

IACUC OCCUPATIONAL HEALTH INFO SHEET

Tetanus

Tetanus is an acute, often fatal, disease that is caused by exotoxins produced by the bacterium *Clostridium tetani*. Tetanus disease is characterized by muscle rigidity and spasm. It usually initially affects the jaw (lockjaw), and progresses to stiffness of the neck, difficulty swallowing, rigidity of abdominal muscles, and generalized muscle rigidity. The symptomology is caused by interference of the tetanus toxins with release of neurotransmitters that block inhibitory impulses, leading to muscle contraction and spasm. Clinical symptoms may also include elevated temperature, sweating, elevated blood pressure, rapid heart rate, and spasms.

Clostridium tetani is a spore-forming, gram-positive bacterium. Its spores are found in soil and the intestines of horses, sheep, cattle, dogs, cats, rats, guinea pigs, and chickens. Tetanus usually enters the body via a wound. It is not contagious from person to person.

Vaccination with tetanus toxoid is recommended in 3-4 doses with subsequent boosters. Boosters are recommended every 10 years. The tetanus vaccine is virtually 100% effective; cases of tetanus in fully immunized persons whose last dose was within the last 10 years is extremely rare. Persons who sustain an unclean or severe wound should be given the tetanus booster if it has been more than 5 years since their last dose.

Kent State University requires that all persons working with animals have an up-to-date tetanus vaccination. Boosters will be provided as indicated upon injury. For further information regarding tetanus and the tetanus vaccine, please contact the DeWeese Health Center at Kent State University at 330-672-2326 or your health care provider.

For further information and reference:

Centers for Disease Control and Prevention. Tetanus. Retrieved on June 13, 2008 from:
<<http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/tetanus.pdf>>