

What is tetanus?

Tetanus is a serious disease of the nervous system caused by a toxin-producing bacteria called *Clostridium tetani*. The disease causes muscle contractions, particularly of your jaw and neck muscles. Tetanus is commonly known as lockjaw.

How is tetanus spread?

Tetanus is different from other vaccine-preventable diseases because it does not spread from person to person. The bacteria are usually found in soil, dust, and manure and enter the body through breaks in the skin — usually cuts or puncture wounds caused by contaminated objects.

Tetanus bacteria can also infect the body through breaks in the skin caused by:

- Clean superficial wounds (when only the topmost layer of skin is scraped off)
- Surgical procedures
- Insect bites
- Dental infections
- Compound fractures (a break in the bone where it is exposed)
- Chronic sores and infections
- Intravenous (IV) drug use
- Intramuscular injections (shots given in a muscle).

What are the signs and symptoms of tetanus?

The most common type of tetanus is called generalized tetanus. Signs and symptoms begin gradually and then progressively get worse over two weeks. They usually start at the jaw and progress downward on the body.

Signs and symptoms of generalized tetanus include:

- Painful muscle spasms and stiff, immovable muscles in your jaw
- Tension of muscles around your lips, sometimes producing a persistent grin
- Painful spasms and stiffness in your neck muscles
- Difficulty swallowing
- Stiff abdominal muscles.

How long after infection do symptoms appear?

The average time from infection to the appearance of signs and symptoms (incubation period) is 10 days. The incubation period can range from 3 to 21 days.

Who is most at risk?

The greatest risk factor for tetanus infection is not being vaccinated or not keeping up with the 10-year booster.

Other factors that increase the risk of tetanus infection are:

- Cuts or wounds exposed to soil or manure
- A foreign body in a wound, such as a nail or splinter
- A history of immune-suppressing medical conditions
- Infected skin lesions in people living with diabetes
- An infected umbilical cord when a mother isn't fully vaccinated
- Shared and unsanitary needles for illegal drug use.

What type of health problems are caused by tetanus?

Complications of tetanus infection may include:

- Breathing problems
- Blockage of a lung artery (pulmonary embolism)
- Pneumonia
- Broken bones
- Death.

How is tetanus diagnosed?

Healthcare providers can diagnose tetanus by examining you and looking for certain signs and symptoms. There are no lab tests that can confirm tetanus.

How is tetanus treated?

Wounds should be thoroughly cleaned, and dead tissue removed. If you have not had a tetanus toxoid booster in the previous 10

years, you should get a single booster on the day of injury. For severe wounds, a booster may be given if more than five years have elapsed since your last dose. Tetanus immune globulin (TIG), antitoxin or antibiotics may be given if you have not been previously immunized.

Tetanus infection is a medical emergency requiring care in the hospital and aggressive wound treatment. Depending on how serious the infection is, a machine to help you breathe may be required.

How can tetanus be prevented?

Being up to date with your tetanus vaccine is the best tool to prevent tetanus. Protection from vaccines, as well as a prior infection, do not last a lifetime. This means that if you had tetanus or got the vaccine before, you still need to get the vaccine regularly to keep a high level of protection against this serious disease. A tetanus booster is recommended every 10 years. Click [here](#) to learn more about tetanus vaccines.

Where can I get more information?

- Your personal healthcare provider
- [Centers for Disease Control and Prevention](#)
- [Mayo Clinic](#)

Rev. 07/2021

