

PLAGUE Fact Sheet

Plague is an infectious disease of animals and humans caused by a bacterium named *Yersinia pestis*. People usually get plague from being bitten by a rodent flea that is carrying the plague bacterium or by handling an infected animal. Millions of people in Europe died from plague in the Middle Ages, when human homes and places of work were inhabited by flea-infested rats. Today, modern antibiotics are effective against plague, but if an infected person is not treated promptly, the disease is likely to cause illness or death.

CLINICAL FEATURES

- Bubonic plague: enlarged, tender lymph nodes, fever, chills, and prostration
- Septicemic plague: fever, chills, prostration, abdominal pain, shock, and bleeding into skin and other organs
- Pneumonic plague: fever, chills, cough, and difficulty breathing; rapid shock and death if not treated early

ETIOLOGIC AGENT

Yersinia pestis - bacillus

INCIDENCE

- In Georgia: no cases have been reported
- In the US: 1 to 40 cases are reported annually (mean = 13 cases) by western states, 1971-1995
- Worldwide: 2861 cases were reported by 10 countries to the WHO in 1995

SEQUELAE

- Rare; consequences of disseminated intravascular coagulation, lung damage
- Mortality 50-90% if untreated; 15% when diagnosed and treated

TRANSMISSION

- Flea-borne, from infected rodents to humans



- Direct contact with infected tissues or fluids from handling sick or dead animals
Respiratory droplets from cats and humans with pneumonic plague

RESERVOIRS

- Primarily wild rodents in the US (e.g., rock squirrels, ground squirrels, prairie dogs, and other burrowing rodents)
- Commensal rats may be important elsewhere

RISK GROUPS:

- Persons exposed to rodent fleas, wild rodents, or other susceptible animals in enzootic areas of western states
- Most cases occur in southwestern states of NM, AZ, CO, and in CA
- Highest rates in Native Americans, especially Navajos
- Hunters veterinarians and pet owners handling infected cats, campers or hikers entering areas with outbreaks of animal plague

