

Glanders

What is glanders?

Glanders is a disease caused by a kind of bacteria. It primarily affects horses, mules and donkeys, but is also seen in animals like goats, dogs and cats. Glanders is rare in humans – no human cases have been reported in the U.S.



In nature, glanders primarily affects horses, mules and donkeys

since 1945. However, people can become infected through direct contact with infected animals. There is also concern that glanders could be used as a weapon

– by releasing the bacteria into the air, or by exposing people to contaminated materials.

Depending partly on how people are exposed to it, glanders can affect people in a number of different ways. They include:

- localized skin infections, at the site of a cut or scratch
- pneumonia and other serious lung problems
- an infection of the blood, which is the most dangerous form of glanders
- a chronic form of the illness involving abscesses (places where fluid collects) in a number of different locations – including the arms and legs, the spleen and the liver

More general symptoms of glanders include fever, muscle aches, chest pain, muscle tightness, headache, watery eyes, sensitivity to light and diarrhea.

If the glanders bacteria are inhaled, symptoms usually develop in ten to 14 days. Inhaling the

bacteria is the most likely way that a person might become infected if glanders is used as a weapon.

Glanders is a very dangerous illness, and it has a high fatality rate if left untreated. Blood infections with the bacteria that cause glanders are especially dangerous.

How do you become infected?

When people get glanders from animals, the bacteria can enter the body through the skin, eyes and nose. In the past, cases have been reported in veterinarians, people who work with horses, and lab workers. However, no cases have been reported in the U.S. since the 1940s. The disease is still seen in domestic animals in Africa, Asia, the Middle East, Central America and South America.

Even when glanders is present in animals, spread of the disease from animals to humans has been rare. However, there is evidence that the risk of infection is much higher if the bacteria are inhaled – as they would be if the bacteria were used as a weapon, and released into the air.

Can you get it from other people?

Some cases have been reported where glanders was spread from one person to another. Those include cases where the illness was spread through sexual contact, or by caring for family members who had the illness.

Why is it considered a possible terror weapon?

Deliberately releasing glanders bacteria into the air would be a very effective way to infect people. The result would be an outbreak of very serious, life-threatening illness.



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It is believed that glanders was used as a weapon during World War I, to infect horses and mules used by the military. In World War II, glanders was used against horses, civilians and prisoners of war. It was also used against horses by the former Soviet Union, during its war with Afghanistan.

As long as the disease isn't present in animals, any human cases would automatically raise suspicion of a terrorist attack.

Can glanders be treated?

Because the disease is so rare in humans, there is limited information about different kinds of treatment and how well they work. However, a number of different antibiotics appear to work with glanders. Treatment may need to be continued for a long time.

Can glanders be prevented?

There is no vaccine for glanders. People can avoid getting it from animals by taking steps to eliminate it from the animal population. When and if human cases do occur, steps should be taken to prevent spreading it in health care settings.

What should I do if I think I may have been exposed to glanders?

It may not be possible to tell if you've been exposed. However, if you are concerned about it, you should see your doctor right away. Any suspicious activity, involving possible use of a disease agent as a weapon, should be reported to law enforcement officials.