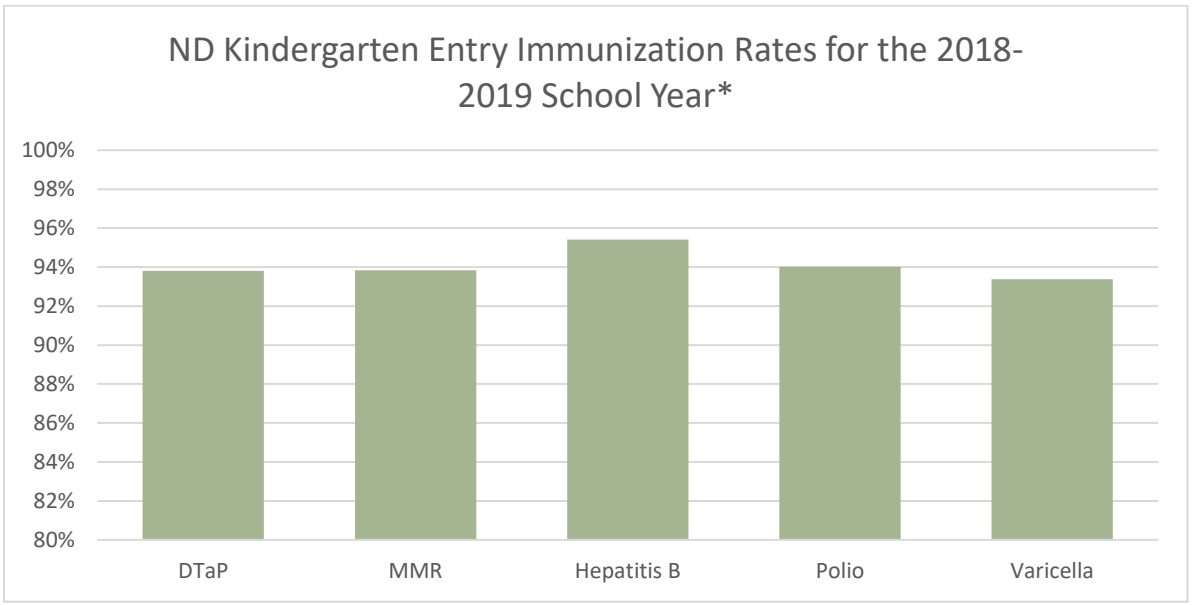
Please also note that the NDIIS is offering 2.5 continuing education (CE) credits to eligible attendees via the North Dakota Board of Nursing. There are also limited travel and meal reimbursements available to help staff from facilities that would otherwise face difficulty in attending the training. If you or staff from your facility are interested in learning how to use the various functionalities of the NDIIS, would like a refresher, or would like to learn how to address common data quality issues, we encourage you to register to attend an upcoming session near you. For more information contact Dominick Fitzsimmons, NDIIS Coordinator, at Tel: (701) 328-4169 or Email: dfitzsimmons@nd.gov .

Preliminary 2018 – 2019 School Vaccination Rates

Each year, the NDDoH conducts a school immunization survey to gather school immunization rates. The rates are self-reported by the schools. The survey is sent out in the fall and due around mid-November. The following rates are preliminary and are still undergoing a validation process.

Kindergarten Immunization Rates

Kindergarten vaccination rates for 2018-2019 remained relatively the same compared to the previous year, with rates around 94 percent for all five of the required vaccinations. Personal belief exemptions rose to 3.88 percent from 3.07 percent in the 2017-2018 school year. Vaccination rates continue to be higher in schools who exclude students versus those who do not.



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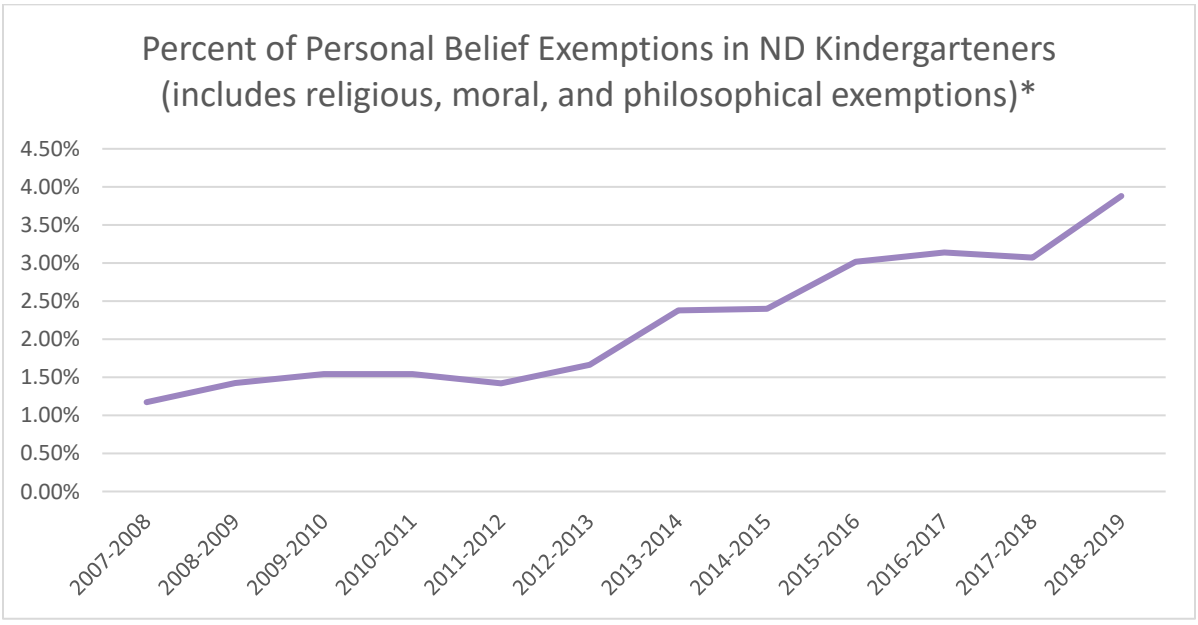

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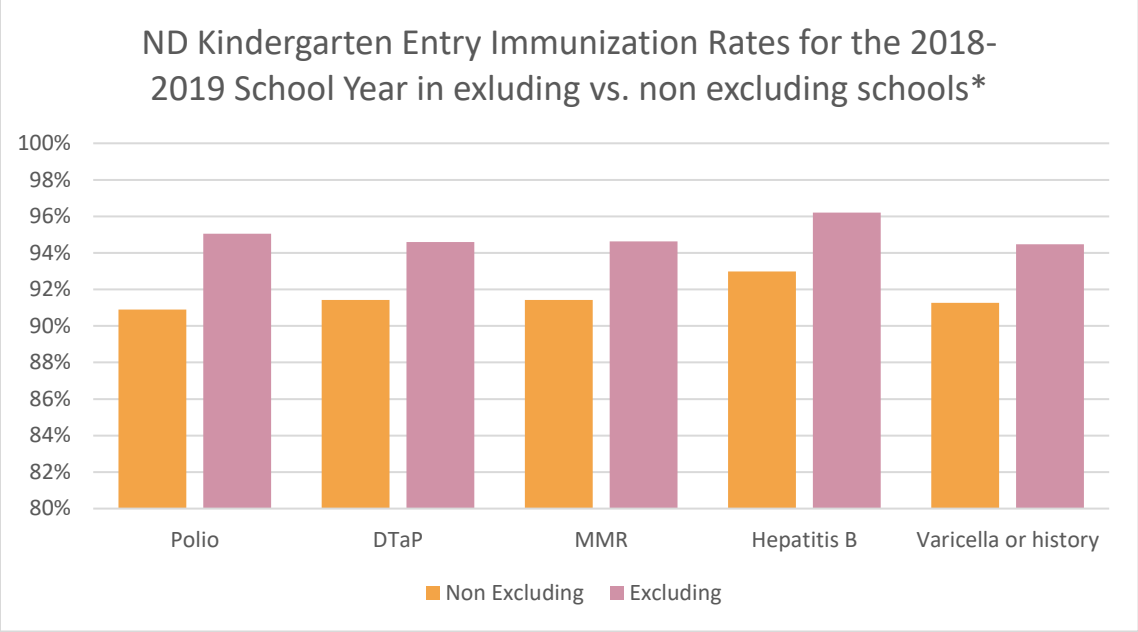

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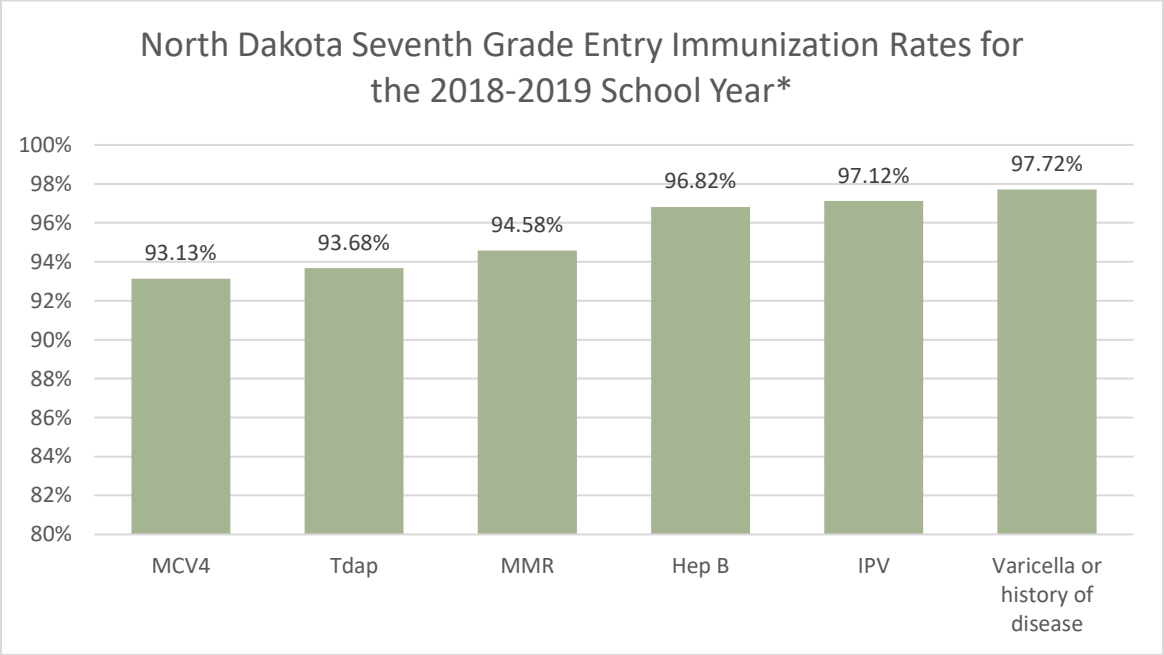
Seventh Grade Vaccination Rates

Tdap and meningococcal conjugate (MCV4) vaccines were first required for middle school entry in 2008. This was changed for the 2014-2015 school year, to require Tdap and MCV4 for seventh grade entry to standardize the recommendations. For the 2018-2019 school year, Tdap and meningococcal coverage rates were about 94 percent and 93 percent respectively.



**preliminary*

Eleventh and Twelfth Grade MCV4 Rates

The second dose of MCV4 was required for entry into eleventh and twelfth grades starting with the 2018 – 2019 school year. Eleventh and twelfth grade MCV4 rates were 90 percent and 92 percent respectively.

Flumist® Vaccine Efficacy in *Pediatrics*

An article[1] was recently published in *Pediatrics* showing that LAIV wasn't as effective as injectable influenza vaccine (IIV) against the influenza A 2009 H1N1 strain during three past flu seasons. Researchers looked at data from five U.S. studies conducted from the 2013-14 through 2015-16 seasons comparing quadrivalent LAIV and IIV against lab-confirmed flu in children ages two to 17. Factors included influenza season, subtype, age-group, and prior vaccination status. They calculated vaccine effectiveness (VE) for LAIV and IIV based on a test-negative study design. Of 17,173 patients from the five studies, 4,579 received IIV, 1,979 received LAIV, and 10,615 were unvaccinated. For IIV, VE was 67 percent against the 2009 H1N1 virus (95% confidence interval [CI], 62% to 72%. For LAIV, however, VE against the same strain was 20 percent (95% CI, -6% to 39%) and not statistically significant.

The reduced effectiveness the scientists found for LAIV applied to all age-groups. Results were similar in children vaccinated the previous season, meaning that prior vaccination status didn't explain the VE difference. Compared with their IIV peers, kids who got quadrivalent LAIV has significantly higher odds of contracting 2009 H1N1 (odds ratio, 2.66; 95% CI, 2.06 to 3.44). Both vaccines, though, had similar effectiveness against H3N2 and influenza B. During the 2014-15 season dominated by a drifted H3N2 strain, VE was poor for both vaccines, regardless of previous season vaccination.

In the same issue of *Pediatrics*, Pedro Piedra, MD, with the departments of molecular virology and microbiology and pediatrics at Baylor College of Medicine in Houston wrote a related commentary. AstraZeneca, the maker of FluMist®, has updated the 2009 H1N1 strain to influenza A/Slovenia/2903/2015, which has improved viral growth, he said, and last year ACIP recommended quadrivalent LAIV as an option, based on viral shedding data and immunogenicity in young children. Piedra said since then, the United Kingdom—which has a universal flu vaccine program for kids that mainly uses LAIV—has released an interim analysis for the 2017-18, which suggested an adjusted VE of 90.3 percent (95% CI, 16.4% to 98.9%) against 2009 H1N1.

CDC Childhood Immunization Champion Award

Again this year, CDC is soliciting nominations for the *Childhood Immunization Champion Award*. The *Champion Award* is intended to recognize individuals who are working at the local level. It honors those who are doing an exemplary job or going above and beyond to promote or foster childhood (ages 0-2) immunizations in their communities. Nominations should be based on **Leadership, Collaboration, Innovation and Advocacy**.

Champions may include coalition members, parents, health care professionals (e.g., physicians, nurses, physicians' assistants, nurse practitioners, medical assistants, etc.), and other immunization leaders who meet the award criteria.

The nomination packet includes additional information about the award. If you would like to nominate yourself or someone else, please complete the materials in the packet in their entirety and email them to Molly Howell (mahowell@nd.gov) by **February 15, 2019.**

Awardees will be announced during National Infant Immunization Week (NIIW), April 27 – May 4, 2019.

[1] Chung JR, Flannery B, Ambrose CS, , et alfor the Influenza Clinical Investigation for Children Study Team, the Influenza Incidence Surveillance Project, the US Influenza Vaccine Effectiveness Network. Live Attenuated and Inactivated Influenza Vaccine Effectiveness. *Pediatrics.* 2019;143(2):e20182094

Calendar of Events

CDC COCA Webinar: 2018 – 2019 Influenza Season and Recommendations for Clinicians, Feb. 5, 2019

National Foundation for Infectious Diseases Webinar: Strategies to Increase Adult Vaccination Rates, Feb. 6, 2019

CDC COCA Webinar: Cholera Vaccine for Travelers, Feb. 7, 2019

NDDoH Immunization Lunch and Learn, Feb. 13, 2019

PreteenVaxScene Webinar: Perspective on Oropharyngeal Cancer: Scientific Overview, Clinical expertise, and Personal Experience, Feb. 13, 2019

ACIP Meeting, Feb. 27-28, 2019 in Atlanta, GA

NDDoH Immunization Lunch and Learn, Mar. 13, 2019

Children's Hospital of Philadelphia Vaccine Webinar Series, April 3, 2019

NDDoH Immunization Lunch and Learn, April 10, 2019

National Infant Immunization Week, April 27 – May 4, 2019

NDDoH Immunization Lunch and Learn, May 8, 2019

2019 National Adult and Influenza Summit, May 14 – 16, 2019 in Atlanta, GA

Immunization Program

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