

When one hears the words “the plague” one typically conjures up visions of the Middle Ages and widespread death (think millions). This, however, is not a long forgotten disease. In fact, it occurs yearly in places such as Africa, Asia and South America, with 300 to 600 cases of bubonic plague reported in Madagascar typically between October and March of each year. Rare cases occur in the United States of America in parts of California, Arizona, New Mexico and Colorado. It is not known in Jamaica.



The plague is caused by the bacterium *Yersinia pestis* and has the potential to infect dogs, cats, rabbits and humans. When a rodent or rabbit flea feeds on an animal with the bacteria in the bloodstream it becomes infected and can transmit the bacteria when it bites a susceptible animal. The time from infection to manifestation of the disease (the incubation period) is 1-4 days in dogs and cats and 1-7 days in humans.



The plague occurs in 3 forms: bubonic, septicemic and pneumonic. Bubonic plague, the most common form, spreads from the wound to the nearest lymph node. The swollen and painful lymph nodes are called buboes and when draining can be a source of infection. The bacteria can spread to the bloodstream directly from the flea bite wound, contact with the bacteria through cracks in the skin or as a result of advanced bubonic plague. Bubonic plague is the most common form in cats, and clinical signs include fever, chills, body aches, lack of appetite, vomiting and diarrhea. Similar symptoms occur in humans.

In addition to the signs seen in bubonic plague, cats may also show weak pulses and respiratory distress with the septicemic form. Pneumonic plague, the least common but most dangerous form, may occur when the bacteria migrate to the lungs in advanced bubonic plague or when infectious cough droplets are released by an infected person and inhaled by others. Dogs are less likely to exhibit clinical signs of plague but these may include fever, lethargy, enlarged lymph nodes and coughing.

Diagnosis of the plague involves identifying the bacterium in sputum, blood or fluid from the bubo, but because of the rapid rate at which the disease progresses, therapy must be instituted before confirmation of suspected cases. Doxycycline or gentamicin are used in both animals and humans to treat the disease.

Prevention includes using appropriate flea control on pets, restricting hunting by pets and avoiding contact with draining buboes or animal carcasses in areas with known cases.