

# TETANUS

## Case definition

### CONFIRMED CASE

Clinical evidence of illness without other apparent medical cause, with or without isolation of *Clostridium tetani* and with or without history of injury.

## Causative agent

*Clostridium tetani* (C. tetani), the tetanus bacillus, is a gram-positive spore-forming bacillus that produces a potent exotoxin.

## Source

Intestines of horses and other animals including humans, where the bacillus is in its normal habitat, and in soil contaminated with human and animal feces. Tetanus spores are ubiquitous in the environment.

## Incubation

3-21 days, although may range from 1 day to several months, depending on the character, extent and location of the wound; average 10 days. Most cases occur within 14 days.

## Transmission

*C. tetani* spores introduced into the bloodstream through a wound, laceration or puncture. Transmission can also occur through injection of contaminated street drugs.

## Communicability

Not transmitted directly from person-to-person.

## Symptoms

Characterized by acute onset of hypertonia and/or painful muscular contractions (usually of the muscles of the jaw and neck), and generalized muscle spasms without other apparent medical cause.

## Diagnostic testing

- Swabs from wounds and other lesion for culture
- Smears for microscopy

## Treatment

Tetanus Immune Globulin (TIG) is recommended. If TIG is not available, tetanus antitoxin (TAT) should be given. Metronidazole is the antibiotic of choice. Supportive care and effective wound management are recommended.

## PUBLIC HEALTH MANAGEMENT & RESPONSE

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### Case management

Initiate case follow-up upon receipt of the report.

### Prophylaxis

- For individuals who have a severe or contaminated wound and who have not had a booster in 5 years, a booster dose of Td should be given immediately.
- For those who have not completed a primary series of tetanus toxoid immunization, an immediate dose of tetanus toxoid should be given and a dose of TIG if the wound is severe or contaminated (different syringes and sites should be used). Completion of the primary series of immunization is recommended.
- Wound debridement is essential in the management of tetanus.

### Education

- Immunization of all infants and adults as per the N.S. immunization schedule.
- Any individual who sustains a wound may be at risk if their tetanus immunization is not up to date.

### Surveillance forms

[novascotia.ca/dhw/populationhealth/surveillanceguidelines/Vaccine\\_Preventable\\_Case\\_Report\\_Form.pdf](http://novascotia.ca/dhw/populationhealth/surveillanceguidelines/Vaccine_Preventable_Case_Report_Form.pdf)

### General Information Sheet

#### REFERENCES

[cdha.nshealth.ca/pathology-laboratory-medicine](http://cdha.nshealth.ca/pathology-laboratory-medicine)  
[Provincial Microbiology Users Manual](#)