



Big Era Five
Patterns of Interregional Unity
300-1500 CE



Closeup Teaching Unit 5.5.1
Coping with Catastrophe
The Black Death of the Fourteenth Century

Table of Contents

A Teaching Unit of the National Center for History in the Schools	2
Why this unit?	2
Unit objectives	2
Time and materials	3
Authors	3
The historical context	3
Table of dates	7
This unit in the Big Era timeline	10
Dramatic moment	11
Lesson 1: No Escape from Death: The Catastrophic Plague Arrives	13
Lesson 2: Trying to Cope: Explanations and Counter-measures	23
Lesson 3: The Impact on Society	40
Unit summary discussion questions and activities	49
This unit and the Three Essential Questions	50
This unit and the Seven Key Themes	50
This unit and the Standards in Historical Thinking	50
Resources	51
Correlations to National and State Standards	53
Conceptual links to other teaching units	54

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A Teaching Unit of the National Center for History in the Schools

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Why this unit?

This unit deals with the causes, characteristics, transmission, and social consequences of the **Black Death** of the mid-fourteenth century in the geographical context of **Afroeurasia**. Through study of **primary source** documents, students will consider how the mindsets of people who faced a horrifying crisis nearly 700 years ago were similar to or different from those of people today. Exploring a case of catastrophic population decline, they will investigate the importance of demographic (population) change as a historical theme. They will grapple with the problem of how to assess the historical significance of a key event in world history.

Teachers may present this unit in a number of classroom contexts:

- An example of a historical process that cut across political and cultural boundaries and that had significance for Afroeurasia as a whole.
- A case study of the influence of the environment on human history.
- Part of a general study of the medieval period.
- A basis for comparison with other demographic crises of major significance, for example, the calamitous decline of American Indian populations in the sixteenth century.
- Background to study of the Renaissance-Reformation in Europe.

Unit objectives

Upon completing this unit, students will be able to:

1. Trace the spread of the Black Death and relate its spread to historical conditions in Afroeurasia in the fourteenth century.
2. Describe contemporary reactions to the Black Death and explain how social and cultural values, beliefs, and conditions influenced those reactions.
3. Analyze and appreciate the complexity of the causes and consequences of the Black Death.
4. Draw inferences from information on a map or in a primary source document.
5. Assess the reliability of primary sources as historical evidence.
6. Evaluate the historical significance of an event.

Time and materials

A thorough treatment of the unit will take 120 to 240 minutes of class time. Because each lesson stands on its own, however, teachers may choose to present only one or two lessons.

No special materials are required.

Authors

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The historical context

In the mid-fourteenth century, the plague pandemic first known as the Great Dying and later as the Black Death arrived from Central Asia to afflict Europe, the Middle East, and North Africa. Carried by infected fleas that infested black rats, clothing, bedding, or human body hair, the plague appeared first in Europe and the Middle East in ports. Then it progressed quickly along rivers and roads into towns and cities, progressing more slowly into rural areas inland. Bubonic plague, the most common form of the disease, killed people in three to five days. It began with high fever climbing to 105 degrees, then it caused convulsions, vomiting, and agonizingly painful swellings. Those sores, or *buboes*, which gave their name to the disease, appeared in the lymph glands and could be the size of an egg or apple. Between two-thirds and four-fifths of those bitten by the fleas and infected by the disease died. The pneumonic form of the plague affected the lungs and could be transmitted directly from person to person by coughing, sneezing, or even breathing. This form was always fatal and could kill within a matter of hours.

All in all, during the initial half-century or so of recurring outbreaks, about one-third to one-half of the population died in the areas that the plague reached. In crowded cities, the death toll was higher and dying was faster. For instance, in the Italian town of Pistoia (where population had already dropped significantly owing to the famines of the early fourteenth century), it is estimated that about two-thirds of the population died during the plague's first occurrence in 1348. Three more waves of the plague afflicted the city before 1400. In the last of these, half the remaining population died. In the next half-century or so, the plague returned six more times.

Medical knowledge at the time was helpless in the face of the disease. People did not agree on what caused it or on how to treat it. Many different explanations were put forward, drawing on both pre-existing beliefs and actual observations. The most widespread theories were God's anger with sinful humanity, the malign influence of comets, the conjunction of planets, and the activities of demons and devils. Several learned authorities thought "tainted air" was the cause, since illness was known to be associated with rotting corpses, the reeking filth, and the fetid mists rising from swamps. Some argued that exposure to those people already sick, or to objects contaminated by contact with them, caused infection. At times, sheer human malice was blamed.

Although many doctors, officials, and ordinary people admitted that nothing anyone did seemed to make a difference, people took a number of religious, magical, and practical measures to try to prevent or cure the plague. These ranged from religious rituals to strict enforcement of existing sanitary laws to control garbage and urban pollution; from burning the possessions of those who died of the infection to burning Jews, who could be handy scapegoats; from restrictions on travel to the use of magical talismans and spells; from bloodletting for the healthy to surgery on the buboes.

It was not until the end of the nineteenth century that two men, Alexandre Yersin and Kitasato Shibasaburo, independently discovered the bacillus that causes bubonic plague. Subsequently, Professor M. Ogata in Tokyo proved that fleas taken from infected rats carried the bacillus. Then, by observing bites on the legs of victims, in 1897 P. L. Simond proved that fleas transmitted the plague from sick rodents to the humans they bit. Development of antibiotics after World War II provided effective medication against the plague. The disease continues to occur in smaller-scale outbreaks in various parts of the world today. The plague bacillus remains alive and well among wild rodent populations in a number of places, including the western United States. It is still capable of infecting people. In some campgrounds and other public areas, signs warn people to stay away from squirrels or other rodents because these animals could be infected.

Many features of fourteenth-century life encouraged the spread of the plague. Thatched roofs, wattle-and-daub walls, household trash, and straw on floors and in bedding provided nesting places and food for infected black rats and fleas. When sick rats died, the fleas that infested them looked for other hosts. Human bodies and woolen clothes, both unwashed, were comfortable habitats for fleas. Long-distance trade, Christian pilgrimages, the march of armies, and the custom of nobles and their households of moving from manor to manor were all ways that infected rats, fleas, and people carried the plague from place to place. Medieval towns and villages were crowded, and within houses whole families sometimes lived packed together in a small room, which they often shared with domestic animals.

Although the plague killed both rich and poor, mortality among the latter was higher. The rich lived in houses more likely to have stone floors and walls with tile roofs, locked-away food supplies, and less contact with garbage, making their homes less attractive and accessible to rats. It is noteworthy that King Alfonso IX of Castile was the only crowned head of Europe who died of the plague. He contracted it when he refused to leave his troops after the plague broke out both among his own and the enemy soldiers. Mortality was also higher than average among

physicians and priests, because they attended the sick and dying. One city's careful records show that there were nine municipal physicians and eighteen barber-surgeons in the population of about 12,000. But only one physician and two barber-surgeons survived.

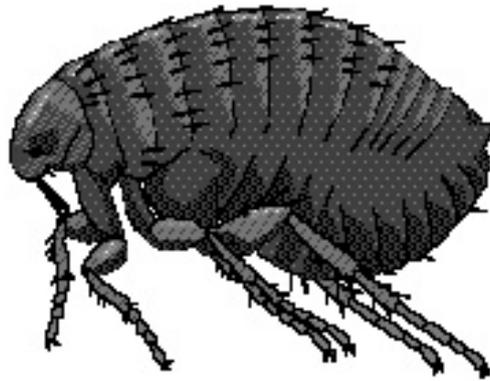
Historians' judgments about the effects of the Black Death have varied. In the short term, the huge die-off brought a serious labor shortage. One early result of this was a mini-boom in the slave trade in some areas such as northern Italy. Entire villages were abandoned and untilled fields were converted to pasture for sheep. After the initial crisis, wages and therefore the **standard of living** rose for working people who had survived. Over the long term, the experience of the plague contributed to the establishment of government-controlled public health boards, the use of quarantine, and more university-oriented training for medical professionals. Because of the difficulty of replacing victims, such as priests and officials, who knew Latin, the Black Death also led to the vernacular languages. It also contributed to changes in settlement patterns such as the eastward migration of Jewish communities fleeing the plague and the accompanying persecutions. Out of this period emerged the *shtetl* culture of eastern Europe.

Another widespread effect was increased tension between upper and lower classes. The rich who survived had more wealth concentrated in their hands, having inherited from all who had died. The working classes, however, also held a stronger hand because the scarcity of labor encouraged them to demand higher pay and greater freedoms. Resentments and conflicts of interest between the classes led to uprisings in a number of countries both among serfs and peasants in the countryside and workers in the cities. The Peasant Rebellion in England in 1381 is a well-known example.

Some have seen popular loss of confidence in Church and political authorities as contributing to greater individualism and to a rising interest in personal, mystical religious beliefs. That is, the plague was part of the background to both the Renaissance and the Reformation. The constant nearness of death made salvation of immediate importance. Yet the clergy, who as the educated class should have been able to explain and deal with the plague, failed to do so. Too often, priests also failed to live up to their idealized image as selfless individuals. Therefore, people increasingly took the acquisition of salvation, at least in part, into their own hands by emphasizing the importance of "good works." There was significant increase in charitable giving, especially to hospitals, new chapels, and pilgrimage centers. In the arts, themes connected with death were popular. Contemporaries described the psychological effects as swinging between the pole of frantic pleasure-seeking to the pole of ardent religious faith, which often tipped toward fanaticism.

Though this unit focuses on Europe, the Black Death and the recurring plague had equally far-reaching effects in north Africa, the Middle East, and Inner Eurasia, and probably in China. Epidemic disease and the disruptions that went along with the massive die-off may have been a factor in the collapse of Mongol rule in China, the weakening of the Mamluk Empire in Egypt and Syria, a general downswing of production and trade all across Afroeurasia, and a widespread shift of populations from rural areas to towns and cities.

As a final note, the term Black Death normally refers to the first onslaught of the plague that, between 1346 and 1352, swept from the Black Sea region across the Mediterranean, the Middle East, and Europe. Scholars do not refer to recurrences of the plague in the following decades as Black Death, nor do they use the misnomer Black Plague.



An illustration of the flea that transmits plague



Rats that carry fleas which transmit the plague bacterium
Pneumonic Plague Outbreak Sites and Rats in Los Angeles. California Heritage
Finding Aid Collection, 1924, no. 34. <http://www.oac.cdlib.org/>

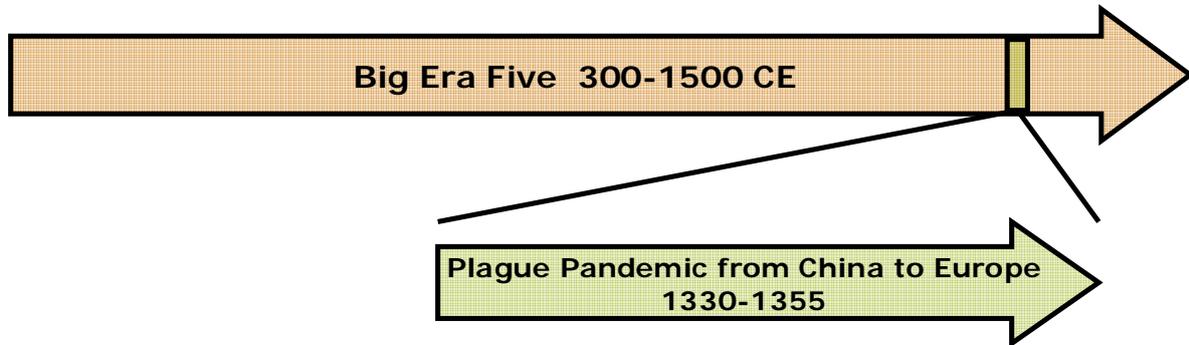
Table of dates

1306	France and England renew their periodic expelling of Jews
1309	Pope moves his court to Avignon under pressure from French king, starting the so-called “Babylonian Captivity” of the Church First continent-wide famine in 250 years due to excessive rainfall (climate had been getting colder and wetter since late thirteenth century)
1310-19	Decade of failing harvests and famine in large areas of western Europe
1318-20	Cattle pest and sheep disease decimates herds and flocks
1321-22	Europe-wide harvest failures
1324-25	Widespread murrain (disease) of sheep
1323-28	Peasant revolts in Flanders against landlord nobility
1325	Return of sheep murrain
1331	Widespread epidemic disease in China, which some consider to have been plague
1335-36	Europe-wide famine
1337	Hundred Years’ War between England and France begins; French king employs Middle-Eastern mercenary ships from the Levant Death of Florentine painter Giotto, who led the way in introducing naturalism, the style that developed and flourished during the Renaissance
1338	Embassy from Great Khan of Mongols arrives at Avignon, asking pope to re-establish friendly relations. Pope sends thirty-two missionaries with gifts in response, who reach Peking in 1341 and return after three years there
1340	“The Merchant’s Handbook” by an Italian author reports that the road from China to the Black Sea is safe to travel both day and night

- 1345 Conjunction of three planets: notoriously malevolent Saturn, hot and humid Jupiter, and fiery Mars, later claimed as cause of Black Death
- Ottoman Turks cross into Europe to intervene in the Byzantine empire's civil war
- Urban workers in Florence revolt against the ruling class following civil war
- 1345-48 Poor harvests and major famines in many areas
- 1346 Mongol troops on the Black Sea infected with plague
- English army of commoners with longbows on foot defeats French mounted nobility at battle of Crécy
- 1347 Outbreak of the Black Death in Constantinople, Sicily, Genoa, and Alexandria
- Turkish and Serb armies fighting in the Byzantine civil war harass the Balkans
- 1348 The Black Death reaches France, England, Tunisia, and Mecca (Arabia)
- Blaming of Jews for the plague begins, though Pope issues official statements declaring their innocence
- 1349 Plague-ravaged England and France declare a truce in the Hundred Years' War
- Pope issues condemnation of flagellants
- 1349 Black Death reaches Scandinavia
- 1350 Often-given conventional date for the beginning of the Renaissance
- 1351 English law, the *Statute of Laborers*, fixes wages at 1346 levels
- The Black Death reaches Moscow
- 1353 Italian humanist Boccaccio's book, *The Decameron*, describes the Black Death in Florence

- 1354 England and France resume the Hundred Years' War
- 1355 Founder of Ming Dynasty leads revolt against Mongol domination of China
- 1358 Massive peasant uprising, the *Jacquerie*, in France
- 1360 Tamerlane becomes chief of his tribe
- 1361 Europe-wide recurrence of plague, with mortality especially high among children. Hereafter, there are local, regional, and sometimes wider recurrences of the plague every 5-12 years or so
- 1368 The Mongol (Yuan) dynasty in China is replaced by the Ming dynasty
- 1374 Quarantine imposed by the Venetian Republic on ships found infected with plague
- 1375 Death of the poet Petrarch, among the first and most influential of Renaissance humanists
- 1376 John Wycliff claims any good man can act as priest, allows women to preach, asserts that reading the Bible for oneself negates need for guidance from Church, and begins translation of Bible into English
- 1378 Great Schism in Catholic Church: two popes are elected, each denouncing the authority of the other
- 1378-1383 Uprisings of urban workers, journeymen, peasants in France, Flanders, and Italy
- 1381 Peasant revolt in England against serfdom, and unpopular taxes
- 1382 Europe-wide recurrence of plague
- 1391 Major pogrom in Spain, again scapegoating Jews for new outbreak of plague
- 1393 Tamerlane's Mongol horsemen add Mesopotamia to their earlier conquests in Persia, Afghanistan, Russia, and elsewhere. Five years later, they will invade India

This unit in the Big Era timeline



Death, represented by a skeleton, leads people of all social ranks in a macabre dance
Fresco in the Chapel of Kermaria-an-Iskuit, 1501 CE, Brittany, France

Photo by R. Dunn

Dramatic Moment

A Case of Germ Warfare That Got Out of Hand

In the year 1346 ... in eastern parts an immense number of Tartars and Saracens fell victims to a mysterious and sudden death. In these regions vast districts, numerous provinces, magnificent kingdoms, cities, castles, and villages, peopled by a great multitude, were suddenly attacked by the mortality, and in a brief space were depopulated. A place in East called Tana, situated in a northerly direction from Constantinople and under the rule of the tartars, ... which Italian merchants [often visited] was besieged by a vast horde of Tartars and was in the short time taken. The Christian merchants violently expelled from the city were then received for the protection of their persons and property within the walls of Caffa, which the Genoese had built in that country.

The Tartars followed these fugitive Italian merchants, and surrounding the city of Caffa, besieged it likewise. Completely encircled by this vast army of enemies, the inhabitants were hardly able to obtain the necessaries of life, and their only hope lay in the fleet which brought them provisions. Suddenly "the death," as it was called, broke out in the Tartar host, and thousands were daily carried off by the disease, as if arrows from heaven were striking at them and beating down their pride.

At first the Tartars were paralyzed with fear at the ravages of the disease, and the prospect that sooner or later all must fall victims to it. Then they turned their vengeance on the besieged, and in the hope of communicating the infection to their Christian enemies, by the aid of the engines of war, they projected the bodies of the dead over the walls into the city. The Christian defenders, however, held their ground, and committed as many of these plague-infected bodies as possible to the waters of the sea.

Soon as might be supposed, the air became tainted and wells of water poisoned, and in this way the disease spread so rapidly in the city that few of the inhabitants had strength sufficient to fly from it.

[Those who escaped did so aboard Genoese ships, falling sick on the sea-voyage to Sicily. At this point, another chronicler took up the story.]

In the month of October, in the year of our Lord, 1347, about the beginning of the month, twelve Genoese ships, flying from the divine vengeance which our Lord for their sins had sent upon them, put into the port of Messina [in Sicily] bringing with them such a sickness clinging to their very bones that, did anyone speak to them, he was directly struck with a mortal sickness from which there was no escape. ...

Seeing what a calamity of sudden death had come to them by the arrival of the Genoese, the people of Messina drove them in all haste from their city and port. But the sickness remained and a terrible mortality ensued. The one thought in the mind of all was how to avoid the infection.

The father abandoned the sick son; magistrates and notaries refused to come and make the wills of the dying; even the priests to hear their confessions. ...

Corpses were abandoned in empty houses, and there was none to give them Christian burial. The houses of the dead were left open and unguarded with their jewels, money, and valuables; if anyone wished to enter, there was no one to prevent him. The great pestilence came so suddenly that there was not time to organize any measures of protection; from the very beginning the officials were too few, and soon there were none. The population deserted the city in crowds; fearing even to stay in the environs, they camped out in the open air in the vineyards whilst some managed to put up at least a temporary shelter for their families. ...

Processions and pilgrimages were organized to beg God's favor. Still the pestilence raged and with greater fury. Everyone was in too great a terror to aid his neighbor. Flight profited nothing, for the sickness, already contracted and clinging to the fugitives, was only carried wherever they sought refuge.

Source: Francis Aidan Gasquet, *The Great Pestilence (AD 1348-9), Now Commonly Known as the Black Death* (London: S. Marshall, Hamilton, Kent, and Co., 1893), 5-6, 12-14.



A depiction of Death felling the Tree of Life

Source: Phyllis Corzine, *The Black Death* (San Diego, CA: Lucent Books, 1997), 77.

Lesson 1
No Escape from Death
The Catastrophic Plague Arrives

Objectives

1. To examine the characteristics and course of the Black Death.
2. To relate the spread of the Black Death to historical conditions at the time.
3. To analyze ways that the characteristics of their culture constrain the choices available to members of a society.
4. To practice drawing inferences from information given on a map and in original sources, and to assess their reliability as historical evidence.

Activities**Activity One: Map Interpretation**

Distribute copies of Student Handout 1.1. Use your choice of the following questions to guide the students' analyses of the map.

Discussion questions on transmission of the Black Death:

1. Given the information about the route and dates of arrival of the Black Death on the map, information in the Table of Dates (above), and what you already know about medieval history and society, do you think that, overall, the infection was most likely to have been carried by armies, lords visiting their various manors, merchants, or pilgrims? For each possibility, suggest the area on the map where it was most likely to have been at least a contributory factor in transmission. What other methods of transmission might have played a part? What evidence can you give to support your hypotheses?
2. What information on the map would support a connection between population density and the presence of plague? What information would contradict this hypothesis?
3. What explanations might be given for the fact that it took the plague as much as sixteen years to move from China to the northern shore of the Black Sea but only a year or so from there to Italy and Egypt and another year to England? What evidence can you give to support your explanations?

4. How certain can you be that areas on the map to which the plague is not shown to have been transmitted (such as West Africa, East Africa, and India) were in fact spared? Explain your reasoning.

5. If you were a textbook editor with a tight budget and if maps were expensive to print, would you include this map in your textbook? Why or why not?

Activity Two: Primary Source Interpretation

Have students read Student Handouts 1.2 and 1.3. Guide group or class discussions using the following questions.

Discussion Questions:

1. Besides the fact of death itself, what other problems caused by the Black Death did Boccaccio and di Tura identify?

2. What characteristics of the Black Death were emphasized by the contemporary observers read so far (including those in the Dramatic Moment)?

3. From the evidence of the map and the original sources, what inferences could you draw about the influence of geography on the spread of the plague? About the influence of human activities on the spread of plague? If you were a historian, what kinds of additional evidence would you try to find in order to support your inferences?

4. Given fourteenth-century conditions, what additional actions could have been taken to cope with the plague besides those described by the contemporary observers you have read so far?

5. What reasons can you give for accepting, and what reasons for doubting, the information given by Boccaccio and di Tura?

6. In your reaction to Boccaccio's and di Tura's accounts, what difference, if any, does it make that the two authors' outlook and purpose were different? That Boccaccio's account is part of a book that is fiction, and he did not speak from personal experience, while di Tura's is a chronicle by an eyewitness? How acceptable is hearsay as historical evidence? How acceptable is fiction as historical evidence—what could novels, say, reveal about the historical period in which they were written? Defend your point of view.

Activity Three: Role-Playing

Role-play a conversation among members of a family in Florence in the summer of 1348, when the plague had already gotten a hold but well before its peak. What features of their situation would they be talking about? What alternative courses of action are open to them? Given their level of knowledge, what are the pros and cons of various courses of action?

Students might be asked, perhaps in groups, to pre-design the family's situation. What characteristics of the family would affect their options and how they regarded the pros and cons of the various options: Social class? Age and gender of various family members? Knowledge of the surrounding countryside and neighboring settlements? Whether any of their relatives, friends, or neighbors had died already? Measures being taken by the government, the Church, or people they know? The kind of advice they are getting, and from whom?

Activity Four: Writing Diary Entries

Write a set of diary entries spanning several weeks as they might have been written by a literate citizen of a town hard hit by the plague in 1348. Include the descriptions, observations, concerns, and attitudes that would likely have been reflected in such a diary. (This activity may serve as an assessment.)



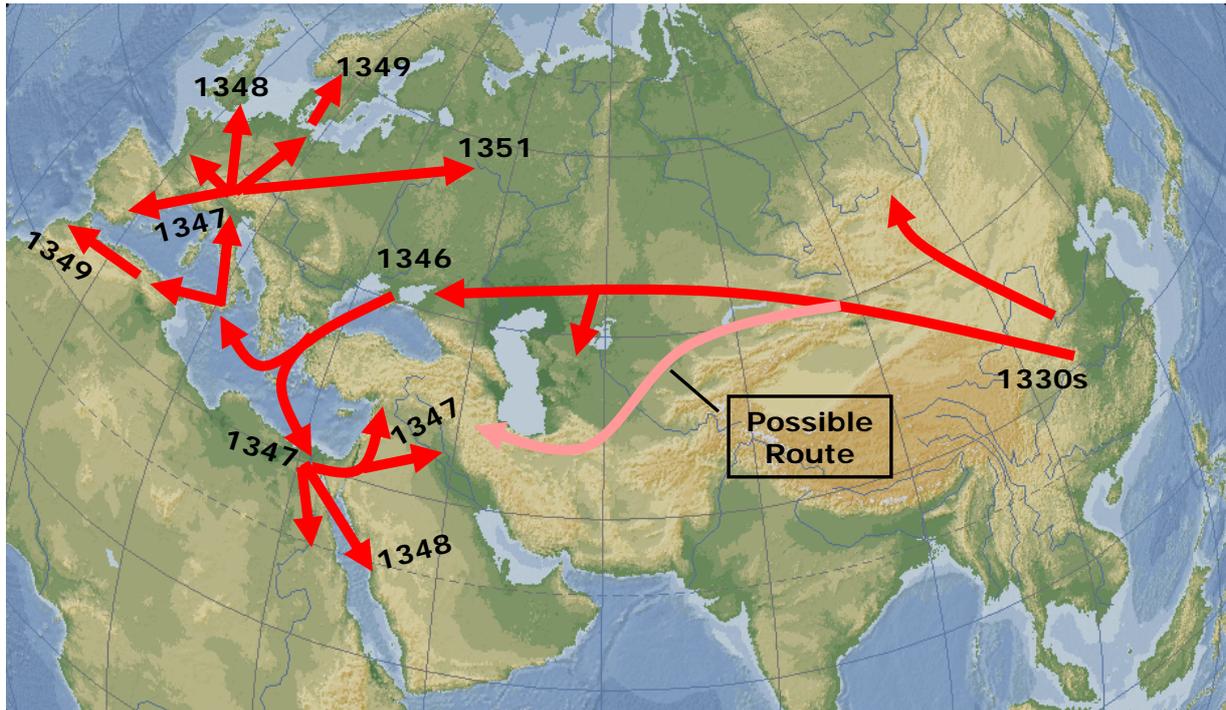
All Saints Cemetery Church in Sedlec, Czech Republic. The interior of the building, known as the "Bone Church," is decorated with human bones. The remains of people, including victims of the Black Death, were transferred from the cemetery to the church early in the sixteenth century.

Photo by R. Dunn



Lesson 1

Student Handout 1.1—Transmission of the Black Death



Lesson 1

Student Handout 1.2—Everyone Felt He Was Doomed to Die.

Historical background

Boccaccio was the illegitimate son of a merchant family. Although poetry was his love from an early age, his father made him serve an apprenticeship in commerce. He studied law for a while, and traveled on business in Italy and France. He was not in Florence in 1348 when the Black Death struck the city, though he described it in his masterpiece, the book called *The Decameron*. It is a book of stories in which seven young women and three young men of Florence leave the city for the hills. They are fleeing the plague which, according to Boccaccio, killed upwards of 100,000 people during its height from March to July. In the stories, the young people amuse themselves by taking turns telling tales. Many authors later borrowed the plots of these tales. Although Boccaccio's vivid portrait of plague-infested Florence was not an eyewitness account, he certainly had plenty of opportunity to talk to those who were survivors of the epidemic.

In 1350, when he returned to Florence, he became a friend of the humanist man of letters, Petrarch. The two of them became important figures in the early Renaissance. As a humanist, Boccaccio bought and copied many neglected manuscripts of classical literature and history. He also promoted the study of Greek, so that the newly-collected books in this language could be read in Italy. Acclaimed as an author, he traveled as a diplomat in the service of the Republic of Florence. Therefore, his ideas could be widely influential.

Florence was an inland city, but located on the navigable Arno river. At the time of the Black Death, its records show about 100,000 inhabitants. It had 200 establishments producing high quality cloth which, along with customs dues and income from banking services, enriched the republic. It was a center of arts and letters, with many fine buildings, pictures, and libraries. It was not immune, however, to famine, which struck in 1340, followed by rioting of the poor against the wealthy, and civil war. Famine recurred in 1347. The following year, according to the reputable Florentine historian Villani, three-fifths of the city's population died of the Black Death. In fact, it later killed Villani himself.

This mortality, however, was not for lack of people trying to cope with the disaster. A committee of eight was formed and given near-dictatorial powers. They refused entrance to the walled city to any who were sick, enforced stringent regulations against garbage in the streets, forbade large public gatherings at funerals, and arranged for the collection of corpses and their burial layered in trenches after graveyard space ran out. Their measures were unsuccessful, and lapsed when not enough personnel were left to enforce them. For five months, the plague continued to rage. Nevertheless, only three years later, Florence was able to make war on the lord of Milan who tried to dominate the city. Soon after, Florence expelled bands of mercenaries that had invaded its territory.

Primary Source

Into the distinguished city of Florence, more noble than any other Italian city, there came the deadly pestilence. It started in the East, either because of the influence of heavenly bodies or because of God's just wrath as a punishment to mortals for our wicked deeds, and it killed an infinite number of people. Without pause it spread from one place and it stretched its miserable length over the West. And against the pestilence no human wisdom or foresight was of any avail; quantities of filth were removed from the city by officials charged with this task; the entry of any sick person into the city was prohibited; and many directives were issued concerning the maintenance of good health. ...

[I]t began in both men and women with certain swellings either in the groin or under the armpits, some of which grew to the size of a normal apple and others to the size of an egg (more or less), and the people called them *gavoccioli*. And from the two parts of the body already mentioned, within a brief space of time, the said deadly *gavoccioli* began to spread indiscriminately over every part of the body; and after this, the symptoms of the illness changed to black or livid spots appearing on the arms and thighs, and on every part of the body, some large ones and sometimes many little ones scattered all around. ... Neither a doctor's advice nor the strength of medicine could do anything to cure this illness; on the contrary, either the nature of the illness was such that it afforded no cure, or else the doctors were so ignorant that they did not recognize its cause and, as a result, could not prescribe the proper remedy (in fact, the number of doctors, other than the well-trained, was increased by a large number of men and women who had never had any medical training) at any rate, few of the sick were ever cured, and almost all died after the third day of the appearance of the previously described symptoms (some sooner, others later), and most of them died without fever or any other side-effects.

This pestilence was so powerful that it was communicated to the healthy by contact with the sick, the way a fire close to dry or oily things will set them aflame. And the evil of the plague went even further: not only did talking to or being around the sick bring infection and a common death, but also touching the clothes of the sick or anything touched or used by them seemed to communicate this very disease to the person involved. ...

Everyone felt he was doomed to die and, as a result, abandoned his property, so that most of the houses had become common property, and any stranger who came upon them used them as if he were their rightful owner. In addition to this bestial behavior, they always managed to avoid the sick as best they could. And in this great affliction and misery of our city the revered authority of the laws, both divine and human, had fallen and almost completely disappeared, for, like other men, the ministers and executors of the laws were either dead or sick or so short of help that it was impossible for them to fulfill their duties; as a result, everyone was free to do as he pleased.

...

Thus, for countless multitude of men and women who fell sick there remained no support except the charity of their friends (and these were few) or the avarice of servants, who worked for inflated salaries ... And since the sick were abandoned by their neighbors, their parents, and their friends and there was a scarcity of servants, a practice that was almost unheard of before spread through the city: when a woman fell sick, no matter how attractive or beautiful or noble she

might be, she did not mind having a manservant (whoever he might be, no matter how young or old he was), and she had no shame whatsoever in revealing any part of her body to him—the way she would have done to a woman—when the necessity of her sickness required her to do so. This practice was, perhaps, in the days that followed the pestilence, the cause of looser morals in the women who survived the plague. ...



Doctors at the bedside of a plague victim

Source: Hieronymus Brunschwig, *Buch der Chirurgia* (1497; reprinted Oberkirch, Germany: A. Köhler, 1971), 11.
San Diego State University Library and Information Access, Special Collections and University Archives

The plight of the lower class and, perhaps, a large part of the middle class, was ... pathetic: most of them stayed in their homes or neighborhoods either because of their poverty or their hopes for remaining safe, and every day they fell sick by the thousands; and not having servants or attendants of any kind, they almost always died. Many ended their lives in the public streets, during the day or at night, while many others who died in their homes were discovered dead by their neighbors only by the smell of the decomposing bodies. The city was full of corpses. ...

In the scattered villages and in the fields the poor, miserable peasants and their families, without any medical assistance or aid of servants died on the roads and in the fields and in their homes, as many by day as by night, and they died not like men but more like wild animals. Because of this they, like the city dwellers, became careless in their ways and did not look after their possessions or their businesses; furthermore, when they saw that death was upon them,

completely neglecting the future fruits of their past labors, their livestock, their property, they did their best to consume what they already had at hand. So, it came about that oxen, donkeys, sheep, pigs, chickens, and even dogs, man's most faithful companion, were driven from their homes into the fields, where the wheat was left not only unharvested but also unreaped, and they were allowed to roam where they wished. ...

Oh how many great palaces, beautiful homes, and noble dwellings, once filled with families, gentlemen, and ladies, were now emptied, down to the last servant! How many notable families, vast domains, and famous fortunes remained without legitimate heir! ...

Reflecting upon so many miseries makes me very sad. ...

Source: Giovanni Boccaccio, *The Decameron*, translated and edited by Mark Musa and Peter Bondanella (New York: W. W. Norton, 1977), 3-4, 6-9.

Lesson 1

Student Handout 1.3—I Buried my Five Children with my Own Hands

Historical background

Agnolo di Tura was a chronicler in Siena, a city of about 60,000 some 30 miles south of Florence. In 1348, it was a great banking center and wealthy enough to be building what the citizens intended to be the greatest church in Christendom. But in that year, Siena was hit very hard by the Black Death. Di Tura, who survived it though all his family died, claimed that after the plague had passed, only 10,000 people remained alive. The records do not allow us to know exact figures, but certainly there is evidence that the city suffered unusually high losses. Construction work on the cathedral was halted and never resumed. Both the university and the wool-processing industry closed down. Laymen filled posts usually reserved for clergymen because so many priests died. Many estates, left with no heirs at all, were taken over by a much-reduced city council. The civil courts ceased to meet. When recovery set in, the authorities acted quickly to identify the taxpayers that remained and to impose a new tax in order to pay much higher salaries that soldiers and government employees were demanding. This, however, led to poverty in the countryside, a wave of immigration to higher-paying jobs in the city, and increased tension between haves and have-nots, with an accompanying rise in crime and financial problems. Siena probably never fully recovered from the effects of the Black Death.



The Cathedral of Siena, Italy

The tall wall with the arches on the left side of the illustration was to be the façade of a much more magnificent church. A great nave, or main longitudinal area of the church, was to extend from the façade back to the tower and dome. The Black Death, however, killed so many people in Siena in 1348 that the work came to a halt and was never resumed.

Photo by Jeanne Dunn

Primary Source

The mortality in Siena began in May. It was a cruel and horrible thing; and I do not know where to begin to tell of the cruelty and the pitiless ways. It seemed that almost everyone became stupefied by seeing the pain. And it is impossible for the human tongue to recount the awful truth. Indeed, one who did not see such horribleness can be called blessed. And the victims died almost immediately. They would swell beneath the armpits and in the groin and fall over while talking. Father abandoned child, wife husband, one brother another; for this illness seemed to strike through breath and sight. And so they died. And none could be found to bury the dead for money or friendship. Members of a household brought their dead to a ditch as best they could without priest, without divine offices. Nor did the death bell sound. And in many places in Siena great pits were dug and piled deep with the multitude of dead. And they died by the hundreds, both day and night and all were thrown in those ditches and covered with earth. And as soon as those ditches were filled, more were dug. And I Agnolo di Tura ... buried my five children with my own hands. ... And so many died that all believed it was the end of the world.

Source: Qtd. in Robert S. Gottfried, *The Black Death: Natural and Human Disaster in Medieval Europe* (New York: Free Press, 1983), 45.

Lesson 2
Trying to Cope
Explanations and Counter-Measures

Objectives

1. To further student understanding of how fourteenth-century ways of thought were connected to conditions at the time.
2. To have students analyze and appreciate both the complexity of the causes of the Black Death, and how fourteenth-century conditions constrained people's understanding of those causes and their attempts to cope with the disease.
3. To raise student awareness of the practical, emotional, and intellectual methods that individuals and institutions used to cope with catastrophic circumstances, and how the coping mechanisms were connected to conditions at the time.

Activities**Activity One: Analyzing and Comparing Primary Sources**

Give out Student Handout 2.1, and have copies of Student Handouts 1.1, 1.2, and 1.3 available so that students may compare the documents.

Discussion Questions:

1. What explanations did people at the time give for the pestilence? (Use Student Handouts 1.2 and 1.3 as well as the documents in this lesson to develop your answer).
2. Which explanations were based on observation? Which on reasoning? On religious belief? Analogy? Inference? Later statements by authorities? Which ways of arriving at explanations that you would expect to find today are absent in the fourteenth century? What hypothesis would you put forward to explain the absence?
3. What information available at the time did each of the medieval explanations fit? Explain your reasoning. For instance, the explanation that the plague was caused by humans poisoning wells fits the information, known at the time, that drinking tainted water results in illness. (This activity could serve as assessment.)
4. If you had to identify *one* thing we now know from scientific research that was not known in the fourteenth century and most handicapped efforts at finding the causes of the plague, what would you pick? Why? Given fourteenth-century conditions, what would have been the

consequences of someone at the time discovering the one thing you picked? Defend your hypothesis.

5. Which of the various explanations given as causes of the Black Death from the 1340s to the present would you consider scientific and which unscientific? Rank the level of how scientific each explanation is on a scale of 1 (minimally scientific) to 10 (fully scientific). What measures of evaluation and what characteristics of the explanations did you use to determine whether an explanation was scientific or not? How can one judge the relative level of “scientificness?” Does an explanation have to be correct in order for it to be scientific? Why or why not?

Activity Two: Analyzing Primary Documents

Give out Student Handout 2.2.

Discussion Questions:

1. Do you agree that the cause of a problem does not matter as long as a way to deal with its results can be found? Why or why not?
2. For each explanation you have identified that people at the time gave for the pestilence, find the recommendations for prevention that match the explanation. (For instance, the recommendation “use DDT to kill fleas” would match up with the explanation “the plague is caused by being bitten by an infected flea.”)
3. Compare the two methods of coping illustrated, that is, burning clothes and wearing amulets. What are the similarities? Differences? Which segments of the population would each have appealed to more, considering level of education, age, gender, social class, and power? Why?
4. Given your twenty-first-century knowledge, which of the fourteenth-century preventive recommendations would you say were of positive benefit a) psychologically or b) pragmatically in coping with the Black Death? Which would you say were of no use at all? Explain.
5. Give all the reasons you can to explain why the list of preventive measures was so much longer than the list of cures.
6. Discuss the proposition: “People in the fourteenth century coped successfully with the catastrophic impact of the Black Death.” In your discussion, consider how you are defining “success” and what other definitions there might be of “success” in coping with disaster.

Activity Three: Gain and Demonstrate Understanding via Role-playing, Writing and Imitating Art

a. Role-play a meeting of the city council in a medieval town a month or so after the Black Death breaks out. The meeting must decide what actions must be taken to solve the problems reported from other towns where the plague had arrived earlier. The meeting must also address all the other problems that you as council members can identify as arising from the plague. Different students may be asked to write individual town ordinances to put into effect the actions identified in the group exercise.

b. Assume that the King of England has posted a reward for the most comprehensive report provided to him on the causes and characteristics of the plague. As a member of the medical faculty of an English university in 1350, respond to the king's demand for information. Include as many of the explanations as you can that were available at the time. (This activity may serve as assessment.)

c. Develop a hypothesis, drawing on all the knowledge you have of medieval history, to account for the fact that attempts to cope with the crisis used traditional ideas and methods rather than innovative approaches. Support your hypothesis with evidence. (This may be either an individual or a group exercise, and may serve as assessment.)

d. Using Student Handout 2.2 as an example, devise an amulet or a charm that uneducated fourteenth-century people would have accepted as providing protection from the plague.

Activity Four: Using Primary Sources to Deduce Motives

Have students read Student Handout 2.3.

Discussion Questions:

1. Taking into account conditions of the time, develop a hypothesis to account for the popularity of the flagellants, especially among the lower classes. What evidence can you give to support your hypothesis?

2. What considerations, other than the accusation that they poisoned wells, influenced attitudes and actions towards Jews during the Black Death?

3. What similarities can you find between the flagellants and those who burnt Jews?

4. There are extremist groups today that deny the historical reality of the twentieth-century Nazi Holocaust, claiming that it is invention and not fact. How would you counter the claim that von Konigshofen's account of the burning of Strasbourg's Jews in 1349 was invention and not fact?

5. Develop a hypothesis outlining the probable psychological and practical consequences, for themselves and others, of the behavior of the flagellants and those who persecuted Jews. In what ways, if any, could it be argued that the actions of either or both were “coping with catastrophe?”



Doctor despairs at two patients covered with plague buboes.

Source: Otto Bettmann, *A Pictorial History of Medicine* (Springfield, IL: Charles C. Thomas, 1956), 93.

Drawing adapted for this teaching unit. Used with permission of the publisher.

Lesson 2

Student Handout 2.1—We ... Intend to Make Known the Causes of this Pestilence

Historical background

The following three documents illustrate some of the similarities and differences in the explanations given for the Black Death. The first is part of a statement issued in 1348 by the staff of the Paris medical school in response to a request by the king of France for information about the causes of the plague. In associating the disease with harmful vapors infecting the air, the doctors followed highly-respected Greek and Roman authorities. The works of the physicians Hippocrates and Galen, written centuries before, were the mainstay of both Christian and Muslim medical education of the time. Both held that disease was produced and spread by corruption of the air. Similarly, the idea that events in the heavens, such as the movements of the planets, influenced what happened on earth, was a well-established and accepted medieval belief. Many Muslim as well as Christian writers cited these same two sets of causes of the plague. An example is the second document, written by a Muslim physician of Egypt.

Nevertheless, observation of the disease led some to recognize that its spread was caused by contagion, that is, by contact with people already infected. A Muslim physician, who was an eyewitness of the Black Death in Spain, wrote that contagion was proved by “experience, study, and the evidence of the senses, by trustworthy reports on transmission by clothing, dishes, earrings ...” He also declared that the population of a healthy seaport could be infected by an arrival from a land where the disease was already present. Moreover, he said, isolated individuals and the pastoral nomadic tribes of Africa appeared to be immune. Many Muslim writers, however, denied contagion on the religious grounds that the prophet Muhammad had rejected.

Among Christians, there were no religious reasons for rejecting contagion. The explanation of how contagion worked varied, as is shown by the third document, which is from a 1348 treatise by an anonymous French physician. Certain scholars recognized that some people were more susceptible to the infection than others—especially the old, the weak, pregnant women, and the undernourished poor. Others saw people of a “hot, moist temperament” as most at risk. A number of authors observed that the pneumonic form of the plague, which attacked the lungs, was more contagious and deadly than bubonic plague.

We now know that the Black Death was caused by a bacillus, *Yersinia pestis*; that about a hundred different species of flea can be plague carriers; and that some three dozen species of animals, including domestic animals, foxes, and birds have become infected by the plague. Rodent fleas (which bite humans) live also on cats and dogs, and fleas that normally live on human bodies infest dogs. Both flea types are plague transmitters. Another species of flea, which spreads the plague quite efficiently, commonly lives on both rodents and poultry. While rodents, especially rats, have probably been the most common carriers, a wide range of other animals, from kittens to chickens, play host to fleas that can spread the plague. Moreover, the role of fleas can be played just as well by lice or bedbugs, or by airborne particles emitted by those infected.

It is the penetration of *Yersinia pestis* into the lungs or bloodstream of humans that causes them to come down with the disease.

Yersinia pestis reproduces extremely fast. Half a dozen plague bacilli on a host will multiply to several thousand within one day and to some hundred million within two days. A flea that bites a terminally-sick rat can suck up half a million plague bacilli, becoming so full of the plague organism that it can no longer digest any blood from its host. Blocked from feeding, it becomes hungrier and hungrier. Leaving its dead host, it will bite its new host, perhaps a human, again and again. It tries to feed but succeeds only in pumping hundreds of thousands of lethal plague bacilli into its victim. Animals the size of a monkey have died from the plague following the injection of a single bacillus of *Yersinia pestis*.

The several possible paths of transmission and the nature of the bacillus help to explain the rapidity of the Black Death's spread and the heavy mortality. It is interesting that quite a few contemporary observers recognized that animals also caught the disease. According to Middle Eastern sources, dead cats, dogs, and horses were found with the characteristic swellings under their limbs, especially in houses where people had died of the plague. Curiously, there is only a single reference in the available documentation to rats, though dead rats must have been found in abundance in plague-stricken neighborhoods. A Byzantine historian observed that the plague killed many animals living with humans—"dogs, horses ... and all species of birds, even the rats that happened to live within the walls of the houses."

Document 1

We, the Members of the College of Physicians of Paris, ... intend to make known the causes of this pestilence. ... We, therefore, declare as follows: It is known that in India, and the vicinity of the Great Sea, the constellations which combated the rays of the sun ... exerted their power especially against the sea ... and the waters of the ocean arose in the form of vapor, thereby the waters were, in some parts, so corrupted that the fish which they contained died. This vapor spread itself through the air in many places on earth. ... [O]n all the islands and adjoining countries to which the corrupted sea-wind extends ... [if] the inhabitants of those parts do not [take the following advice,] we announce to them inevitable death—except the grace of Christ preserve their lives.

Every one of you should protect himself from the air; wormwood and chamomile should also be burnt in great quantity in the market places, in other densely inhabited localities, and in the houses. ... The diet should be simple. ... Cold, moist, watery food is in general prejudicial. Going out at night, and even until three o'clock in the morning, is dangerous, on account of the dew. Rainwater must not be employed in cooking, and everyone should guard against exposure to wet weather ... injurious are fasting and ... anxiety of mind, anger, and immoderate drinking. ... Bathing is injurious. Men must preserve chastity as they value their lives. Everyone should impress this on his recollection, but especially those who reside on the coast, or upon an island into which the noxious wind has penetrated.

Source: George Deaux, *The Black Death: 1347* (New York: Weybright and Talley, 1969), 52-3.

Document 2

According to the Egyptian physician Ibn al-Nafis,

The pestilence resulted from a corruption occurring in the substance of the air due to heavenly and terrestrial causes. In the earth the causes are brackish water and the many cadavers found in places of battle when the dead are not buried, and land which is water-logged and stagnant from rotteness, vermin, and frogs. As regards the heavenly air, the causes are the many shooting stars and meteorites at the end of the summer and in the autumn, the strong south and east winds in December and January, and when signs of rain increase in the winter but it does not rain.

Source: Michael W. Dols, *The Black Death in the Middle East* (Princeton: Princeton UP, 1977), 88-9.

Document 3

An anonymous French physician had a different view:

Since therefore the epidemic, according to some, happens only by the air, only by breathing, only by conversation with the sick, more say that it kills because, by means of the air breathed in by the sick and then by the well standing near, the latter are stricken and killed, especially when the sick are in agony; and that not suddenly, but at intervals and gradually. But the greater strength of this epidemic and, as it were, instantaneous death is when the aerial spirit going out of the eyes of the sick strikes the eyes of the well person standing near and looking at the sick, especially when they are in agony; for then the poisonous nature of that member passes from one to the other, killing the other. Whence whoever has seen the *Book on Mirrors* of Euclid about burning and concave and reflex mirrors will not wonder, but will grant that this epidemic can occur, and pass from the sick to the well, and the latter be killed naturally and in the nature of the case, and not miraculously; since a thing is miraculous when there is no reason or natural cause for its occurrence. But the aerial and subtle nature going forth and reflected from two mirrors, by means of the heat and brightness of the sun, immediately takes fire and, as it were, acts suddenly ... from which brightness [nearby] buildings and houses and fortified places and trees ... are burned and destroyed ... thus also by corruption of the air attack is made on human bodies ...

Source: Anna Montgomery Campbell, *The Black Death and Men of Learning* (New York: Columbia UP, 1931), 61.

Lesson 2

Student Handout 2.2—It Is No Great Matter [Whether the Cause is Heavenly or Earthly] if Only We May Know How to Resist It ...**Historical background**

In spite of their oft-repeated emphasis on human helplessness in the face of the disease, medieval populations did more than just lament and wring their hands. They reacted vigorously with a wide variety of attempts at prevention and control. For the most part, though, their responses followed along traditional lines. Rather than developing new strategies, they attempted to manage the crisis with tried-and-true measures.

The medical profession made its opinions known by writing extensively about the plague, trying to explain it and to give advice as to its prevention and treatment. In Christian Europe, sixteen medical treatises are known to have been written on the topic in the first two years of the Black Death alone, and seventy-seven were produced before 1400. Besides the medical authorities, churchmen, governments, and scholars wrote advice on what to do to cope with the disease. Their advice varied widely. A list of the most common recommendations is offered below.

For centuries after the Black Death's mid-fourteenth-century outbreak, doctors continued to have no way to treat the disease other than trying to relieve the symptoms. The first successful measure in the fight against the plague came in 1897 when a vaccine was developed. This was a century after Jenner developed vaccination for smallpox. In the twentieth century, if given in adequate time before exposure to the disease, vaccination against bubonic plague reduced mortality from about eighty-five percent to about sixty-five percent. The sulfa drugs that doctors began to use in the 1930s to treat the plague had no effect against the pneumonic form of the disease, though this medication reduced mortality among victims of the bubonic form to perhaps ten percent. It was not until the 1940s that streptomycin and tetracyclines were discovered, the first of these drugs found effective against all forms of the plague. At about the same time, DDT, a pesticide, and warfarin, a rodent-killer, came into widespread use, reducing flea and rat populations significantly.

Primary Source

Fourteenth-century advice on what to do to avoid becoming ill with the plague:

Repent, pray, do penance for your sins.

Give alms and settle debts.

Take part in the organized religious processions to mosques and churches for communal worship and prayer.

Order unmarried men and women living together to marry or break off their relationship, and prohibit swearing and work on the Sabbath.

Punish yourself by whipping; your pain may pay for sin.

Carry on your person inscriptions embodying the sacred names of God.

Do not flee, for God has commanded good Muslims to await their fate.

Flee, preferably to mountains, clean air, and isolated places.

Confine the sick to their own homes.

Limit the number of people who can attend a funeral or meet together in public places.

Burn the clothes, bedding, and possessions of the diseased.



Medieval illustration showing the burning of plague victims' clothing.

Marjorie Rowling, *Everyday Life in Medieval Times* (New York: Dorset Press, 1968), 187.

Bury bodies at least 6 feet deep, and cover with lime before replacing earth.

Avoid congested areas.

Do not buy cloth made in regions or from persons known to be infected.

Maintain morale by reading entertaining love-stories or humorous tales.

Avoid fear, worry, sadness, anger.

Do not ring the church bells for funerals and stop the town-crier or trumpeter making public announcements.

Break up the air inside your home by ringing bells and releasing birds, then chasing them so they fly around the room.

Cover windows with waxed cloth or better still glaze them.

Do not bathe, for this opens the pores to the air.

Burn aromatic woods in your home.

Periodically, throw a powdered mixture of sulphur and arsenic on your fire.

Pile sweet-smelling shrubs around the boundaries of cities.

Fill your house with pleasant-smelling flowers, sprinkled with vinegar and rose-water.

Inhale hand held “smelling apples” made of mixtures of black pepper, roses, amber, camphor, myrrh, and sweet basil bound together with a paste of gum Arabic.

Breathe in the smell of sewage.

Spend time in smoky and stinking places.

Burn green wood in your fireplace and outdoors, so it will smoke.

Regulate butchers and meat-sellers, to ensure that what is sold is fresh.

Butcher large animals outside city limits.

Avoid both fasting and eating to excess.

Purge the body with laxatives.

Draw off impure or excessive blood by bleeding.

Wash your hands and face often with vinegar and water, or with warm wine.

Rest as much as possible, with moderate exercise in good weather.

Drink light white wine mixed with boiled water, or water taken from a swift-flowing stream over a rocky bottom.

Drink sour fluids or fruit juice.

Drink syrup of roses mixed with powdered coral, precious stones, and bones from the heart of a stag to strengthen the heart.

Eat a pickled onion every day before breakfast.

Drink deep red Armenian clay mixed with water.

Force anyone entering the city who carries any powders or ointments to swallow them.

Kill Jews, foreigners, gypsies, beggars, and lepers.

What to do to cure those who have the disease:

Put an old rooster cut through the back to flatten it, or a poultice of mustard and lily bulbs, on the buboes (swellings).

Cover buboes with clay.

Sear buboes with red-hot iron.

Cut open and drain buboes, treating them like ulcers.

Surgically remove buboes.

Bathe buboes with vinegar or chamomile water.

Write God's name on the inside of a cup, pour in water. When ink has dissolved, have sick person drink it.

Give the sick fruit juices and extract of violets to drink.

Draw off impure or excessive blood by bleeding.

Source: Adapted from Marjorie Rowling, *Everyday Life in Medieval Times* (New York: Dorset Press, 1968), 187.

Lesson 2

Student Handout 2.3—Focus for Frustration: The Desperate Go to Extremes

Historical background

Self-punishment by flagellants and punishment of certain people by those intent on finding scapegoats for the pestilence also represented attempts to cope with the calamity. Flagellants, who flogged themselves with whips while marching in religious processions, were not new among Christian believers in the mid-fourteenth century. A flagellation movement had broken out in the eleventh century and again, on a huge scale, in the late thirteenth. The movement spread all over Europe, though it was most firmly rooted in Germany. These religious fanatics often lashed themselves for hours on end, using leather whips with iron spikes that drew blood. Spectators often sobbed, howled, and tore their hair. They treasured the blood that flowed, sopping it up with cloths which they carried home with them as miraculous and holy relics.

Since many considered the Black Death an expression of God's anger at sinful humanity, flagellants hoped that, if they punished themselves, God would no longer be angry and the plague would disappear. Flagellants saw themselves as following in the footsteps of Christ, sacrificing themselves and offering up their pain to pay for human sin. Muslims, whose faith did not emphasize the idea of "original sin," were much less convinced than Christians that the plague was God's punishment for humankind's wickedness. Indeed, Muslim theology taught that dying in an epidemic was a type of martyrdom and guaranteed a place in paradise. Moreover, the Qur'an instructed Muslims not to flee from epidemics but to await God's unknowable plan for His creation. Self-punishment such as flagellation was not part of Muslim response to the Black Death.

The Roman Catholic Church was ambivalent, denouncing flagellants sometimes, encouraging them at others. The local clergy were generally opposed to this kind of alternative religious experience because it was a direct, personal approach to God outside their control. Flagellantism also involved extravagant claims: some flagellants advertised their power to cast out evil spirits, others attempted to perform miracles, and most were opposed to authority other than that of their own leaders. Their processions encouraged frenzy and hysteria in the mobs that came to see them. Popular outbreaks against Jews frequently followed flagellant manifestations.

Jews were targets of accusations of poisoning wells, though not the only targets. Pilgrims, lepers, and foreigners were at various times and places accused of causing plague by adding poison to drinking water. Nor was this sort of paranoia about marginal groups or enemies restricted to the Middle Ages. During the 1950s, when the Cold War was intense, some Communist Chinese accused the American Air Force of deliberately causing outbreaks of disease in China by infecting parts of that country with the plague bacillus.

Persecution of Jews during the Black Death was particularly widespread and well documented. Large numbers of Jews are known to have been burnt alive or walled up to die of suffocation or starvation in 1348 and 1349. These atrocities occurred in Spain, France, Switzerland, and many German cities. By and large, rulers and other political authorities disapproved of these

massacres, and the Pope condemned them. The king of Spain gave orders that Jews be protected and that those guilty of hurting them be punished. He posted armed guards at the gates to the ghettos. Leaders, however, had little control over the mobs. In Muslim lands, Jews did not experience persecution connected with the Black Death, perhaps because Muslims had much greater experience of living in harmony with people of different religions and a tradition of toleration for religious minorities in their midst .

Christian pogroms against Jews gradually waned as the first wave of the Black Death came to an end. By 1351, however, 60 large and 150 smaller communities of Jews are believed to have been exterminated. The centers of Jewish population shifted eastward to Poland, whose ruler seemed to have successfully prevented persecution. Nor did pogroms stop altogether in western Europe.

Jacob von Konigshofen was a child when the events he describes in Document 2 took place. He grew up to become archivist of the city of Strasbourg, which had one of the largest Jewish colonies in Europe, even though its bishop was an anti-Semite. Von Konigshofen included the account of his predecessor, who was probably an eyewitness of the tragedy in the history he wrote.

Document 1

The Brotherhood of the Flagellants

Also known as Brethren of the Cross, the flagellants took upon themselves the repentance of the people, for the sins they had committed, and offered prayers and supplications for the averting of this plague. This Order consisted chiefly of persons of the lower class. ... But as these brotherhoods ... were welcomed by the people with veneration and enthusiasm, many nobles and ecclesiastics ranged themselves under their standard; and their bands were not infrequently augmented by children, honorable women, and nuns; so powerfully were minds of the most opposite temperaments enslaved by this infatuation. They marched through cities, in well organized processions, with leaders and singers; their heads covered as far as the eyes; their look fixed on the ground, accompanied by every token of the deepest contritions and mourning. They were robed in sombre garments, with red crosses on the breast, back, and cap, and bore triple scourges, tied in three or four knots, in which points of iron were fixed. Tapers and magnificent banners of velvet and cloth of gold, were carried before them; wherever they made their appearance, they were welcomed by the ringing of bells; and the people flocked from all quarters, to listen to their hymns and to witness their penance, with devotion and tears.

Whoever was desirous of joining the brotherhood was bound to remain in it thirty-four days, and to have four pence per day at his own disposal, so that he might not be burthensome to any one; if married he was obliged to have the sanction of his wife, and give the assurance that he was reconciled to all men. The Brothers of the Cross were not permitted to seek for free quarters, or even to enter a house without having been invited; they were forbidden to converse with females.

When they arrived at the place of flagellation, they stripped the upper part of their bodies and put off their shoes, keeping on only a linen dress, reaching from the waist to the ankles. They then

lay down in a large circle, in different positions, according to the nature of their crime: the adulterer with his face to the ground; the perjurer on one side, holding up three of his fingers, &c., and were then castigated, some more and some less, by the Master, who ordered them to rise in the words of prescribed form. Upon this, they scourged themselves, amid the singing of psalms and loud supplications for the averting of the plague, with genuflexions, and other ceremonies.

Source: J. F. C. Hecker, *The Epidemics of the Middle Ages*, trans. B. G. Babington (London: Sydenham Society, 1844), 32-4, 37-40.



Flagellant

Source: George Deaux, *The Black Death: 1347*
(New York: Weybright and Talley, 1969), after 182.

Document 2 The Jews of Strasbourg

From what this epidemic came, all wise teachers and physicians could only say that it was God's will. And as the plague was now here, so was it in other places, and lasted more than a whole year. This epidemic also came to Strasbourg in the summer of the above mentioned year [1349], and it is estimated that about sixteen thousand people died.

In the matter of this plague the Jews throughout the world were reviled and accused in all lands of having caused it through the poison which they are said to have put into the water and the wells—that is what they were accused of—and for this reason the Jews were burnt all the way from the Mediterranean into Germany, but not in Avignon, for the pope protected them there.

Nevertheless they tortured a number of Jews in Berne and Zofingen [Switzerland] who then admitted that they had put poison into many wells, and they also found the poison in the wells.

Thereupon they burnt the Jews in many towns and wrote of this affair to Strasbourg, Freiburg, and Basel in order that they too should burn their Jews. But the leaders in these three cities in whose hands the government lay did not believe that anything ought to be done to the Jews. However in Basel the citizens marched to the city-hall and compelled the council to take an oath that they would burn the Jews, and that they would allow no Jew to enter the city for the next two hundred years. Thereupon the Jews were arrested in all these places and a conference was arranged to meet at Benfeld [Alsace, February 8, 1349]. The Bishop of Strasbourg [Berthold II], all the feudal lords of Alsace, and representatives of the three above mentioned cities came there. The deputies of the city of Strasbourg were asked what they were going to do with their Jews. They answered and said that they knew no evil of them. Then they asked the Strasbourgers why they had closed the wells and put away the buckets, and there was a great indignation and clamor against the deputies from Strasbourg. So finally the Bishop and the lords and the Imperial Cities agreed to do away with the Jews. The result was that they were burnt in many cities, and wherever they were expelled they were caught by the peasants and stabbed to death or drowned.

[The town-council of Strasbourg which wanted to save the Jews was deposed on the ninth or tenth of February, and the new council gave in to the mob, who then arrested the Jews on Friday, the thirteenth.]



Jews of the city of Cologne in Germany being burned alive as scapegoats for the Black Death
Source: Hartmann Schedel, *Liber Chronicarum*, 1493 (reprinted, Munich: Kölbl, 1965), 221.

On Saturday—that was St. Valentine’s Day—they burnt the Jews on a wooden platform in their cemetery. There were about two thousand people of them. Those who wanted to baptize themselves were spared. [Some say that about a thousand accepted baptism.] Many small children were taken out of the fire and baptized against the will of their fathers and mothers. And everything that was owed to the Jews was cancelled, and the Jews had to surrender all pledges and notes that they had taken for debts. The council, however, took the cash that the Jews possessed and divided it among the working-men proportionately. The money was indeed the thing that killed the Jews. If they had been poor and if the feudal lords had not been in debt to them, they would not have been burnt. After this wealth was divided among the artisans some gave their share to the Cathedral or to the Church on the advice of their confessors.

Thus were the Jews burnt at Strasbourg, and in the same year in all the cities of the Rhine, whether Free Cities or Imperial Cities or cities belonging to the lords. In some towns they burnt the Jews after a trial, in others, without a trial. In some cities the Jews themselves set fire to their houses and cremated themselves.

Source: Qtd. in Jacob R. Marcus, *The Jew in the Medieval World: A Sourcebook, 315-179* (New York: Atheneum, 1981), 45-6.

Lesson 3
The Impact on Society
Short- and Long-Range Consequences of the Population Crash

Objectives

1. To help students analyze the impact of rapid demographic change on society.
2. To lead students to recognize the complexity of the Black Death's consequences.
3. To add to students' empathetic acquaintance with fourteenth-century conditions of life and thought.
4. To encourage the habit of comparing and analyzing different kinds of historical evidence for reliability.
5. To alert students to ways of assessing the historical importance of various events and developments.

Activities**Activity One: Making Inferences from a Primary Source**

Read Student Handout 3.1. What can you infer about the social class, point of view, and motives of its author?

Activity Two: Comparing Primary Sources

Read Boccaccio's account of the Black Death (Student Handout 1.2). In what ways does Knighton's description of the Black Death in Student Handout 3.1 differ from Boccaccio's? How would you account for the differences?

Activity Three: Analyzing Charts and Figures

Compare Student Handouts 3.2, 3.3, and 3.4. Which of the three sets of changes shown in the charts and figures (Price of Wheat, Wages of Craftsmen, Labor Services of Serfs) do you consider the most significant? By what measures are you evaluating "significance?" What other measures of significance could you use?

Activity Four: What is Good Historical Evidence?

1. For each of the selections in this lesson, what reasons can you give for considering it reliable historical evidence, and what reasons for questioning its reliability? Which of the selections do you consider most reliable as historical evidence, and why?

2. What are the advantages and disadvantages as historical evidence of written documents and numerical evidence? Explain.

Activity Five: Understanding via Role-Playing and Art

1. Ask students to assume the roles of king, noble landlord, skilled craftsperson, bourgeois housewife, free peasant, serf, servant girl, unskilled urban worker, and perhaps other social types decided on in discussion. Have each historical character explain to a traveler from an area little touched by the Black Death what impact the plague, which killed half the population in your neighborhood a few years earlier, had on your economic circumstances. Take into account income, expenditure, losses, inheritance, job opportunities, nature of occupation, and any other factors you might consider relevant. Draw on the documentary evidence in the unit for evidence. (This activity may serve as assessment.)

2. Create a work of art, perhaps a version of the Dance of Death, that models the attitudes and the artistic vision that were the characteristic artistic responses to the plague pandemic.



Part of a scene from the French *Dance of Death*

Source: Otto L. Bettmann, *A Pictorial History of Medicine* (Springfield, Ill: Charles C. Thomas, 1962), 92.

Lesson 3

Student Handout 3.1—Legacies of the Crisis

Historical background

The significance of changes in society resulting from the Black Death is a matter of debate among historians. No one disagrees that the Black Death and plague recurrences caused the populations of Europe, north Africa, and the Middle East to take a spectacular nosedive. Moreover, demographic recovery was slow. Only around 1550 did Europe's population reach the level at which it had been before 1348. However, the populations of European countries had already begun to decline during the first half of the century. This was partly due to the rapid population growth and expansion in the previous century. This had made it necessary to cultivate unproductive, marginal land because all the better land had already been put to the plow to meet the increasing demand for food. This practice in turn depressed wages, created unemployment, and left many people impoverished. Major outbreaks of animal disease, plus recurring poor harvests resulting from climate change, also contributed to gradual population decline. More people were starving or dying of malnutrition-related illness even before the arrival of the Black Death.

One of the immediate consequences of the Black Death was a crisis in the workforce. The rapid loss of workers in every occupation, and of customers for every product, resulted first of all in economic dislocation. Demand for goods fell abruptly and steeply, and both prices and wages plummeted. Many enterprises shut down. Farms and building programs were abandoned; textile workshops and universities closed. After the Black Death and the panic-stage passed, surviving workers came to be much in demand. This labor scarcity drove wages and prices up. In 1363, a Florentine chronicler observed: "Serving girls and unskilled women with no experience in service ... and [others] working with their hands want three times or more their usual pay ..." In many cases people previously held to be unqualified had to be allowed to do jobs for which no one qualified could be found. Women, contrary to tradition, were permitted to serve as witnesses. Scribes not admitted to the guild of notaries could draw up legal contracts. People who knew no Latin were hired as teachers. There was employment for everyone. Contemporaries commented on the fact that beggars had disappeared, and "there were not at that time any needy poor." A general, long-term increase in the income and standard of living of the lower classes was one of the legacies of the Black Death.

The practice of exchanging serfdom for freedom by making a lump sum cash payment and thereafter paying the landlord a money rent instead of labor service had been going on in Europe for many generations. However, it became much more widespread after the Black Death when labor was at a premium. If a lord refused his serfs' demand for freedom, they would simply leave, knowing that there were many other lords eager for workers only too pleased to give them what they wanted. Serfs often upped the ante, and demanded not only freedom and a small rent payment, but also assurances that the lord would provide them with the loan of oxen, seed-corn, tools, or other privileges in return for their agreeing to stay on. In response to this labor squeeze, many landlords turned from the growing of crops to raising sheep, which was less labor-

intensive. Records from the Middle East show a significant increase in protein in working class diets and consumption of mutton almost doubling.

Every few years in the second half of the fourteenth century royal decrees and laws were enacted, demanding that workers stop asking for and employers stop paying wages higher than they were in 1347. This shows how widespread wage hikes were and how impossible it was to stop them. Other evidence also shows that the working classes benefited from the labor shortage. The size of the average peasant holding increased. This affected inheritance patterns: it became common for all the sons in a family, not just the eldest son, to inherit a piece of the father's lands. By the fifteenth century even daughters were getting a piece of the estate as a legacy. The upper classes repeatedly complained about and enacted laws to control increased spending by workers, who were buying clothes and other personal items traditionally thought appropriate only for the bourgeoisie or nobility. Ordinances were repeatedly issued to regulate the size of sleeves, the length of women's dresses, the kind of fur used to trim collars, and the types of food served at weddings of different social classes. These regulations had little or no effect. In fact, tensions between classes led to several major uprisings by peasants and urban workers, though such revolts were not unknown before the Black Death.

The plague discredited the leaders of society—the medical, political, intellectual, and religious authorities who had clearly failed in their social function of protecting the welfare of the people. For instance, although many clergymen admirably risked their lives during plague outbreaks by visiting the sick, hearing confessions, and giving final rites, many others did not. Whatever the precise reality, the perception was widespread at the time that the churchmen's behavior in this crisis was disappointing at best and despicable at worst. Of twenty-two European chroniclers who commented on the behavior of the clergy during the pestilence, only one is entirely favorable. Most of the others are wholly, and sometimes virulently critical. A bishop in England wrote to his flock that, "since no priest can be found willing ... to visit the sick and administer to them the sacraments of the Church," he gave permission to plague victims on the point of death to confess their sins to anyone, clergyman or not. He added, as if in proof of ultimate desperation, "if no man is present, even to a woman." John Wycliffe and Martin Luther would both later argue in favor of the "priesthood of all believers," considering ordained priests unnecessary.

The Black Death undoubtedly influenced the subject-matter of visual arts for a century or more. Paintings of plague-protecting saints were popular, especially on banners carried in the many religious processions, as well as scenes showing victims being shot by demons with plague-arrows. Scenes of the Dance of Death became very common: death represented as a skeleton leading by the hand a procession of kings, princes, bishops, merchants, good wives, and beggars in a long dancing line towards the grave. Typical of the mood is the tomb of a cardinal who died just before 1400. It has a sculpture showing his decomposing body with the inscription "Let the great and humble, by our example, see well to what state they shall be inexorably reduced ... rotten corpse, morsel and meal for worms." In line with the broader anti-authoritarian attitudes, artists and scholars began to be more innovative than had earlier generations. The arts became more naturalistic and observation-based, while scholarly writers dared to look at pagan sources

instead of restricting themselves to Christian authorities. They also began to write in vernacular languages, not just in Latin, the language of the Church.

Finally, violence and lawlessness increased in the aftermath of the Black Death. For instance, twice as many homicides occurred in England in the twenty-year period after 1349 than between 1320 and 1340, even though the population had drastically declined.

Primary Source

"There was such a lack of servants, no one knew what to do"

The English chronicler Henry Knighton wrote about the effects of the Black Death in England in 1348-50 as follows:

And the price of everything was cheap, because of the fear of death; there were very few who took any care for their wealth, or for anything else. For a man could buy a horse for half a mark, which before was worth forty shillings, a large fat ox for four shillings, a cow for twelve pence, ... a lamb for two pence, a fat pig for five pence, a stone of wool for nine pence. And the sheep and cattle wandered about through the fields and among the crops, and there was no one to go after them or to collect them. They perished in countless numbers everywhere, in secluded ditches and hedges, for lack of watering, since there was such a lack of servants, that no one knew what he should do.

In the following autumn, one could not hire a reaper at a lower wage than eight pence with food, or a mower at less than twelve pence with food. Because of this, much grain rotted in the fields for lack of harvesting, but in the year of the plague, as was said above, among other things there was so great an abundance of all kinds of grain that no one seemed to have concerned himself about it.

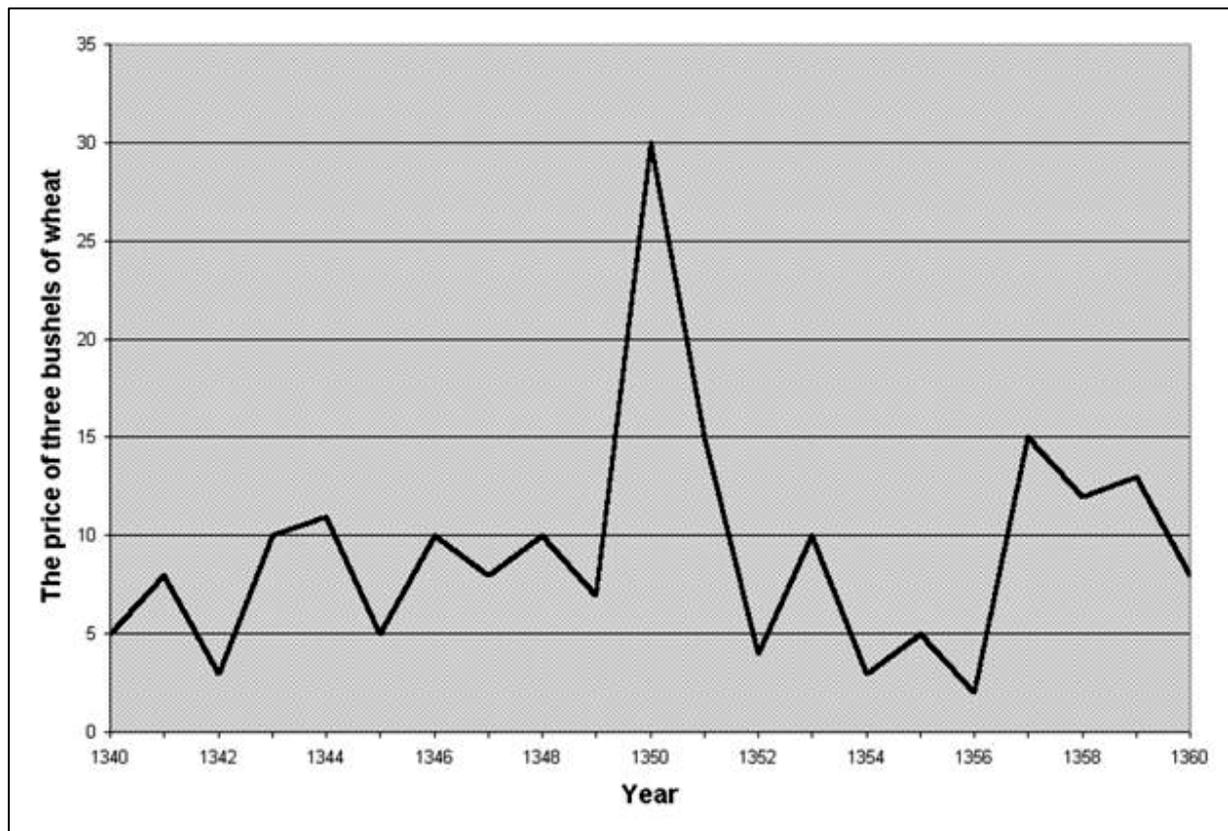
One could hardly hire a chaplain to minister to any church for less than ... ten marks, and whereas, before the pestilence, when there were plenty of priests, one could hire a chaplain for five or four marks or for two marks, with board. ... But within a short time a very great multitude whose wives had died of the plague rushed into holy orders. Of these many were illiterate and, it seemed, simply laymen who knew nothing except how to read to some extent. The hides of cattle went up from a low price to twelve pence, and for shoes the price went to ten, twelve, fourteen pence.

Meanwhile, the king ordered that in every county of the kingdom, reapers and other laborers should not receive more than they were accustomed to receive, under the penalty provided in the statute, and he renewed the statute from this time. The laborers, however, were so arrogant and hostile that they did not heed the king's command, but if anyone wished to hire them, he had to pay them what they wanted, and either lose his fruits and crops or satisfy the arrogant and greedy desire of the laborers as they wished. When it was made known to the king that they had not obeyed his mandate, and had paid higher wages to the laborers, he imposed heavy fines ... from

each according to what he could pay. ... Then the king had many laborers arrested, and put them in prison. Many such hid themselves and ran away to the forests and woods for a while and those who were captured were heavily fined.

After the aforesaid pestilence, many buildings, both large and small, in all cities, towns, and villages had collapsed, and had completely fallen to the ground in the absence of inhabitants. Likewise, many small villages and hamlets were completely deserted; there was not one house left in them, but all those who had lived in them were dead. It is likely that many such hamlets will never again be inhabited. In the following summer [1350], there was so great a lack of servants to do anything that, as one believed, there had hardly been so great a dearth in past times. For all the beasts and cattle that a man possessed wandered about without a shepherd, and everything a man had was without a caretaker. And so all necessities became so dear that anything that in the past had been worth a penny was now worth four or five pence. Moreover, both the magnates of the kingdom and the other lesser lords who had tenants, remitted something from the rents, lest the tenants should leave, because of the lack of servants and the dearth of things. Some remitted half the rent, some more and others less, some remitted it for two years, some for three, and others for one year, according as they were able to come to an agreement with their tenants. Similarly, those who received day-work from their tenants throughout the year, as is usual from serfs, had to release them and to remit such services. They either had to excuse them entirely or had to fix them in a laxer manner at a small rent, lest very great and irreparable damage be done to the buildings, and the land everywhere remain completely uncultivated. And all foodstuffs and all necessities became exceedingly dear.

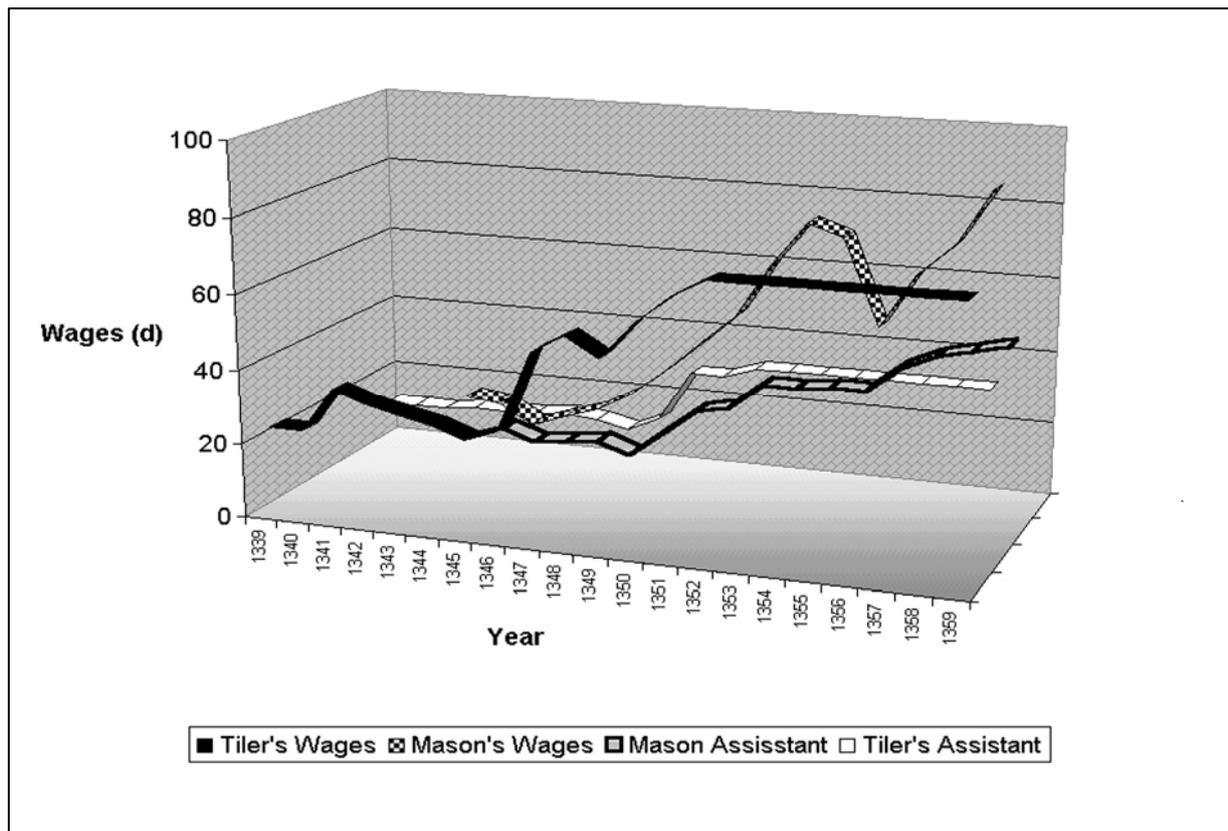
Source: Qtd. in James Bruce Ross and Mary Martin McLaughlin, eds., *The Portable Medieval Reader* (New York: Viking Press, 1949), 218-22.

Lesson 3***Student Handout 3.2—The Price of Wheat in Paris***

Source: Adapted from Jean Gimpel, *The Medieval Machine: The Industrial Revolution of the Middle Ages* (New York: Penguin Books, 1976), 216.

Lesson 3

Student Handout 3.3—The Daily Wages in Paris Building Trade in Four Kinds of Jobs



Source: Adapted from Jean Gimpel, *The Medieval Machine: The Industrial Revolution of the Middle Ages* (New York: Penguin Books, 1976), 216.

Lesson 3

Student Handout 3.4—Serfs Gain the Upper Hand

Serfs did most of the work on the lord of the manor's lands, such as raking hay, digging ditches, building fences, pruning trees, and planting and harvesting crops. As tenant farmers, serfs were not free to move away from the manor on which they were born, and owed their lord a fixed number of days' work each year. This was a serious burden, since it took away time that serfs would otherwise have spent cultivating their own fields and doing other farm work. In addition, they needed their lord's permission for all sorts of things, including their daughters' marriages. They also had to make yearly payments to the lord in cash or in kind (such as hens, cloth, or honey). If the lord did not have enough serfs to get all the needed work done, he had to pay wages to hired workers.

Comparison of Labor Services Due from Serfs on 81 English Manors in 1350 and 1380		
	1350 Number of manors	1380 Number of manors
No labor service due from serfs	6	40
Serfs owed an insignificant amount of labor service	9	39
Serfs' labor service made up about half of all the work done	22	25
Just about all the work was done by serfs owing labor service	44	22

Source: Based on information in E. Lipson, *The Economic History of England*, Vol. I (London: A & C Black, 1959), 95 and 97.

Unit summary discussion questions and activities

1. How significant to people's experience of the Black Death were actions of individuals? For instance, Ibn al-Khatib wrote a medical treatise that insisted that the plague was spread by contagion and the English king issued the Statute of Artificers. How significant was collective action by institutions, such as the decision by city councils to establish quarantine or close the town to Jews? By what measures are you judging significance? What other measures of significance could be used?

2. Hold a class debate to consider what a historian would need to take into account in assessing the historical importance of the Black Death. Some issues you might want to pursue: Should "importance" be measured by how widespread the changes were resulting from the Black Death? By how many people were affected by the changes? By how seriously they were affected, or for how long? By how influential the changes were in preparing the ground for other, perhaps even more radical changes in society? Does an event or process have to result in changes for it to be historically important? Why or why not?

3. Building on information gained from the unit, and the results of class discussions, compose a historian's response to the statement by a fellow historian that "The significance of the Black Death has been greatly overrated by historians of the past. In fact, it was a passing event that, while catastrophic at the time, had little historical importance."

This unit and the Three Essential Questions

 <p>HUMANS & the ENVIRONMENT</p>	<p>Compare and contrast the Black Death with the AIDS pandemic in the late twentieth and early twenty-first centuries in terms of 1) geographical origins and patterns of spread; 2) type of infection, symptoms, and mortality; 3) demographic, economic, and social impact; and 4) measures taken to prevent, avoid, or cure the disease.</p>
 <p>HUMANS & other HUMANS</p>	<p>The Black Death caused great social disruption and may have reduced the population of Europe, southwest Asia, and north Africa combined by a third to a half. Both fear of the plague and suffering from it affected how people behaved toward one another. The crisis forced people to come up with new ways of cooperating with one another and organizing work and social life. Because of post-plague demand for labor and skill, people who survived the Black Death were sometimes better off than they previously had been. How do you think life in your community or country would be challenged and changed if a pandemic crisis suddenly reduced population by a third?</p>
 <p>HUMANS & IDEAS</p>	<p>Researching artistic expression in Europe in the later fourteenth century, show and explain examples of art that was influenced by the social and cultural climate attending the Black Death and its aftermath. How do you think the examples you choose express popular fears and anxieties about the plague and its consequences for society?</p>

This unit and the Seven Key Themes

This unit emphasizes:

Key Theme 1: Patterns of Population

Key Theme 6: Science, Technology, and the Environment

Key Theme 7: Spiritual Life and Moral Codes

This unit and the Standards in Historical Thinking

Historical Thinking Standard 1: Chronological Thinking

The student is able to (F) reconstruct patterns of historical succession and duration in which historical developments have unfolded, and apply them to explain historical continuity and change.

Historical Thinking Standard 2: Historical Comprehension

The student is able to (C) read historical narratives imaginatively.

Historical Thinking Standard 3: Historical Analysis and Interpretation

The student is able to (E) analyze cause-and-effect relationships and multiple causation, including the importance of the individual, the influence of ideas, and the role of chance.

Historical Thinking Standard 4: Historical Research Capabilities

The student is able to (C) interrogate historical data.

Historical Thinking Standard 5: Historical Issues-Analysis and Decision-Making

The student is able to (C) identify relevant historical antecedents.

Resources***Resources for teachers***

Campbell, Anna Montgomery. *The Black Death and Men of Learning*. New York: AMS Press, 1966. Summaries of, and some quotations from, contemporary writings about the plague, especially medical but also from other intellectual fields; in more detail than most will want. Includes both Christian and Muslim authorities. Teacher background for the ambitious.

Cantor, Norman F. *In the Wake of the Plague: The Black Death and the World It Made*. New York: Perennial, 2001.

Cohen, Samuel K., Jr. "The Black Death: End of a Paradigm." *American Historical Review* 107 (2002): 703-38. In this article and the book below, the author supports the theory that the Black Death was not the same disease as modern plague but an infection, whose nature is so far unknown, that was more likely caused by a virus than a bacterium.

---. *The Black Death Transformed: Disease and Culture in Early Renaissance Europe*. London: Arnold, 2002.

Crosby, Alfred W. *Ecological Imperialism: The Biological Expansion of Europe*. Cambridge: Cambridge UP, 1986.

Deaux, George. *The Black Death: 1347*. New York: Weybright and Talley, 1969. Useful for those looking for additional, substantial excerpts from original sources.

Dols, Michael. *The Black Death in the Middle East*. Princeton, N.J.: Princeton UP, 1977. More detail than most will want, but the only reasonably-accessible account of the disease

outside Europe. Presents much interesting material for those willing to digest it. Teacher background.

Gies, Frances and Joseph Gies. *Life in a Medieval Village*. New York: Harper & Row, 1990. Vivid and non-technical yet scholarly account, focusing on one particular village. Helpful for students' understanding of the context for the Black Death. Heavily and usefully illustrated. Reasonably competent readers can enjoy it.

Gottfried, Robert S. *The Black Death: Natural and Human Disaster in Medieval Europe*. New York: Free Press, 1983. A broad, popular account.

Herlihy, David. *The Black Death and the Transformation of the West*. Cambridge, Mass: Harvard UP, 1997. Slim and readable volume, scholarly but non-technical, with many interesting quotations from original sources. Teacher background, but good readers in eleventh and twelfth grade could enjoy a chapter or two.

McEvedy, Colin. "A Bubonic Plague." *Scientific American* 258 (1988): 118-23. Explanation of bubonic plague in historical context. Published in a popular magazine, so good for research material.

McNeill, William H. *Plagues and Peoples*. Garden City, N.Y.: Anchor Press/Doubleday, 1976. Describes and analyzes from a global perspective the role played by disease in humanity's development. Chapter 6 discusses the Black Death, setting it in the context of the Mongol empire. The book treats plague recurrences up until contemporary times. Good readers in high school could tackle it.

Twigg, Graham. *The Black Death: A Biological Reappraisal*. New York: Schocken Books, 1984. Argues, like Samuel Cohen, that the Black Death is linked with a pathogen other than *Yersinia pestis*, the bacterium causing modern plague.

Wills, Christopher. *Yellow Fever, Black Goddess: The Coevolution of People and Plagues*. Reading, MA: Addison-Wesley, 1996. Chapter 4 discusses the Black Death.

Ziegler, Philip. *The Black Death*. New York: Harper & Row, 1969. Generally reliable overview of the subject, though written by a non-historian and confined to Europe. Parts could be assigned to competent high school readers.

Resources for students

Biel, Timothy Levi. *The Black Death*. San Diego, CA: Lucent Books, 1989. Good short reading for younger students and less able readers. Gives considerable information about

medieval life and conditions as context: many brief excerpts from original sources, illustrations, glossary, suggestions for further reading for both students and teachers.

Corzine, Phyllis. *The Black Death*. San Diego, CA: Lucent Books, 1997. Investigates the causes, effects, and legacy of the fourteenth-century pandemic, focusing on Europe. Appropriate for middle school.

Giblin, James Cross. *When Plague Strikes: The Black Death, Smallpox, AIDS*. New York: HarperCollins, 1995. Draws parallels between the practical and psychological impact of the three diseases, describing their course down to the present. Vivid and readable; for high school-age students.

Hanawalt, Barbara A. *The European World, 400-1450*. Oxford: Oxford UP, 2005. This volume in Oxford's fine "The Medieval and Early Modern World" series for young readers devotes chapter 11 to "Matters of Life and Death: Famine, Plague, and War."

"Insecta Inspecta World. <http://www.insecta-inspecta.com/fleas/bdeath/index.html>. This award-winning website is all about insects. A section on the oriental rat flea is featured in a detailed discussion of the Black Death.

Correlations to National and State Standards

National Standards for World History

Era 5: Intensified Hemispheric Interactions, 1000-1500 CE. 5A: The student understands the consequences of the Black Death and recurring plague pandemic in the fourteenth century. 5B: The student understands transformations in Europe following the economic and demographic crises of the fourteenth century.

California: History-Social Science Content Standards

Grade Seven, 7.6.7: Map the spread of the bubonic plague from Central Asia to China, the Middle East, and Europe, and describe its impact on global population.

Minnesota Academic Standards in History and Social Studies

III. World History. E. Global Encounters, Exchanges, and Conflicts, 500 AD-1500 AD. 3. Students will identify patterns of crisis and recovery related to the Black Death, and evaluate their impact.

New York: Social Studies Resource Guide with Core Curriculum

Unit Three: Global Interactions (1200-1650), E. Social, economic, and political impacts of the plague on Eurasia and Africa.

Virginia History and Social Science Standards of Learning

Grade Nine, 9.2. The student will analyze the patterns of social, economic, and political change and cultural achievement in the late Medieval period, including ... patterns of crisis and recovery including the Black Death.

Conceptual links to other teaching units



Big Era Five Panorama Teaching Unit Patterns of Interregional Unity 300-1500 CE

Long-term expansion of long-distance networks of trade, technical diffusion, and cultural exchange throughout Afroeurasia; made easier the spread of disease microorganisms and infected animal species.



Big Era Five Landscape Teaching Unit 5.5 Calamities and Recoveries 1300-1500 CE

Several fourteenth-century ecological, political, social, and economic crises in Afroeurasia connected to climate change and to spread of infectious disease along interregional trade routes.



Big Era Five Closeup Teaching Unit 5.5.1 Coping with Catastrophe

Black Death, the greatest of the fourteenth-century calamities; infectious disease transmitted across Eurasia via trade routes; had devastating demographic, social, and economic impact on Europe and the Mediterranean basin.