

# Plague

# FACTSHEET

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## What is Plague?

Plague is an acute bacterial disease that occurs when a human is bitten by an infected flea. There are three types of Plague:

- Bubonic Plague; an infection of the lymph system
- Septicemic Plague; an infection of the bloodstream and other organs
- Pneumonic Plague; an infection of the respiratory tract (lungs)

The most common form of plague is usually bubonic plague. Pneumonic plague can occur due to the purposeful spread of this bacteria through the air such as the result of a terrorist event.

## Who gets Plague?

Plague occurs most frequently in areas where housing and sanitation conditions are poor. It is associated with infected rats and rat fleas that live in the home. In the United States, most cases occur in the Southwestern states. The risk of acquiring the disease is greatest in Native Americans, hunters, veterinarians, and pet owners handling infected cats. Campers and hikers entering areas where the disease occurs frequently have been infected.

## What are the symptoms of Plague?

The typical symptom of plague is a swollen and very tender lymph gland, accompanied by pain. Other symptoms include fever, chills, headache, and tiredness. Persons with pneumonic plague also have cough, difficulty breathing, and bloody respiratory secretions.

## How is Plague spread?

Humans can become infected with plague through the bite of an infected flea. Plague is also spread by direct contact with infected body parts or fluids from handling sick or dead animals. Pneumonic plague is spread to humans from the respiratory secretions of infected humans and some pets, such as cats.

## How soon do symptoms appear?

A person usually becomes ill with bubonic plague one to seven days after being infected. A person with pneumonic plague usually becomes ill one to four days after being infected. The disease will progress rapidly without treatment.

## Is a person with Plague contagious?

Yes, a person with pneumonic plague can spread the bacteria through the air when he/she coughs. Non-infected people who breathe in that air can develop the disease. A person with pneumonic plague is no longer contagious after he/she has been on appropriate antibiotics for at least 48 hours. Persons

who live in the same house with someone diagnosed with pneumonic plague will be given antibiotics so that they do not develop the disease.

## Is there a vaccine for Plague?

A vaccine is available to protect people from bubonic plague but is not effective against pneumonic plague. It is given as three injections over a six month period of time and requires booster doses. The vaccine is usually only given to people who travel to areas where plague occurs most frequently and laboratory workers who handle the bacteria that causes plague. It is not recommended as a routine vaccination for the general public.

## How is Plague treated?

Several antibiotics can be used to treat all three types of plague and should be started as soon as possible. Early recognition and treatment are important. Persons who live in the same house as the individual with pneumonic plague, but are not yet sick, will also be treated with preventive antibiotics.

## Could pneumonic Plague be used as a biological weapon?

The bacteria causing plague, *Yersinia Pestis*, could be aerosolized (made airborne) and cause pneumonic plague in exposed individuals. The concern is that an infected individual is considered contagious and could possibly infect others. In a situation where pneumonic plague is used as a biological weapon, ill individuals would likely be hospitalized and treated with antibiotics and those exposed but not yet ill would receive preventive antibiotics and monitor their health.

## How can Plague be prevented?

Plague can be prevented in the following ways:

- Rat proofing buildings
- Preventing access to rodents to food and shelter by appropriate storage and disposal of food, garbage, and refuse
- Prevention of flea bites by use of an insecticide repellents
- Do not handle dead or sick animals
- Wear gloves when hunting or handling wildlife
- Do not camp by rodent burrows.

## Want more information?

Information about Plague and other related health topics can be found at the website [www.cdc.gov](http://www.cdc.gov). The DC Department of Health promotes the health and safety of the District residents. For additional information, please call 202-442-9371.

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