Can Disease Change the World?


Supporting Questions

1. What was the Black Death?
2. How did the Black Death spread so quickly?
3. How did the Black Death affect people in the 14th century?
# 6th Grade Black Death Inquiry

## Can Disease Change the World?

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<th>Summative Performance Task</th>
<th>ARGUMENT Can disease change the world? Construct an argument (e.g., detailed outline, poster, essay) that discusses the impact of the Black Death using specific claims and relevant evidence from historical sources while acknowledging competing views that people had about the nature of the Black Death in the 14th century.</th>
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<td>Taking Informed Action</td>
<td>UNDERSTAND Find current examples of how we prevent, detect, and minimize the spread of diseases in homes, schools, and communities (e.g., washing hands, vaccinations). ASSESS Think of at least one way we might improve the prevention or control the spread of diseases in homes, schools, and communities. ACT Create a public service announcement to advocate for improved methods of prevention, detection, and control of diseases.</td>
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Inquiry Description

This inquiry is framed by the compelling question “Can disease change the world?” Among the many catastrophic global pandemics in history, perhaps none achieved the notoriety of the Black Death. The Black Death was a massive outbreak of the bubonic plague caused by infectious bacteria. Thought by scientists to have been spread by contaminated fleas on rats and/or other rodents, the Black Death quickly decimated entire families and communities. In doing so, the Black Death led more than one observer of the time to ponder whether the apocalypse had begun. The Black Death began and first spread on the Silk Roads through central Asia in the early 14th century, and by mid-century moved via merchant ships into North Africa and Europe, where it would kill nearly one-half of the population. It took almost 150 years for Europe’s population to recover. By investigating the compelling question “Can disease change the world?” students consider the causes, symptoms, and reasons for the rapid geographic expansion of the disease and how this pandemic affected people of the 14th century and beyond. Through their investigation of sources in this inquiry, students should develop an understanding of the consequences of the Black Death and an informed awareness of the importance of preparing for future diseases and possible pandemics.

In addition to the Key Idea listed earlier, this inquiry highlights the following Conceptual Understanding:

- 6.7a The Silk Roads, the Indian Ocean, and the Trans-Saharan routes formed the major Afro-Eurasian trade networks connecting the East and the West. Ideas, people, technologies, products, and diseases moved along these routes.

NOTE: This inquiry is expected to take three to five 40-minute class periods. The inquiry time frame could expand if teachers think their students need additional instructional experiences (i.e., supporting questions, formative performance tasks, and featured sources). Teachers are encouraged to adapt the inquiries in order to meet the needs and interests of their particular students. Resources can also be modified as necessary to meet individualized education programs (IEPs) or Section 504 Plans for students with disabilities.

Structure of the Inquiry

In addressing the compelling question “Can disease change the world?” students work through a series of supporting questions, formative performance tasks, and featured sources in order to construct an argument with evidence and counterevidence from a variety of sources.

Staging the Compelling Question

In this staging task, teachers may begin the inquiry by helping students understand that disease is a part of our everyday modern life and that the implications of the compelling question, “Can disease change the world?” are as well. To accomplish this goal, teachers may engage students in a discussion about a recent outbreak of infectious disease (e.g., SARS, Ebola, MERS) and how public officials responded to the outbreak.
Supporting Question 1

The first supporting question—“What was the Black Death?”—introduces students to the catastrophic pandemic known as the Black Death. The formative performance task calls on students to describe the Black Death by focusing on the symptoms of the disease and the geographic areas most affected by it. Featured Source A is an eyewitness account from 14th-century writer Giovanni Boccaccio about the symptoms of the Black Death. Featured Source B is a painting from 1411 of two patients suffering from the disease.

Supporting Question 2

The second supporting question—“How did the Black Death spread so quickly?”—invites students to examine why the Black Death became so widespread and how it was possible for the mortality rate to be so high. The formative performance task calls on students to construct a diagram depicting how the Black Death spread. Featured Sources A and B are visuals about the spread of the Black Death. The first is a contemporary illustration showing the general pattern of transmission of plague bacteria from natural to human environments; the second is a cartoon-style visual that illustrates the role of fleas and rats in spreading the disease. Featured Source C is a map showing the ways in which the disease spread from Asia to Europe in the 1340s and within Europe after 1348.

Supporting Question 3

The third supporting question—“How did the Black Death affect people in the 14th century?”—asks students to explore how the Black Death changed people’s lives and how those affected by the plague responded to it. The formative performance task calls on students to create an annotated illustration depicting how the Black Death affected different groups of people in the 14th century. The featured sources include a set of graphs illustrating the dramatic decline in population as a result of the Black Death and a painting and accompanying text about the false claim that Jewish people were to blame for the Black Death. The final featured source is a text that shows the effect of the Black Plague on the European economy and feudal society.

Summative Performance Task

At this point in the inquiry, students have examined the causes and symptoms of the Black Death. Students have also examined where, when, and how the disease spread as rapidly as it did and how the people were affected by this catastrophic pandemic. Students should be able to demonstrate the breadth of their understanding and the ability to use evidence from multiple sources by constructing an argument in response to the compelling question “Can disease change the world?” It is important to note that students’ arguments could take a variety of forms, including a detailed outline, poster, or essay.
Student arguments likely will vary, but could include the following:

- The Black Death changed the world by spreading quickly from Asia to Europe, where half of the population died.
- The Black Death did not change the world, but large numbers of Jews were blamed and persecuted unfairly.
- The shortage of labor in Europe that resulted from the Black Death changed the world by creating labor unrest and new social arrangements.

Students have the opportunity to Take Informed Action by drawing on their knowledge of how pandemics spread and impact society. Students show that they understand by finding current examples of how we prevent, detect, and minimize the spread of diseases in homes, schools, and communities (e.g. washing hands, vaccinations). They can then assess at least one way people might improve the prevention or control the spread of diseases in homes, schools, and communities. And they can act by creating a public service announcement to advocate for improved methods of prevention, detection, and control of diseases.
### Supporting Question 1

| Featured Source | Source A: Giovanni Boccaccio, novel about the Black Death, *Decameron* (translated by David Burr, excerpts), 1353 |

**NOTE:** Teachers and their students can read an excerpt from Boccaccio’s novel *Decameron* by clicking this link: [http://www.history.vt.edu/Burr/Boccaccio.html](http://www.history.vt.edu/Burr/Boccaccio.html)
## Supporting Question 1

| Featured Source | Source B: Rudolf von Ems, illustration of the Black Death, “The Black Death-from the 10 Plagues of Egypt,” 1411 |

Supporting Question 2

**Featured Source**

**Source A:** Center for Disease Control and Prevention, illustration of plague cycle, *Plague Ecology*, 2012

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**Plague Ecology in the United States**

**Plague in Nature**

Plague occurs naturally in the western U.S., especially in the semi-arid grasslands and scrub woodlands of the southwestern states of Arizona, Colorado, New Mexico and Utah.

The plague bacterium (*Yersinia pestis*) is transmitted by fleas and cycles naturally among wild rodents, including rock squirrels, ground squirrels, prairie dogs and wood rats.

**Plague in Humans**

Occasionally, infections among rodents increase dramatically, causing an outbreak, or epidemic. During plague epidemics, many rodents die, causing hungry fleas to seek other sources of blood. Studies suggest that epidemics in the southwestern U.S. are more likely during cooler summers that follow wet winters.

Humans and domestic animals that are bitten by fleas from dead animals are at risk for contracting plague, especially during an epidemic. Cats usually become very ill from plague and can directly infect humans when they cough infectious droplets into the air. Dogs are less likely to be ill, but they can still bring plague-infected fleas into the home. In addition to flea bites, people can be exposed while handling skins or flesh of infected animals.

Supporting Question 2

**Featured Source**  
Source B: Maps depicting the spread of the Black Death, 2015

Created for the New York K-12 Social Studies Toolkit by Agate Publishing.
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Supporting Question 3

**Source A:** Data bank: Bubonic plague statistics

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**Graphic 1:** William L. Langer chart depicting the population of Europe before, during, and after the Black Death, "The Black Death," *Scientific American,* February 1, 1964.

Reproduction of William L. Langer chart depicting the population of Europe before, during, and after the Black Death, "The Black Death," *Scientific American,* February 1, 1964. Reproduced with permission. Copyright (C) 1964 Scientific American, Inc. All rights reserved.
Graphic 2: Chart depicting the population of selected European countries before, during, and after the Black Death, 2015.

Graphic 3: Chart depicting deaths caused by the Black Death compared to other catastrophic events, 2015.

NOTE: In the Middle Ages, people had no knowledge of germs, and most rarely washed their hands or bathed. In cities they were often cramped in close quarters. However, Jews were often forced to live on the outskirts of town. Their religion required exceptional cleanliness. This requirement meant that they got sick far less frequently than their non-Jewish peers. Many townsfolk then assumed that Jews were poisoning their wells. They began to destroy Jewish communities and murder thousands of Jewish people during plague outbreaks.

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The plague had many effects. People abandoned their friends and family. They even fled cities and shut themselves off from the world. Some people stopped working. So many people died, they even stopped having funerals. Some fought the plague with prayer and by living a more religious life. However, many priests died and prayers went unanswered. Overall, people’s faith in religion decreased during the Black Death.

The economy was affected as well. Inflation rose and productivity declined. It was difficult (and dangerous) to engage in trade and to produce goods. That caused the price of goods to rise. There were not enough replacement workers to take over from workers who died. Serfs were no longer tied to one master. A serf who left the land would be instantly hired by another lord. The lords had to make changes in order to keep their estates. Because of the lack of workers, wages (what people earned) actually went up. In general, wages outpaced prices and the standard of living was increased.

As the feudal system began to crumble, new distinctions among people emerged. The fashions of the nobility became more extravagant in order to emphasize their social standing. The peasants were more empowered. They even began to revolt when the nobles attempted to resist the changes brought about by the Black Death. In 1358, the peasantry of northern France rioted. From 1378 to 1381, a series of rebellions challenged the feudal system. The social and economic structure of Europe was drastically changed as a result of the Black Death.

From Decameron Web, Department of Italian Studies, Brown University, Virtual Humanities Lab. Used with permission. http://www.brown.edu/Departments/Italian_Studies/dweb/plague/effects/social.php