Tetanus
What you need to know

Tetanus is a serious infection caused by exposure to the bacterium Clostridium tetani. The bacterium most commonly enters the body through a wound or cut, especially a deep wound contaminated with soil, dust or manure.

Without prompt treatment, tetanus can lead to severe complications and even death, primarily due to respiratory failure when the muscles that control breathing stop functioning. However, with timely vaccination and wound care, tetanus is preventable.

Thanks to routine childhood vaccination against tetanus in all countries of the WHO European Region, tetanus and neo-natal tetanus has been greatly reduced in the Region over the past 50 years.

What are symptoms of tetanus?
Tetanus affects the nervous system, leading to muscle stiffness and spasms. One of the most well-known symptoms is lockjaw, where the jaw muscles tighten and it becomes impossible for an infected person to open their mouth or swallow. Other symptoms can include muscle stiffness in the neck, difficulty swallowing, stiffness of the abdominal muscles, and painful body spasms lasting for several minutes.

How can tetanus be prevented?
Unlike diseases that are transmitted from person to person, tetanus is acquired through the environment, so herd immunity cannot offer protection for those who are unvaccinated. Individual vaccination is therefore essential for protection against this disease.

Once a person has received all doses of the tetanus vaccine, protection is almost 100% effective. However, protection wanes over time, and booster shots are recommended every 10 years to maintain immunity, especially for individuals who frequently work with soil or in outdoor settings.
There are several types of tetanus vaccines:

1. **DTaP (Diphtheria, Tetanus, and acellular Pertussis):**
   This vaccine is given to children and protects against diphtheria, tetanus, and pertussis (whooping cough).

2. **Td (Tetanus and Diphtheria):**
   This vaccine is a booster shot given to older children and adults to maintain immunity against tetanus and diphtheria. This booster vaccine should be given every 10 years in order to maintain immunity against tetanus.

3. **Tdap (Tetanus, Diphtheria, and Pertussis):**
   This is a booster vaccine similar to Td but also includes protection against pertussis. It’s recommended for adolescents and adults, including pregnant women, to ensure they are protected and can pass on some temporary immunity to newborns.

   It is important to keep in mind that although the tetanus vaccine is remarkably effective at preventing the disease, no vaccine offers 100% protection. Therefore, in addition to vaccination, proper wound care and hygiene are important to prevent tetanus.

**Treatment**

Tetanus is a medical emergency that requires immediate treatment, which typically includes wound care, medications to kill the bacteria, and antitoxins to neutralize the toxin. Anyone who has a wound that could potentially be contaminated with tetanus bacteria should seek medical attention immediately, especially if they’re unsure about their vaccination status or know they haven’t been vaccinated. Even with treatment, tetanus can be fatal which is why vaccination against tetanus is extremely important.