

Point of Contact:

Community Health Nurses (Statewide), ask for
Name/Telephone Number for your County, (775) 684-4221

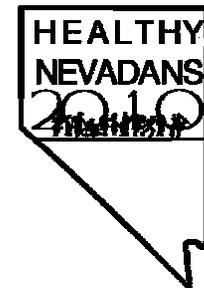
Washoe County District Health Department
Division of Environmental Health Services
(775) 328-2434



Plague

NEVADA STATE HEALTH DIVISION

Office of Public Information



Please visit our Website:

Health2k.state.nv.us
(775) 684-4200



Facts about Plague

Plague is an infectious disease that affects animals and humans. It is caused by the bacterium *Yersinia pestis*. This bacterium is found in rodents and their fleas and occurs in many areas of the world, including the United States. *Y. pestis* is easily destroyed by sunlight and drying. Even so, when released into air, the bacterium will survive for up to one hour, although this could vary depending on conditions.

Pneumonic plague is one of several forms of plague. Depending on circumstances, these forms may occur separately or in combination:

- ***Pneumonic*** plague occurs when *Y. pestis* infects the lungs. This type of plague can spread from person to person through the air. Transmission can take place if someone breathes in aerosolized bacteria, which could happen in a bioterrorist attack. Pneumonic plague is also spread by breathing in *Y. pestis* suspended in respiratory droplets from a person (or animal) with pneumonic plague. Becoming infected in this way usually requires direct and close contact with the ill person or animal. Pneumonic plague may also occur if a person with bubonic or septicemic plague is untreated and the bacteria spread to the lungs.
- ***Bubonic*** plague is the most common form of plague. This occurs when an infected flea bites a person or when materials contaminated with *Y.*

pestis enter through a break in a person's skin. Patients develop swollen, tender lymph glands (called buboes –[see photo below](#)) and fever, headache, chills, and weakness. Bubonic plague does not spread from person to person.



- Septicemic plague occurs when plague bacteria multiply in the blood. It can be a complication of pneumonic or bubonic plague or it can occur by itself. When it occurs alone, it is caused in the same ways as bubonic plague. Patients have fever, chills, prostration, abdominal pain, shock, and bleeding into skin and other organs. Septicemic plague does not spread from person to person.

Nevadans need to know that isolated cases of Bubonic Plague have been reported in Nevada. Cases are extremely rare (10 to 20 persons each year in the United States), and most have been associated with the inappropriate handling of infected animals such as squirrels, chipmunks, prairie dogs, and rodents, which harbor fleas infected with plague bacteria. The fleas on these animals become infected with bacteria (*Yersinia pestis*) that cause plague. People contract the plague from the bite of these fleas. (See below)



Could you get plague from another person? Bubonic-No. Pneumonic-Yes. When the other person has [plague pneumonia](#) (pneumonic plague), and coughs droplets containing the plague bacteria into air that is breathed by a non-infected person.

What is the incubation period for plague? A person usually comes ill with bubonic plague 2 to 6 days after being infected. When bubonic plague is left untreated, plague bacteria invade the bloodstream. When plague bacteria multiply in the bloodstream, they spread rapidly throughout the body and cause a severe and often fatal condition. Infection of the lungs with the plague bacterium causes the pneumonic form of plague, a severe respiratory illness. The infected person may experience high fever, chills, cough, and breathing difficulty, and expel bloody sputum. If plague patients are not given specific antibiotic therapy, the disease can progress rapidly to death.

How is plague treated? A patient diagnosed with suspected plague should be hospitalized and medically isolated. Extensive laboratory tests should be done and antibiotic treatment should begin as soon as possible. Streptomycin is the antibiotic of choice. Gentamicin, the tetracyclines, and chloramphenicol are all effective against pneumonic plague. To reduce the chance of death, antibiotics must be given within 24 hours of first symptoms. Persons who have been in close contact with a plague patient, particularly a patient with plague pneumonia, should be identified and evaluated. Antibiotic treatment for 7 days will protect people who have had direct, close contact with infected patients. Wearing a close-fitting surgical mask also protects against infection.

Is there a plague vaccine? A plague vaccine is not currently available in the United States.

Protective Measures: If in an area where unavoidable exposure is possible, use insect repellents on skin and clothing. Avoid all contact with sick or dead animals. Avoid visiting areas that have experienced recent plague epidemics.