"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

**Topics**

- June ACIP Meeting Update – Molly Howell
- West Nile Virus Cases Reported in North Dakota – Evan Bischoff
- Sexually Transmitted Diseases Remain Elevated in 2019 – Shari Renton
- North Dakota’s First CRPA-VIM Identified – Faye Salzer

**June ACIP Meeting Update**


**Human papillomavirus (HPV) vaccine**

- At the June 2019 ACIP meeting, the upper age limit for routine vaccination against HPV was harmonized for women and men to age 26 for both.
  - “ACIP also recommends catch-up vaccination for persons through age 26 years who are not adequately vaccinated.”
- Also at the June 2019 ACIP meeting, ACIP recommended “HPV vaccination based on shared clinical decision making for individuals ages 27 through 45 years who are not adequately vaccinated.”
What this means is that HPV vaccine is not routinely recommended for everyone ages 27 – 45, but if a provider feels that a patient is at risk and should have it or if a patient requests the vaccine, then the provider can administer it.

This type of recommendation also ensures insurance coverage for HPV vaccine for people ages 27 – 45. Insurance companies generally have one year from when an ACIP recommendation is published to provide coverage.

For the recommendations that have “shared clinical decision making,” the published recommendations will outline who is at highest risk to help inform the decision on whether to vaccinate.

• The age at which HPV vaccination confers the greatest benefits to the patient continues to be 11 to 12 years.

**Pneumococcal conjugate vaccine (PCV13)**

- Prior to the June ACIP meeting, a single dose of PCV13 vaccine was routinely recommended for all adults ages 65 and older who were not previously vaccinated.
- When PCV13 was originally recommended routinely for adults ages 65 and older in 2014, the ACIP directed themselves to review data to determine if the recommendation should continue because of the impact the vaccine was having in children.
  - Older adults were benefiting from the use of the PCV13 vaccine in small children. With fewer kids sick with pneumococcus, fewer cases in older adults were being seen as well.
- **At the June ACIP meeting, ACIP voted to discontinue the routine recommendation for PCV13 for all adults 65 and older and replace it with “ACIP recommends PCV13 based on shared clinical decision making for adults 65 and older who do not have an immunocompromising condition and who have not previously received PCV13. All adults 65 years and older should receive a dose of PPSV23.”**
  - PPSV23: pneumococcal polysaccharide vaccine or Pneumovax®
  - For the recommendations that have “shared clinical decision making,” the published recommendations will outline who is at highest risk to help inform the decision on whether to vaccinate.

**DTaP-IPV-Hib-HepB vaccine**

- In December 2018, the FDA approved Vaxelis® for use in children ages 6 weeks through 4 years of ages.
  - Vaxelis® is a hexavalent vaccine that protects against diphtheria, tetanus, pertussis, polio, *Haemophilus influenzae* type B, and hepatitis B.
  - It is approved as a three-dose series.
- **At the June ACIP meeting, ACIP voted to add this vaccine to the Vaccines for Children Program formulary.**
- Unfortunately, Vaxelis® won’t be available until 2021.
Influenza vaccine
- The ACIP was provided with preliminary 2018-2019 influenza vaccine effectiveness (VE) data. Overall VE was 29% for medically attended influenza for the 2018-2019 season.
  - For data collected through early May 2019, CDC estimates that flu vaccine reduced the risk of having to go to the doctor or being hospitalized for any flu by about 30% overall during 2018-2019.
  - The flu vaccine likely prevented between ~40,000 to ~90,000 hospitalizations.
  - The influenza H3N2 subtype drifted and brought the overall VE down.
- Influenza vaccine recommendations were approved for the 2019-2020 flu season. There were no significant changes in influenza vaccine recommendations.
- The ACIP also received information about influenza vaccine safety and upcoming supply.
- 2019-2020 influenza vaccine distribution:

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Distribution Estimated to Begin</th>
</tr>
</thead>
<tbody>
<tr>
<td>AstraZeneca</td>
<td>Early September</td>
</tr>
<tr>
<td>GSK</td>
<td>Mid-August</td>
</tr>
<tr>
<td>Sanofi Pasteur</td>
<td>Late August/Early September</td>
</tr>
<tr>
<td>Seqirus</td>
<td>Mid-August</td>
</tr>
</tbody>
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Hepatitis A vaccine
- Since 2006, ACIP has recommended routine vaccination of children ages 12 – 23 months for hepatitis A vaccine.
- At the June ACIP meeting, ACIP voted to recommend “that all children and adolescents aged 2 through 18 years who have not previously received hepatitis A vaccine be vaccinated at any age (i.e., children and adolescents are recommended for catch-up vaccination).”
- ACIP also recommended that “all persons with HIV aged ≥1 year be vaccinated with hepatitis A vaccine.”

Meningococcal B vaccine
- At the June ACIP meeting, the committee voted in favor of the following meningococcal B vaccine booster recommendations:
  - For persons aged ≥10 years with complement component deficiency, compliment inhibitor use, asplenia, or who are microbiologists:
    - ACIP recommends a MenB booster dose 1 year following completion of a MenB primary series followed by a MenB booster dose every 2-3 years thereafter, for as long as increased risk remains.
  - For persons aged ≥10 years determined by public health officials to be at increased risk during an outbreak:
    - ACIP recommends a one-time booster dose if it has been ≥1 year since completion of a MenB primary series.
A booster dose interval of ≥6 months may be considered by public health officials depending on the specific outbreak, vaccination strategy, and projected duration of elevated risk.”

**Dengue vaccine**

- The ACIP was presented information about Dengue epidemiology in the United States and Dengvaxia® clinical trials.
- ACIP is anticipated to vote on recommendations for dengue vaccine at the February 2020 meeting.

**West Nile Virus Cases Reported in North Dakota**

As of August 2, 2019, there have been three confirmed cases of West Nile virus (WNV) reported in North Dakota. The individuals reside in McHenry, Mercer and Golden Valley counties and none were hospitalized.

Most people infected with West Nile virus experience no symptoms. Those who develop symptoms will commonly report fever, headache, body/joint aches or rash. People who develop severe illness may experience stiff neck, altered mental status, paralysis, coma and possibly death. People over 60, or those who have underlying health issues are at greater risk for developing West Nile neuroinvasive disease.

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

- Use insect repellent registered with the U.S. Environmental Protection Agency (EPA) that contain ingredients such as DEET, picaridin, IR3535, oil of lemon eucalyptus, PMD, and permethrin (clothing only). Always follow the directions on the manufacturer’s label for safe and effective use.
- Wear protective clothing outdoors such as long-sleeved shirts, long pants and socks.
- Limit outdoor activities between dusk and dawn when mosquitoes that can carry WNV are most likely to bite.
- Eliminate stagnant water in containers around homes where mosquitoes can lay their eggs (e.g. gutters, buckets, flower pots, old tires, wading pools and birdbaths).
- Install or repair screens on windows and doors to keep mosquitoes out of your residence.
- Maintain a well-trimmed yard and landscape around your home.

There is no vaccine for WNV and no specific treatment so it is essential to incorporate the prevention strategies listed any time mosquitoes are outside to reduce your risk of developing the disease.
Sexually Transmitted Diseases Remain Elevated in 2019

Reports of sexually transmitted diseases (STDs) in the first half of 2019 are trending similar to 2018. In 2018, STD reports were at an unprecedented high with 3,528 cases of chlamydia, 1371 cases of gonorrhea and 83 cases of syphilis. As of June 30, 2019, there have been 1,892 cases of chlamydia, 672 cases of gonorrhea and 34 cases of syphilis.

Nearly 30% of the reported cases of syphilis in 2019 have been among females of childbearing age. The NDDoH continues to recommend screening for syphilis three times throughout pregnancy (first prenatal exam, 28 to 32 weeks and at delivery) for all pregnant women regardless of risk to prevent mother to child transmission. Other screening recommendations for syphilis include sexually active men who have sex with men and persons living with HIV. Screening recommendations for gonorrhea/chlamydia include the following:

- Sexually active women under the age of 25 and those at increased risk over the age of 25
- All pregnant women under the age of 25 at first prenatal exam and pregnant women over the age of 25 if at increased risk
- At least annually for sexually active men who have sex with men at sites of contact (urethra, rectum, pharynx) and every three to six months if at increased risk
- Annual screening for persons living with HIV that are sexually active

The NDDoH is asking all healthcare providers to obtain a sexual history on patients to identify behaviors that may put them at risk for STDs and screen accordingly. For treatment guidelines on STDs, please refer to [https://www.cdc.gov/std/tg2015/default.htm](https://www.cdc.gov/std/tg2015/default.htm). For any questions, please contact the NDDoH STD program at 701.328.2378 or 800.472.2180.

North Dakota’s First CRPA-VIM Identified

The NDDoH Division of Microbiology identified North Dakota’s first Carbapenem resistant pseudomonas aeruginosa (CRPA) containing the Verona Integron Metallo-Beta-Lactamase (VIM) gene from an isolate collected at a critical access hospital (CAH) emergency room (ER). The patient was transferred to an acute care hospital from the ER. The patient was placed in a private room but was not put on contact isolation until the facility was notified by Disease Control of the positive CRPA-VIM test results. As a result, targeted colonization screening was performed on four hospital patients still admitted who overlapped on the same unit as the CRPA-VIM patient. All four patients tested negative for CRPA. The CRPA-VIM patient was a resident of a long-term care (LTC) facility prior to admit and returned after hospital discharge. A point
prevalence was performed on the neighborhood at the LTC where the CDPA-VIM case resided with 26 residents, including the case’s roommate, screening negative for CRPA.

An infection control risk assessment was done at the LTC facility. Hand hygiene, personnel protective equipment (PPE), environmental cleaning, and equipment disinfection was reviewed with recommendation for periodic monitoring to maintain compliance. The importance of multi-drug resistant organism (MDRO) communication was also reviewed with the LTC facility. The patient had a cystoscopy a few months prior to the CRPA-VIM identification at a clinic who uses a hospital to re-process their instruments. Device processing was re-assessed at the hospital with no issues identified. Scope use was tracked by the hospital and assessed patients who had exposure to the same scope as the CRPA-VIM case and found no patients with a history of MDRO. The hospital will be submitting all CRPAs to the Division of Microbiology for carbapenemase mechanism testing for the next three months. This CRPA-VIM patient had no recent history of travel or medical care outside of the US. All facilities involved have been working with the NDDoH Healthcare Associated Infections (HAI) program and the Division of Microbiology to assess and prevent transmission of this novel organism.

For more information on MDRO containment response visit https://www.cdc.gov/hai/containment/guidelines.html.

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