Ohio Department of Health

TETANUS AND PERTUSSIS DISEASE AND COLLEGE STUDENTS

Tetanus (lockjaw) is an acute, often fatal disease. The bacteria produce a toxin that causes painful muscle contractions. It is characterized by generalized rigidity and convulsive spasms of skeletal muscles. The bacteria spore is widely found in intestinal tracts of animals, and is secreted in stool of animals. It is also found in the soil. Tetanus spores are resistant to heat and most antiseptics, making it readily present in our environment.

Pertussis (whooping cough) is an acute infectious disease also caused by bacteria. It is very contagious and can cause serious illness, especially in infants too young to be fully vaccinated. Pertussis is one of the most commonly occurring vaccine-preventable diseases and has been increasing in numbers since the 1980's in the United States. It causes inflammation of the respiratory tract, interfering with clearing of secretions and causing severe coughing spasms. The most common complication is pneumonia. Typical pertussis in children and adults starts with a cough and runny nose, which is followed by weeks to months of rapid coughing spells that end with a whooping sound with inhalation as the lungs are depleted of air. It is much more dangerous to younger family members and contacts, especially those under 6 months of age who are too young to be fully immunized.

How is Tetanus/Pertussis infection spread?

Tetanus bacterium usually enters through an open wound or sore on the skin. Most cases in the United States occur in individuals who have not received their booster in the last 10 years.

Pertussis is a human disease usually spread by close contact with an infected person who is coughing or sneezing as others breathe in the bacteria. It is highly contagious with about 80% of those who come in contact with it becoming infected.

Who is at risk?

Anyone who acquires open wounds, traumatic injuries, works outside or has contact with animals is at risk from tetanus. This risk is greater if you have not received a booster vaccine dose within the last 10 years, since immunity decreases over time.

Anyone is at risk from pertussis, as most infections will occur before the severe coughing is present in the ill person (they may have no or mild symptoms). College students are at a higher risk due to closed classrooms and close living quarters. Immunity from vaccines weakens over time and even previously having the disease does not prevent contracting pertussis again.

What can be done to decrease risk?

Obtain a booster dose of vaccine every 10 years after receiving the primary series. If you obtain a wound that is moderate to severe and NOT clean, consult your medical provider about receiving a booster dose if it has been five years or more since your last booster dose.

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Have all children receive timely immunizations and receive a tetanus booster with pertussis component, Tdap, after the age of 10 or when you could expose infants to this disease.

It is now recommended that all pregnant females receive a Tdap vaccine with every pregnancy to provide maternal antibody protection to the infant before they may receive vaccines. All family/household members of a newborn infant should receive a Tdap at least two weeks prior to the infants' birth/homecoming.

What about the vaccine?

A vaccine is available to protect teens and adults against tetanus, diphtheria, and pertussis (Tdap). Anyone who has not received a Td or Tdap booster within the last 10 years should receive a Tdap booster now, in order to provide protection against these diseases. A vaccine, like any other medicine, is capable of causing serious problems, such as allergic reactions. People should not get a tetanus vaccine booster dose if they have ever had a serious allergic reaction to a previous dose of the vaccine. If you have a moderate to severe acute illness, you should wait until you feel better.

A minor illness is acceptable to have when vaccinated. Common reactions are warmth, redness, swelling and tenderness at the injections site. More severe reactions have occurred, please contact medical provider if you have any concerns or more severe reactions. College students and their parents should discuss the risks and benefits of vaccination with their health care providers.

If a college student decides to be vaccinated, they (or their parents if they are less than 18 years of age) should contact their health care provider or the college student health care center where they will be attending to inquire about receiving the vaccine.

For more information about the tetanus/pertussis vaccine, you may access the "Vaccine Information Statement" (VIS) at the Centers for Disease Control and Prevention (CDC) Web site:

Td (Tetanus, Diphtheria): http://www.cdc.gov/vaccines/hcp/vis/vis-statements/td.html

Tdap (Tetanus, Diphtheria, Pertussis): http://www.cdc.gov/vaccines/hcp/vis/vis-statements/tdap.html

Material adapted from the CDC Web site: http://www.cdc.gov.

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