

Plague

The disease

The *Yersinia pestis* (*Y. pestis*), a bacteria, is the causative agent of plague. It is found in rodents and their fleas in many areas around the world. Without early treatment the infected person will die within 2-4 days of septic shock.

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, by respiratory droplets. 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) 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. Septicemic plague does not spread from person to person.

Cause

- Being bitten by an infected rodent or flea
- Having direct or close contact with an infected person

Symptoms

- Sudden onset of fever
- Chills
- Weakness
- Cough with blood and sometimes water product
- Tenderness of lymph node in the groin area

The risk

- Most frequent source of exposure is the bite of infected fleas from an infected rat.
- Plague results from the inhalation of plague bacilli.
- Person-to-person transmission of plague occurs through respiratory droplets, which can only infect those who have direct and close (within 6 feet) contact to the ill patient.
- About 14% (1 in 7) of all plague cases in the United States are fatal.

Treatment

Early treatment with antibiotics is vital.