

## PLAGUE

### What is plague?

Plague is a disease that affects animals and humans. It is caused by the bacterium *Yersinia pestis* which is found in rodents and their fleas. Plague is found in many areas of the world. It is not common in the United States.

There are three forms of plague:

1. Bubonic (large swollen lymph nodes)
2. Pneumonic (lungs)
3. Septicemic (blood)

### How can someone come into contact with plague?

Plague can be spread from person to person.

- **Bubonic plague:** Humans can come into contact with plague when an infected flea bites a person or when materials that have plague bacteria enter through a break (a cut or sore) in a person's skin. This is the most common form of plague.
- **Pneumonic plague:** Humans can come into contact with plague when a person breathes in plague bacteria from the air. This type of plague can spread from person to person through the air (coughing and sneezing) and usually requires direct and close contact with an infected person. Pneumonic plague may occur if a person with bubonic or septicemic plague is untreated and the bacteria spread to the lungs.
- **Septicemic plague** is caused by plague bacteria that grow and spread in the blood. It can result from pneumonic or bubonic plague or it can occur by itself. When it occurs alone, it is caused in the same ways as bubonic plague.

**Plague as a weapon:** As a weapon, the plague bacteria can be aerosolized and released into the air. Scattering infected fleas into the air is another way plague can be used as a weapon.

Please note: Just because you come into contact with plague, or a person sick from plague, does not mean you will get sick from it.

### What happens if someone gets sick from plague?

- **Bubonic plague**
  - Patients have swollen, tender lymph glands (called buboes).
  - Symptoms also include fever, headache, chills and weakness.
- **Pneumonic plague**
  - The first signs of illness are fever, headache and weakness.
  - Pneumonia develops quickly with shortness of breath, chest pain, cough and, sometimes, bloody or watery mucus.
  - The pneumonia progresses for two to four days. It may cause respiratory (lung) failure. Without early treatment, patients may die.

(Plague continued)

- **Septicemic plague**

- Similar symptoms to bubonic plague occur but buboes do not form.
- Patients have fever, chills, weakness, stomach pain, shock and bleeding into skin and other organs.
- Without early treatment, patients may die.

## **How likely is someone to die from plague?**

About 14 percent (1 in 7) of all plague cases in the United States are deadly.

## **What is the treatment for plague?**

Treatment is different for a person who comes into contact with plague, but is not yet displaying symptoms. **Early treatment of plague is important.**

- **Prevention of illness after contact:** Antibiotic treatment for seven days will protect people who have had direct, close contact with infected patients. Health care providers can give out antibiotics that can be taken at home. Antibiotics to prevent infection usually are taken for seven days or until the patient gets better.
- **Treatment of illness:** If a person is showing signs of plague infection, the person needs to go to the hospital. To reduce the chance of death, antibiotics must be given within 24 hours of first symptoms. Treatment is usually a 10-day course of antibiotics.

People who are sick from plague need to be isolated. Wearing a close-fitting surgical mask over the nose and mouth also protects against spreading the infection.

## **Is there a vaccine for plague?**

No, a plague vaccine is not currently available for use in the United States.

## **What should be done if someone comes into contact with plague?**

If you think that you or someone you know may have come into contact with plague bacteria, contact the local county health department right away. (Visit [www.idph.state.il.us//local/alpha.htm](http://www.idph.state.il.us//local/alpha.htm) for a listing of all county health departments in Illinois or check your local phone book.)

If you or someone you know is showing symptoms of plague, call your health care provider or the Illinois Poison Center right away. The toll-free number for the poison center is 1-800-222-1222.

## **Where can one get more information about plague?**

- U.S. Centers for Disease Control and Prevention      [www.bt.cdc.gov/agent/plague/index.asp](http://www.bt.cdc.gov/agent/plague/index.asp)
- Illinois Department of Public Health                      [www.idph.state.il.us](http://www.idph.state.il.us)
- Illinois Poison Center    [www.IllinoisPoisonCenter.org](http://www.IllinoisPoisonCenter.org)