



Tetanus Quicksheet



Background

- Tetanus infection is caused by a toxin produced by the gram-positive spore-forming bacterium *Clostridium tetani*.
- Tetanus bacteria are not transmitted from person to person.
- Tetanus infection primarily occurs when the bacteria enter the body through cuts or wounds.
- Tetanus bacteria are present worldwide and are commonly found in soil, dust, and manure.
- Although now rare in the United States, tetanus cases continue to occur among unimmunized and incompletely immunized persons.

Clinical symptoms

Symptoms of tetanus include sudden, involuntary muscle spasms and “locking” of the jaw, painful muscle stiffness all over the body, trouble swallowing, jerking or staring (seizures), headache, and fever.

Incubation period

The incubation period for tetanus is typically 10 days (range: 3-21 days).

Laboratory testing

There are no laboratory tests that can confirm tetanus. Healthcare providers diagnose tetanus by looking for clinical signs and symptoms.

Case definition

Probable:

- In the absence of a more likely diagnosis, an acute illness with muscle spasms or hypertonia AND diagnosis of tetanus by a healthcare provider; OR
- Death, with tetanus listed on the death certificate as the cause of death or a significant condition contributing to death.

Immunization

DTaP (diphtheria, tetanus, and acellular pertussis), Td (tetanus, diphtheria), and Tdap (tetanus, diphtheria, and acellular pertussis) vaccines all protect against tetanus. Children need four doses of DTaP by 15 months and a Tdap booster at age 11 or 12. Adults need a booster every 10 years after the primary series has been completed. The Tdap vaccine is recommended for one of the booster doses in adults aged 18-64 years.

Postexposure prophylaxis

Even minor wounds or abrasions can result in tetanus. Healthcare providers should assess vaccination status in patients with wounds, particularly those considered at increased risk for tetanus: older adults, injection-drug users, patients with diabetes, and patients with chronic wounds.

Tetanus prophylaxis is dependent on the patient’s history of vaccination with tetanus toxoid-containing vaccinations (TT) and the nature of the wound (Table):

Table. Guide to tetanus prophylaxis in routine wound management among adults aged 19-64 years

Vaccination history	Clean, minor wounds		All other wounds	
	Td*	TIG	Td*	TIG
Unknown or <3 doses	Yes	No	Yes	Yes
≥3 doses	No†	No	No§	No

Abbreviations: Td = tetanus and diphtheria vaccine; TIG = tetanus immune globulin.

* Tdap (tetanus, diphtheria, acellular pertussis vaccine) may be substituted for Td if the person has not previously received Tdap and is aged ≥10 years.

† Yes, if >10 years since last dose.

§ Yes, if >5 years since last dose.

When TIG is recommended for wound prophylaxis, the standard dose is 250 U IM, regardless of age or weight.

Source: CDC. [MMWR Recomm Rep 2006;55\(No. RR-17\)](#). CDC. [MMWR Morb Mortal Wkly Rep 2012;61:468-70](#).

Treatment of tetanus infection

The AAP Red Book recommends that patients with tetanus be immediately treated with 3,000–6,000 U of TIG, given in a single intramuscular dose with part of the dose infiltrated around the wound if it can be identified. However, the optimal dose of TIG has not been determined and CDC and WHO recommend 500 U for treatment. Whichever treatment dose is used, it is important to note that when TIG is used for treatment, the dose is larger than that used for prophylaxis.

Additional information

[CDPH tetanus web page:](#)

<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/tetanus.aspx#>

[CDC tetanus web page:](#)

<https://www.cdc.gov/tetanus/index.html>