

Talking Points

Tdap Vaccination Policies for Healthcare Personnel

Updated November 2016

Pertussis Facts

- Pertussis, or whooping cough, is a highly contagious respiratory disease with secondary attack rates as high as 80 percent in susceptible individuals. It can cause severe debilitating disease in people of all ages, but can be less severe, with the typical "whoop" absent in children, adolescents and adults who have been previously vaccinated.
- People with mild disease can transmit infection.
- Symptoms can be difficult to distinguish from other causes of upper respiratory infections.
- Infants are at greatest risk for disease and death, especially during the first few months of life when they are too young to be protected by vaccination.
- It is estimated that pertussis causes more than [195,000 deaths](#) per year worldwide and is one of the most commonly occurring vaccine-preventable diseases.
- In 2015, the U.S. experienced a decrease in pertussis throughout the country, with 18,166 cases reported to the Centers for Disease Control and Prevention, down from 32,971 cases in 2014. As in previous years, reported incidence was highest in infants.
- [In Michigan](#), pertussis has substantially increased since 2000, when 127 cases were reported. The number of reported cases varies from year to year, usually with a cyclical peak every three to five years. Cases peaked in 2010 with more than 1,500 reported cases and in 2014 with more than 1,400.
- In [2015](#), there were 496 pertussis cases reported in Michigan, representing a 65 percent decrease from the 1,424 cases reported in [2014](#). The first infant pertussis death since 2012 occurred in 2015.
- The cyclical [pattern](#) of pertussis is not completely understood, but vaccination plays an important role in limiting spread of the disease.
- To address concerns over waning immunity, the first U.S. pertussis vaccine for adolescents and adults, Tdap, was licensed in 2005. Tdap protects individuals from contracting tetanus, diphtheria and pertussis.

Pertussis in Healthcare Settings

- Nosocomial spread of pertussis [has been documented](#) in various healthcare settings, including hospitals and emergency departments serving pediatric and adult outpatient clinics, nursing homes, and long-term-care facilities.

- [In 2003 a hospital worker](#) transmitted pertussis to a 2-month-old premature infant
 - Infant was discharged two months after diagnosis
 - Seventy-two infant patients and 72 healthcare personnel (HCP) were exposed
- [In 2004 a pregnant HCP](#) diagnosed with pertussis potentially exposed 738 people
 - 388 hospital staff, 265 patients and 85 visitors
- Patients with the disease require droplet precautions.
- Exposed HCP should be monitored daily for 21 days (infectious three weeks after cough onset).
- If HCP become ill, they must be excluded from work until completing at least five days of antibiotics.
- [Post-exposure antimicrobial prophylaxis is recommended](#) for all HCP who have unprotected exposure to pertussis and are likely to expose a patient at risk for severe pertussis (e.g. hospitalized neonates and pregnant women).

Facts about Tdap (Tetanus, Diphtheria and Acellular Pertussis) Vaccine

- **Healthcare personnel have been recommended to receive Tdap vaccine [since 2005](#). The 2013 National Health Interview Survey [reported](#) that only 37 percent of HCP were vaccinated with Tdap.**
- Tdap can be administered regardless of the interval since the last dose of Td, which protects against tetanus and diphtheria.
- If Tdap vaccination status cannot be confirmed, a patient is considered unvaccinated and therefore eligible to be vaccinated.
- There are two brands of Tdap vaccine licensed for booster immunization for prevention of tetanus, diphtheria and pertussis.
 - BOOSTRIX (GlaxoSmithKline) licensed for 10 years and older.
 - ADACEL (sanofi pasteur) licensed for 10 years through 64 years.
- Vaccine side effects include pain and redness at the injection site (common), fever, headache, nausea or vomiting (less common) and anaphylaxis (very rare).
[\(Epidemiology and Prevention of Vaccine-Preventable Diseases\)](#)

Vaccinating Healthcare Personnel Protects Patients

- **HCP are considered to be at risk for acquiring or transmitting hepatitis B, influenza, measles, mumps, rubella, pertussis, and varicella.**
- **HCP Recommendations were updated in [November 2011](#).**
- Employees of healthcare organizations have both ethical and professional obligations to act in the best interests of their patients' health.

Establishing Vaccination Policies in Healthcare Settings

- **Hospitals are individually best positioned to understand the unique needs of their patients and communities. Requiring HCP vaccination is a local decision, made with the best interests of patients in mind.**
- Multifaceted, employer-mandated vaccination programs have been found to be the single most effective strategy to increase HCP vaccination rates. Using influenza vaccination as an example, self-reported flu vaccination coverage among those required to be vaccinated was [96 percent, compared with 44 percent](#) among those not subject to a requirement.
- Tdap is becoming a standard vaccine for HCP entering the healthcare field. Current HCP should be assessed for vaccination and immunity status at the time of hire and at least annually to ensure they are up-to-date with recommended vaccines.
 - Use the [Michigan Care Improvement Registry](#) to assist in assessing immunization history and to document vaccinations administered.
- A survey conducted by the Michigan Department of Health and Human Services showed **29 percent of Michigan’s hospitals had mandatory employee Tdap vaccination policies** in place as of September 2013.

MHA Staff Contacts

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