

The Black Plague



1347 - 1351

Why did the plague hit Europe so hard?

By 1300 Europeans were farming as much land as they could cultivate.

There were three years of crop failures between 1315-17.

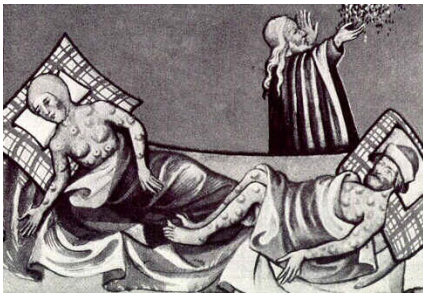


Some villages lost up to 15% of their peasant population.

There was a lack of sanitation procedures for keeping towns clean.

The Bubonic Plague wiped out one-third of Europe's population between 1347 and 1351 - only 4 years!

3 Forms of the Plague



Bubonic Plague
painful lymph node swellings, buboes

Septicemic Plague
attacked the blood system



Pneumonic Plague
attacked the respiratory system

Causes of the Plague

Myths

Foreigners or those of a different religion had poisoned the wells

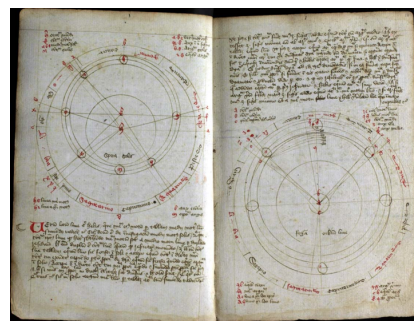


It was a punishment from God.



Bad air

The position
of the planets



The Bubonic Plague



Swellings “egg” or “apple”

Fever of 101-105 degrees

Headaches and Aching joints

Vomiting

Malaise

People with swellings might have a chance.

Mortality rate: 30-40%

Whole process: 3-5 days

The Pneumonic Plague



2nd most common form of the plague

sputum infected the lungs

Bacteria in saliva coughed or sneezed up by sick persons

1-7 days for symptoms to appear

Mortality Rate: 90-95%



The Septicemic Plague

DIC: disseminated intravascular coagulation
(bleeding under the skin)

Attacked the
blood system



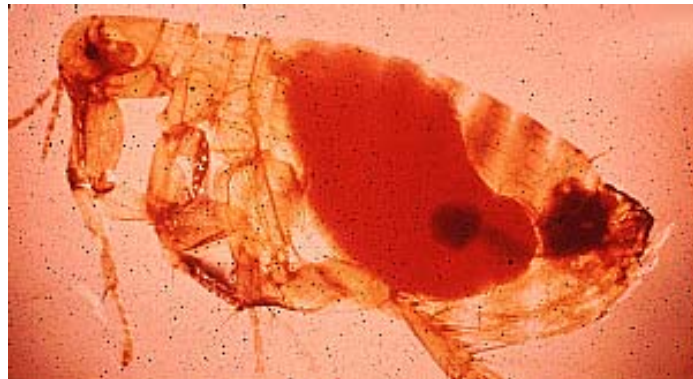
caused the
skin to turn
dark purple,
almost black

Victims usually died the same day symptoms appeared.

Mortality Rate: close to 100%

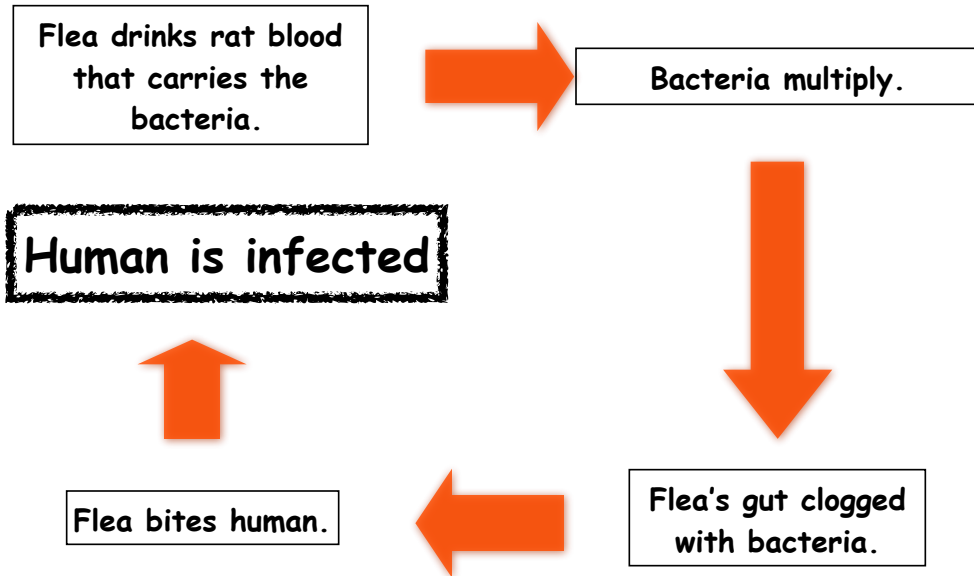
Transmission of the Bubonic and Septicemic Plague

Direct contact with a flea



The Bacteria (*Yersinia pestis*) carried by rodents
Fleas bite the rodent and move to human hosts
Xenopsylla cheopis

The Disease Cycle



Attempts to Stop the Plague



A Doctor's Robe



Flagellanti: self-inflicted "penance" for sins



"Leeching"



"Golden Circle" obligatory badge

Pogroms against Jews





Day 1 Painful swellings called buboes appeared in the victim's armpits and groin. These were usually about the size of an egg, but could sometimes be as big as an apple.



Day 4 The disease attacked the nervous system. This caused the victim to suffer spasms. The victim was in terrible pain.



Day 2 The victim vomited and developed a fever.



Day 5 Sometimes the buboes burst and a foul-smelling black liquid oozed from the open boils. When this happened the victim usually lived. However, in most cases the victim suffered a painful death.



Day 3 Bleeding under the skin caused dark blotches all over the body.

Buboes – swollen lumps in the groin, Neck, or armpit