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Examining the Plague: An Investigation of Epidemic Past and Present

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Lesson Plan

TITLE: Examining the Plague: An Investigation of Epidemic Past and Present

SUBJECT AREA: Social studies, science

OBJECTIVES: At the end of this module, the student should be able to:

• Describe the nature of the Black Plague and its spread during the Middle Ages
• Identify the pope's fears at losing religious power over his subjects
• Analyze the reaction amongst the people to the plague and its effect on their attitudes toward religion, politics, culture and economics
• Understand the meaning of the word scapegoat and identify the population scapegoated during the plague
• Analyze documents for information relating to the Black Plague's effect on medieval Europe
• Compare the reaction to the Black Plague with modern reaction to the acquired immunodeficiency syndrome (AIDS) epidemic

TIME FRAME: Three to four 50-minute lessons

PREREQUISITE KNOWLEDGE: None. The timing of the lessons may be shortened if the class has already covered the origins of the Black Plague in a previous lesson.

MATERIALS NEEDED:

• Instructor's Notes: brief history of the Black Plague in the fourteenth century. This document will be most useful for teachers who have not yet discussed the plague in their classes.
• Plague Document Collection (included as part of the module).

PROCEDURE: See Teacher's Guidelines (included as part of the module).

ASSESSMENT:

• Assign the students the following: Prepare a document for Pope Clement V in which you analyze the concerns and beliefs of the people and recommend immediate solutions to the pope so that he can retain his influence over the people. Also, predict the effects of the plague on culture, arts, trade, children, education, medicine, economics, politics, etc. The pope will not accept any recommendation without proof, so identify the document that will provide your evidence.
• Ask the students to write a letter to the president or director of the World Health Organization, stating recommendations for global handling of the AIDS epidemic.

**LINK TO SOCIAL STUDIES STANDARDS:**

3a Students will be able to describe and compare how people create places that reflect culture, human needs, government policy and current values and ideals as they design and build specialized buildings, neighborhoods, shopping centers, urban centers, industrial parks and the like.

3b Students will be able to describe and assess ways that historical events have been influenced by, and have influenced, physical and human geographic factors in local, regional, national and global settings.

5 Students will demonstrate the ability to explain and apply ideas and modes of inquiry drawn from behavioral science and social theory in the examination of persistent issues and social problems.

8 Students will demonstrate the ability to evaluate various policies that have been proposed as ways of dealing with social changes resulting from new technologies, such as genetically engineered plants and animals.

9 Students will analyze the causes, consequences and possible solutions to persistent, contemporary and emerging global issues, such as health, security, resource allocation, economic development and environmental quality.

Available at www.ncss.org/standards

**Bibliography**

Defoe D. *A Journal of the Plague Year . . . Written by a Citizen, etc.* 1722. Brayley EW editor, 1839.


Teacher's Guidelines

Part I (Day 1)

Introduction to the Plague (Instructor's Notes)

The teacher should begin class by introducing or revisiting information about the Black Plague.

Historical Background

During the fourteenth century, Europe was living through a deadly epidemic known as the Great Plague. Probably originating in Asia in 1330, the Black Death spread through the land and sea trading routes of the time. Contact from these trade routes reached North Africa, Europe and the Middle East. Known by names such as the Great Plague, the Black Death and the Black Plague the disease that tore through Europe is now more commonly known as the bubonic plague.

The plague's rapid transmission can be traced to a small bacterium, *Yersina pestis*, that usually infected the black rat. Infected fleas, however, transmitted the disease to humans initially. Eventually humans spread the disease as well, through infected saliva. Once people became infected, the symptoms of the disease were painful and difficult, and many died. Symptoms included swollen nodes in the groin, severe headache and severe pneumonia. The disease became known as the black plague because of the dark blood clots that appeared under the skin.

The overall effects of the plague devastated Europe. The population decreased as much as 33% in 20 years, affecting agricultural production, family structure and economics.

Class Discussion

The following questions may enhance the students' understanding of the plague and its spread after reviewing the introductory information:

1. Why do you think the plague spread so rapidly throughout Europe?
   
   Answers may include lack of knowledge of methods by which disease is spread, varying standards of hygiene, trading, crowding and rat harborage.

2. What areas of medieval life probably faced the most impact as a result of this plague?
   
   Families, business and all other areas felt an impact most likely, and according to perspective, many answers are acceptable. Student answers will most likely cover many of the specifics requested in the question section of Day 2.

3. What were the likely effects of a die-off of about one third of a total population in a 10-year period upon the economic life and structure in medieval times?
Students should draw on general knowledge of medieval times. Their answers will vary but should cover ideas such as loss of business, lack of trade, increased isolation, decline of feudal structure, decreased power and control of local rulers. The change in the economic structure could raise the social status of peasants and other groups formerly lower on the socioeconomic scale.

4. What were the likely effects of a die-off of about one third of a total population in a 10-year period upon the family life and structure in medieval times?

Again, answers will vary but should span a variety of ideas such as change in gender roles (male-dominated society will see a shift in power and leadership of women as a result of a die-off of males), decrease in population, change in nature of family traditions and rituals (men assume more maternal roles as women die off), role of children changing as they are forced to assume adult roles without parents.

5. What were the likely effects of a die-off of about one third of a total population in a 10-year period upon the population growth or decline in medieval times?

Students should recognize the negative effect of the die-off on the population's growth and its contribution to the population decline. At this point, Questions 3–5 of this section can be discussed together.

Class Activity

• Inform students that they are going to investigate the class discussion questions further through an activity using documents from the fourteenth through the eighteenth centuries.

• Divide students into groups of three or four students.

• Pass out plague documents to groups (Plague Document Collection included in module). Ask students to look through the documents and use them to gather information for the following assignment:

  Analyze the various responses to the outbreaks of plague in the fourteenth and fifteenth centuries. Discuss the beliefs and concerns that these responses express.

Assessment

The plague devastated Europe in several different areas. The church in particular suffered a loss of influence over the population because of a series of disasters in the fourteenth century. Prepare a document for the pope in which you analyze the concerns and beliefs of the people and recommend immediate solutions to the pope so that he can retain his influence over the people. You also must predict the effects of the plague on culture, arts, trade, children, education, medicine, economics, politics, etc. The pope will not accept any recommendation without proof, so identify the document that will provide your evidence.
Part II (Day 2)

Introduction

Begin class by reviewing the findings and recommendations of each of the groups. Combine the results as a class list of recommended solutions on the board for each of the following categories: culture, arts, trade, children, education, medicine, economics, politics and any other category that the groups uncovered.

Class Discussion

A. Guide discussion with follow-up questions:

1. Begin by discussing whether the pope's fear of losing power was justified? Why or why not?

   The students should find the pope's fears justified, particularly in light of the documents that allude to the population's denial or misapplication of religious practices. (Documents 1, 4, 5, 8, 10, 13)

2. Ask the students to tell which of the documents or reactions to the plague seemed most interesting to them.

   Answers will vary, but a common response is the ring around the rosy song and the link to the plague.

3. Which reactions seemed the most unrealistic or outrageous?

   Answers will vary, but a common response is the reaction to the Jewish population. (Document 9) or the belief that toads could cure the disease (Document 10).

4. Ask students if they understand the concept of a scapegoat.

   Explain to students that scapegoats are groups that are usually blamed. Ask if they recognize this scenario's scapegoats, which include Jews (Document 9) and Christians in galleys that helped the Turks and Saracens (Document 5).

B. Guide students through a comparison of what a modern Black Plague would do to society today. Questions 1 and 2 are the same as those from day 1, applied to current times.

1. What are the likely effects of a die-off of about one third of a total population in a 10-year period upon the economic life and structure in current times?
Answers will vary but should include some of the following: disruption of certain industries or activities, depending on the age and sex of people affected; loss of tax revenue, due to loss of workforce; loss of consumer confidence, leading to recession or depression; loss of productivity, as survivors take on additional responsibilities due to death and illness of others; rise of new industries that offer real or imagined methods to control or respond to the epidemic; blurring of class lines as socioeconomic status rises or lowers with die-off.

2. What would be the effects on family life and structure in current times?

Answers will vary but should include some of the following: change in family roles, particularly traditional male–female parenting responsibilities with the death or illness of some members and additional responsibilities for survivors; increase in orphans, leading to both short-term stresses associated with foster care and long-term effects of youth development; increase in divorce due to stress on marriage; ostracism of family members thought to be responsible for the epidemic; strengthening of other social bonds as people attempt to adjust to the threat.

3. What would be the effects on the role of religion, religious tolerance and the rise or fall of secularism?

Guide students to think of religious reaction to the Black Plague. Ask them if they can think of any similarities today. Reaction to the AIDS epidemic? One might expect to see a rise in religious activity among people who seek an explanation for the epidemic in religious terms. Others, however, may become disillusioned by catastrophic events and reject religion. If the cause of the epidemic is cast in religious terms, scapegoating of certain religious groups (or atheists) may be seen.

4. If you lived through and survived a catastrophe like the Black Plague, would it strengthen or weaken your religious faith?

Answers will vary, for the reasons given in the commentary for Question 3.

5. What about your belief in the power and utility of the scientific method?

The scientific method involves framing a testable hypothesis about the reasons why some phenomenon occurs, gathering information to test that hypothesis, judging whether the collected data are consistent with the hypothesis or not and then rejecting the hypothesis and crafting another (if the data are inconsistent) or designing a stiffer test of the hypothesis (if the data are consistent). One’s belief in this approach to explaining an epidemic is likely to be strengthened if science discovers the cause and leads to effective control methods. If it does not, many people may move toward other methods of explanation, like religion, other supernatural models or preconceptions based on prejudice.
6. What modern epidemics or plagues have we seen today?

   Answers might include the current SARS epidemic, flu, AIDS, Lyme disease, mad cow disease, Hantaan virus infection. One might also consider obesity, Alzheimer's disease and diabetes to be modern epidemics in the United States.

C. The following questions are intended as a bridge to a discussion about the perception of AIDS as a modern plague:

1. Can you give examples in the last (twentieth) century of the use of scapegoating to explain epidemics?

   Early in the AIDS outbreak AIDS was specifically seen as a disease of gay men and of Haitians. Those two groups were greatly discomforted by public reaction to this interpretation of incomplete scientific information.

2. An AIDS vaccine was tested and reported in February 2003 as ineffective in the total population tested, but there was a suggestion of efficacy in African Americans and Asian Americans. What are the possible explanations for this anomaly?

   The most likely explanation is that this was a chance finding, which will not be confirmed in subsequent testing. The scientists who designed the vaccine trial did not expect such ethnic differences. Post hoc analysis of the effectiveness of interventions in subgroups is fraught with complications—and should generally be used to generate hypotheses rather than test them.

**Homework**

Ask students to try to find one document or article that deals with the early response to the AIDS epidemic. Students will most likely search the Web. It is hoped they will uncover early attitudes about and reactions to the disease.

**Part III (Day 3)**

**Introduction**

Discuss the findings from the homework assignment of the day before. Depending on the documents found, students' answers will vary. Some examples may be unclear knowledge about AIDS and its cause, the idea that AIDS was a "gay disease" and religious reaction that this was a plague meant for gay men.

Can the students see any similarities between early reaction to the plague and early reaction to AIDS?
Class Activity

• Tell the students they are going to find evidence to support or refute the similarities. This next assignment will require library time or Internet access if available.

• Divide the class into small groups of about four students per group.

• Divide the following topics amongst the groups. It might be useful to give each group two or three categories of the following assignment.

Today your group will collect documents in the following categories that are related to the response to the AIDS virus in the early years of AIDS knowledge:

- Statistics
- Quotes
- Research
- Medical studies
- Culture
- Religion
- Pictures
- Various countries
- Art

This activity can be extended a day or so, depending on the magnitude of student findings and available class times.

Part IV (Day 4)

Introduction

Review the students’ findings. Discuss the similarities in attitudes between reaction to the plague and reaction to AIDS. Remind the students of their reactions to the practices during the Middle Ages. Can the students see the similarities in the reactions to both epidemics? How are these attitudes possible in a time when medicine and knowledge are advanced?

Assessment

Ask the students to write a letter to the president or director of the World Health Organization, stating recommendations for global handling of the AIDS epidemic.
Part I (Day 1)

Class Discussion

1. Why do you think the plague spread so rapidly throughout Europe?
2. What areas of medieval life probably faced the most impact as a result of this plague?
3. What were the likely effects of a die-off of about one third of a total population in a 10-year period upon the economic life and structure in medieval times?
4. What were the likely effects of a die-off of about one third of a total population in a 10-year period upon the family life and structure in medieval times?
5. What were the likely effects of a die-off of about one third of a total population in a 10-year period upon the population growth or decline in medieval times?

Class Activity

In small groups you are going to investigate the class discussion questions further through an activity using documents from the fourteenth through the eighteenth centuries. Look through the documents and use them to gather information for the following assignment:

- Divide students into groups of three or four students.
- Look through the documents and use them to gather information for the following assignment:

Analyse the various responses to the outbreaks of plague in the fourteenth and fifteenth centuries. Discuss the beliefs and concerns that these responses express.

Assessment

The plague devastated Europe in several different areas. The church in particular suffered a loss of influence over the population because of a series of disasters in the fourteenth century. Prepare a document for the pope in which you analyze the concerns and beliefs of the people and recommend immediate solutions to the pope so that he can retain his influence over the people. You also must predict the effects of the plague on culture, arts, trade, children, education, medicine, economics, politics, etc. The pope will not accept any recommendation without proof, so identify the document that will provide your evidence.
(The letter to the Pope can be replaced with a letter to a king if necessary)

**Part II (Day 2)**

*Class Discussion*

A. Follow-up questions to assignments:

1. Begin by discussing whether the pope's fear of losing power was justified? Why or why not?
2. Which of the documents or reactions to the plague seemed most interesting to you?
3. Which reactions seemed the most unrealistic or outrageous?
4. Do you understand the concept of a scapegoat?

B. What would a modern Black Plague do to society today? Questions 1 and 2 are the same as those from day 1, applied to current times.

1. What are the likely effects of a die-off of about one third of a total population in a 10-year period upon the economic life and structure in current times?
2. What would be the effects on family life and structure in current times?
3. What would be the effects on the role of religion, religious tolerance and the rise or fall of secularism?
4. If you lived through and survived a catastrophe like the Black Plague, would it strengthen or weaken your religious faith?
5. What about your belief in the power and utility of the scientific method?
6. What modern epidemics or plagues have we seen today?

C. The following questions are intended as a bridge to a discussion about the perception of AIDS as a modern plague:

1. Can you give examples in the last (twentieth) century of the use of scapegoating to explain epidemics?
2. An AIDS vaccine was tested and reported in February 2003 as ineffective in the total population tested, but there was a suggestion of efficacy in African Americans and Asian Americans. What are the possible explanations for this anomaly?

**Homework**

Find one document or article that deals with the early response to the AIDS epidemic. The Web
is a useful source.

Part III (Day 3)

Activity

Today your group will collect documents in the following categories that are related to the response to the AIDS virus in the early years of AIDS knowledge:

- Statistics
- Quotes
- Research
- Medical studies
- Culture
- Religion
- Pictures
- Various countries
- Art

Can you see any similarities between early reaction to the plague and early reaction to AIDS?

Part IV (Day 4)

Assessment

Write a letter to the president or director of the World Health Organization, stating recommendations for global handling of the AIDS epidemic.
Plague Document Collection
(Student Handout)

• Analyze the various responses to the outbreaks of plague in the fourteenth and fifteenth centuries. Discuss the beliefs and concerns that these responses express.

• Prepare a document for the pope in which you analyze the concerns and beliefs of the people and recommend immediate solutions to the pope so that he can retain his influence over the people.

• You also must predict the effects of the plague on culture, arts, trade, children, education, medicine, etc. The pope will not accept any recommendation without proof, so identify the document that will provide your evidence.
But even those wholesome reflections—which, rightly managed, would have most happily led the people to fall upon their knees, make confession of their sins, and look up to their merciful Saviour for pardon, imploring His compassion on them in such a time of their distress . . . had a quite contrary extreme in the common people, who, ignorant and stupid in their reflections as they were brutishly wicked and thoughtless before, were now led by their fright to extremes of folly; and, as I have said before, that they ran to conjurers and witches, and all sorts of deceivers, to know what should become of them (who fed their fears, and kept them always alarmed and awake on purpose to delude them and pick their pockets), so they were as mad upon their running after quacks and mountebanks, and every practising old woman, for medicines and remedies; storing themselves with such multitudes of pills, potions, and preservatives, as they were called, that they not only spent their money but even poisoned themselves beforehand for fear of the poison of the infection; and prepared their bodies for the plague, instead of preserving them against it.

Source: Daniel Defoe, *Journal of the Plague Year*, 1722.
Document 2

Whatever house the pestilence visited was immediately nailed up, and if a person died within, he had to be buried there. Many died of hunger in their own houses. Throughout the country, all the roads and highways were guarded so that a person could not pass from one place to another.

Source: Heinrich von Staden, Count of the Palatinate and traveler to Russia, The Land and Government of Muscovy, 1571.
In the town of Florence, the authorities took every precaution against the Plague. The streets were cleaned; those with the Plague were prevented from coming into the town; and prayers were said to God. But the Plague came.

Both doctors and medicines seemed useless; almost everyone who got the Plague died. Those left alive behaved in different ways. Some got together in a house and cut themselves completely off from the rest of the town; they ate and drank very little and would not even talk about the Plague. Others drank a great deal, and went about in public and laughed about the Plague: they broke into houses and got drunk on the wine they found. Others carried bunches of flowers, herbs or spices and held these to their noses when they walked about: they felt that this was healthy and also it stopped them smelling the stink of the dead and dying. Others thought the best thing was to escape: they left their neighbors and families and fled to the country.

People avoided each other: neighbors and families kept apart. The Plague had the effect of making brothers leave each other and husbands leave wives.

Those who were dying of the Plague were left to die alone. Many died each night in the streets. Many others died in their houses and only the terrible smell of rotting bodies warned their neighbors what had happened. Then the neighbors would drag the bodies out with their own hands and leave them in the doorway. Anyone walking around in the morning could have seen more corpses than he could count. The whole town was like a graveyard.

Soon huge trenches had to be dug for the bodies, which were thrown in hundreds at a time—like cargo being chucked into a ship. The bodies were covered up with a little earth and stacked up until the trench was full.

Source: Giovanni Boccacio, author of The Decameron, 1348.
Document 4

MCCCX. penta miseranda ferox violenta
superest plebs pessima testis in fineque ventus validus
oc anno maurus in orbe tonat

(1350. The people who remain are driven wild and miserable. They are wretched witnesses to the end. A strong wind is thundering over the whole earth. Written on St. Maurice's Day.)

Source: Etched into a wall of the Ashwell church tower, England.
Document 5

The Plague carried by these cursed galleys was a punishment sent by God. He did this because those galleys had helped the Turks and Saracens to capture a Christian town. The Italian merchants broke down the walls and killed their fellow Christians: they were more brutal against the Christians than the Saracens had ever been.

Source: Italian Cardinal, 1348.
That there were a great many robberies and wicked practices committed even in this dreadful time I do not deny. The power of avarice was so strong in some that they would run any hazard to steal and to plunder; and particularly in houses where all the families or inhabitants have been dead and carried out, they would break in at all hazards, and without regard to the danger of infection, take even the clothes off the dead bodies and the bed-clothes from others where they lay dead.

Source: Daniel Defoe, *Journal of the Plague Year*, 1722.
In the year 1349, the Plague was still deadly and it was spreading from town to town. So men in Germany, Flanders, Hainault and Lorraine decided to found a new religious group. They gathered together in large groups and marched in procession, with their backs bare. When they got to a crossroads, or the market squares of towns, they formed circles and beat their backs with weighted whips. They sung loudly and many of these hymns were completely new.

For thirty-three days they marched through many towns and villages, punishing themselves for their sins. The common people were amazed at this strange sight. For the flagellants lashed at their shoulders and arms with whips which had iron points at the end. They whipped themselves so hard that they drew blood.

They said that the blood that came from the whipping was mixed with the blood of Christ.

Many honorable women, both young and old, joined the flagellants. They beat themselves and sang through the towns and churches just as the men did.

But after a little time everyone stopped doing this.

Source: Jean de Venette, French friar, ca. 1359.
Document 8

At this time there was such a great shortage of priests everywhere that many churches were abandoned. None of the normal services were held.

It was impossible to get a priest to come to take services unless he was paid up to £10 a year. Before the Plague, a priest would live in a village and take all the services for 3 a year—but now no one will do the job unless they are paid 20 a year.

Shortly after the Plague a large number of men whose wives had died became priests, although many of them could not even write. They could read a little, but did not understand what they were reading.

Source: Henry Knighton, Chronicler and Canon of St. Mary’s Leicester, 1350s.
Document 9

Men ascribed the pestilence to infected air or water, because there was no famine or lack of food at that time but, on the contrary, a great abundance. One result of this interpretation was that the infection, and the sudden death which it brought, were blamed on the Jews, who were said to have poisoned wells and rivers and corrupted the air. Accordingly the whole world brutally rose against them, and in Germany and in other countries which had Jewish communities many thousands were indiscriminately butchered, slaughtered and burnt alive.

Source: Jean de Venette, French friar, 1359.
Plague-stricken patients hang around their necks toads, either dead or alive, whose venom should within a few days draw out the poison of the disease.

Suddenly everything became very cheap, because no one was bothered about money or goods—they were all too frightened of dying... Sheep and oxen strayed through the fields and among the crops, because there was no one to drive them away, or collect them together. These animals mostly died in ditches, or by getting tangled up in the hedges; there was no one to look after them and the lords of the manor did not know what to do...

Lords who had lent land in return for yearly labor service were forced to change these services. They either had to let the serfs off the services, or else accept money instead. Unless they did this the serfs ran away and left their houses and the land to go to ruin.

The laborers were so proud and hostile that they took no notice of the King's law. If anyone wanted to employ laborers, he had to pay them what they asked—or lose his fruit and crops.

Source: Henry Knighton, Chronicler and Canon of St. Mary's Leicester, 1350s.
The doctor’s robe. The nose of the sinister costume was supposed to act as a filter, being filled with materials imbued with perfumes and alleged disinfectants. The lenses were supposed to protect the eyes from the miasmas.

Source: Illustration from Historiarum anatomicarum medicarum (1661), by Thomas Bartholin.
The Plague is a Divine action with no goal less than the extermination of mankind.

The few people who remained alive led wild and wicked lives. They did no work but spent their time eating vast meals. They drank and feasted on expensive foods. They gambled and were sexually immoral. They dressed in strange and indecent clothes.

Source: Matteo Villani, Florentine merchant and banker, 1348.
Document 14

No poultry should be eaten, no waterfowl, no pig, no old beef, altogether no fat meat. . . . It is injurious to sleep during the daytime. . . . Fish should not be eaten, too much exercise may be injurious . . . and nothing should be cooked in rainwater. Olive oil with food is deadly. . . .

Bathing is dangerous. . . .

**Source:** Statement of the University of Paris Medical Faculty, 1348.
Neither physicians nor medicines were effective. Whether because these illnesses were previously unknown or because physicians had not previously studied them, there seemed to be no cure. There was such a fear that no one seemed to know what to do. When it took hold in a house it often happened that no one remained who had not died. And it was not just that men and women died, but even sentient animals died. Dogs, cats, chickens, oxen, donkeys, sheep showed the same symptoms and died of the same disease. And almost none, or very few, who showed these symptoms, were cured. The symptoms were the following: a bubo in the groin, where the thigh meets the trunk; or a small swelling under the armpit; sudden fever; spitting blood and saliva (and no one who spit blood survived it). It was such a frightful thing that when it got into a house, as was said, no one remained. Frightened people abandoned the house and fled to another.

Source: Marchione di Coppo Stefani, ca. 1370.
Document 16

Ring around the rosy
Pocket full of posies
Ashes, ashes!
We all fall down!

Ring around the rosy: rosary beads give you God's help. A pocket full of posies: used to stop the odor of rotting bodies which was at one point thought to cause the plague, it was also used widely by doctors to protect them from the infected plague patients. Ashes, ashes: the church burned the dead when burying them became too laborious. We all fall down: dead. Not only were the children affected physically, but also mentally. Parents even abandoned their children, leaving them to the streets instead of risking the babies giving them the dreaded "pestilence." Children were especially unlucky if they were female. Baby girls would be left to die because parents would favor male children that could carry on the family name.

Source: Available at pages.zdnet.com/genealogy.research
Source: *The Cemetery* from *The Dance of Death*—Hans Holbein the Younger.