

# Tetanus

A disease of the nervous system caused by a toxin produced by the bacterium *Clostridium tetani*. This bacterium produces spores, which are resistant cells able to survive in the soil for many years.

Symptoms include painful muscle spasms, initially of the muscles of the neck and jaw (lockjaw), and later of the muscles of the trunk.

Tetanus is a very serious disease and is frequently fatal, particularly in infants and the elderly. It has become relatively common in intravenous drug users.

Diagnosis is made by clinical examination.

Bacteria causing tetanus are found in soil or human or animal faeces. The bacteria may contaminate puncture wounds, cuts, burns and complicated fractures. The initial wound is often quite trivial and may not have received medical attention.

## Incubation period

*(time between becoming infected and developing symptoms)*

1 day to several months, with an average of 10 days.

## Infectious period

*(time during which an infected person can infect others)*

Person-to-person spread does not occur.

## Treatment

Treatment requires the administration of antitoxin and antibiotics. Often prolonged treatment in the intensive care unit of a hospital is necessary.

## Control of spread

- > Exclusion from work or school is not necessary.
- > Protection against tetanus is provided by tetanus vaccine. Tetanus vaccine is one of the components of vaccines routinely administered to children at two, four and six months of age, with booster doses at four years and 15 to 17 years (in South Australia this booster is offered to Year 9 school students).

## Control of spread cont.

Adults should receive a further booster at age 50 if they have not had one in the past 10 years. (Regular boosters at 10 yearly intervals are no longer recommended in Australia.) For adolescents and adults, the combined diphtheria-tetanus-pertussis vaccine (dTpa) is preferred, if not given previously, as it provides additional protection against pertussis.

- > After an injury, particularly if a wound is deep, dirty or contains a foreign object (for example, wood splinter), the wound should be cleaned immediately with disinfectant and medical advice sought regarding the need for further treatment to prevent tetanus.
- > Wear gloves while gardening.



**Tetanus is a notifiable disease**

- > **Immunisation**