

Tetanus

Tetanus is a vaccine-preventable disease caused by a toxin produced by the bacteria *Clostridium tetani*. and spores are found in soil throughout the world

Tetanus is a vaccine-preventable disease caused by a toxin produced by bacteria called *Clostridium tetani*. Tetanus spores are found in soil throughout the world. The disease is acquired when material containing these spores, such as soil, contaminates a wound. The toxin released from the bacteria may then attack the nerves of the brain and spinal cord. Tetanus is not spread by person to person contact.

Tetanus-prone wounds include the following:

- Certain animal bites and scratches.
- Burns.
- Puncture type wounds in an contaminated environment e.g. gardening injuries.
- Eye injuries.
- Wounds containing foreign bodies.
- Bone fractures with broken skin.
- Wounds in people with bloodstream infections.

Tetanus is found worldwide, but is more common in resource-poor countries with low vaccine coverage.

Generalised tetanus is responsible for most cases; this is associated with intense, painful contraction and spasm of skeletal muscles. It usually causes lockjaw (trismus) characterised by facial muscles spasm. Other symptoms include: a stiff neck, forceful arching of the back, abnormal breathing and difficulty swallowing. Even with intensive medical support, death occurs in 10 to 20 percent of cases.

Prevention

All travellers should be aware of the risk of accidents, thoroughly clean all wounds and seek appropriate medical attention. Further vaccines and / or immunoglobulin treatment may be recommended.

Tetanus vaccines

Travellers should have completed (or be up to date with) a primary UK vaccine course according to the NHS vaccination schedule. If visiting countries where medical facilities may be limited, a booster dose of a tetanus-containing vaccine is recommended if the last dose was more than ten years ago, even if five doses of vaccine have been given previously. This is a precautionary measure in case immunoglobulin (if recommended) is not available to the individual in the event of a tetanus-prone injury overseas.

Vaccination schedule

Vaccine	Schedule and age range
The 6-in-1 vaccine DTaP/IPV/Hib/HepB	Three doses given one month apart (offered at two, three and four months of age)
The 4-in-1 vaccine dTaP/IPV	Pre-school: single dose (offered at three years and four months or soon after)
The 3-in-1 vaccine Td/IPV	Single dose booster (offered at 14 years of age). Also used for adults and children from six years of age, as a booster dose outside the routine UK schedule, e.g. travellers requiring single dose boosters
Boostrix-IPV dTaP/IPV	Single dose booster (for pregnant women 16 to 32 weeks gestation)*

*Recommended for pregnant women between 16 to 32 weeks to protect unborn child against whooping cough (pertussis).

Resources

- [NHS: Tetanus](#)
- [UKHSA: Immunisation against infectious disease. Tetanus](#)
- [UKHSA: Tetanus: guidance, data and analysis](#)
- Further details on the vaccines can be found on the [Summary of Product Characteristics \(SPC\) on the electronic medicines compendium](#)