

# **TETANUS**

### **WHAT IS TETANUS?**

Tetanus is a very serious disease caused by the *Clostridium tetani* bacterium. The clinical disease is caused by neurotoxins that are produced by the bacterium infecting contaminated wounds. This toxin causes painful muscle spasms and breathing problems, leading to complications such as pneumonia, bone fractures and muscle rupture. Death can occur due to respiratory failure, hypertension, hypotension (low blood pressure) or heart problems.

Symptoms generally occur between 3 and 21 days after infection, but with the majority of infections symptoms appear approximately 10 days following bacterial contamination of the wound.

Early signs and symptoms include inability to open the mouth (giving the early name Lockjaw), difficulty swallowing, stiffness or pain in the neck, shoulder and back muscles. Additional symptoms include painful muscle spasms, difficulty breathing and talking.

#### WHERE IS IT FOUND?

Tetanus is a public health concern of particular issue in developing countries where immunisation rates are low. It exists worldwide, mainly in agricultural regions and in areas where contact with soil or animal faeces is more likely.

## **RISK TO TRAVELLERS**

Whilst tetanus is rare in Australia, it does occur in unvaccinated individuals - those who have not received 4 or more doses of tetanus-containing vaccines or who have not received a dose in the previous 10 years (or 5 years for those travelling off the beaten track, undertaking high risk adventure trips).

Others at risk are:

- People who work with soil, horses or in dusty environments
- Injecting drug users
- Travellers to countries where health services are difficult to access
- People with high risk tetanus-prone wounds

#### **HOW IS TETANUS TRANSMITTED?**

Contact with non-intact skin, usually via injuries from contaminated objects. "Tetanus-prone" wounds include those contaminated with dirt, faeces or saliva; punctures; burns; crush injuries or injuries with necrotic disease.

### WHAT IS TETANUS VACCINATION?

Australian children are vaccinated against tetanus as part of the standard childhood immunisation schedule.

All travellers should ensure the status of their tetanus toxoid vaccination is current before departure. Once a primary series of tetanus-containing vaccines is given in childhood and adolescence, adult booster doses with a tetanus toxoid—containing vaccine are recommended at 10-year intervals given either as dT (diphtheria-tetanus) or dTpa (diphtheria-tetanus-acellular pertussis, if not previously given). For adults who need protection against poliomyelitis, it is recommended they receive a dTpa-IPV vaccine.

Tetanus toxoid is available in combination with diphtheria and other antigens. Tetanus vaccination stimulates the production of anti-toxin.

- · Combined with Diphtheria
- Combined with Diphtheria, Whooping Cough
- Combined with Diphtheria, Whooping Cough, Polio

Read more in the Australian Immunisation Handbook.

### **SCHEDULE**

The primary <u>childhood immunisation</u> series is given from 6-8 weeks of age: three doses are administered at least 4 weeks apart, with boosters at 4 and 11-17 years of age.

A single booster of tetanus/diphtheria-containing vaccine (preferably also with pertussis) is given at 50 years of age. Boosters are however administered every 10 years for travellers who are travelling to countries where health services are difficult to access, or every 5 years for those travellers who are partaking in high risk activities such as mountaineering, bike riding, rock climbing or caving.

**Contraindications:** Should not be administered to individuals who have previously experienced a serious reaction to this vaccine or those who are known to be hypersensitive to any of the vaccine components.

### **LEVEL OF PROTECTION**

Over 95%

### POSSIBLE SIDE EFFECTS

Pain, redness or swelling at injection site as well as transient fever, headache and malaise.

Acute allergic reactions occur in 1 per 1 million doses.

In young babies, decreased appetite, fever and crying. In children who had DTPa (tetanus, diphtheria, whooping cough) as their primary vaccination, boosting with the same vaccine produced extensive limb swelling in 2% of recipient.

# **FAQS**

More information on Tetanus is available during your pre-travel consultation with Travelvax. Call 1300 360 164 for the location of the clinic nearest to you.