

## Plague

**Plague is a zoonotic infection with a spectrum of clinical manifestations caused by the Gram-negative bacterium *Yersinia pestis***

Plague is an infectious disease caused by bacteria (*Yersinia pestis*) that spreads to humans from animals, usually by rat (rodent) flea bites. People can also catch it from bites or scratches from other infected animals such as cats, by working with plague bacteria or infected animal tissue in a laboratory and by breathing in respiratory droplets from someone who has already been infected.

Plague is no longer a risk in the United Kingdom (UK) but is still reported worldwide, in Africa, Asia, South America and the USA. Annually, most human cases are reported in Africa. Madagascar is regarded as the most affected country, with cases usually reported in specific, rural areas every year between September and April. Risk for travellers to any endemic country is generally regarded as very low, based on the rarity of cases (no UK cases reported in the last 50 years). However, during an [unusual outbreak in Madagascar](#) the plague risk rating for travellers and those working in the country was increased to 'low-moderate' for the duration of the outbreak.

Plague is a severe disease and can be fatal. Symptoms usually appear one to eight days after exposure and usually start with fever. There are three main types: **bubonic**, **pneumonic** and **septicaemic**.

**Bubonic** - is the commonest, spread by infected flea bites. In bubonic plague, bacteria travel from the site of the flea bite to a lymph node which becomes inflamed and painful. This is called a 'bubo'.

**Pneumonic** - the most severe type, is rare but can be caused by advanced bubonic plague spreading to the lungs, and if not diagnosed and treated early, may be fatal.

Anyone with pneumonic plague can spread the bacteria via respiratory droplets to other people. Pneumonic plague causes a rapidly developing pneumonia, with shortness of breath, chest pain, cough and sometimes bloody or watery mucus.

**Septicaemic** - when infection spreads through the bloodstream. This can develop from untreated bubonic plague or may be the main infection. Septicemic plague causes chills, extreme weakness, abdominal pain, shock and sometimes internal bleeding.

Diagnosis of plague requires a laboratory test to identify the bacteria. Antibiotic treatment is effective against plague, but early diagnosis and treatment is vital to reduce risk of dying.

Check our [Country Information pages](#) for destination specific news and outbreaks.

## Prevention

- Protect against flea bites: use DEET repellents and wear long trousers.
- Avoid contact with dead animals and/or infected tissues and material.
- Avoid anyone with confirmed or suspected plague and any areas where plague has recently been reported.

There is no plague vaccine currently in the UK (in some countries, high risk groups such as laboratory staff and at risk health care workers may be offered vaccine).

Anyone at increased risk should know how plague is spread, be aware of the symptoms and understand that urgent medical help is needed if unwell. Post-exposure antibiotic treatment can be considered, following specialist advice, if there is a risk of exposure such as close contact with someone known to be infected.

[Detailed information on plague](#) can be found on the UK Health Security Agency website.

## Resources

- [World Health Organization: Plague](#)
- [Centers for Disease Control and Prevention: Plague](#)