



## Hawaii State Department of Health

### Disease Investigation Branch

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## Tetanus

(Lockjaw)

### What is tetanus?

Tetanus is a serious disease of the nervous system caused by a toxin (poison) made by *Clostridium tetani* bacteria. Although tetanus can be prevented with routine vaccinations, cases continue to occur.

### How do you get tetanus?

You get tetanus by having a cut or wound that becomes infected with *C. tetani*. *C. tetani* is found in the soil and in the intestines and stools of household and farm animals. Because the tetanus bacteria produce spores that are resistant to drying, they can survive in soil, street dust, dried fecal material, and in street drugs. Tetanus is not spread person-to-person.

### What are the symptoms of tetanus?

Early symptoms of tetanus are a locked jaw, stiffness of the neck and abdomen, and difficulty swallowing. Other symptoms include fever, sweating, elevated blood pressure and rapid heart rate. Muscle spasms may occur frequently and last for several minutes. Complications include spasms of the vocal cords and/or breathing muscles, fractures of the spine or long bones as a result of muscle spasms, and convulsions. Severe infection with tetanus can be life threatening; death occurs in about 11% of cases, especially in infants and the elderly.

### When do symptoms start?

The symptoms usually start 8-10 days after the wound is contaminated by the bacteria, but they can appear sometimes months later.

### What is the treatment for tetanus?

There is no treatment for tetanus once a person develops symptoms.

### Can tetanus be prevented?

Yes. The best way to prevent tetanus is to be fully immunized with the tetanus vaccine. The tetanus vaccine is usually given as a combination shot called DTaP (diphtheria, tetanus and acellular pertussis) vaccine. All children should receive the DTaP vaccine at 2, 4, 6, and 15 to 18 months of age. An additional dose is recommended at 4 to 6 years of age. DT does not contain pertussis and is used as a substitute for children who cannot tolerate the pertussis vaccine. Tetanus/diphtheria (Td) vaccine is administered to people 7 years and older and should be given every 10 years. The newly licensed Tdap vaccine is similar to Td, but also contains protection against pertussis. It can be used in place of one Td booster in adolescents and adults up to age 64.

All wounds should be promptly and carefully cleaned. If the patient has not completed the full series of tetanus vaccinations, or if the wound is very dirty or large, immediate medical treatment is recommended. A doctor can prescribe medications to be given on the day of the injury that can help prevent tetanus.

Seek prompt medical treatment for any puncture injury, especially if it is contaminated with dirt or fecal matter.

For more information, see the CDC's website at [http://www.cdc.gov/ncidod/diseases/submenus/sub\\_tetanus.htm](http://www.cdc.gov/ncidod/diseases/submenus/sub_tetanus.htm)