

## 1. What is tetanus?

Tetanus is a neurologic disease which is often fatal, characterised by profound muscular spasms, including locking of the jaw so the mouth cannot open. The disease is caused by bacteria called *Clostridium tetani*, which usually enters the body through an open wound, or a newborn baby's umbilical cord. It is the only vaccine-preventable disease that is not communicable. Neonatal tetanus is tetanus occurring in a newborn between the 3rd and 28th day following birth. It occurs as a result of unhygienic birth practices.

## 2. What are the symptoms of neonatal tetanus?

- Irritability
- Muscle cramps
- Sore muscles
- Weakness or difficulty swallowing
- Stiffening jaw muscles (lockjaw)

## 3. Why is neonatal tetanus a health problem in South Africa and the world?

Neonatal tetanus (NNT) is a serious disease that affects infants in the first month of life. Worldwide more than 450 000 infants (14% of all neonatal deaths) die from NNT annually, and nearly 40 000 mothers die from tetanus infection acquired during delivery. In Africa alone, there are between 150 000 and 200 000 deaths due to NNT. However, according to the WHO, South Africa, Namibia, Tanzania and Zimbabwe have potentially eliminated maternal and neonatal tetanus. Even with this status accorded by the WHO, in South Africa, under-reporting of NNT is a huge problem, as deaths that occur following home delivery are often not reported on the vital events registry.

## 4. How is NNT transmitted?

Tetanus is not transmitted from person to person. A person becomes infected with tetanus when dirt enters a wound or cut. This may happen if, for example, a wound is made with a dirty tool. A newborn may become infected if the knife, razor or other instrument used to cut the umbilical cord is dirty. Infection may also occur if cow dung or ash is used to dress the cord, or soil enters the navel.

## 5. Who is at risk?

- Home-delivered babies
- Infants born under unhygienic birth conditions
- Young children and teenagers during circumcision with dirty instruments
- Pregnant women during delivery.

## 6. What is the treatment following infection with tetanus?

Anti-tetanus serum and sedation are the basis of supportive therapy once symptoms appear. Without supportive therapy, more than 95% of infants will die of NNT. People who recover from tetanus do not have lifelong immunity.

## 7. How is tetanus prevented?

Neonatal tetanus can be prevented by immunising women of childbearing age with tetanus toxoid, either during pregnancy or outside of pregnancy. This protects the mother and enables tetanus antibodies to be transferred to her baby. Clean practices during delivery and clean wound care are also very important in preventing tetanus.

## 8. Who should get the tetanus vaccine?

- Pregnant women
- All children from the age of six weeks to twelve years.

## 9. How and when is the tetanus vaccine given?

- Tetanus vaccine as part of pentaxim is given by injection to the left thigh for the first three doses and the left arm for the last dose, administered at 6, 10 and 14 weeks, and 18 months of age.
- As part of Td vaccine it is given by injection to the left arm at 6 years and 12 years of age.
- In South Africa, tetanus toxoid is administered to pregnant women from the 24<sup>th</sup> week of pregnancy onwards, with 3 doses been given at 4 week intervals. A booster dose is given during each subsequent pregnancy at the 24<sup>th</sup> week or thereafter. If there is no record of immunisation in previous antenatal care, the case is treated as first pregnancy and three doses given.

## 10. Should HIV positive individuals be vaccinated against tetanus?

Because tetanus-toxoid containing vaccines are inactivated, they are safe for use in individuals with HIV infection.

## 11. What are the side effects of tetanus vaccine?

Reactions to pentaxim and Td vaccines are mild. Side-effects include fever and soreness at the site of injection.

### Where to find us:

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