Disaster Relief *Preventing Tetanus*



The best offense is a good defense—especially against infection. The first thing to do in guarding against infection is to cleanse the wound thoroughly with soap and water. Your skin is the first line of defense against infection.

A serious infection can cause serious medical issues. One of these is known as tetanus. Tetanus is caused by a bacterium found in the soil and in the feces of common farm animals. It can infect many kinds of wounds through a break in the skin.

Tetanus gets into the body mainly through puncture wounds, lacerations, abrasions, burns, or breaks in the skin. The bacteria multiplies in an environment that is low in oxygen, so puncture wounds and other deep wounds are a perfect opportunity for bacteria to grow. The bacteria produces a powerful toxin, one of the most lethal toxins known to man, and this toxin affects the central nervous system and specific muscles.

Symptoms: fever, difficulty swallowing, irritability, headache, and muscle spasms near the infected area. When the infection progresses throughout the body, it can affect other muscles, such as the jaw, which is where the term "lockjaw" comes from. Once tetanus gets into the nervous system, the condition is irreversible.

Prevention: Immunization and tetanus boosters are the best ways to prevent this infection. Because the immunization does not last a lifetime, the booster shot is necessary to protect against this infection. Booster shots are recommended every 5 to 10 years, or whenever a wound has been contaminated. This includes after a car accident, if there is any type of puncture wound. The most common object that causes contamination is a rusty nail. Again, the first line of defense is to thoroughly clean an open wound. To clean a minor wound, clean with soap and water, and apply an antibiotic ointment along with a clean or sterile dressing. Major wounds need to be cleaned and treated at a medical facility. If signs of infection develop, seek medical attention immediately.

Any infected wounds of the face, neck, or head should receive immediate attention by medical personnel; tetanus toxin can travel rapidly to the brain.

A healthcare provider can determine whether you need a tetanus shot. Contact your healthcare provider if you do not recall the date of your last tetanus immunization or booster shot.

Signs of Infection

- The area around the wound becomes swollen and red.
- The area is warm to the touch and may throb in pain.
- Some wounds have a pus discharge or slight drainage (yellowish or whitish).
- A more serious infection may cause the person to feel ill and may cause a fever.
- Red streaks may develop that progress from the wound in the direction of the heart.

If a fever or red streaks develop, this is a sign the infection is becoming much worse. If this should occur, contact a healthcare provider immediately.

Information Sheet 1715 (POD-06-18)

From the American Red Cross (2005) FIRSTAID, Responding to Emergencies. Distributed in Mississippi by David Buys, PhD, Assistant Research/Extension Professor, Food Science, Nutrition, and Health Promotion.



Copyright 2018 by Mississippi State University. All rights reserved. This publication may be copied and distributed without alteration for nonprofit educational purposes provided that credit is given to the Mississippi State University Extension Service.

Produced by Agricultural Communications.

Mississippi State University is an equal opportunity institution. Discrimination in university employment, programs, or activities based on race, color, ethnicity, sex, pregnancy, religion, national origin, disability, age, sexual orientation, genetic information, status as a U.S. veteran, or any other status protected by applicable law is prohibited. Questions about equal opportunity programs or compliance should be directed to the Office of Compliance and Integrity, 56 Morgan Avenue, P.O. 6044, Mississippi State, MS 39762, (662) 325-5839.

Extension Service of Mississippi State University, cooperating with U.S. Department of Agriculture. Published in furtherance of Acts of Congress, May 8 and June 30, 1914. GARY B. JACKSON, Director