Fact Sheet

Plague

What is plague?
Plague is a disease caused by bacteria found in rodents and their fleas. There are three types of plague: bubonic plague, septicemic plague, and pneumonic plague. All three types are caused by the same bacteria, but the modes of transmission and body parts infected are different.

How common is plague?
The World Health Organization reports 1,000 to 3,000 cases of plague worldwide each year. An average of 5 to 15 cases occurs each year in the western United States, usually in rural to semi-rural areas.

How is plague spread?
Bubonic plague is spread as a result of a bite from an infected flea or exposure to infected material through a break in the skin. The bacteria travel through the lymphatic system to the nearest lymph nodes. The nodes become inflamed and are called buboes.

Pneumonic plague is an infection of the lungs that occurs when a person breathes infected particles in the air. When an infected person coughs or sneezes, respiratory droplets are spread through the air, usually within about 6 feet.

Septicemic plague occurs when the infection spreads through the bloodstream and causes blood poisoning. If bubonic or pneumonic plagues are left untreated, the bacteria could spread into the bloodstream and cause septicemic plague.

What are the symptoms of plague?
Symptoms of bubonic plague include a swollen, very tender lymph gland (called a bubo), fever, chills, headache, and extreme exhaustion.

A person exposed to the bacteria through the air would become ill within 1 to 6 days of exposure. Symptoms of pneumonic plague include fever, weakness, and rapidly developing pneumonia with shortness of breath, chest pain, cough, and sometimes bloody or watery sputum. Nausea, vomiting, and abdominal pain may also occur.

What is the treatment for plague?
Antibiotics should be given within 24 hours of the first symptoms in order to prevent a high risk of death.

Are there complications from plague?
If left untreated, death from all types of the plague is very likely. Before antibiotic treatment was available, nearly 100% of cases were reported to be fatal.
How can plague be prevented?
There is currently no vaccine available to prevent plague. People having direct and close contact with someone with pneumonic plague should wear tightly fitting surgical masks. Patients with pneumonic plague should be isolated and medically supervised for at least the first 48 hours of antibiotic treatment.

People who have had close contact with an infected person can greatly reduce the chance of becoming sick if they begin an antibiotic within 7 days of their exposure. The round of antibiotics usually lasts 7 days.

To prevent bubonic plague, reduce the likelihood of being bitten by infected fleas or having direct contact with infected tissues.

Can plague be used as a bioweapon?
If used as a weapon, the bacteria would be made airborne for exposure by inhalation. People who inhale the bacteria would develop pneumonic plague within 1 to 6 days of exposure. Also, people who are in contact with those infected would be at risk, even if not exposed directly to the initial attack.

How do I get more information on plague?
Van Buren/Cass District Health Department
Phone: (269) 621-3143

Centers for Disease Control and Prevention
Web Site: http://www.cdc.gov/ncidod/dvbid/plague/index.htm

World Health Organization
Web Site: http://www.who.int/health_topics/plague/en/

This fact sheet is meant to provide general health information and is not intended to be medical advice or otherwise take the place of your doctor’s orders or to diagnose your specific health problems. Check with your doctor if you have any questions or concerns about your health.