

# What is Tetanus ?

Tetanus is an infectious disease in which tetanus bacteria invade and multiply through wounds, causing severe damage and symptoms. These bacteria are widely present in the soil and anywhere and anytime in daily life.

## Threats of tetanus

- Even a small, invisible wound can cause tetanus.
- It is difficult to correctly determine the high or low risk of developing tetanus by just looking at the wound.
- Even wounds made under clean environments can develop tetanus.

**30~40% !!**  
in the world

- **The fatality rate is high** even in developed countries with advanced medical care since the bacteria rapidly affect the nervous, respiratory, and cardiovascular systems.

### 【Phase1】



- Feeling of tightness at the wound.
- Tightening of the jaw muscle (lockjaw).

### 【Phase2】



- Developing lockjaw. Difficulty in swallowing.
- The muscles of the whole body become tense and cause walking difficulties.

### 【Phase4】



- In the course of recovery, severe symptoms such as muscle spasms disappear.
- Muscle weakness and stiffness remain, and long-term rehabilitation is needed.

### 【Phase3】



- Repeated muscle spasms appear even by small noises or slight light stimulation. (Painful, rolling over backward posture).
- Breathing difficulty (ventilator control is needed in severe cases).
- Urinating and bowel movements Difficulty (cannot be self controlled).

## About Vaccinations

If routine childhood vaccinations are completed, a booster shot should be given every 10 years after the last vaccination. If the number of routine childhood vaccinations is less than what is recommended, a booster shot every 10 years must be considered after the additional vaccination is done under the doctor's instructions.

## Who should be vaccinated

- Those who do not know when he/she was last vaccinated.
- Those who have never been vaccinated.
- People who were last vaccinated more than 10 years ago.
- People who are at a high risk of falling (injury by fall).
- People at a high risk of injury in contaminated soil ( frequent exposure to nature or animals, etc.).
- Travelers abroad (many countries do not have sufficient sanitation, clean and well maintained roads , and medical services).



## Points to note

~The best prevention is vaccination~.



- Avoid getting injured. Use gloves when touching soil, animals, nails, iron rust, etc.
- If injured, wash the wound immediately and thoroughly with plenty of clean water (tap water is fine in Japan).
- When a person without immunity suffers from injury and is worried about the risk of tetanus, consult a medical facility immediately and take appropriate measures of the wound itself.
- If there is a possibility of developing the disease, immediately consult an advanced medical facility with a pulmonologist or infectious disease specialist.
- If convulsions appear, call an ambulance without hesitation.