

Pertussis E-Message: Health Care Professionals & Medical Providers

Prevent Pertussis in Missouri – Stop the Spread – Vaccinate Your Patients

As you know, pertussis (whooping cough) is a highly contagious, **vaccine-preventable** respiratory disease that can easily be transmitted from person-to-person, and can cause serious illness and death in infants.

The best way to protect against pertussis is vaccination. With introduction of the vaccine in the United States, pertussis incidence significantly decreased; however, there has been a gradual increase in pertussis cases since the early 1980s. Consistent with the national trend, there is a steady increase in pertussis cases in Missouri during the last decade.

Pertussis can be fatal, especially in younger infants. In 2009, 798 children under 14 years of age were diagnosed with pertussis in Missouri, and 59 (7.4%) were hospitalized. Many more cases were probably undiagnosed and not reported. More than half of the pertussis cases diagnosed in infants and young children were acquired from infected adults. Unvaccinated children are much more likely to get pertussis than fully immunized children. Neither natural nor vaccine-acquired immunity provides lifelong protection.

Infants are most vulnerable before they can receive their first pertussis vaccination at two months of age. Children are not fully protected until they complete the DTaP vaccination series by six years of age. In 2005 and 2006, the Advisory Committee on Immunization Practices (ACIP) recommended the replacement of a single Td booster with a dose of Tdap for adolescents (ages 11–18) and adults (ages 19–64) who have not previously received Tdap.

In 2010, ACIP expanded Tdap recommendations to include both under-vaccinated children and senior adults. The new recommendations state that children aged 7-10 years who are not up-to-date with their childhood pertussis vaccinations should receive a single dose of Tdap. Additionally, Tdap is recommended for adults aged 65 years and older who anticipate close contact with an infant and who have not previously received the vaccine. In 2011, ACIP recommended that all healthcare personnel who have not yet received a dose of Tdap, regardless of age, should be vaccinated.

Women of childbearing age should receive Tdap during routine wellness visits or preconception visits. Pregnant women should receive a Tdap during each pregnancy, regardless of previous history of receiving Tdap. Ideally, the vaccine should be given between 27 and 36 weeks of pregnancy, however it may be given at any time during the pregnancy. A woman who did not receive a dose of Tdap during her pregnancy should get a dose of Tdap immediately post-partum. Tdap will protect the mother at the time of delivery, making her less likely to transmit pertussis to her infant.

It is important to remember that adolescents and adults, as well as children partially or fully vaccinated, may become infected with *Bordetella pertussis* but may have milder disease than infants and young children. Pertussis infection in these persons may be minimally symptomatic, or present as illness ranging from a mild cough illness to classic pertussis with persistent cough. Inspiratory whoop may not be present. Young infants may also present atypically: cough of any duration, apnea alone, or even present with sudden death.

Talk to your patients, or your patients' parents, about getting their family appropriately vaccinated against pertussis today!

For more information about pertussis, visit the Missouri Department of Health and Senior Services' web site at www.health.mo.gov/pertussis.

