

The Black Death: origin, causes, symptoms, treatments, effects

Lesson Map: <http://esriaustralia.com.au/education/SpatialActivity79>

Note to teachers: This learning resource and lesson plan has been created to include an overview of several aspects of the Black Death. Teachers may choose to engage with the entire resource or aspects specific to their teaching needs. For example, teachers may use this StoryMap to explore one aspect of the Black Death, like causes and transmission. As a result, no activity time for this resource is provided.

Engage

Historical context: Where did the Black Death originate?

- Click on the map URL above to open the StoryMap. The title page will be displayed. Scroll down to the section titled *Historical Context: Where did the Black Death originate?* to begin.
- This StoryMap also has a navigation panel at the top of the page, which allows users to quickly jump to specific aspects of the Black Death.
- Read the information. Take notes if required and stop to discuss if necessary.
- ? **Engage with the map.** Locate Heibei in China. What year did the plague affect the city and how many people died as a result? Hint: click on symbols to bring up additional information. [*The Black Death affected Heibei in 1334 and killed approximately 90% of the city's population.*]
- Scroll down to the section titled *How did the Black Death make its way from Central Asia through to the Middle East?* Read the information and take notes if required. Stop to discuss as necessary.
- **Engage with the map.** Land and sea trade routes are now displayed on the map. Using the legend as a guide, trace the route of the Black Death along the Silk Road from Mongolia to Issyk-Kul Lake to Kaffa to Constantinople. Click on each location to read additional information on how the Black Death affected these places.
- Scroll down to the section titled *The Black Death reaches Europe*. Read the information and take notes if required. Stop to discuss as necessary.

Download student worksheet [here](#).

Time

See **Note to teachers** for information

Activity

Investigate the Black Death.

Learning Outcome

Students will be able to:

- Understand and comprehend various aspects of the Black Death e.g. symptoms, effects
- Analyse and evaluate primary sources
- Use evidence from sources to justify responses
- Examine long-term effects of the Black Death

ACARA Curriculum Link

[Year 8 History: The Black Death in Asia, Europe and Africa \(14th century plague\)](#)

[ACDSEH015](#) | [ACDSEH069](#) | [ACDSEH070](#) | [ACDSEH071](#) | [ACHHS148](#) | [ACHHS149](#) | [ACHHS152](#) | [ACHHS153](#) | [ACHHS154](#) | [ACHHS157](#)

Teacher Feedback:

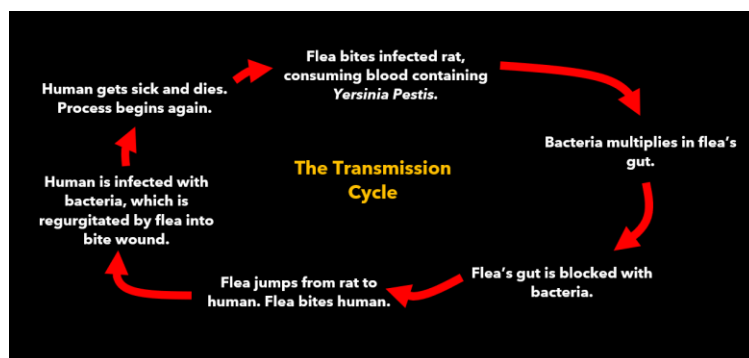
To share your feedback on this, or any Spatial Activity, please contact education@esriaustralia.com.au

- **Engage with the map.** Click on the Legend to identify land and sea trade routes that contributed to the spread of the Black Death into mainland Europe.

Explore

Aspects: Causes and transmission; Symptoms; Medieval explanations for the plague

- Scroll down to the major heading titled *Causes and Transmission*. Read the information on *Yersinia Pestis* and *The role of the black rat and the flea*. Take notes if required and stop to discuss as necessary.
- ? Create a flow-chart of the transmission cycle of the Black Death from rat to human. *[See example below as model response.]*



- Scroll down to the major heading titled *Symptoms*. Read the information on the three forms of plague: *Bubonic Plague*, *Pneumonic Plague*, *Septicemic Plague*. Take notes if required and stop to discuss as necessary.
- ? Complete the table below to demonstrate your knowledge of the three forms of the Plague.

	Bubonic Plague	Pneumonic Plague	Septicemic Plague
Mortality rate	60%	Close to 100%	Close to 100%
Mode of transmission	Flea bite	Spread by cough droplets, sneezes, breathing	Occurred if bacteria reached blood stream and multiplied.
Part of body attacked	Areas where lymph nodes are present e.g. groin, neck, armpits	Lungs	Circulatory system
Symptoms	Buboes, headaches, fever, chills, fatigue, muscle aches	Coughing, coughing of blood, breathing difficulties, nausea, vomiting, chest pains, fever,	Nausea, vomiting, diarrhea, abdominal pain, severe bleeding problems, shock,

		<i>respiratory failure</i>	<i>unconsciousness, kidney failure</i>
Duration of symptoms before death / survival	<i>2 – 6 days</i>	<i>Symptoms started a couple hours after infection. Death in 2 days</i>	<i>1 – 2 days</i>

→ Scroll down to the major heading titled *Medieval Explanation for the Plague*. Read the information and take notes if required. Stop to discuss as necessary.

? Read the three sources that share the perspectives of medieval physicians attempting to explain the causes of the Plague. Identify the believed causes of the Plague and any medical treatments suggested by each source.

	Causes of the Plague	Suggested medical treatments
Source 1: College of Physicians in Paris	<i>The stars [constellations] caused water from the ocean to rise as a form of vapor. This vapor was corrupted [contained the disease] and was spread through the air to many places. The vapor in the air brought the plague and killed people. The disease could be found in water, dew etc. as well.</i>	<ul style="list-style-type: none"> - burn great quantities of wormwood and chamomile in busy / congested places - eat cold, moist, watery food (simple diet) - Avoid going out at night so as to avoid the dew (which would contain the vapor) - do not use rainwater for cooking - avoid wet weather - fasting, anxiety, anger, drinking should be avoided - bathing should be avoided - maintain chastity
Source 2: Egyptian physician Ibn al-Nafis	<i>Heavenly and earthly forces created a corruption [the Plague], which was in the air. More specifically, the disease was caused on the Earth by dead bodies that had not been buried, and in stagnant or rotten water. Heavenly [space] forces that caused the plague were shooting stars and meteorites, and strong south and east winds in Dec + Jan.</i>	<i>No treatments suggested.</i>
Source 3: Anonymous French physician	<p><i>Acknowledges that some believe that the plague is passed in the air, through breathing, conversation or being near the sick.</i></p> <p><i>However, he then shares his own view that states that the plague kills when the aerial spirit of an infected person leaves their eyes and strikes the eyes of a well person who is looking at the sick person.</i></p>	<i>No treatments suggested.</i>

? Based on what you now know about the causes and transmission of the Black Death, are there any parts of the explanations above that were on the right track? If so, identify who was partially correct and what they were correct about. Use **specific evidence** from the source(s) to support your response. [*Before the French physician*

shares his own perspective on how the Plague was transmitted from sick person to healthy person, he shares partially correct information when he states that the Black Death was transmitted, “by breathing, ... by conversation with the sick ...[and] 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.” This clearly refers to the Pneumonic form of the plague, which was transmitted by breathing in particles containing the infection. Egyptian physician Ibn al-Nafis also shares some partially correct information in that the disease was found in corpses. This can be considered partially correct as the Mongols did catapult infected dead bodies over the wall of Kaffa. He also makes reference to dirty and unclean places – infested with vermin, like rats – being a more likely place to contract the Plague.]

- ? The French physician’s view reveals that at least some people in society thought that the Plague could be transmitted through the air. Why might this information not have been acted on? *[Although the French physician revealed that some people believed the disease was spread through the air, he himself didn’t subscribe to this belief, instead arguing that a spiritual cause was responsible for transmission. It is evident that religious or spiritual beliefs influenced medical perspectives, which may explain why some explanations were ignored or discarded.]*

Explain

Aspects: Medieval cures; exacerbating effects; social effects

- Scroll down to the major heading titled *Medieval cures*. Read the information and take notes if required. Stop to discuss as necessary.
- ? Read the list of 14th-century advice on what to do to avoid becoming ill with the plague. Sort the 14th-century advice by assigning each point to the relevant heading in the table below. OPTIONAL: Teachers may only get students to sort half of the advice.

<i>Religious belief</i>	<i>Superstitious thinking</i>	<i>Medical advice</i>	<i>Government advice</i>
<i>- repent, pray, do penance for sins</i> <i>- give alms + settle debts</i> <i>- etc.</i>	<i>- Spend time in smoky and stinking places</i> <i>- Breathe in the smell of sewage</i> <i>- etc.</i>	<i>- Flee to mountains, clean air, and isolated places</i> <i>- confine the sick to their own homes</i> <i>- etc.</i>	<i>- Avoid congested areas</i> <i>- Butcher large animals outside city limits</i> <i>- etc.</i>

- ? Make a shortlist of the 14th-century advice that may have actually been useful in reducing the spread or effects of the Plague. *[Flee to mountains and isolated places; confine the sick to their own homes; avoid congested areas; butcher large animals outside city limits; wash your hands and face often with vinegar and water, or with warm wine; regulate butchers and meat-sellers to ensure what is sold is fresh; cover*

windows with waxed cloth or glaze them; do not buy cloth from regions or people known to be infected; bury bodies at least 6 ft deep; burn the clothes, bedding and possessions of the diseased; limit the number of people who can meet together in public.]

- ? Choose one piece of advice from the shortlist you created for Task 2. Explain how this may have been useful in reducing the spread or effects of the Plague. [*The advice to confine the sick to their own homes would be useful in reducing the spread of the Plague. Although this would not have been a popular option for loved ones, it would have been a clear means of quarantining the sick and separating them from the healthy, which would reduce the chances of contracting the Plague.*]
- Scroll down to the major heading titled *Exacerbating effects*. Read the information and take notes if required. Stop to discuss as necessary.
- **Engage with the map.** Click on the Legend to see how the Black Death spread throughout Europe from 1347 to 1353.
- Scroll down to the major heading titled *Social effects*. Read the information and take notes if required. Stop to discuss as necessary.
- ? **Read Agnolo di Tura's first-hand account of the Black Death in Siena.** Di Tura's account is a primary source. How does this bolster the source's reliability? [*Di Tura's account can be considered a primary source as he was in Siena when the Black Death struck the city. This bolsters the source's reliability as he is an eyewitness, who experienced the Plague's chaos and devastation in his city and in his own life.*]
- ? Agnolo di Tura states that he buried his five children, who likely died of the Plague. How might the deaths of his children have influenced his account of events? [*The deaths of di Tura's five children may have caused him to perceive the Black Death as worse than it was. Personal grief and loss may have influenced his outlook and experience with the Black Death as his circumstances were particularly difficult and heartbreaking.*]
- ? What evidence is there in this source that suggests that the Church abandoned people at this time? [*The source suggests that Church officials had abandoned their duties, particularly when it came to ensuring the deceased had a proper Christian burial. This is evident in di Tura's account as he states, "Members of a household brought their dead to a ditch as best they could without priest, without divine offices."*]
- ? **Read Giovanni Boccaccio's account of the Black Death in Florence.** Consider the context of this source's creation. Evaluate the reliability of this source. [*Boccaccio's account of the Black Death in Florence is not an eyewitness account based on first-*

hand experience. Instead, Boccaccio created a book of fictional stories about the Plague's effects in Florence from the accounts of those that were present in the city when the Plague struck. Considering this, Boccaccio's account can be considered reliable as he had access to people that did experience the Plague and could share their experiences. However, the accuracy of his account may be called into question as he has reworked the knowledge he gained from his interviews with survivors into fictional stories, where embellishment is likely evident.]

- ? How does Boccaccio's account corroborate evidence in di Tura's account? In your response, refer to **specific evidence** from each source. [*Boccaccio's account asserts that, "the sick were abandoned by their neighbors, their parents, and their friends." This corroborates di Tura's sentiment that communities were torn apart and people deserted each other as he also states that, "Father abandoned child, wife husband, one brother another."*]

Extend

What were the long-term effects of the Black Death?

- Scroll down to the major heading titled *Long-term effects*. Read the information under the sub-heading titled *Significant population loss* and take notes if required. Stop to discuss as necessary.
- Scroll down to the next sub-heading titled *Feudal system weakened*. Read the information and take notes if required. Stop to discuss as necessary.
- Scroll down to the next sub-heading titled *Catholic Church loses power*. Read the information and take notes if required. Stop to discuss as necessary.
- Scroll down to the next sub-heading titled *Advances in medicine and science*. Read the information and take notes if required. Stop to discuss as necessary.

Next Steps:

Request a free ArcGIS Online Account for your school:

Australian schools can request a free ArcGIS Online account as part of Esri Australia's Classroom GIS Initiative. A school subscription provides additional map layers, content, features and privacy.

Learn more about ArcGIS Online, and apply for your ArcGIS Online School subscription at <http://esriaustralia.com.au/education>