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## What is plague?

Plague is a disease caused by *Yersinia pestis* that affects rodents (e.g., squirrels, prairie dogs, or mice), other mammals (e.g., rabbits or hares), and humans. The bacteria are found naturally in many areas of the world, including the western United States. There are three forms of plague: bubonic (lymph node infection), pneumonic (lung infection) and septicemic (bloodstream infection).

## Who gets plague?

Plague is rare in the United States, with an average of seven human plague cases reported each year (range: 0-17 cases per year). Cases in the United States usually occur in rural and semi-rural areas parts of Arizona, California, Colorado, Utah, and New Mexico. Worldwide, about 1,000-2,000 cases of plague are reported each year.

## How is plague spread?

Plague is usually spread to people by the bite of an infected flea. People can also get plague by handling tissue or body fluids from an infected animal or breathing in cough droplets from a person or animal with pneumonic plague.

## What are the symptoms of plague?

Symptoms of plague can include fever, chills, nausea, headache, weakness and body aches. Specific types of plague can also lead to other symptoms. People with bubonic plague develop swollen, painful lymph nodes (called "buboes") usually in the groin, armpit, or neck. Those with septicemic plague develop abdominal pain, shock, and organ failure. People with pneumonic plague develop a cough with bloody or watery sputum.

## How soon after exposure do symptoms appear?

Symptoms of plague usually appear one to eight days after exposure, depending on the form of plague.

## How is plague diagnosed?

Laboratory tests are needed to confirm the diagnosis of plague. Blood or part of a swollen lymph node from a patient may be collected and submitted for testing.

## What is the treatment for plague?

Plague can be treated with antibiotics, but an infected person must be treated early in their illness to avoid serious complications and death. About 11% of all plague cases in the United States are

fatal. Plague can lead to death even if treated with effective antibiotics, though the death rate is lower for bubonic plague than for septicemic or pneumonic plague.

## **Do people who have been in contact with someone with plague need to be tested and treated?**

People in close contact with pneumonic plague patients or those who have contact with infected body fluids or tissues may be evaluated and given preventive antibiotics to reduce their risk of infection.

## **How can plague infection be prevented?**

Travelers to and residents of areas where plague is more common should avoid contact with rodents and fleas, avoid handling sick or dead stray animals, and stay away from rodent-infested places. Wear gloves if you are handling or skinning potentially infected animals. Insecticides or insect repellents effective against fleas should be used. Eliminate nesting places for rodents around the home, garages, or recreational areas. Sometimes antibiotics will be prescribed to close contacts of someone who has the disease to prevent plague. Currently, a plague vaccine is not available.

## **Could plague be used for bioterrorism?**

*Yersinia pestis* is considered a possible bioterrorism agent because it occurs in nature and could be isolated and grown in a laboratory. If the bacteria were used in an aerosol attack, people would develop the pneumonic form of plague that can cause severe disease and spread from one person to another.

## **How can I get more information about plague?**

- If you have concerns about plague, contact your healthcare provider.
- Call your local health department. You can find your local health department at [virginia.gov/health-department-locator/](https://virginia.gov/health-department-locator/).
- Visit the CDC page on plague at [gov/plague/about/index.html](https://gov/plague/about/index.html) for more information.

### **[Plague: Overview for Health Care Providers](#) (Updated May 2023)**

Two page summary of: Organism, Reporting, Infectious Dose, Occurrence, Natural Reservoir, Route of Infection, Communicability, Case-fatality Rate, Risk Factors, Incubation Period, Clinical Manifestations, Differential Diagnosis, Laboratory Tests/Sample Collection, Treatment, Vaccine

### **[Plague: Guidance for Health Care Providers](#) (Updated May 2023)**

Key Medical and Public Health Interventions After Identification of a Suspected Case

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