



**Public Health**  
Prevent. Promote. Protect.

**Bismarck-Burleigh Public Health**

# Tetanus Safety

Flooding is the most common disaster in the U.S. and can cause a variety of problems to urban and rural communities. However, by utilizing these suggestions, you can learn how to stay safe before, during and after a flood.

## TETANUS FACTS

Tetanus is a disease that affects the nervous system and is caused by the bacterium *Clostridium tetani*. *Clostridium tetani* releases a toxin that affects the nerves and causes painful muscle spasms.

## WHO IS AT RISK?

Anyone who is inadequately vaccinated is at risk for tetanus. *Clostridium tetani* enters the body through a wound contaminated by soil, feces, manure.

## TETANUS SYMPTOMS?

- Stiffening of the jaw, sometimes referred to as lockjaw, or neck.
- Painful, involuntary contraction of other muscles.
- Difficulty swallowing.
- Fever.
- Sweating.
- Elevated blood pressure.
- Rapid heart rate.

## HOW IS SOMEONE WITH TETANUS DIAGNOSED?

There are no reliable, consistent tests for diagnosing tetanus. Your healthcare provider will evaluate symptoms and look for tears in the skin.

## WHAT IS TETANUS TREATMENT?

A dose of tetanus immune globu-



lin (TIG) is recommended. This is used to remove the toxin released by *Clostridium tetani*, but only the toxin that isn't already affecting nerves. Special wound care may be needed and medications may be used to reduce muscle spasm severity.

## HOW CAN TETANUS BE PREVENTED?

Vaccines, including the childhood vaccine DTaP, protect against individuals against tetanus. Traditionally, a child will receive 5 doses of DTaP, starting at 2 months and concluding prior to starting elementary school. North Dakota state law requires all children attending early childhood facilities or schools to be vaccinated against tetanus. A vac-

cine containing tetanus, diphtheria, and pertussis (TDap) is available for older children, adolescents and adults. Pregnant women should receive a dose of TDap during each pregnancy (27 – 36 weeks). A vaccine against tetanus should be given to adults every 10 years.

## SHOULD AN INDIVIDUAL BE EXCLUDED FROM WORK/ CHILDCARE/SCHOOL/ETC. IF THEY HAVE TETANUS?

No. Tetanus is not spread from person to person, and so this will not determine a person's ability to participate in activities.

**SOURCE:** ND Disease Control, CDC, ND Department of Health

# Emergency Wound Care After a Natural Disaster



The risk for injury during and after a hurricane and other natural disasters is high. Flood waters and standing waters pose various risks, including infectious diseases, chemical hazards and injuries. Prompt first aid can help heal small wounds and prevent infection.



## Take the following steps to protect yourself and your family:



Avoid contact with flood waters if you have an open wound.



Keep open wounds as clean as possible by washing thoroughly with soap and clean water.



Cover clean, open wounds with a waterproof bandage to reduce chance of infection.



Seek immediate medical care if a wound develops redness, swelling, or oozing or other signs of working infection such as fever, increasing pain, shortness of breath, fast heart rate, or confusion or disorientation, high heart rate.

## Take care of wounds:

- Wash your hands thoroughly with soap and clean water, if possible.
- Avoid touching the wound with your fingers while treating it (if possible, use disposable gloves).
- Remove obstructive jewelry and clothing from the injured body part.
- Apply direct pressure to any bleeding wound to control bleeding.
- Clean the wound after bleeding has stopped.
  - » Examine wounds for dirt and foreign objects.
  - » Gently flood the wound with bottled water or clean running water (if available, saline solution is preferred).
  - » Gently clean around the wound with soap and clean water.
  - » Pat dry and apply an adhesive bandage or dry clean cloth.
- Leave unclean wounds, bites and punctures open. Wounds that are not cleaned correctly can trap bacteria and result in infection.
- Provide pain relievers when possible.
- Review the wound every 24 hours.



## Seek medical attention as soon as possible if:

- There is a foreign object (soil, wood, metal, or other objects) embedded in the wound;
- A wound is a result of an animal bite;
- A wound is a result of a puncture by a dirty object;
- The wound is infected (pain and soreness, swelling, redness, draining, or you develop a fever);
- You have signs of sepsis such as confusion or disorientation, shortness of breath, high heart rate, fever or shivering, extreme pain or discomfort or clammy or sweaty skin.



If you have wounds, you should be evaluated for a tetanus immunization. If you receive a puncture wound or a wound contaminated with feces, soil, or saliva, have a health care professional determine whether a tetanus booster is necessary based on individual records.



For more information visit:  
[www.cdc.gov/disasters/woundcare.html](http://www.cdc.gov/disasters/woundcare.html)