

VACCINE-PREVENTABLE DISEASES**Neonatal tetanus**

There have been seven tetanus cases notified via the national Notifiable Medical Conditions Surveillance System (NMCSS) from 1 January 2020 to 21 April 2020. Two of these were suspected neonatal tetanus, both from Mpumalanga Province.

The first suspected neonatal tetanus case was born in Bushbuckridge Clinic, Ehlanzeni District. The tetanus vaccination status of the mother was unknown. An unknown substance was placed on the newborn's umbilical cord. This child is alive and doing well. The second case was born in Middelburg Hospital, Nkangala District. The mother was not given tetanus toxoid during pregnancy. A coin and an unknown substance from a traditional healer were placed on the umbilical cord. The child died following admission.

The remaining five suspected tetanus cases ranged in age from five to 66 years, comprising one confirmed case and four cases pending classification. There is no laboratory test for tetanus. Cases are classified after reviewing medical records.

Tetanus is a category 2 notifiable medical condition caused by the bacterium *Clostridium tetani*. It typically presents as painful muscle spasms. Infection can result in

serious complications, including death, in the absence of adequate management. Infection occurs when wounds or animal bites are infected with tetanus spores. Between 2014 and 2019, there were seven neonatal tetanus cases in South Africa (two in 2014, two in 2015, one in 2017, and two in 2019) (historic data courtesy of WHO).

Tetanus can be prevented by the administration of tetanus toxoid, which induces specific antitoxins. To prevent maternal and neonatal tetanus, tetanus toxoid needs to be administered to the mother before or during pregnancy, and delivery has to take place under hygienic conditions. In addition, the care of the umbilical cord needs to be appropriate. Neonatal tetanus, which is mostly fatal, was previously common in rural areas where home deliveries were frequent.

South Africa is considered to have eliminated maternal and neonatal tetanus in 2002. A country is certified as having eliminated neonatal tetanus if there is <1 case per 1 000 live births in every district per year. The rate of neonatal tetanus in South Africa remains below this threshold.

Article source: Centre for Vaccines and Immunology, NICD-NHLS; melindas@nicd.ac.za