

# 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 2016 Topics

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## October ACIP Updates

The Advisory Committee on Immunization Practices (ACIP) met October 19 and 20 in Atlanta, Ga. ACIP-approved recommendations do not become official until they are approved by the Centers for Disease Control and Prevention (CDC) Director and published in the *Morbidity and Mortality Weekly Report (MMWR)*. The following is the Immunization Action Coalition's summary of the meeting.

### **Hepatitis B Vaccine**

The rate of acute hepatitis B virus (HBV) infections in the United States has declined by more than 90 percent since recommendations for hepatitis B vaccine (HepB) were first issued in 1982. The ACIP has updated HepB recommendations multiple times. Since 2005, the committee has published five statements which offered recommendations based on differing criteria such as the recipient's age, chronic health condition, pregnancy status, or occupation.

At the October meeting, ACIP voted to approve a single guidance document that consolidated these previously published recommendations into a comprehensive statement. The committee reemphasized the importance of the HepB birth dose by recommending that all infants of hepatitis B surface antigen (HBsAg)-negative mothers be immunized with HepB within 24 hours of birth. The birth dose acts as a safety net to prevent passage of the chronic HBV infection from mother to infant. This recommendation removes previous policy language that allowed for a

delay in administering the birth dose in certain rare circumstances and on a case-by-case basis. Additional areas updated in the statement include prioritization of HBsAg-positive women for HBV management and therapy; guidance on post-vaccination serologic testing for an infant whose mother's HBsAg status remains unknown indefinitely (e.g., infant surrendered anonymously after birth); and provision of specific examples of chronic liver disease to further define whom to vaccinate.

### **Tdap Vaccine**

Previous ACIP recommendations called for prenatal care providers to vaccinate all pregnant women with tetanus-diphtheria-acellular pertussis (Tdap) vaccine during each pregnancy with optimal timing for this dose designated between 27 and 36 weeks gestation. Following a presentation of data indicating increased immunogenicity of the vaccine when mothers were vaccinated earlier, ACIP voted to recommend administering Tdap vaccination early in the 27-through 36-week "window" to maximize passive antibody transfer to the infant. The new recommendations also clarify children 7-10 years of age who receive Tdap as part of a catch-up series may be given an additional Tdap for the routinely recommended adolescent dose at 11-12 years of age.

### **Human Papillomavirus (HPV) Vaccine**

Although the ACIP has recommended HPV vaccine for females since 2006 and males since 2011, the 2015 NIS-Teen indicated that in adolescents 13-17 years of age, less than one-half (41.9 percent) of girls and less than one-third (28.1 percent) of boys had received the recommended three doses. On October 7, the U.S. Food & Drug Administration (FDA) approved adding a 2-dose schedule for 9vHPV (Gardasil 9, Merck) vaccine for adolescents 9-14 years of age. After reviewing the immunogenicity data and efficacy trials of the 2-dose schedule, ACIP voted to recommend that younger adolescents who begin the series at 9-14 years of age receive two doses of HPV at least six months apart, rather than the previously recommended 3-dose series. The ACIP now recommends two doses (not three) for anyone who receives the first dose before their 15<sup>th</sup> birthday, regardless of age at series completion. It is anticipated this schedule will increase vaccine initiation and series completion in the United States. Teens and young adults who start the series later, at 15-26 years of age, will continue to need three doses.

According to [CDC's official press release](#), "CDC encourages clinicians to begin implementing the 2-dose schedule in their practice to protect preteen patients from HPV cancers." The 9vHPV vaccine will soon be the only HPV vaccine available in this country; Merck will distribute only 9vHPV after the end of October. Supplies of 2vHPV (Cervarix, GlaxoSmithKline) in the United States are expected to be depleted by November. 9vHPV may be used to complete a series begun with 4vHPV or 2vHPV.

### **Meningococcal Serogroup B Vaccine**

In 2015, ACIP recommended routine meningococcal serogroup B (MenB) vaccination for persons 10 years of age or older who were at increased risk of meningococcal infection. The committee also recommended the vaccine be provided to healthy adolescents and young adults 16-23 years of age. ACIP did not express a preference for the use of MenB-4C (Bexsero<sup>®</sup>, GlaxoSmithKline) or MenB-FHbp (Trumenba<sup>®</sup>, Pfizer), although the same product must be used for the entire series.

Bexsero<sup>®</sup> has previously been recommended for use with a 2-dose schedule for high-risk

individuals and in outbreak settings, and may be administered to healthy individuals 16-23 years of age. In April, the FDA approved a label change giving Trumenba® a 2-dose (0, 6 months) or 3-dose (0, 1-2, 6 months) schedule. The ACIP voted to recommend that providers who use Trumenba® continue to use the 3-dose schedule when vaccinating persons at increased risk of meningococcal serogroup B disease (e.g., persons with persistent complement component deficiencies or anatomical or functional asplenia) or during serogroup B outbreaks. The 2-dose schedule of Trumenba® at 0, 6 months can be used for routine vaccination for healthy persons 16-23 years of age.

### **Child and Adolescent Immunization Schedule**

ACIP annually updates the recommended immunization schedule for children and adolescents. Although ACIP voted on edits for the 2017 schedule during the October meeting, the final schedule is not slated for publication until February 2017. Many changes approved for the 2017 schedule incorporate policies previously approved by ACIP during 2016. The majority of the edits involve changes to help improve readability and usability of the document. Users should review the schedule for specific details in 2017 when it is published.

One of the significant formatting changes in the schedule was made to the age columns. The vaccine recommendations for adolescents 16 years of age were placed in a separate column from the recommendations for persons 17-18 years of age. In making this distinction, ACIP is highlighting the importance of the 16-year-old visit to administer the recommended meningococcal conjugate (Men-ACWY) booster dose, as well as to provide the opportunity to deliver MenB vaccine and catch up on other recommended adolescent vaccines such as HPV and Tdap. Previously, there was one column for ages 16-18 years.

### **Adult Immunization Schedule**

Similar to the child and adolescent schedule, the updated adult immunization recommendations are scheduled for publication in early 2017. In addition to multiple revisions being made to improve the readability and clarity of the schedule, a significant change to the table format is that the ages 27- 59 years will be shown as one age group in a single column. Previously, the age groups were in two columns -- one for 27-49 years and the other for 50-59 years.

All recommendations approved by ACIP are provisional until the Director of CDC approves them, and they are published in *MMWR*. Presentation slides from the October meeting should be posted on the [ACIP website](#) in the next 4-6 weeks.



### **Contaminated Devices Putting Open-Heart Surgery Patients at Risk**

The CDC issued a [Health Advisory](#) to patients and hospitals regarding the risk of nontuberculous mycobacterium (NTM) infections from Stöckert heater-cooler devices used during open-heart surgery.

Patients who have had open heart surgery should seek medical care if they are experiencing symptoms associated with infections such as night sweats, muscle aches, weight loss, fatigue, or unexplained fever. This advice follows new information indicating that some LivaNova PLC (formerly Sorin Group Deutschland GmbH) Stöckert 3T heater-cooler devices, used for many of these surgeries, might have been contaminated during manufacturing which could put patients at risk for life-threatening infections.

More than 250,000 heart bypass procedures using heater-cooler devices are performed in the United States every year. Heater-cooler units are an essential part of these life-saving surgeries because they help keep a patient's circulating blood and organs at a specific temperature during the procedure. Approximately 60 percent of heart bypass procedures performed in the United States utilize the devices that have been associated with these infections. CDC estimates that in hospitals where at least one infection has been identified, the risk of a patient getting an infection from the bacteria was between about 1 in 100 and 1 in 1,000. While these infections can be severe and some patients in this investigation have died, it is unclear whether the infection was a direct cause of death. Available information suggests that patients who had valves or prosthetic products implanted are at higher risk of these infections.

Providers are encouraged to counsel patients undergoing thoracic surgery regarding the small risk of NTM infection versus the benefit of the surgery. Providers should advise patients to immediately report even minor symptoms that may suggest an infectious process.

For general questions and answers, a heater-cooler notification tool kit, and additional resources visit the CDC page <https://www.cdc.gov/HAI/outbreaks/heater-cooler.html>. Providers should report potential infections associated with heater-cooler devices to the North Dakota Department of Health (NDDoH) at 800.472.2180 or 701.328.3177. For more information on healthcare-related infections, visit <http://ndhealth.gov/disease/hai/>.



### **World AIDS Day Preparation**

December 1 is World AIDS Day, an opportunity to raise awareness about the impact the disease has on people, families, and communities. In the United States, one in eight individuals who are infected with HIV is unaware of the infection. The CDC recommends that everyone between the ages of 13 and 64 should be tested for HIV at least once as part of routine health care. As we approach World AIDS Day, the NDDoH stresses the importance of knowing your HIV status. Free HIV testing is available at test sites throughout the state, and results are available in as little as 20 minutes.

More tools than ever are available to prevent HIV, including [pre-exposure prophylaxis](#) (PrEP) for people who are at very high risk for HIV. Taking PrEP medicine daily can reduce the risk of getting HIV from sex by more than 90 percent. Among people who inject drugs, it can reduce the risk by more than 70 percent. Many people in the United States, especially gay and bisexual men and injection drug users, are at high risk for HIV and could benefit from PrEP. PrEP and other prevention methods (e.g., treating persons living with HIV, using condoms consistently and correctly, and getting tested for HIV and other STDs) are some of the most important tools for moving us closer to the goal of an AIDS-free generation.

For additional information about HIV testing and other HIV/AIDS services, call the NDDoH HIV/AIDS Program hotline at 800.70.NDHIV, or visit the program's website at [www.ndhealth.gov/hiv](http://www.ndhealth.gov/hiv).



## **Zika Virus Update**

As of November 1, 2016, three cases of Zika virus disease have been reported to the NDDoH. The three individuals reported recent travel to an area with active Zika virus transmission prior to becoming ill. None of the cases were hospitalized.

The NDDoH continues to recommend that pregnant women should not travel to areas with active Zika transmission. A current map and full listing of these areas can be found at [www.cdc.gov/zika/geo/active-countries.html](http://www.cdc.gov/zika/geo/active-countries.html). If a pregnant woman must travel to one of these areas, she should consult her healthcare provider before traveling and strictly follow steps to prevent mosquito bites during her trip. Pregnant women with a sex partner who has traveled to or lives in an area with active Zika virus transmission should use condoms or other barrier methods to prevent infection via sexual transmission, or abstain from sex for the duration of the pregnancy.

Women and men who are planning to conceive in the near future should consider avoiding nonessential travel to areas with active Zika virus transmission. The CDC does not recommend Zika virus testing of nonpregnant persons with possible Zika virus exposure who do not have symptoms of Zika virus disease. Testing is not recommended for persons planning to attempt conception or to assess the risk for sexual transmission of Zika virus. Women who have had possible Zika virus exposure through travel or sexual contact and who do not have ongoing risks for exposure should wait at least 8 weeks from symptom onset (if symptomatic) or from last possible exposure (if asymptomatic) to attempt conception. Men with possible Zika virus exposure, regardless of symptom status, should wait at least 6 months from symptom onset (if symptomatic) or from last possible exposure (if asymptomatic) before attempting conception with their partner.

For more information on Zika virus, including current testing recommendations, please contact Laura Cronquist at 701.328.2694, or visit [www.ndhealth.gov/disease/zika](http://www.ndhealth.gov/disease/zika).



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