



Glanders Fact Sheet (English)

What is glanders?

Glanders is an infectious disease caused by a bacterium called *Burkholderia mallei*. Glanders usually affects horses, donkeys and mules. Other animals such as goats, dogs and cats can be infected also. Rarely, humans become infected through contact with infected animals or persons who have glanders.

How common is glanders?

The U.S. has not seen any cases of glanders since the 1940s. However, it is considered as a potential biological agent for bioterrorism. Glanders is still commonly found among domestic animals in Africa, Asia, the Middle East and Central and South America.

How does glanders spread to humans?

Humans become infected with glanders through direct contact with animals that have glanders. The bacteria can enter the body through skin and through the mucous membranes of the eyes, nose and mouth. Glanders can pass from person to person through an infected person's body fluids such as sexual intercourse with an infected person.

What are the signs and symptoms of glanders in humans?

General signs and symptoms are fever, muscle aches, chest pain, muscle tightness and headache. Other symptoms depend on the way glanders was acquired:

- **Local infections:** If there is a cut or scratch in the skin, ulceration will develop within 1 to 5 days at the site where the bacteria has entered the body. Swollen lymph nodes are common. Infections in the mucous membranes in the eyes, nose and respiratory tract may increase amounts of mucous.
- **Lung infections:** Infection of the lungs can lead to pneumonia, pulmonary abscesses and the build up of fluid inside the chest cavity around the lung. Signs and symptoms include chest pain, cough and shortness of breath.
- **Bloodstream infections:** Infections are usually fatal within 7 to 10 days. Signs and symptoms are very high fever, fast heart rate and skin rash.
- **Chronic infections:** The chronic form of glanders has many abscesses within the muscles of the arms and legs or in the spleen or liver.



How is glanders treated?

Human cases of glanders are rare so there is little information about treatment. However, specific antibiotics may be used to treat glanders.

Is there a vaccine to protect humans from glanders?

No. There is no vaccine available for humans.

Can we prevent the spread of glanders?

Yes. In countries where glanders is found in animals, prevention of the disease can be stopped through identification and elimination of the infection in animal population. In the health care setting, transmission can be stopped by using common blood and body fluid precautions.

Where can I get more information?

Visit these websites for more information about Glanders.

- Centers for Disease Control (CDC): http://www.cdc.gov/ncidod/dbmd/diseaseinfo/glanders_g.htm
- CDC Travelers' Health: <http://www.cdc.gov/travel/diseases.htm>
- WHO Travelers' Health: <http://www.who.int/ith/en/>

Sources: Centers for Disease Control and Washington State Department of Health.