

Tetanus

Agent: Toxin secreted by the bacteria *Clostridium tetani*

Mode of Transmission: The bacteria enter the body through a break in the skin, usually when a wound, either major or minor, is infected by contaminated soil, dust, or animal or human feces. Person-to-person transmission does not occur.

Signs/Symptoms: A descending pattern of painful muscle contractions, particularly of the neck muscles, difficulty swallowing and abdominal rigidity.

Prevention: Tetanus vaccine is available as part of the diphtheria/tetanus/pertussis (DTaP) vaccine for children and the combination tetanus/diphtheria/pertussis (Tdap) vaccine for adolescents and adults. One dose of Tdap should be given at 11 to 12 years of age with booster doses of tetanus/diphtheria (Td) every ten years thereafter.

Other Important Information: First produced in 1924, tetanus toxoid was primarily used for armed services in World War II. Tetanus was made nationally reportable in 1947 and since then, cases of tetanus have declined more than 95% and deaths from tetanus have declined more than 99%. The decline in cases and deaths from tetanus is primarily attributed to continued use of tetanus antitoxin for wound management, and the universal vaccination recommendations for children with tetanus boosters for adults every ten years. The case-fatality rate of tetanus ranges from 10% to over 80% and depends on patient age, length of incubation period, and quality of and access to care, especially access to intensive care unit resources and tetanus immune globulin. Sporadic cases of tetanus continue to occur in adults, especially in people who were not vaccinated in childhood or did not receive ten-year booster shots. Proper wound management is necessary for all wounds, even wounds that appear to be minor, as a higher proportion of patients with tetanus in recent years had minor wounds. .

In 2014, no cases of tetanus were reported in Virginia. In recent years, one case of tetanus was reported in each of 2004, 2005 and 2012, and two cases were reported in 2013. The five-year average for tetanus is less than one case per year.