

PLAGUE

What is plague?

Plague is an infectious disease caused by the bacteria *Yersinia pestis*. Historically, plague caused thousands of deaths throughout Europe during the 6th and 14th centuries. Today, plague in humans is rare in the United States and can be treated effectively with antibiotics if diagnosed early.

Is plague present in California?

Yes. Plague is most common in the foothills, plateaus, mountains, and coast. It is absent from the southeastern desert region and the San Joaquin Valley. Rodents and their fleas maintain plague bacteria in nature. Although urban rats were historically important in plague transmission, they no longer play an important role in California. The major threat of plague is from wild rodents, primarily chipmunks and squirrels, in rural recreational and wilderness areas. Rodents in the suburban foothills of some larger cities may also pose a threat.

How is plague transmitted?

People become infected with plague bacteria most commonly through the bite of an infected flea. Infection is also possible when the blood or other body fluids of an infected animal enter through cuts or breaks in the skin or mucous membranes (eyes, mouth, nose). Finally, persons can be infected by inhaling bacteria from the cough or sneeze of an infected person or animal, such as a cat. Cats are especially susceptible to plague and, if infected, represent a serious source of potential human exposure. Cats may also transport infected rodent fleas into a home or campsite.

What are the symptoms of plague?

The initial symptoms of plague usually develop two to six days after exposure and include nausea, vomiting, fever, chills, muscle aches, headache, and weakness. Three forms of plague are known: bubonic, septicemic, and pneumonic. Bubonic plague, the most common form, is characterized by swollen and tender lymph nodes (called "buboes") in the groin, neck, or armpit. In septicemic plague, plague bacteria infect the bloodstream, causing high fever, fatigue, weakness, and bleeding disorders. Pneumonic plague is an infection of the lungs that can follow bubonic or septicemic plague, or occur directly from inhalation of plague bacteria. Patients with pneumonic plague have difficulty breathing, develop a cough, and may spit up blood-tinged saliva.

How is plague diagnosed?

Diagnosis is based on finding the bacteria in blood, saliva or mucus from the throat, or material from enlarged lymph nodes. Blood tests are also available.

Is plague treatable?

Antibiotics are effective against plague, but treatment should begin as soon as possible. Most bubonic plague patients recover following antibiotic treatment. Septicemic and pneumonic plague are often fatal if antibiotic treatment is not started within the first 24

hours of illness. Sometimes, persons who have been in close contact with a patient who has plague pneumonia will be advised to take antibiotics to prevent illness.

How can I decrease my chances of getting plague?

Be aware of areas in which plague-infected rodents might exist. Follow the instructions on plague notices that are posted at camping and recreation areas. Avoid all contact with rodents and their fleas, especially sick or dead rodents. Store food and garbage in rodent-proof containers. Do not feed rodents in campgrounds and picnic areas. Do not place chairs, tents, or sleeping bags near rodent burrows. Wear long pants tucked into boots and use insect repellent to avoid flea exposure. Do not allow pets to approach sick or dead rodents, or to explore rodent burrows. Be cautious when handling ill cats that may have had contact with wild rodents; take ill cats to your veterinarian for examination. If you become ill within seven days after being in a plague area, contact a physician immediately.

Where can I find more information on plague?

The Centers for Disease Control and Prevention has information available at their website <http://www.cdc.gov/health/plague.htm>.