

# FACTS ABOUT PLAGUE IN LOS ANGELES COUNTY



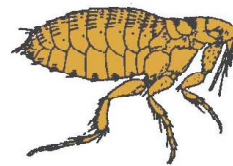
Plague is a highly infectious bacterial disease which primarily affects rodents. Humans and their pets (dogs, and especially cats) can get plague if they visit or live in areas where wild rodents are naturally infected. The disease may also occur in rats that live in close contact with people.

This is the same disease that ravaged Europe in the 6th Century (the Plague of Justinian) and again in the 14th Century (the Black Death). At the present time, plague in humans is relatively rare, and can be treated successfully with modern antibiotics. However, it is vital that the disease be diagnosed and treated in its early stages. If not, it is often fatal and, if lung infection (plague pneumonia) develops, it can be transmitted directly and rapidly to others.

## EXPOSURE TO PLAGUE

People can get the disease from animals in several ways. The most important routes of transmission are:

### 1. Bites of fleas from infected rodents



Hungry fleas will leave a sick or dead rodent to find another host and can bite people.

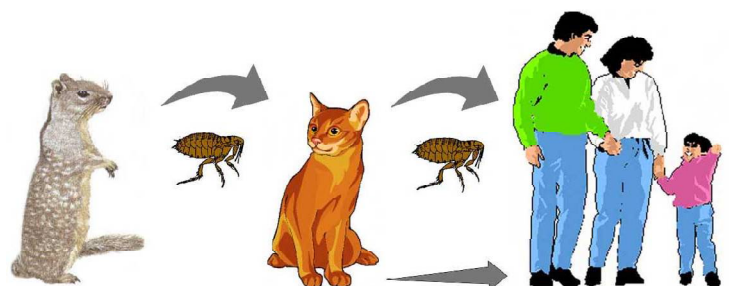
### 2. Direct contact with sick animals

The bacteria in the blood or other body fluids of an infected animal can enter through cuts and abrasions on the hands, or through the mucous membranes.



### 3. Pet involvement

- (1) Infected rodent fleas can be brought into the home or campsite by a dog or cat.
- (2) Plague pneumonia can be caught from a sick cat that is coughing or sneezing.



## RISKS OF PLAGUE

Plague in California occurs in the foothills, plateaus, mountains and coast (shaded areas on map). Plague is absent from the southeastern desert region and the Central Valley.

When plague was first introduced to North America, it was principally associated with domestic rats in urban areas. The last known human cases of rat-associated plague occurred in Los Angeles in the 1920's.



Today, wild rodents in rural areas are the principal source of plague in Los Angeles county. The potential for exposure exists throughout the county, but the major threat of plague to humans is in the rural recreational and wilderness areas of the Angeles National Forest, as well as the Santa Monica and San Gabriel mountains. Since 1979 there have been three cases of human plague contracted within the county. Two cases were the result of contact with infected rodent fleas, the third was from exposure to a pet cat infected with plague.

The Los Angeles County Department of Health Services has recently detected evidence of plague in both feral and free-roaming domestic cats within the county. These animals can prey upon rodents infected with plague or can transport plague-infected fleas.

You can minimize your exposure to plague by educating yourself about this disease, and by carefully following the precautions listed in this pamphlet.

## ANIMALS THAT CARRY PLAGUE



California ground squirrel



Chipmunks



The most important wild rodents that can carry the disease are squirrels (especially ground squirrels), chipmunks, woodrats, mice and marmots. Plague is lethal to many rodents; therefore, any sign of sick or dead rodents is a warning that plague may be in the area. Other wild animals—especially rabbits, carnivores (including coyote, bobcat, badger, bear, gray fox and skunk) and wild pigs - can also acquire plague but usually with no signs of illness.



Coyote

Domestic animals can acquire plague and pose a direct threat to humans. Dogs rarely become ill, but cats are highly susceptible and can suffer a severe illness. Pets can transport rodent fleas from the field into homes or campsites. If a cat develops plague pneumonia, it can infect humans by coughing or sneezing.

# WAYS TO PROTECT YOUR FAMILY FROM PLAGUE

## General Precautions

- ✓ If you become ill within seven days after possible exposure to plague, contact a physician immediately.
- ✓ Use caution when handling a sick pet that has been in a plague area, especially a cat. Avoid close face to face contact. Consult a veterinarian. Inform the vet that the animal has been in a plague area.
- ✓ Avoid all contact with rodents and their fleas. Do not touch sick or dead rodents. Report them to rangers or health authorities.

## Where you live

- ✓ Keep rodent populations down around homes and other inhabited areas. Prevent them from entering buildings. As much as possible, remove or deny rodents access to any source of food or shelter.
- ✓ Minimize pet contact with rodents and their fleas. A bell on a cat's collar may help. Protect pets with oral or topical flea control. Flea collars are helpful, but, if used alone, are too slow acting.

## Where you work or play

- ✓ Do not camp, sleep or rest near animal burrows.
- ✓ Do not feed rodents in campgrounds and picnic areas. Store food and refuse in rodent-proof containers.
- ✓ Wearing long pants tucked into boot tops can reduce your exposure to fleas. Insect repellent sprayed on socks and trouser cuffs also may help.
- ✓ LEAVE PETS AT HOME if possible. If not, keep pet confined or on a leash. Do not allow pet to approach sick or dead rodents or to explore rodent burrows.
- ✓ HUNTERS AND TRAPPERS: Use rubber gloves when skinning and cleaning rodents, rabbits, wild pigs, coyotes and other carnivores. Cook game animals thoroughly.

## SYMPTOMS OF PLAGUE

In humans, the initial symptoms of plague include fever, chills, muscle aches, a feeling of weakness and, commonly, swollen and tender lymph nodes ( called “buboes”). This stage is called bubonic plague.

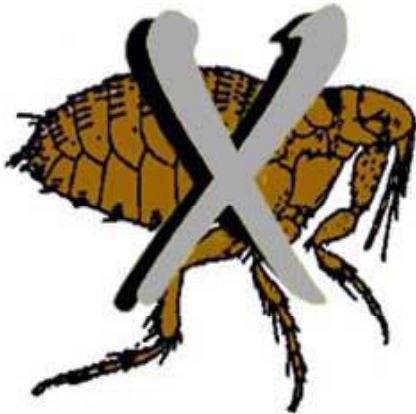
**Contact a physician immediately if you become ill within 7 days of being in a plague area.**

The usual incubation period is 2 to 6 days. Plague is curable when diagnosed early. You can help with diagnosis by telling your doctor where you have been and what you have done that may have exposed you to plague.

If it is not treated in time, bubonic plague can progress to septicemic plague (blood-stream infection) and / or pneumonic plague (plague pneumonia).

A cat with plague will become very ill, may stop eating and will have a fever. Swollen lymph nodes may occur, generally in the neck area.

**Inform your veterinarian if a sick pet has been in a plague area.**



## ROLE OF THE HEALTH DEPARTMENT

State and local health agencies monitor plague activity throughout the State. Rangers, park personnel and others are trained to watch for sick or dead rodents or other evidence that plague may be active in a particular area and to report their findings to health authorities.

Health authorities will institute preventive measures when animal plague is found in areas with human exposure. Warnings will be posted. After careful evaluation, the area may be quarantined and insecticides may be used to reduce the risk of flea bites to humans.

Insecticide dust is applied into rodent burrows and/or into tube-like containers called “bait stations.” Rodents enter the bait stations and get flea powder in their fur. They also carry the insecticide in their fur back to the nest, killing fleas inside the burrows. This method of flea control is very effective, uses a minimum of insecticide, and does not harm the rodents.

**If you see a bait station, please do not disturb it.**

If you have questions about plague or other vector-borne diseases, please call:

**Los Angeles County - Department of  
Public Health  
Vector Management Program  
5050 Commerce Drive  
Baldwin Park, California 91706  
(626) 430-5450**

