

Tetanus is a neurologic disease characterised by trismus (lockjaw) and muscular spasms caused by *Clostridium tetani*. The portal of entry for *C. tetani* is an open wound or the umbilical cord stump in neonates. The incubation period ranges from 4 to 14 days but can be as short as 1 day or as long as a few weeks to several years following injury. The further the site of injury is from the central nervous system, the longer the incubation period. The shorter the incubation period, the deadlier the disease.

The disease begins insidiously with progressively increasing stiffness of the voluntary muscles. Muscles of the neck and back are involved first, and within 24 to 48 hours after onset, rigidity may be fully developed and may spread rapidly to involve the trunk and extremities. Reflex spasms usually occur within 1-4 days after onset of initial symptoms and are characterised by trismus. The neck and back become arched. The abdominal wall is board-like, and the extremities are usually stiff and extended. The manifestations of tetanus can be classified into different clinical presentations:

- **Local tetanus**

This manifests as muscle contraction at the site of injury which may persist for weeks or months before disappearing without residue.

- **Generalized tetanus**

The most common form of the disease with trismus being the presenting complaint in more than 50% of cases. Associated complaints are restlessness, irritability, stiff neck, abdominal rigidity, dysphagia or pre-existing localized tetanus. Death occurs as a result of interference with mechanisms of breathing.

- **Cephalic tetanus**

An unusual form of the disease characterized by local muscle paralysis after injuries to the head or otitis media. There is involvement of the cranial nerves, especially in the facial area.

- **Neonatal tetanus**

This results from contamination of the umbilical cord stump and usually begins 3 to 12 days after the baby is born, and is characterised by difficulty in suckling and excessive crying, followed by stiffening of the jaw, making it hard to swallow; stiffening of the body follows and intermittent jerking spasms begin. The baby dies within a week from dehydration, pneumonia or pulmonary haemorrhage.

Where to find us:

South African Vaccination and Immunisation Centre (SAVIC)
PO Box 173, University of Limpopo – Medunsa Campus
0204, PRETORIA, Gauteng Province, South Africa

Tel: +27 12 521 3077 or 4227; Fax: +27 12 521 5794; Email: info@savic.ac.za ; <http://www.savic.ac.za>