

## Tetanus

Tetanus is a serious bacterial disease that causes muscle spasms and breathing problems. The tetanus bacillus is called *Clostridium tetani*. The bacteria produce toxins that affect the nervous system. Around one in 10 people infected with tetanus will die.

Tetanus is uncommon in Australia because of the widespread use of the tetanus vaccine. However, anyone who hasn't been immunised is at risk.

### Symptoms of tetanus

The signs and symptoms of tetanus may include:

- Muscle spasms that begin in the jaw and neck
- Inability to open the mouth (lockjaw)
- Swallowing problems
- Breathing difficulties
- Painful convulsions
- Abnormal heart rhythms.

### Complications of tetanus

The extremely serious and potentially lethal complications of tetanus can include:

- Suffocation
- Respiratory failure
- Pneumonia
- Hypertension (high blood pressure)
- Hypotension (low blood pressure)
- Heart attack.

### Causes of tetanus

Tetanus bacteria live in soil, dust and manure, particularly horse manure. Infection occurs when the bacteria enter the body through a break in the skin. Symptoms occur between three days and three weeks after infection. Most cases occur within 14 days. Generally, if symptoms appear very quickly, the infection is severe. Tetanus is not transmitted from person to person.

### High risk groups

Anyone who has not been immunised against tetanus is at risk, in particular:

- People who work with soil, or horses, or in dusty environments
- Intravenous drug users
- Australians travelling overseas to parts of Asia, South America or Africa
- People who have high-risk or 'tetanus-prone' wounds.

### High-risk and tetanus-prone wounds

Some wounds are more likely to harbour germs and encourage the growth of tetanus bacteria. Examples of these wounds are:

- Compound fracture (the broken bone pierces the skin)
- Burns
- Animal bite
- Any type of penetrating wound, such as from a rusty nail or rose thorns
- Wound contaminated with soil, horse manure or foreign objects such as wood fragments.

## Diagnosis of tetanus

The diagnosis is usually made by physical examination and taking a person's history. It is difficult to confirm a diagnosis through laboratory tests.

## Treatment for tetanus

Tetanus is a life-threatening disease and sometimes, a person dies despite prompt medical attention.

Treatment for tetanus may include:

- Antitoxin called tetanus immunoglobulin to neutralise the tetanus toxin
- Hospitalisation
- Anti-convulsive medications
- Antibiotics
- Life support – for example, the person may be placed on an artificial respirator if they have severe breathing problems
- Vaccination, if the adult hasn't had a booster shot in the previous five years.

## Prevention of tetanus

The best prevention against tetanus is immunisation. Avoid skin injuries to reduce the risk of tetanus, for example wear gloves while gardening.

Seek medical advice for dirty wounds or wounds where the skin has been penetrated. The doctor may advise a tetanus booster shot depending on how long it is since your last tetanus dose.

If you have not had any previous immunisation against tetanus, a full course of three doses should be given. If the wound is deemed 'tetanus-prone', tetanus immunoglobulin should be given as well.

## Vaccination is available

In Victoria, the tetanus vaccine is available in a combined vaccine that also contains vaccines against other serious and potentially fatal diseases. Different vaccine combinations are available depending on the person's age.

The recommended vaccination schedule where vaccine is provided free is:

- Children at age two, four and six months and four years of age.
- Year 10 of secondary school as a booster
- Age 50 to 59 years (inclusive) as a booster
- Catch-up to seven years of age (inclusive).

The immunisations you may need are decided by your health, age, lifestyle and occupation. Together, these factors are referred to as HALO.

## Where to get help

- In an emergency, call triple zero (000)
- Your doctor
- Emergency department of your nearest hospital
- Your local council immunisation service
- Department of Health Victoria– Immunisation Program Tel. 1300 882 008

- NURSE-ON-CALL Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)
- Maternal and Child Health Line ( 24 hours, 7 days) Tel. 13 22 29
- National Immunisation Infoline Tel. 1800 671 811

## Things to remember

- Tetanus is a serious bacterial disease that causes muscle spasms and breathing problems.
- Tetanus is uncommon in Australia because of the widespread use of the tetanus vaccine.
- The best prevention against tetanus is immunisation.

**This page has been produced in consultation with, and approved by:**

Department of Health - Communicable Disease Prevention and Control Unit

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