

The Pump Handle The Pump Handle



"I had an interview with the Board of Guardians of St. James's parish, on the evening of Thursday, 7th September, and represented the above circumstances to them. In consequence of what I said, the handle of the pump was removed on the following day."

John Snow, 1855

June 2018 Topics

- June ACIP Update – Lexie Barber
- 2018 West Nile Virus Update – Jenny Galbraith
- Update of Recommendations for Use of Once-Weekly Isoniazid-Rifapentine Regimen to Treat Latent Mycobacterium Tuberculosis Infection – Dee Pritschet
- Stay Healthy at Summer Events – Jill Baber
- Get to Know Your Field Epidemiologist



June ACIP Update

The Advisory Committee on Immunization Practices (ACIP) met on June 20 and 21. There were only two votes, one on the upcoming influenza vaccine and the other on anthrax antimicrobial use and vaccination schedules given a mass event.

Votes:

2018 – 2019 Influenza Vaccine Recommendations

- The recommendations will remain unchanged from last season.
 - Everyone 6 months of age and older is recommended to receive influenza vaccine.
 - If a child received at least two doses prior to July 1, 2018 they only need one influenza vaccine during the 2018 – 2019 influenza season.
 - Official recommendations will be published in an MMWR.

- The Committee received updates on influenza vaccine effectiveness, cell cultured vs. egg-based influenza vaccines, and influenza season vaccine safety.
 - High dose flu vaccine was found to be 8.4 percent more effective than the standard egg-based influenza vaccine.
 - Cell culture influenza vaccine was found to be 10 percent more effective than the standard egg-based influenza vaccine.
 - No concerns on influenza vaccine safety were found in the last influenza season.
- The H3N2 and B influenza strains will be different in this season's influenza vaccine.
- There will be three influenza vaccines available for use in children 6 months – 35 months. Fluarix® (0.5 mL), Flulaval® (0.5 mL) and Fluzone® (0.25 mL).
- Seqirus is working on an adjuvanted quadrivalent vaccine for use in children. So far, studies have shown a better immune response, but they've also seen a higher rate of fever and reactions.

Anthrax

- Voted in favor of recommendations for anthrax vaccine as post-exposure prophylaxis (PEP).
- Should there be an inadequate supply of anthrax vaccine available for PEP, either 2 full doses or 3 half doses of AVA may be used to expand vaccine coverage.
- In immunocompetent individuals 18-65 years of age, antimicrobials given in conjunction with vaccine may be discontinued at 42 days after the first vaccine dose or 2 weeks after the last vaccine dose, whichever comes later.
- Details of antimicrobial treatment changes and vaccination recommendations will be published in a future MMWR.

Discussion:

HPV Vaccine in Persons Over 27 Years of Age

- Data was presented showing reductions in HPV-related cancers in persons vaccinated after 27 years of age.
- Merck has submitted a licensure application for use of Gardasil 9® in persons 27 – 45 years of age.
- At the next ACIP meeting in October more data will be presented, including cost effectiveness data.
- HPV schedule harmonization with males and females will be discussed, and potentially voted on, at the same time as the expanded age indication. A vote will likely not take place on either change until 2019.

Three Dose MMR Recommendations During Outbreaks

- The CDC presented guidance on the use of a 3rd dose of MMR vaccine during mumps outbreaks.

PCV13 Vaccine Recommendations in those 65 and Older

- Vaccine safety and efficacy data was reviewed for people 65 years and older who have received a PCV13. No safety concerns have been found.

- Studies have shown the largest reduction of invasive pneumococcal disease is occurring because of childhood pneumococcal vaccination, and not adult vaccination.
- The ACIP will continue to review data and make future recommendations based on cost effectiveness and reduction of invasive pneumococcal disease.



2018 West Nile Virus Update

As of July 11, 2018, a total of two human WNV cases have been reported in North Dakota - one each in Ransom and Ramsey counties. Neither of the cases has been hospitalized. Additionally, 4 birds have tested positive for WNV in Grand Forks county.

Most people infected with WNV experience no symptoms or have only mild symptoms such as fever and headache. However, the more serious form of the illness, West Nile neuroinvasive disease, can cause high fever, severe headache, stiff neck, altered mental status and death. People over age 50 or those who have underlying health issues are at greater risk for developing the neuroinvasive disease.

There is no human vaccine for WNV and no specific treatment for the disease.

The North Dakota Department of Health (NDDoH) recommends residents take these precautions to avoid mosquito bites:

- Use insect repellents containing ingredients registered with the U.S. Environmental Protection Agency (EPA) – such as DEET, picaridin, or IR3535. Always follow the directions on the manufacturer’s label for safe and effective use. Do not use insect repellent on babies younger than two months old.
- When possible, wear long pants, long-sleeved shirts, and socks while outside.
- Treat items such as boots, pants, socks, and tents, with permethrin or buy permethrin-treated clothing and gear.
- Limit outdoor activities between dusk and dawn when mosquitoes are most likely to bite.
- Eliminate stagnant water and leaf debris in containers around homes where mosquitoes can lay their eggs (e.g., gutters, buckets, flowerpots, old tires, wading pools and birdbaths).
- Keep mosquitoes from entering your home by installing and maintaining screens in windows and doors.
- Keep the grass around your home trimmed.

For more information about West Nile virus, contact Jenny Galbraith, North Dakota Department of Health, at 701.328.2378 or visit www.ndhealth.gov/wnv.



Update of Recommendations for Use of Once-Weekly Isoniazid-Rifapentine Regimen to Treat Latent Mycobacterium Tuberculosis Infection

Treatment of latent tuberculosis infection (LTBI) is critical to the control and elimination of tuberculosis (TB) disease in the United States. Traditional regimens for latent TB infection in the

United States were isoniazid (INH) for nine months or rifampin (RIF) for four months. In 2011, the Centers for Disease Control and Prevention (CDC) approved a short-course combination of once-weekly isoniazid and rifapentine for 12 weeks (3HP) by directly observed therapy for treatment of LTBI.

On June 29, 2018, the CDC released an update when using the 12 week isoniazid-rifapentine regimen to expand use and reduce oversight of administration. Based on evidence on effectiveness, safety, and treatment completion rates from the systematic review, and after consideration of viewpoints from TB subject matter experts and input from Advisory Council for the Elimination of Tuberculosis and the public, CDC continues to recommend 3HP for treatment of LTBI in adults and now recommends use of 3HP:

- 1) in persons with LTBI aged 2–17 years
- 2) in persons with LTBI who have HIV infection, including AIDS, and are taking antiretroviral medications with acceptable drug-drug interactions with rifapentine
- 3) by Directly Observed Therapy (DOT) or Self-Administered Therapy (SAT) in persons aged ≥ 2 years.

The health care providers should choose the mode of administration (DOT versus SAT) based on local practice, individual patient attributes and preferences, and other considerations, including risk for progression to severe forms of TB disease. Use of synchronous LTBI treatment and antiretroviral agents should be guided by clinicians experienced in the management of both conditions.

Medications for treatment of TB Infection (LTBI) or active TB disease care provided at no cost to North Dakota Residents by the NDDoH through local public health TB Programs. However, currently the 3HP regimen is only available to those who have insurance.



Stay Healthy at Summer Events

This month, the NDDoH reminds people to take healthy precautions at fairs, festivals, carnivals, and rodeos this summer. Certain diseases, like *Campylobacter*, *E. coli* and influenza, can be passed back and forth between humans and animals. The NDDoH recommends residents take the following precautions to prevent disease transmission between animals and people:

- Wash your hands before and after viewing animals, and before eating. Preferably, handwashing should be done with soap and water, but if unavailable, an alcohol-based hand sanitizer that contains at least 60 percent alcohol is acceptable.
- Avoid contact with any animal or viewing animals in enclosed spaces, such as barns, if you are sick or if the animal looks sick.
- Do not eat or drink while in petting zoos or livestock viewing areas.
- Do not take toys, pacifiers, cups, baby bottles, strollers, or comparable items into animal viewing/petting areas. These items can become contaminated, allowing microbes to travel with you out of viewing areas.
- NEVER touch an animal unless invited to do so by the animal's owner.

Anyone at risk for serious complications from infectious diseases like influenza or *E. coli* may consider avoiding contact with live animals and their environments at fairs or similar events. High-risk individuals include young children, pregnant women, people 65 years and older, and those with long-term health conditions. People with respiratory conditions may consider avoiding enclosed spaces where livestock are present, such as barns and indoor arenas. Anyone who becomes ill after contact with livestock or other animals should contact a health care provider and should tell the health care provider about the animal contact.



Get to Know Your Field Epidemiologist

★**Name:** Jennifer Schmidt

Title: Regional Field Epidemiologist

Area of ND Covered: Towner, Pierce, Benson, Ramsey, Wells, Eddy, Foster, Stutsman, Barnes, Lamoure, and Dickey Counties

Education Background: I have a bachelor's degree in Radiology Technology from the University of Mary and Masters in Community Health from Minnesota State University Mankato.

Past Experience: I have been a field epidemiologist for North Dakota since 2010, this is my third career. Prior to this I was a college instructor for a radiology technology program in Minnesota and prior to that I was an x-ray and mammography tech.

Family/Hobbies: I am a public servant at heart and love my community so much I serve on the local public school board. I am also active in my local swim club board and church faith formation. My husband and I like to travel and show our three daughters the world around us. We recently added a dog named Beans. We adopted him from a home that had a cat named Frank. I think the dog got the short end of the stick on the name. Oh well, Frank & Beans anyone?



Kirby Kruger, Director, Division of Disease Control; Chief of Medical Services Section
Molly Howell, MPH, Assistant Director, Division of Disease Control
Jenny Galbraith, Managing Editor