

**Tetanus, Diphtheria, Pertussis (Tdap) Vaccine
Secondary School Requirement Fact Sheet
January 2013**

Pertussis Disease

- Pertussis (whooping cough) is a very contagious disease caused by a type of bacteria called *Bordetella pertussis*. Among vaccine-preventable diseases, pertussis is one of the most commonly occurring ones in the United States.
- Pertussis can cause serious illness in infants, children and adults. The disease starts like the common cold, with runny nose or congestion, sneezing, and maybe a mild cough or fever. But after 1–2 weeks, severe coughing can begin.
- Unlike the common cold, pertussis can become a series of coughing fits that continues for weeks. Pertussis can cause violent and rapid coughing, over and over, until the air is gone from the lungs and you are forced to inhale with a loud "whooping" sound. In infants, the cough can be minimal or not even present. They may instead have life-threatening pauses in breathing (apnea).
- In 2012, there were approximately 417% more persons with pertussis disease compared to the average of the past five years.
- Historically, pertussis activity has been cyclical with increased activity observed every three to five years; therefore the current activity is not unexpected.
- High levels of activity last occurred in 2004 (1066 cases reported) and 2005 (1106 cases reported), and the number of cases also increased moderately in 2010.
- No pertussis-related deaths have been reported to IDPH in 2012.

Confirmed and probable cases per year in Iowa (2007-2012)

Year	2007	2008	2009	2010	2011	2012
Reported Cases	152	255	239	705	232	1647*

*Year to date (December 31, 2012)

- The majority of cases occurred in children ages 10-14 years. In the last Iowa pertussis outbreak, the largest number of cases also occurred in this age group.

Tetanus, Diphtheria, Pertussis Vaccine

- The Food and Drug Administration (FDA) first licensed Tdap vaccine in 2005. Two vaccines are currently available, Adacel manufactured by Sanofi Pasteur, and Boostrix manufactured by GlaxoSmithKline.
- Tdap vaccine is readily available and is administered as part of the Advisory Committee on Immunization Practices (ACIP), Recommend Immunization Schedule (Adolescent Immunization Schedule, Persons 7-18 Years and Adult Immunization Schedule).
- Tdap vaccine can be used in three ways: 1) as catch up for individuals who did not receive a complete series of DTaP/DTP as children, 2) as a single booster dose to replace a Td booster to provide protection as a result of waning immunity, and 3) for protection against tetanus infection after a wound.

- The ACIP recommends Tdap vaccine for the following groups:

Routine: Adolescents 11 through 18

- A dose of Tdap is recommended for persons 11 through 18 years of age who have not received a dose, followed by Td booster doses every 10 years thereafter.
- Persons 7 through 10 years of age who are not fully immunized against pertussis (including those never vaccinated or with unknown pertussis vaccination status) should receive a single dose of Tdap.
- Tdap can be given regardless of the interval since the last tetanus and diphtheria toxoid-containing vaccine.

Routine: Adults 19 and Older

- Adults younger than age 65 years who have not received a dose of Tdap, or for whom vaccine status is unknown, should be immunized as soon as feasible to replace one of the 10-year Td boosters. (Tdap can be administered regardless of interval since the previous Td dose.)
- Adults age 65 years and older who have not previously received a dose of Tdap, and who have or anticipate having close contact with children younger than age 12 months (e.g., grandparents, other relatives, child care providers, and health care personnel), should receive a one-time dose to protect infants.
- Other adults 65 years and older who are not in contact with an infant, and who have not previously received a dose of Tdap, may receive a single dose of Tdap in place of a dose of Td.
- Healthcare personnel with direct patient contact regardless of age should receive a single dose of Tdap as soon as feasible if they have not previously received Tdap.
- Administer Tdap to pregnant women who previously have not received the vaccine, preferably late in the second trimester (after 20 weeks gestation) or during the third trimester. If not administered during pregnancy, Tdap should be administered immediately postpartum.

Tdap Vaccination Rates

- The National Immunization Survey (NIS) Teen, 2011 results indicates 74.7% of Iowa adolescents 13-17 years have received the Tdap vaccine. The national average is 78.2%.

School Requirement

- The role of a school immunization requirement is to assist in the removal of barriers to vaccine, achieve high vaccination coverage rates and subsequently lower rates of vaccine-preventable diseases.
- Prior to this change, Iowa was one of 10 states that did not have a Td or Tdap vaccine requirement for secondary school (Connecticut, Delaware, Georgia, Hawaii, Iowa, Maine, Maryland, Mississippi, South Dakota, and West Virginia).
 - Beginning for the 2013-14 school year, children entering 7th grade and above if born on or after September 15, 2000, shall receive a one-time dose of tetanus, diphtheria, acellular pertussis (Tdap) vaccine.