## ROLE OF PUBLIC HEALTH OFFICIALS

State and local health agencies monitor plague activity throughout the state. Public health officials:

- Work with doctors and veterinarians to identify suspect cases of plague, confirm the diagnosis, and ensure that patients receive necessary treatment.
- Conduct investigations of confirmed plague cases to determine how the person was exposed and to identify others who may be at risk of plague.
- Work with rangers, park personnel, and others to watch for sick or dead rodents or other evidence that plague may be active in a particular area.

If signs of plague are identified, health authorities institute preventive measures including notification of residents and visitors, posting of warning signs, and, if deemed necessary, closing off the area so that flea control measures can be conducted.

Additional information on plague can be obtained from your local health department and the CDPH website, www.cdph.ca.gov.

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# FACTS ABOUT PLAGUE IN CALIFORNIA

You can minimize your exposure to plague by carefully following the precautions listed in this pamphlet.

California Department of Public Health Vector-Borne Disease Section (916) 552-9730 March 2016

#### **EXPOSURE TO PLAGUE**

Plague is a highly infectious bacterial disease which affects primarily rodents. Humans and other animals can get plague if they visit or live in areas where wild rodents are naturally infected. People can get plague in several ways. The most important routes of transmission are:

#### **BITES FROM FLEAS OF INFECTED RODENTS**

Hungry fleas will leave a sick or dead rodent to bite another animal, including humans.



#### **DIRECT CONTACT WITH SICK RODENTS**



Plague bacteria in the blood or tissues of an infected animal can enter through cuts and scrapes in the skin or through the eyes, nose, and mouth.

#### PET INVOLVEMENT

Cats with plague pneumonia can spread plague bacteria when they cough or sneeze.



#### **PLAGUE AREAS IN CALIFORNIA**



Plague is endemic (naturally occuring) in many parts of California. Plague in California occurs in the mountains and foothills shown in shaded areas on the map.

Plague is absent from the southeastern desert and the Central Valley.

Plague is most common in the rural and undeveloped mountain regions, as well as the suburban foothills of some larger cities.

Plague has not occurred in urban and developed areas of California for nearly 100 years.

## WHICH ANIMALS CARRY PLAGUE?

Wild rodents in rural areas are the principal source of plague in California. Urban rats and house mice are not important sources of plague.

The most important wild rodents that can carry plague are ground squirrels, chipmunks, woodrats, mice, and marmots. Plague is deadly to many rodents; therefore, sick or dead rodents are a warning that plague may be in the area.



Other wild animals -- especially rabbits, carnivores (coyote, bobcat, badger, bear, gray fox, and raccoon), and wild pigs -- can also acquire plague but rarely transmit plague to people.

Pet cats are highly susceptible to plague and can pose a direct threat to humans.

A cat with plague will become very ill, may stop eating, will have a

fever, and typically develop swollen lymph nodes in the neck area.

## Ways to Protect Yourself From Plague

#### **General Precautions**

Avoid all contact with wild rodents and their fleas. Do not touch sick or dead rodents; report them to rangers or health authorities.

Use caution when handling a sick cat that has been in a plague area and had contact with wild rodents. Avoid close face-to-face contact. Consult a veterinarian and inform them that the animal has been in a plague area.

#### **Where You Live**

Discourage rodents from around homes and other inhabited areas. As much as possible, remove or deny rodents access to any source of food or shelter.

Minimize pet contact with rodents and rodent fleas. Consult your veterinarian for effective flea control methods.





#### Where You Work or Play

Do not camp, sleep, or rest near animal burrows.

Look for and heed posted warning signs.

Do not feed rodents in campgrounds and picnic areas. Store food and garbage in rodent-proof containers.

Wear long pants tucked into boot tops to reduce your exposure to fleas.

Apply insect repellent to socks and pants cuffs.

Leave pets at home if possible; otherwise, keep pets confined or on a leash. Do not allow pets to approach sick or dead rodents or to explore rodent burrows. Protect pets with flea control products.

The initial symptoms of plague include fever, chills, muscle aches, weakness, and commonly, swollen and tender lymph nodes (called buboes). Buboes most commonly occur in the neck, armpit, or groin. This form is called bubonic plague.



If it is not diagnosed early, bubonic plague can progress to septicemic plague (bloodstream infection) and/or pneumonic plague (lung infection). These forms of plague are more severe and more difficult to treat.

Plague is readily treatable when diagnosed early. You can help with the diagnosis by telling your doctor where you have been and what you have done that may have exposed you to plague.