

INTRODUCTION

Tetanus is a serious bacterial infection that affects the nervous system and causes muscles throughout the body to tighten. It's also called lockjaw because the infection often causes muscle contractions in the jaw and neck. However, it can eventually spread to other parts of the body..

CAUSES

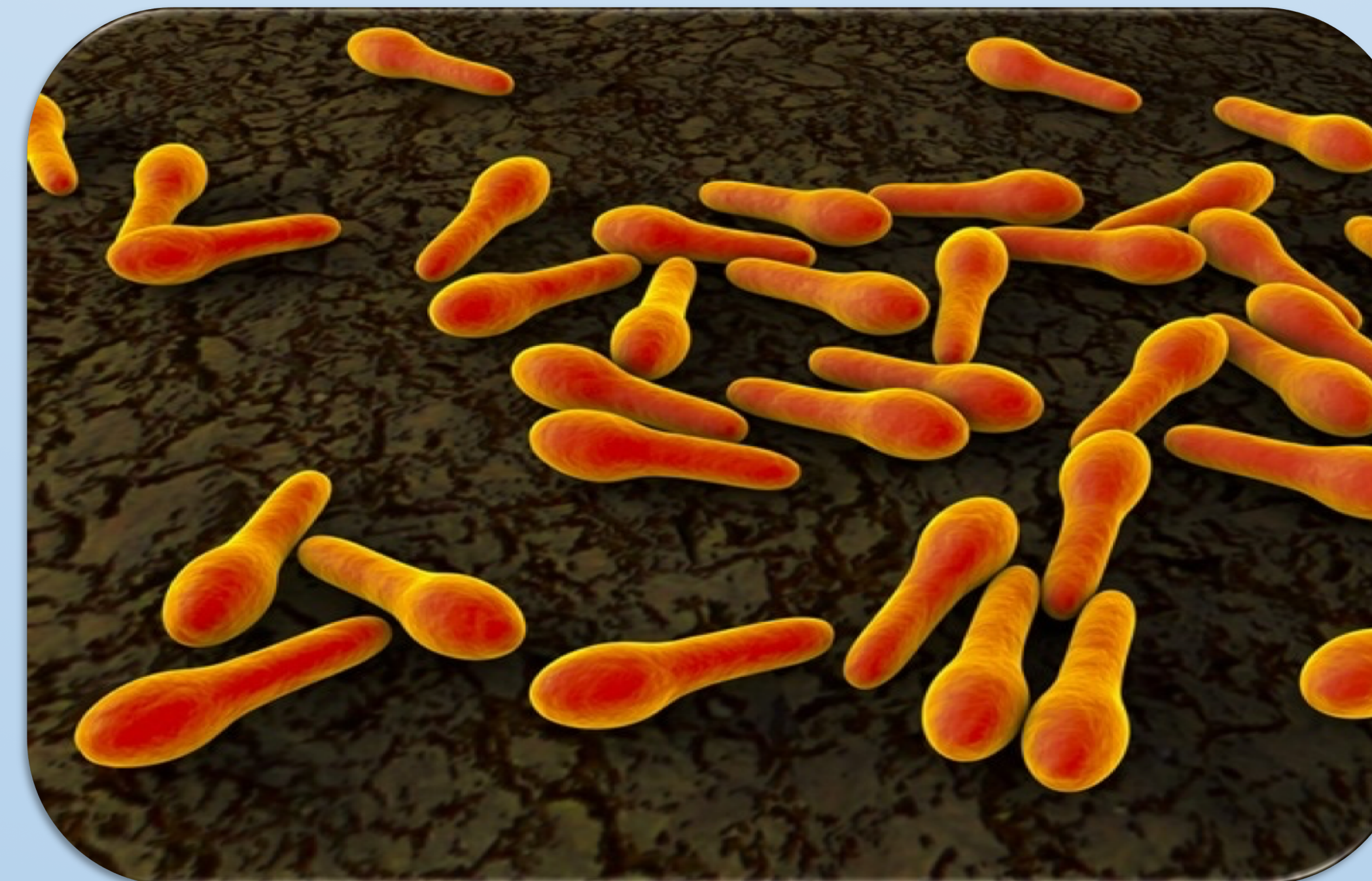
Caused by spores of Anaerobic gram-positive Bacteria called Clostridium tetani. These Spores can be found in dust, dirt, and animal droppings. They're often resistant to harsh environmental conditions, such as high heat..

A person can become infected when these spores enter the bloodstream through a cut or deep wound..

Tetanus infection has been associated with:

- crush injuries.
- injuries with dead tissue.
- burns.
- wounds contaminated with dirt, feces, or saliva.
Less commonly, it's been associated with.
- dental infections.
- insect bites.
- chronic sores and infections.

Tetanus is not contagious from person to person.



Symptoms

Signs and symptoms of tetanus appear anytime from 3 to 21 days after tetanus bacteria enter the body through a wound. Most cases occur within 14 days.

Symptoms can include:

- Jaw cramping or the inability to open the mouth.
- Muscle spasms often in the back, abdomen and extremities.
- Trouble swallowing.
- Seizures.
- Headache.
- Fever and sweating.
- Changes in blood pressure or fast heart rate.

Diagnosis

Doctors diagnose tetanus based on a physical exam, medical and immunization history, and the signs and symptoms of muscle spasms, stiffness and pain. Laboratory tests generally aren't helpful for diagnosing tetanus.

The doctor may still perform lab tests to help rule out diseases with similar symptoms. These include meningitis, a bacterial infection that affects the brain and spinal cord, or rabies, a viral infection that causes brain swelling.

Treatment

Nearly all cases of tetanus occur in people who have never been vaccinated or in adults who have not kept up to date on their booster shots.

There's no cure for tetanus. Treatment consists of wound care, medications to ease symptoms and supportive care.

Medications:

- Antibiotics : such as penicillin to kill the bacteria in your system.
- Antitoxin : tetanus immune globulin (TIG) to neutralize the toxins that the bacteria have created in your body.
- Muscle relaxers to control muscle spasms.
- A tetanus vaccine given along with the treatment.

In some cases, a surgical procedure called debridement is used to remove dead or infected tissue.

Summary

- Caused by exotoxin produced by bacterium Clostridium tetani.
- Characterized by generalized rigidity and convulsive spasms.
- First produced in animals in 1884 and the organism was isolated in 1889.
- Tetanus toxoid developed in 1924 and widely used during World War
- There's no cure for tetanus and its occur in people who have never been vaccinated.
- WHO estimated that 18 511 deaths from tetanus occurred in 2008.

References

<https://www.healthline.com/health/animal-bite-infections#diagnosis>