

Tetanus (lockjaw)

Last Reviewed: January 2012

What is tetanus?

Tetanus, commonly called lockjaw, is a serious bacterial disease that affects muscles and nerves. It is characterized by muscle stiffness that usually involves the jaw and neck that then progresses to involve other parts of the body. Death can result from severe breathing difficulties or heart abnormalities.

Who gets tetanus?

As a result of widespread immunization, tetanus is now a rare disease in the United States. Tetanus occurs more often in older people and in agricultural workers for who contact with animal manure is more likely and immunization is inadequate. Neonatal (newborn) tetanus remains a major problem in many developing countries where women are not immunized appropriately against tetanus.

How is tetanus spread?

In unvaccinated individuals, tetanus is contracted through a cut or deep wound which becomes contaminated with the organism. Tetanus has also been associated with clean wounds, surgical procedures, insect bites, dental infections, and intravenous drug use. It is not transmitted from person to person.

Where is the tetanus bacteria found?

The tetanus bacterium is present throughout the environment and is commonly found in soil contaminated with manure, and animal and human feces.

What are the symptoms of tetanus?

A common first sign of tetanus is muscular stiffness in the jaw (lockjaw), followed by stiffness of the neck, difficulty in swallowing, rigidity of abdominal muscles, spasms, sweating, and fever.

How soon after infection do symptoms occur?

The incubation period is usually eight days but may range from three days to three weeks. Shorter incubation periods are associated with more heavily contaminated wounds.

What are the complications associated with tetanus?

Complications include spasm of the vocal cords and/or spasms of the respiratory muscles causing interference with breathing. Other complications include fractures of the spine or long bones from stiff muscles, elevated blood pressure, abnormal heartbeats, coma, generalized infection, clotting in the blood vessels of the lung, and pneumonia. Death occurs in about 11 percent of all cases, especially in persons 60 years of age and older and unvaccinated individuals.

What is the treatment for tetanus?

The use of tetanus toxoid-containing vaccine and tetanus immune globulin (TIG) or antitoxin in the management of wounds depends on the nature of the wound and the history of immunization. Persons with clean, minor wounds may need to catch-up their tetanus toxoid-containing vaccine. For more severe wounds, persons may need TIG in addition to vaccine.

If the disease develops, supportive care and therapy to control severe spasms are indicated.

Does past infection with tetanus make a person immune?

Recovery from tetanus may not result in immunity. Second attacks can occur and immunization is needed after recovery.

Is there a vaccine for tetanus?

An effective vaccine called tetanus toxoid has been available for many years. It is contained in the DTP (diphtheria, tetanus, pertussis), DT (diphtheria, tetanus), DTaP (diphtheria, tetanus, acellular pertussis), Tdap (tetanus, diphtheria and acellular pertussis), and Td (tetanus and diphtheria) vaccines. A tetanus booster shot is recommended every ten years after the completion of a three-dose series.

In New York State, children born after 1/1/2005 are required to have at least three doses of DTaP to attend pre-kindergarten programs and school. Children born on or after 1/1/1994 and enrolling in sixth grade are required to have one dose of Tdap. Although tetanus vaccine is not required for all children, it is highly recommended.

What can be done to prevent the spread of tetanus?

The single most important preventive measure is to maintain a high level of immunization in the community.

http://www.health.ny.gov/diseases/communicable/tetanus/fact_sheet.htm