TETANUS

What is tetanus?

Tetanus (lockjaw) is a disease caused by the bacteria Clostridium tetani. Spores from this bacterium are widespread in the environment. The bacteria produce a toxin or poison that attacks a person's nervous system. Although the disease is fairly uncommon in Canada, because of immunization, it can be fatal.

What are the symptoms?

Early symptoms include: painful muscle spasms that begin in the jaw (lock jaw), stiff neck, shoulder and back muscles, difficulty swallowing, violent generalized muscle spasms, convulsions and breathing difficulties. A person may have a fever and sometimes develop abnormal heart rhythms. Complications include pneumonia, broken bones (from the muscle spasms), respiratory failure, cardiac arrest and death.

How is tetanus spread?

Tetanus bacteria typically enter the body of a person through a wound or cut. Infection may occur in people after minor injury (sometimes unnoticed punctures to the skin that are contaminated with soil, dust or manure) or after major injuries such as open fractures, dirty or deep penetrating wounds, and burns. Tetanus is not passed on from one person to another.

Neonatal tetanus (affecting new born babies) can occur in babies born to inadequately immunized mothers, especially after unsterile treatment of the umbilical cord stump.

How is tetanus diagnosed?

Tetanus can be diagnosed by signs and symptoms, and an examination. Laboratory diagnosis is usually not useful.

Who is at risk of tetanus infections?

Anyone at any age who is not immune to tetanus can contract the disease.

How can tetanus be prevented?

The best way to protect against tetanus is to be immunized. The New Brunswick Routine Immunization Schedule provides tetanus vaccine as part of a diphtheria, tetanus, pertussis, polio and haemophilus influenzae type b vaccine (DTaP-IPV-Hib) at two, four, six and 18 months of age and (DTaP-IPV) at four years of age. Tetanus vaccine as part of a tetanus, diphtheria and pertussis vaccine (Tdap) is provided to children at 14 years of age.

All adults should get a tetanus booster as part of a tetanus and diphtheria vaccine (Td) every ten years.

Adults who have sustained tetanus prone wounds (e.g., open fractures, deep penetrating wounds, contaminated wounds or burns) should disinfect the wound, seek medical attention and receive a boosting dose of tetanus vaccine if more than five years have elapsed since their last dose. If there is doubt about prior vaccination history, tetanus toxoid should be given.

How is tetanus treated?

The treatment could include antitoxin, antibiotics, surgical treatment of the infected area, and prolonged treatment in a hospital intensive care unit.

What is the public health response?

Hospital staff must confidentially notify cases of tetanus to Public Health. Public health staff will talk to the treating health-care provider and patient or (care-givers) to identify risk factors that the patient may have, and to enquire about immunization history. Information on the number of people who get tetanus and their risk factors helps find better ways to prevent the illness.

Further Information

For additional information, contact your health-care provider, local Public Health office or Tele-Care 811.

Useful websites:

- Canadian Coalition for Immunization Awareness and Promotion www.immunize.cpha.ca
- Public Health Agency of Canada www.phac-aspc.gc.ca
- Canadian Pediatric Society www.cps.ca