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

October 2017 Topics

- Increasing Syphilis Infections and Anonymous Contacts in North Dakota- Shari Renton
- Advice to Health Care Providers Treating Patients with Travel to Hurricane-Affected Areas – Michelle Feist
- October ACIP Update- Molly Howell
- New Disease Control Employee!

Syphilis Update

The North Dakota Department of Health (NDDoH) is alerting healthcare providers in North Dakota to an increased number of reported syphilis infections. Since the start of 2017, there have been 58 reported syphilis cases, with over 70 percent being in an infectious stage (i.e. primary or secondary). Partner services from the cases has led to 58 contacts being notified of their exposure and referred for testing and treatment. However, there have been 136 reported anonymous or unnamed syphilis contacts that the NDDoH has been unable to notify due to limited or no contact information.

The NDDoH is asking all healthcare providers to obtain a complete sexual history of their patients to identify individuals who may be at high-risk for syphilis and other STDs, including HIV. Providers may utilize the Five P's approach to obtaining a sexual health history.

- **Partners** - Determine the number and gender of their sex partners.
- **Practices** - Identify the type of sex (vaginal, oral or anal), as well as where and when they have sex (i.e. at a party, at a bar with anonymous partners, etc.).
- **Prevention of Pregnancy** - Identify the method used to prevent pregnancy.
- **Protection** - Determine what barriers are being used and how often.

- **Past History** - Identify infections that a patient or their partner may have had.

Since many cases have had multiple infections, individuals who are tested for syphilis should also be tested for other STDs and HIV. Chlamydia and gonorrhea testing should be site specific (genital, oral and/or rectal), depending on the type of sexual activity. If a patient is HIV negative and at high risk for HIV, pre-exposure prophylaxis (HIV PrEP) should be provided to prevent HIV infection.

Refer to the most recent treatment guidelines, https://www.cdc.gov/std/tg2015/default.htm, with questions about syphilis clinical management and refer to https://www.cdc.gov/std/treatment/sexualhistory.pdf for more information regarding taking a sexual risk history. For any questions, please contact the NDDoH STD program at 701.328.2378 or 800.472.2180.

Advice to Health Care Providers Treating Patients with Travel to Hurricane-Affected Areas

Post-hurricane environmental conditions may pose an increased risk for the spread of infectious diseases because of the lack of access to safe water, sewage system disruption, and the potential difficulty to maintain personal hygiene-. There also may be increased risk for some vectorborne diseases due to standing water, which may increase mosquito populations, and increases in the time people spend outdoors.

Recommendations to providers treating patients who recently traveled to hurricane-affected areas during the period September 2017 – March 2018:

- All healthcare providers should consider less common infectious disease etiologies in patients presenting with evidence of acute respiratory illness, gastroenteritis, renal or hepatic failure, wound infection, or other febrile illness. Some particularly important infectious diseases to consider include leptospirosis, dengue, hepatitis A, typhoid fever, vibriosis, and influenza.
- Mosquito transmitted diseases, such as dengue, Zika, and chikungunya, are endemic in these hurricane-affected areas such as Puerto Rico and the U.S. Virgin Islands. Outbreaks of these diseases are possible and should be considered when assessing returning travelers.
- For certain conditions, such as leptospirosis, empiric therapy should be considered pending the results of diagnostic tests. Treatment for leptospirosis is most effective when initiated early in the disease process. Providers can contact the NDDoH or CDC for consultation.
- Report cases of hepatitis A, typhoid fever, and vibriosis immediately to the NDDoH for investigation and mitigation of local disease transmission. All other cases can be reported according to standard disease reporting protocols - www.ndhealth.gov/Disease/Disease%20Reporting/

Contact the NDDoH, Division of Disease Control, with questions or to report a case at 800.472.2180 or 701.328.2378. Contact the NDDoH, Division of Microbiology, if you need assistance with ordering specific diagnostic tests at 701.328.627

October ACIP Update

The Advisory Committee on Immunization Practices (ACIP) met October 25 - 26, 2017. They discussed many immunization-related issues and made some new immunization recommendations.

Herpes Zoster Vaccine:
The new Herpes Zoster subunit (HZ/su) inactivated vaccine is a recombinant, adjuvanted vaccine for the prevention of herpes zoster (shingles). It was developed by GlaxoSmithKline (GSK). On October 20, 2017, the U.S. Food and Drug Administration (FDA) licensed this new shingles vaccine, called Shingrix®, for adults 50 years and older in the United States. Two doses of Shingrix® are to be given two months apart. The vaccine is administered intramuscularly. Approximate cost for Shingrix® is $280 for both shots.

In clinical trials, the new shingles vaccine provided high levels of protection in all age groups against shingles and post herpetic neuralgia (PHN), the most common complication from shingles. The vaccine showed:

- 97% protection against shingles in adults 50-69 years old
- 91% protection against shingles in adults 70 years and older
- 91% protection against PHN in adults 50 years and older
- Protection of 85% or above was maintained for 4 years after vaccination.

In clinical trials, the most common side effect was mild to moderate pain where the shot was given. Other side effects included pain, redness or swelling where the shot was given, muscle pain, fatigue, fever, nausea, vomiting, diarrhea, headache, or shivering. The side effects generally lasted 1-2 days. Although no serious adverse events were observed, about 17% of people who received the vaccine did have a reaction that interfered with their activities. Providers should communicate this to patients, so they are aware that these reactions are normal. As with all vaccines, CDC and FDA will continue to monitor the news shingles vaccine for potential safety concerns.

The ACIP voted that HZ/su vaccine is:

- recommended for the prevention of herpes zoster and related complications for immunocompetent* adults aged 50 years and older,
- recommended for the prevention of herpes zoster and related complications for immunocompetent adults who previously received zoster vaccine live,**
- preferred over Zoster Vaccine Live (ZVL/Zostavax®) for the prevention of herpes zoster and related complications.

**Being immunocompromised is not a contraindication or precaution to HZ/su vaccination. The ACIP will discuss formal recommendations for specific high-risk groups, including immunocompromised at an upcoming meeting.*
***CDC guidance will state an 8-week minimum interval between HZ/su and ZVL.*

Official recommendations for HZ/su will be published in early 2018 in Morbidity and Mortality Weekly Report (MMWR).

Mumps Vaccine:
Mumps is a highly contagious, vaccine-preventable disease caused by infection with a virus. Infection with the mumps virus results in tenderness and swelling of the salivary glands in the cheeks and neck. Complications from mumps include swelling of testes, swelling of ovaries, meningitis, deafness, and miscarriage. Forty-two cases of mumps have been reported in North Dakota in 2017.

In the United States, mumps outbreaks have been occurring, with 50% of outbreaks in colleges and universities. In 2016, 6,366 cases of mumps occurred in the United States. So far in 2017, 4,677 cases have been reported. Most cases are occurring in vaccinated individuals. The median 2-dose mumps vaccine effectiveness is 88%. Studies have shown an increased risk for mumps and decreased vaccine effectiveness with longer time since vaccination. Risk for mumps complications is lower among people who have received two doses of mumps vaccine compared with those who are unvaccinated.

In October, the ACIP made the following recommendation regarding a third dose of mumps-containing vaccine:

- Persons previously vaccinated with two doses of MMR vaccine who are identified by public health as at risk for mumps because of an outbreak should receive a third dose of MMR vaccine to improve protection against mumps disease and related complications.

Mumps is a mandatory reportable condition in North Dakota. In an outbreak situation, the NDDoH will make recommendations as to who should receive a third dose of MMR vaccine. Official recommendations for mumps vaccine will be published in early 2018 in MMWR.

Other Vaccines:
Other issues discussed at the October ACIP meeting include a new, adjuvanted hepatitis B vaccine, HEPLISAV-B, that will be available in the near future. HEPLISAV-B is a two-dose series, with doses only one month apart. The ACIP is expected to discuss recommendations for this new hepatitis B vaccine at the February 2018 meeting.

The ACIP also heard information about hepatitis A outbreaks currently occurring in California and Michigan. In the future, ACIP will potentially discuss hepatitis A vaccine recommendations for:

- Catch-up hepatitis A vaccination of children ages 3 – 18
- Use of hepatitis A vaccine for post exposure prophylaxis of cases older than 40
- Routine recommendation for homeless
- Vaccination of pregnant women
- Vaccination of people with chronic liver disease
- Vaccination of people in institutions for those with developmental disabilities
- Vaccination of HIV and immunocompromised individuals

The ACIP also received updates about live attenuated influenza vaccine (Flumist®), pneumococcal conjugate vaccine and its impact on those 65 and older, shoulder injuries related to vaccine administration, anthrax vaccines, Japanese encephalitis vaccine, and an RSV vaccine that is in phase II clinical trials.

For more information about the ACIP meeting, please visit www.cdc.gov/vaccines/acip/index.html.

New Disease Control Employee!

Name: Robin Wrightnour

Title: Administrative Assistant – Immunization Program

Education Background: I received an Associate of Science degree in 1995.

Past Experience: I have been working in the administrative and bookkeeping fields for the past 31 years. I have spent the last 22 years with Saks News, Inc.

Family/Hobbies: I like to spend time with my 3 grandkids, crocheting and reading when I am not tending to the animals and working on the farm.

NORTH DAKOTA DEPARTMENT *of* HEALTH

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