What is plague and what causes it?

Plague is a severe disease caused by the bacteria, *Yersinia pestis* (Yur-sin-EE-ah pes-tis). Many animal species, including humans, can get the disease. Various forms can occur, each with differing symptoms, and possibly death.

Outbreaks occur in North and South America, Africa, the Middle East, and parts of Asia. In the United States, most cases occur in the Southwest. The bacteria is listed as a potential agent of bioterrorism.

What animals get plague?

Many animals (over 200 species) can get plague. The bacteria is maintained in nature by wild rodents, such as prairie dogs, chipmunks, wood rats, ground squirrels, deer mice and voles. Cats can easily get plague. Other species include rabbits, wild carnivores (e.g., coyotes, bobcats), goats, camels, and sheep.

How can my animal get plague?

Animals usually get plague from the bite of an infected flea (vector). Carnivores and domestic cats can also get plague by eating rodents that are infected with the bacteria or from bite wounds from infected animals. Animals with the respiratory form of disease can transmit the disease when they cough or sneeze (aerosol).

How does plague affect my animal?

In rodents, plague usually causes mild illness but can be fatal during outbreaks in the population. Wild carnivores with the disease do not usually appear sick. Cats and other animals can have fever, swollen lymph nodes, and internal abscesses or they may die suddenly.

Can I get plague?

Yes. People can become infected three different ways: flea bite (vector) (most common), direct contact with an infected animal (hunters touching infected internal organs), or inhaling (aerosol) the bacteria.

Bubonic (boo-bon-ic) plague is the most common form of illness. Signs include fever, chills, and very swollen, painful lymph nodes, called “buboes”.

Septicemic plague occurs when the bacteria spread throughout the body.

Pneumonic (new-mon-ik) plague is less common but the most deadly form. It occurs when the bacteria are inhaled and infect the lungs. This form can be spread to other people by coughing. Signs of illness include fever, chills, headache, and coughing-up blood. Treatment must be received within 24 hours for survival.

Who should I contact, if I suspect plague?

In Animals – Contact your veterinarian immediately. Any animals suspected of having plague should be isolated.

In Humans – Contact your physician immediately.

How can I protect my animal from plague?

Do not allow cats and dogs to roam free or hunt wild animals, especially rodents and rabbits. Flea control for dogs and cats is important. Cats and dogs should be treated with a flea control product on a regular basis. If fleas are found in the house or yard, use commercial products to kill them. Use rodent control measures to eliminate rodents around your home and buildings.

How can I protect myself from plague?

Protect yourself against flea bites. Tuck pants into socks when working or playing outside. Wear gloves if touching any animal with an oozing wound. Avoid contact with wildlife. Avoid areas where large groups of rodents suddenly die.

For More Information

CFSPH Technical Fact Sheets. Plague at [http://www.cfsph.iastate.edu/DiseaseInfo/default.htm](http://www.cfsph.iastate.edu/DiseaseInfo/default.htm)
