The Black Death: Bubonic Plague

In the early 1330s an outbreak of deadly bubonic plague occurred in China. Plague mainly affects rodents, but fleas can transmit the disease to people. Once people are infected, they infect others very rapidly. Plague causes fever and a painful swelling of the lymph glands called buboes, which is how it gets its name. The disease also causes spots on the skin that are red at first and then turn black.

Since China was one of the busiest of the world's trading nations, it was only a matter of time before the outbreak of plague in China spread to western Asia and Europe. In October of 1347, several Italian merchant ships returned from a trip to the Black Sea, one of the key links in trade with China. When the ships docked in Sicily, many of those on board were already dying of plague. Within days the disease spread to the city and the surrounding countryside. An eyewitness tells what happened:

"Realizing what a deadly disaster had come to them, the people quickly drove the Italians from their city. But the disease remained, and soon death was everywhere. Fathers abandoned their sick sons. Lawyers refused to come and make out wills for the dying. Friars and nuns were left to care for the sick, and monasteries and convents were soon deserted, as they were stricken, too. Bodies were left in empty houses, and there was no one to give them a Christian burial."

The disease struck and killed people with terrible speed. The Italian writer Boccaccio said its victims often

"ate lunch with their friends and dinner with their ancestors in paradise."

By the following August, the plague had spread as far north as England, where people called it "The Black Death" because of the black spots it produced on the skin. A terrible killer was loose across Europe, and Medieval medicine had nothing to combat it.

In winter the disease seemed to disappear, but only because fleas--which were now helping to carry it from person to person--are dormant then. Each spring, the plague attacked again, killing new victims. After five years 25 million people were dead--one-third of Europe's people.

Even when the worst was over, smaller outbreaks continued, not just for years, but for centuries. The survivors lived in constant fear of the plague's return, and the disease did not disappear until the 1600s.

Medieval society never recovered from the results of the plague. So many people had died that there were serious labor shortages all over Europe. This led workers to demand higher wages, but landlords refused those demands. By the end of the 1300s peasant revolts broke out in England, France, Belgium and Italy.

The disease took its toll on the church as well. People throughout Christendom had prayed devoutly for deliverance from the plague. Why hadn't those prayers been answered? A new period of political turmoil and philosophical questioning lay ahead.

Estimated population of Europe from 1000 to 1352.

- 1000 38 million
- 1100 48 million
- 1200 59 million
- 1300 70 million
- 1347 75 million
- 1352 50 million

25 million people died in just under five years between 1347 and 1352

What was it like for a victim of the plague?

It started with a headache. Then chills and fever, which left him exhausted and prostrate. Maybe he experience nausea, vomiting, back pain, soreness in his arms and legs. Perhaps bright light was too bright to stand.

Within a day or two, the swellings appeared. They were hard, painful, burning lumps on his neck, under his arms, on his inner thighs. Soon they turned black, split open, and began to ooze pus and blood. They may have grown to the size of an orange.

Maybe he recovered. It was possible to recover. But more than likely, death would come quickly. Yet... perhaps not quickly enough. Because after the lumps appeared he would start to bleed internally. There would be blood in his urine, blood in his stool, and blood puddling under his skin, resulting in black boils and spots all over his body. Everything that came out of his body smelled utterly revolting. He would suffer great pain before he breathed his last. And he would die barely a week after he first contracted the disease.

The swellings, called *buboes*, were the victim's lymph nodes, and they gave the *Bubonic* Plague its name. But the bubonic form of the disease was only one manifestation of the horrible pandemic that swept Europe in the 1340s. Another form was *Pneumonic* Plague. The victims of Pneumonic Plague had no buboes, but they suffered severe chest pains, sweated heavily, and coughed up blood. Virtually no one survived the pneumonic form.

The third manifestation was *Septicemic* Plague. This sickness would poisoned the victim's bloodstream. Victims of Septicemic Plague died the most swiftly, often before any notable symptoms had a chance to develop. Another form, *Enteric* Plague, attacked the victim's digestive system, but it too killed the patient too swiftly for dagnosis of any kind.

Medieval Europeans had no way of knowing any of this. The causes of plague were not discovered until the late nineteenth century.

Rodents like rats and squirrels carry plague, but it is transmitted to humans by the fleas that live on them. A flea, having ingested plague-infected blood from its host, can live for as much as a month away from that host before he needs to find another warm body to live on. When a blood-engorged flea attempts to draw blood from another victim, it invariably injects into that victim some of the blood already within it. If the injected blood contains the bacterium *yersinia pestis*, the result is Bubonic Plague. Fleas were, alas, such a part of everyday life that no one noticed them much. In this invisible manner the plague spread from rat to human and to cat and dog, as well.

Pneumonic plague is airborne. It is contracted by breathing the infected water droplets breathed (or coughed) out by a victim of the disease. The pneumonic form was much more virulent and spread much more quickly and just as invisibly.

Plague is occasionally transmitted by direct contact with a carrier through open sores or cuts, directly into the bloodstream. This could result in any form of the plague except pneumonic, although it is likely that such incidents most often resulted in the septicemic variety. The septicemic and enteric forms of the plague killed most quickly of all, and probably accounted for the stories of individuals going to bed apparently healthy and never waking up.

People died so swiftly and in such high numbers that burial pits were dug, filled to overflowing and abandoned; bodies (sometimes still living) were shut up in houses which were then burned to the ground; and corpses were left where they died in the streets

By the end of 1348, plague covered all of Italy and most of France. It crossed over the Alps, and it spread to Switzerland. England was reached in August, and it spread to Scotland, Ireland, Denmark, and most of Germany. By 1351, the Black Death reached Russia. The Black Death killed about 1/3 of the population of Europe, or 25 million people. Government, trade, and commerce in Europe almost came to a halt. The Black Death caused the depopulation of about 1,000 villages in England. There was a drastic reduction of the amount of land under cultivation due to the death of many laborers. This ruined many landowners. The shortage of labor compelled landowners too substitute wages and money rents instead of labor services in order to keep tenets; therefore, the feudal system began to crumble. The Black Death created a preoccupation with death and the afterlife. The Roman Catholic Church lost some of its influence as people moved to mysticism and other spiritual expressions. Jews were blamed for the plague and were massacred. Also, public health institutions came into being because of efforts to stop the spread of the plague.

