

## Did you heard of “Black Death”?

Plague also called the Black Death, began in 1320s, cause 75 million people to die around the world. It mainly spread to fleas through rodents, the pathogen is transmitted to people or animals through flea bites. The latency of the disease is short, 3-5 days in general. Shiver, lacking in strength, headache, dizzy and systemic pain, vomit, diarrhea ...



In recent years, there have been reports of animals infected with the plague, even the emergence of new pathogens. Plague source of infection, like mouse, gopher, vole, fox, wolf, cat, deer, leopard etc. Especially these who deep close to people, dog, cat, horse, deer, rabbit, yak, sheep, they are more likely to infect human beings.



Three types of diseases: Glandular Plague, Septicemic Plague and Pulmonary Plague

1. Glandular Plague: Infection by bite, the pathogenic bacteria will invade the lymph nodes first, causing swelling, necrosis and abscess of the lymph nodes, mainly inguinal lymph nodes, this process is called glandular plague.
2. Septicemic Plague: Pathogenic bacteria invade the bloodstream and mass propagation, caused bacteremia, hematosepsis, this process is called Septicemic Plague.
3. Pulmonary Plague: Pathogenic bacteria accumulate in the lungs by blood flow, multiplication in alveolar macrophages then cause pneumonia, This process is called Pulmonary Plague. The Pulmonary Plague is caused by Septicemic Plague and Glandular Plague, Patients appear high fever, expectoration (there are a large number of bacteria in sputum). Patients or animals Suffered from pneumonic plague, will transmit pathogens by air droplets., lead to the prevalence of the plague. Most of the animals and people who are infected with the plague die within a week.



Prevention and control measures:

Plague germs can be transmitted between animals, animals and human, human and human, the most important is the spread between animals. Therefore controlling the spread of animals is the key to prevention.

Epidemic personnel should do good protection, injection vaccine, Attention to personal hygiene, flea bite prevention. Patients should be strictly isolated, health care workers go into the ward of the plague patients should be well protected, Must wear protective clothing, hat, N95 mask, gloves, protective eyewear, rubber boots. Health care workers in close contact with the patient, should wear a comprehensive respiratory protective device.

The sickroom should be disinfected with chlorine disinfectant or peracetic acid disinfectant.



#### Treatment:

Plague should be treated with antibiotic therapy, the mortality rate of patients without treatment reached more than 50%.

At present, the good choice of clinical treatment are gentamicin and streptomycin, Post-exposure prophylaxis generally use the drug of Doxycycline. According to different sites of infection, collect the patients' lymph node puncture fluid, blood, sputum and inspection. Because the plague is a strong infectious disease, collaborative disease control center as soon as possible to identify sources of infection, when necessary, to implement epidemic blockade, in order to avoid the disease spreading.