

OREGON DEPARTMENT OF FISH AND WILDLIFE FACT SHEET

Plague and wildlife

What is plague? It is a bacterial infection caused by the bacterium *Yersinia pestis*. *Y. pestis* is the same organism responsible for the infamous “black death” pandemic affecting millions of people in Europe in the mid-14th century.

How is plague transmitted? Transmission is usually by the bite of an infected flea. Fleas pick up the bacterium from infected small mammals. Occasionally transmission occurs from direct contact with infected fluids or tissue or by inhalation of respiratory droplets.

Are wildlife affected? Yes. Some rodent species are fairly resistant to infection and act as reservoir hosts. However, some species of wildlife such as prairie dogs, rock squirrels, ground squirrels and rabbits may become infected and suffer high mortality rates. In Oregon, the main wildlife species affected and potentially succumbing from infection are ground squirrels and wild rabbits.

Can humans and domestic animals be infected? Yes. Plague is a zoonotic disease meaning that it can be transmitted from animals to humans. Occasionally humans and domestic animals (primarily cats, rarely dogs) can be alternate hosts and develop clinical signs of infection.

What are the symptoms or clinical signs of plague infection? Plague infection can present in a few different ways:

- **Bubonic:** Involves infection associated with swollen painful lymph nodes or “bubos,” fever, and general malaise
- **Pneumonic:*** Refers to lung infection, which may occur when infectious droplets are inhaled or spread to the lungs via the bloodstream. Clinical signs usually include fever, chills, and respiratory distress or coughing.
- **Septicemic:*** Refers to systemic infection that has invaded the bloodstream. Clinical signs include high fever, lethargy, and abdominal pain.

*Both pneumonic and septicemic forms can rapidly become fatal if not treated early.

What is the incubation period? A person or susceptible animal usually develops infection within two to six days of exposure.

Is plague treatable? Yes. Plague is quite responsive to appropriate antibiotics when caught early in the disease process.

What is the distribution of plague? In the U.S., plague has been documented in multiple Western states since 1899. Plague is also widely distributed around the globe including Africa, Asia, and South America.

World Distribution of Plague, 1998

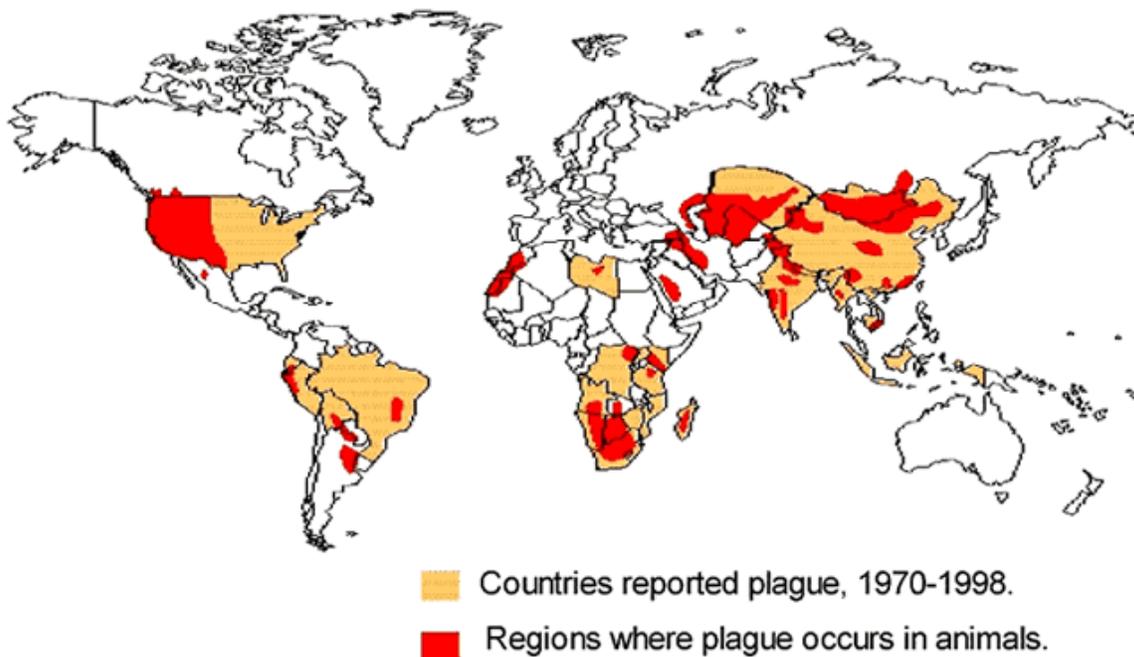


Figure 1. Center for Disease Control map showing plague distribution between 1970-1998.

Has plague been documented in other wildlife in Oregon? There have been several cases of plague in wildlife in the state. One case involved a mule deer near The Dalles but generally most ungulates and carnivores (canids, bears, raccoons, etc.) are fairly resistant.

What can I do to minimize my risk of plague exposure? Domestic pets should be on a flea preventative medicine, especially during the warmer months. Rodent-proof your home and avoid rodent attractants such as leaving pet food outside or open garbage.

Where can I find additional information on plague? Visit the Center for Disease Control website, <http://www.cdc.gov/ncidod/dybid/plague/info.htm>