

Tetanus:

What you need to know

What is tetanus?

Tetanus is a serious bacterial infection that can affect anyone. It is caused by spores produced by the bacterium *Clostridium tetani*. These spores are in every environment worldwide, particularly in soil, dust, and the intestines/feces of humans and animals.

When the spores enter the body, they develop into bacteria. These bacteria then release a neurotoxin (a poison that affects your nervous system) that can lead to muscle spasms and stiffness that usually begin in the jaw and neck. This can make it hard to open your mouth, which is why tetanus is sometimes referred to as “lockjaw”.

Other symptoms of tetanus can include:

- headache,
- seizures,
- trouble swallowing,
- fever and sweating,
- fast heart rate, and
- changes in blood pressure

In severe cases, tetanus can lead to complications such as broken/fractured bones due to muscle spasms, or pneumonia.



How is it spread?

Unlike many other vaccine-preventable diseases, **tetanus cannot be spread from person to person**. Instead, tetanus spores commonly enter the body through wounds contaminated with feces, dust, or soil (e.g., cutting yourself while gardening or puncturing yourself by stepping on a contaminated nail). Spores can also enter the body through wounds that involve dead skin (such as frostbite and burns), animal bites, and injectable drug use.

Who should be immunized?

- Infants, children and adolescents, according to the childhood immunization schedule in their province/territory.
- Adults who have not previously been vaccinated against tetanus, or who have not been fully vaccinated against tetanus.
- Routine booster doses are required every ten years throughout the lifespan, with the first booster dose administered in adolescents at 14 to 16 years of age.
- Depending on a person's prior immunization history and the severity of the wound, a tetanus vaccine should be administered if it is likely a person has been exposed to tetanus spores through a wound. **If you think you have been exposed to tetanus, talk to your healthcare professional about whether or not you need the tetanus vaccine.**

Publicly funded immunization schedules for tetanus may vary between provinces and territories.

Are you protected against tetanus?

Tetanus vaccines are safe and the most effective way to protect against tetanus infection.

The tetanus vaccine is combined with other vaccines - commonly diphtheria and pertussis vaccines - which means that you get protection against multiple diseases in one shot.

Talk to your doctor, nurse, pharmacist or public health office about getting the tetanus vaccine for you or your child.



For more information, visit: immunize.ca/tetanus

Did you know?

The tetanus vaccine is made using what is called a “toxoid”. Toxoids are created when toxins produced by bacteria are inactivated. The toxoid is the part of a vaccine that triggers your immune system to create protective proteins called antibodies. For the tetanus vaccine, the tetanus neurotoxin is inactivated by scientists, and the resulting toxoid is used in the vaccine. The antibodies produced by this toxoid specifically target the tetanus neurotoxin, to protect you against this disease.

References

Public Health Agency of Canada. (2023.) Canadian Immunization Guide. Tetanus toxoid.
<https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-22-tetanus-toxoid.html>

Government of Canada. (2023.) Tetanus: Symptoms.
<https://www.canada.ca/en/public-health/services/immunization/vaccine-preventable-diseases/tetanus/symptoms.html>

Centers for Disease Control and Prevention. (2022.) Tetanus.
<https://www.cdc.gov/tetanus/index.html>

World Health Organization (2018.) Tetanus.
<https://www.who.int/news-room/fact-sheets/detail/tetanus>