

# THE BLACK DEATH IN ENGLAND 1348



*"In this year, 1348, in Melcombe Regis, in the County of Dorset, a little before the Feast of St. John the Baptist (24th June), two ships docked. One was from Bristol. From France one of the sailors brought with him the terrible plague. Through him the men of the town of Melcombe were the first in England to catch it."* (Grey Friar's Chronicle 1348)

## 1) How did the plague start and spread?

- The Bubonic Plague started in China c1335 and rapidly spread to Europe. c = circa
- Many goods (spices, foods, cloth, etc) were exported from China overland and by ship.
- The disease was spread by either infected people such as sailors and merchants or by black rats carried aboard ships to new countries.
- The rats carried fleas (*Xenopsylla Cheopsis*), that passed on bacteria (*Pasteurella Pestis* or *Yersinia Pestis*) when they bit humans. The fleas would feed off a person and then transfer to another person when the opportunity arose. The fleas could hibernate or live away from a host for up to 6 months living in clothes, cargo bales, hay, dung piles.

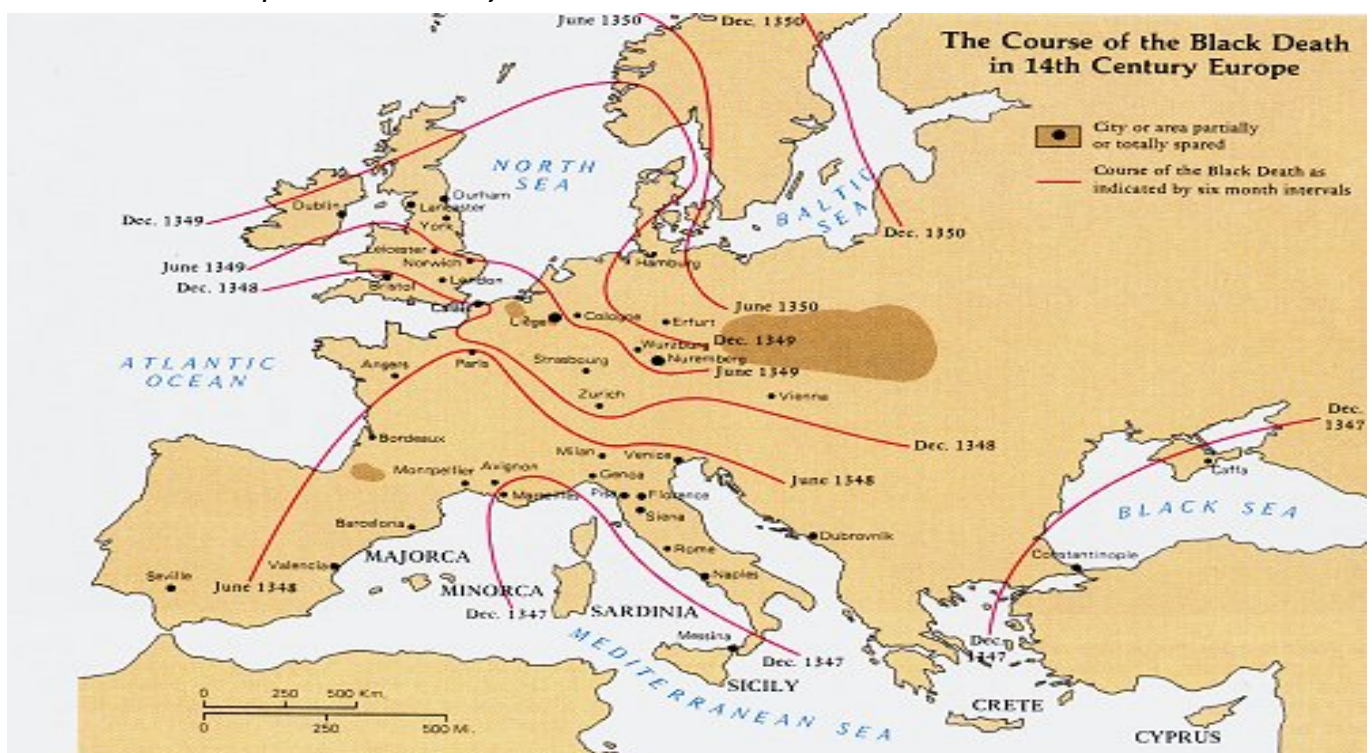
## 2. How did it spread to Europe?

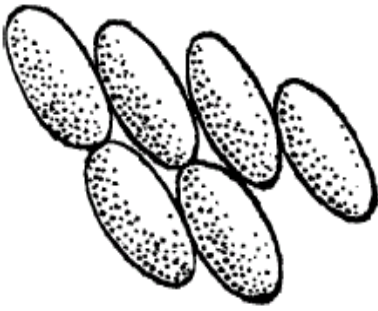
1) Goods were transported to overland to ports in Europe. Rats/fleas were carried in the cargo and travelled aboard ships to other ports in Europe.

2) The Mongol army was advancing west and had attack Caffa on the Black Sea. During the siege several Mongols caught the Plague. Their dead bodies were catapulted over the walls of Caffa, causing the disease to spread. Some merchants trapped in the siege managed to escape by ships, but not before some of them had become infected.

### **Messina 1347 (Italy)**

*"As the ship reached the shore, the people watching gasped in horror. The deck was covered in bodies. Some bodies twitched and moaned. Others lay still. The bodies were covered in black spots and bloody sores."*





'Pasteurella Pestis' The bacterium which causes the plague.

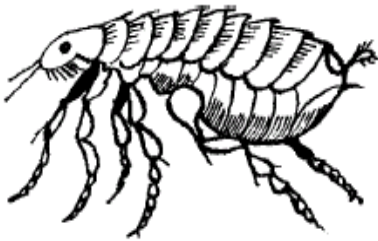


Rats sometimes become infected with this bacterium. It is an internal parasite of rodents especially rats.



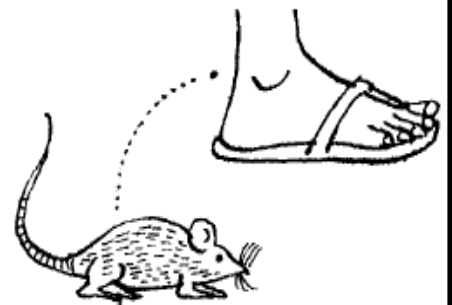
The rat-flea feeds on the infected rat sucking up bacteria along with the blood.

The bacteria multiply quickly in the flea's stomach, completely blocking the stomach with bacteria.



Blocked fleas excrete as they suck blood. The excrement contains the plague bacteria.

As food cannot reach its stomach the flea becomes hungry and attacks any animal including humans to find blood. As the diseased rat dies the fleas move to a new host.



The 'blocked flea' vomits as it tries to suck blood with its blocked stomach. The vomited blood now contains the 'Pasteurella Pestis' from the flea's stomach.



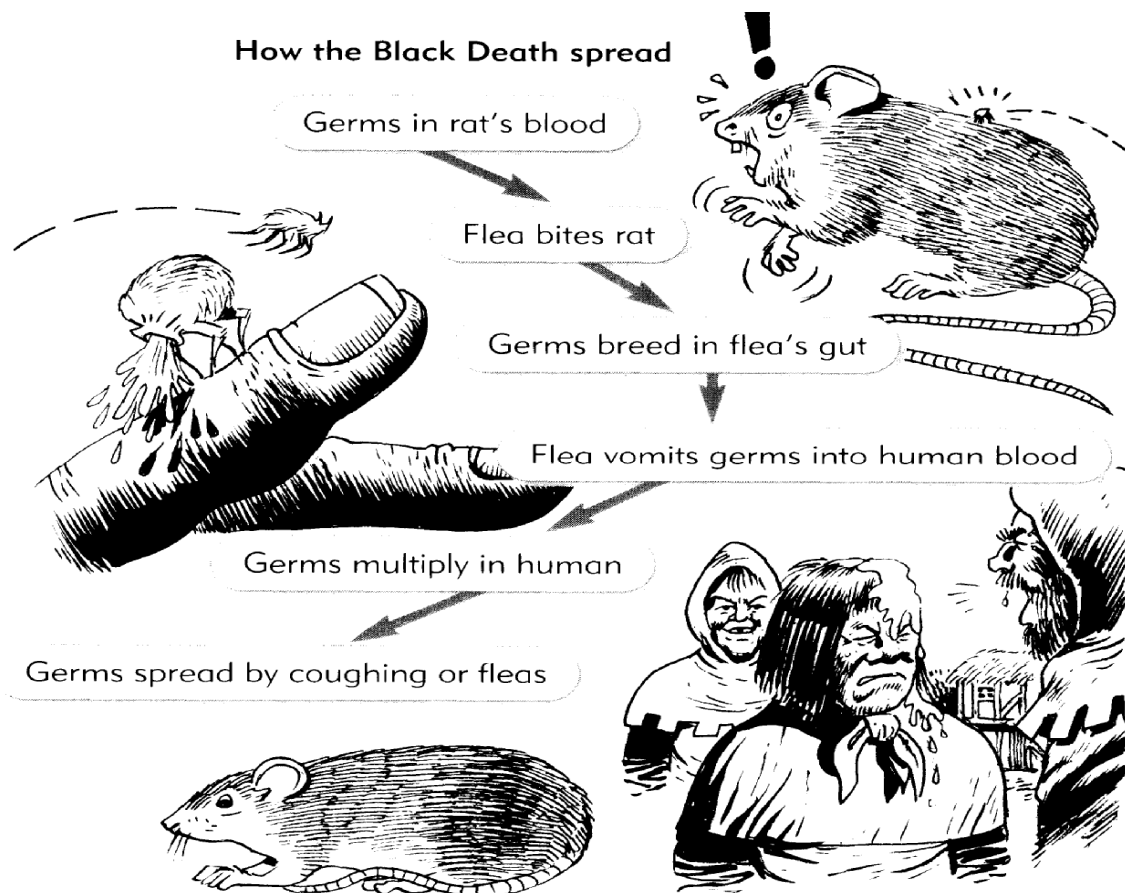
So by vomit and excrement the 'Pasteurella Pestis' is deposited on the victim's skin. As the victim scratches to relieve irritation caused by the flea feeding, the victim rubs bacteria into the puncture wound caused by flea.

### 3. Why did the disease spread so quickly in 1348?

- Rats **breed** quickly and there were large numbers of rats roaming around. Rats already common, therefore nobody made the link!
- The **dirty and crowded conditions** found in towns provided an ideal environment for the rats to live and breed and for the disease to spread. There were **open sewers**, rubbish and waste of all descriptions was thrown in the streets and there was no supply of clean water.
- **Villagers had to travel** to the towns on market days and would then bring the disease back with them.
- **Ignorance** of the cause of the plague was a major cause of the enormous death toll. Rats were already an everyday occurrence.
- **Medical knowledge** was very poor, and remedies often made the situation worse.
- In exceptional circumstances, the **bacteria can transfer** and live in the **human flea** (*Pulex Irritans*).
- In order to thrive the bacteria needs a temperature between 15°-20°C with 90-95% **humidity**. If it is too hot or too cold the flea activity is greatly reduced. Conditions in 1348-1350 favoured an outbreak!

In England the disease reached its peak in August 1349.

### 4. How was the Black Death passed on to humans?





## 5) The Types of Plague and their Symptoms

There were three types of plague: 1) Bubonic, 2) Pneumonic and 3) Septicaemic.

### a) Bubonic Plague

- The most common form of plague. Made up  $\frac{3}{4}$  (75%) of all plague cases.
- Symptoms developed 5 - 6 days after bite.
- Bubonic plague is not directly infectious from human to human; the bacillus must be carried from one person to another by the flea (*Xenopsylla Cheopis*) that live off rats.
- Mortality rate - 60-75%

### What were the symptoms? (How do you know you've got it?)

1. General feeling of being unwell. Aching, Cold/Flu feelings.
- 2: Swellings (boils) under the armpits and in the groin, (buboes) as large as eggs!
3. Red or black patches appear over the body. (Bleeding under the skin)
- 4: Vomiting, headache and fever. Temperature rises to 101-105°F.
5. Sweating, Increased pulse rate and rapid breathing

Death normally followed within 2-5 days of the first symptoms. In non-fatal cases it took two weeks for temperature to return to normal!

### b) Pneumonic Plague

- Affects the lungs and is spread in droplets sprayed from nose and mouth of infected person and through breathing in dried rats droppings (faeces).
  - The respiratory [breathing] system was attacked which meant that the victim's lungs would collapse
  - This would lead to coughing and vomiting, a process that spread the germ to those in the vicinity
  - The Pneumonic Plague was so deadly because it was passed through the air unnoticed
  - Common in spells of colder weather.
  - Highly infectious
  - Mortality rate - 95%
1. Spit becomes slimy and tinted with blood
  2. Spit becomes free flowing and patient bleeds from mouth
  3. Edema – lungs fill with fluid.
  4. Death within 2-3 days.



### c) Septicaemic Plague

- Often followed after Pneumonic Plague, when blood became infected – poisoned.
- Rarest form of plague
- Could also be passed on by direct contact of contaminated hands, foods or objects with nose or mouth.
- Mortality rate 99%

### **Symptoms**

1. High fever and skin turns deep purple owing to lung failure.
2. Unconscious with brain damage.
3. Death occurs very quickly often within a day.

The disease **affected all people** whether rich or poor, healthy or sick, children or adults or they lived in towns or villages. There was widespread panic and fear.

It is because of the enormous death rates between 1347-1352, that medical experts now believe that all three plagues may have hit Europe at the same time. This would also account for the smaller drop of deaths during winter months, something that would not normally occur, as flea activity subsides during the winter!

There are even experts who believe that the Black Death may have been due to an outbreak of Anthrax, a deadly cattle disease. Contemporary (at the time) names were the "Great Pestilence", or simply the "Plague"

### 6) What did medieval people believe were the causes of the plague?

1. A punishment from God. (the well known Biblical stories of the plagues in Exodus would have fuelled this idea) **(religious)**
2. The position of the planets Saturn, Jupiter and Mars **(science)**
3. Breathing in foul smelling air that came from the East. (miasma) **(science)**
4. Being stared at by an infected person, **(science)**
5. Carried in certain foods and spices **(science)**
6. Drinking water from wells poisoned by Jews. **(panic & desperation)**
7. Having sex with an older woman, **(panic and superstition + religious)**
8. Poisonous snakes. **(superstition)**

It didn't take long before people realised that it could be passed on by contact with an infected person. However, the cause of Bubonic Plague was not discovered until 1894!

### 7) What preventions were tried by medieval people?

The attempts at "curing" the plague were usually based on a misunderstanding of its causes and methods of spreading.

1. Shutting oneself up behind closed doors and fasting. **(medical)**
2. Blood letting. Doctor made cut and let amount of blood out. **(medical)**
3. Lance the buboes or use a heated glass over buboes, causing it to burst! **(medical)**
4. Pray for forgiveness or swallowing prayers written on paper by priest. **(religious)**
5. Carrying posies of herbs and flowers to make the air smell sweet. **(herbal)**
6. Cutting a live pigeon in half and applying it to the swellings! **(superstition)**
7. Shave a live chicken's bottom and strap it to the sore! **(superstition)**
8. Using dried toads to reduce the swellings. **(superstition)**
9. Swallow powders of crushed emeralds. **(superstition)**
10. Eat arsenic powder (very poisonous) or powdered unicorn horn! **(superstition)**
11. Kill all cats and dogs **(medical)**
12. Kill Jews. **(panic and desperation)**
13. Wear amulets or charms and say magic spells like abracadabra. **(superstition)**
14. Leave one's town home to go and live in the countryside. **(medical)**
15. Drinking heavily and enjoying oneself in public. (we're going to die anyway, so let's enjoy ourselves!)

Obviously some of the above never worked, whilst others helped to spread the plague. The poorer villagers simply couldn't leave their villages.

## 7) The Flagellants

Many people thought that the plague was a punishment from God for their sins. They believed that the cure was 'prayer and penance'. They were called '**flagellants**' and wandered the country praying, preaching and beating themselves with sharp ended whips. The real effect of this group of travelling fanatics was to weaken themselves and then spread the plague further as going from one town to another was a dangerous way of transporting the bacillus. Pope Clement VI ordered that the Flagellants be suppressed.

### 8) What were the effects/results/impact of the Black Death in Britain?

#### a) Breakdown of The Feudal System - Society

1: **Short term** - It is estimated that between 35-50% of the population died. (**1½ -2 million** of the country's 4m) 17,000 people died in **London** out of a population of 60,000.

**Long term** - It took 200 years for the population to get back up to its 1348 level

2: 3000 **villages** became **deserted** as people died or moved away. Some villages were never reinhabited (Wharram Percy)

3: The **feudal system started to break down**. There was a **shortage of workers (peasants)**. This meant that workers (freemen and peasants) started to demand wages instead of working for the lord in return for the land leased to them. (bondage). In return for the land they would pay rent. Those already being paid for their work could now demand higher wages. For example, a ploughman in Cuxham earned 2s in 1347 but this rose to 7s in 1349 and to 10s 6d by 1351. A mower was paid 5d an acre in 1348 but 9d an acre in 1350.

- Workers were now free to work wherever they wished. The quality of life for peasants would improve. Some peasants inherited more land.
- Some survivors felt that having survived they were God's chosen and demanded better treatment.
- The lords were desperate and had to compete with each other in order to farm their lands and make money and survive! This included lowering rent as well as offering attractive wages and allowing peasants to buy their freedom.
- Law and order broke down in some areas.

**Therefore Black Death = long term cause of 1381 Peasants' Revolt, and helped to end Feudal System.**

#### b) Agriculture - Farming

3: **Short term** - However, because of the shortage of workers, in some areas the land remained unfarmed, animals died or roamed around unattended and fields overgrew or rotted.

4: **Long Term** - The effects on **agriculture** were enormous. Many landowners turned to sheep farming (pastoral) instead of growing crops (arable). **Sheep farming** requires less manpower and less time and the wool industry was beginning to thrive. This led to the policy of **enclosures**. In areas where there was a shortage of workers, sheep farming meant that many lost their jobs and homes.

### c) Prices

5: The reduction in population led to a drop in demand for certain foods but a rise in other foods and products. The price of cattle and sheep dropped.

	1347	1348	1349	1350
Cattle	13s 7d	10s 6d	6s 8d	-
Sheep	2s 2d	1s 5d	1s 4d	-
Salt (Bushel)	4½d	-	-	1s 2d
Iron	8s 6d	-	-	25s
Canvas	2s 3½d	-	2s 9d	4s 3d



### d) The Church

6: **Short term** - In times of plague many turned to their priest/monastery for care and comfort. **It is estimated that 45% of priests died.** There were not enough priests to carry out services, funerals or weddings. In London 3 priests out of every 7 died. Some saw this high death rate as a punishment for their sins and the Church lost support. Many churches had to close. The remaining clergy then demanded more money to carry out their job. The power of the Church was weakened.

**Long term** - Quality of churchmen deteriorated as simony, (selling of positions to anyone) nepotism, (giving positions to relatives or friends) and pluralism (holding more than one position) became widespread. Many new priests were illiterate (could not read or write). However, English became more accepted as a written language as less educated people replaced the many French and Latin writing (literate) priests who had died.

7: **Short term** - In many **monasteries** nearly all the monks died. 100 abbots died along with an estimated 8,500 monks and nuns. **Long Term** - With monasteries closing, the local community suffered as the monasteries provided so much help.

8: Dislike of the Church as it hadn't helped and bishops would not free their peasants.

### e) Business/Commerce/Trade

9: **Short term** - Many important **businessmen died.** Many guild members died including four Master Goldsmiths in London. A shortage of skilled craftsmen saw a rise in prices of certain goods. **Long term** - Surviving journeymen demanded higher wages, which led to an increase in prices.

10: **Short term** - The **Hundred Years War** was brought to a temporary halt. This was at a time when England had the upper hand.

11. Trade between Britain and Europe was disrupted.

### f) Increased religious intolerance

12: was another impact - the Jews persecuted

- Jews were often used as scapegoats when something went wrong in Medieval Europe such as disease, famine and crusade. Many burnt them alive.
- However, Pope Clement VI and many bishops intervened to save the Jews, pointing out they suffered as much as Christians did from the plague Many Jews fled from western Europe to more tolerant régimes in central and eastern Europe



## 9) Ordinance of Labourers (1349) and Statute of Labourers (1351)

Edward III and Parliament introduced the Ordinance of Labourers in 1349. This was a desperate attempt by King Edward III to freeze wages paid to workers at their pre-plague levels. In 1351 the **Statute of Labourers** followed. The high rates of pay and increasing rights of peasants were worrying landowners.

1. No one was to be paid more than he was before the Black Death.
2. Any Lord that paid higher wages would be fined.
3. No one was allowed to move to new village without the Lord's permission.
4. Shopkeepers were not allowed to increase the price of goods.

The Statutes were issued with good intention but had little effect on the situation. A few workers were arrested and some lords fined but the Black Death had started the irreversible breakdown of the feudal system. Wages remained higher. The peasants now had something very valuable - their labour.

## 10) Sources on the Plague

### Source A

*Sheep and oxen wandered free through the fields and among the crops, and there was no one to drive them off. When harvest time came higher wages were not enough to get people to gather in the crops which rotted in the fields.*

**'Chronicle of Henry Knighton' 1348-49**

### Source B

*At Woodeaton there were only two farmers left and they would have gone away if the abbot had not made a new agreement with them to reduce their work service. At the deserted village of Wyville in Lincolnshire the land is worth little because it is poor and stony. It is not being used as there are no people left to farm it after the plague*

**Records of Eynsham Abbey, c.1385**

### Source C

*The king sent an order to all the counties that labourers should not be paid more than before the plague. But the labourers were so proud and stubborn that they would not listen to the King's command. If anyone wanted to employ them he had to pay them what they wanted or lose his fruit and crops. Then the King ordered many labourers to be arrested and put in prison.*

**'Chronicle of Henry Knighton' 1351**

### **Source D**

*You could hardly get a priest to look after a church for less than £10 a year. There had been plenty of priests before the plague. Then you could get a priest for £2 and his food. But at this time very few would take a job at £20 a year.*

**'Chronicle of Henry Knighton' 1349**

### **Source E**

*It is sad but the whole world was changed for the worse when shepherd and cowman demand more for their labour than the overseer. Labour is so high priced that those men who employ workers must pay five or six shillings for what used to cost two. Labourers of old did not eat bread made from wheat, their meals were of beans or coarse grain and their drink was of water. In those days they knew their place. People were meaner and more greedy than before, even though they had more things. They were jealous of each other and there was an increase in the number of fights, arguments and law cases.*

**Jean de Venette, 1349.**

### **Source F**

*As soon as masters accuse their workers of bad work or try to pay them less they leave and quickly find jobs in new places at higher wages. Masters dare not upset their workers and so have to give them whatever they ask for.*

**Introduction to a law, 1376**

### **Source 1 Effects of the plague**

*The price of everything was lower because of the fear of death... The cattle roamed masterless over the countryside, crops rotted in the fields for lack of hands to reap them, and there were not enough priests left alive to bury the dead.*

### **Source 2 Effects of the plague**

*....parishes remained altogether without service, and priests left for fear of death.*

### **Source 3 Causes of the plague**

*Fire fell like rain. It destroyed all the land and killed the people. Then there were huge amounts of smoke- anyone looking at this died in less than twelve hours. Also, anyone who looked at someone who had seen the smoke quickly died.*

**Chronicle of Este, c.1346**

### **Source 4 Symptoms of the plague**

*It began in young children, male or female, either under the armpits or in the groin by swellings, in some to the bigness of an apple, in others like an egg. It also showed itself by black or blue spots on the arms of many, or on their thighs.*

**Boccaccio. Italian writer 1348.**

### Source 5 Symptoms of the plague

*Those infected felt pain throughout their bodies. Then boils developed on their thighs and upper arms, about the size of a walnut, which the people called burn boils. The disease affected the whole body and the patient coughed up blood without stop for three days. As there was no way to prevent this, the patient died.*

**Michael of Pizza. Italian priest 1347.**

### Source 6 Effects of plague in London

*.....it killed off many people every day. It spread so much from the Feast of Purification (2nd Feb.) till after Easter more than two hundred bodies were buried daily in the new cemetery near Smithfield - to say nothing of other cemeteries. But by the grace of God it departed from London at Whitsuntide. (2 months after Easter) London priest 1348*

### Source 7 Cure for the plague

*Toads should be thoroughly dried in the air or sun. They should be laid on the boil. Then the toad will swell and draw the poison of the plague through the skin to its own body. When it is full it should be thrown away and a new one applied..*

**Guy de Chauliac. French surgeon 1348.**



**'You dirty rat.'**

