**Tetanus**

*Research provided by the Kansas Association of Local Health Departments*

***What is it?***

Tetanus, often called “lockjaw” is an infection that is caused by a bacteria called Clostridium Tetani. This bacterium causes painful muscle contractions, most often in the neck and jaw – causing swelling and difficultly eating. Tetanus does not spread by person-to-person contact, but rather infection through open wounds or punctures caused by contaminated objects. The bacteria are found in soil, dust, and manure. While rare, Tetanus can cause serious complications such as blood clots and asphyxiation.

***Neonatal Tetanus***

Neonatal Tetanus is a form of Tetanus that transfers from a mother to a baby in-utero. The infection can come from various places but is most common through unhealed umbilical cords and unclean instruments. The fatality rate for Tetanus in infants is an astronomical 70% to 100% by two weeks old. It is recommended that all pregnant women receive a Tdap from 27 to 36 weeks to increase immunity for baby.

***History and Early Treatment***

Tetanus commonly occurs in hot, damp climates that are rich in soil production (I’m looking at you, Florida). The disease was recorded as far back as the 5th century BC. By 1884, Tetanus was cataloged and reported to the medical community by two Italian scientists who recreated the disease in animals. By the early 1900s, serums to protect from Tetanus were created using horses. Anti-serums were mostly used during World War I because of trench warfare in soil-heavy Europe. The first vaccine was available beginning in 1924 but was not commercially used until 1938.

***Vaccination***

While the anti-serum was the primary protection measure until the mid-1900s, it only protected a person for about two weeks. The first vaccine was developed in 1924 and was used commercially by 1938. It is responsible for a decrease in Tetanus infections during World War II. The Tetanus vaccine is currently recommended for children with five initial doses throughout childhood and a sixth during adolescence. A person is considered immune after the first three doses, but a vaccine is encouraged every 10 years to induce higher immunity. Later, a combination vaccine including Tetanus, Diphtheria, and Pertussis (Tdap) were introduced.

***Personal Connections from your Resident Millennial***

The TV show *Arthur* was popular when I was growing up and they had an episode about Tetanus. After spending time at a local dump, the main character Arthur, cuts his knee on a contaminated can of beans. At the end of the episode, he must go to the doctor and get a Tdap vaccine. I remember it being a gross episode, but very educational, and honestly, I never forgot it.

If interested, you can watch *Arthur’s Knee* on YouTube [here](https://www.youtube.com/watch?v=GjboapMgrCM) and [here](https://www.youtube.com/watch?v=A0q3sCmnU8Q).

***What We Can Learn***

While Tetanus seems like a small disease compared to some of the other diseases we’ve covered, it can lead to serious complications and severe infections. By having vaccinations like Tetanus, we are building trust in the medical system to prevent diseases that help us live long and healthy lives.

Sources:

<https://en.wikipedia.org/wiki/Neonatal_tetanus>

<https://www.physio-pedia.com/Tetanus>

<https://www.cdc.gov/tetanus/about/symptoms-complications.html>

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

<https://www.cdc.gov/tetanus/index.html#:~:text=Tetanus%20is%20an%20infection%20caused,open%20the%20mouth%20or%20swallow>.