

# The Black Death

Lesson Map: http://esriaustralia.com.au/education/SpatialActivity49

### Engage

#### Where did the Black Death originate?

- → Click on the map URL above to open the lesson map. A grey canvas map showing the world is evident. Under the 'Details' pane, click on 'Content' and turn on the Origin and initial spread layer. Ensure all other layers are off.
- ? Click on each 'pin' to bring up information about each location. Begin with the four black pins located in China. What year did the Black Death first originate in China and what area was significantly affected? [1332; Heibei where 90% of population died due to plague]
- ? Click on the final black pin located in Myanmar. What was responsible for the Black Death and how did it begin to spread westward towards Europe? [Hint: read the text in the pop-up box; the bacteria 'Yersinia pestis' was the underlying cause of the Black Death; it was spread by rodents and fleas]
- → Under the 'Details' pane, click on 'Content' and turn on the Old Silk Road Routes layer. Keep the Origin and initial spread layer on.
- Click on each of the lettered icons, beginning from 'M' and moving west towards 'K' and 'C'. As each pop-up box appears, read the information to see how the bacteria, rats, and people quickly carried the plague west before Genoese merchants fled on their vessels for Genoa, Italy.
- ? Brainstorm / Discuss as a class the likely route that rats, and the subsequent spread of the Black Death, took on its way west towards Kaffa? You may wish to draw this out on the board [Considering that rats hitched a ride on Mongol caravans and that the siege of the city of Kaffa was performed by Mongols, it appears that one of the main routes of the initial spread from China to Kaffa was via the yellow and orange Silk Road routes]

### **Explore**

How did the Black Death reach mainland Europe?

→ Turn off all layers. Click the 'Bookmarks' tab and select 'Messina, Sicily'. Zoom out if

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## Download student worksheet here.

Time 30 minutes

Activity

Investigate the origin and spread of the Black Death

#### Learning Outcome

Students will be able to:

- Investigate the origin of the Black Death
- Examine the spatial distribution of the Black Death
- Analyse modes of transmission and distribution
- Evaluate medieval responses to the Black Death

#### ACARA Curriculum Link

Year 8 History: The ancient to the modern world

ACDSEH051 | ACDSEH069 | ACDSEH070 | ACDSEH071 | ACHHS148

Teacher Feedback:

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



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you need to understand its wider geographical location.

- By the time the fleeing Genoese merchant ships arrived at the port of Messina,
  Sicily, many sailors and merchants had already died on the journey or were very sick. Attempts were made to provide aid to the infected, but the Sicilian population was quickly infected too. The local authorities were fearful, closed the port and refused any further access to other arriving ships.
- It was too late. The damage had been done. Rats, infected people and the plague had reached Sicily, an island right off the tip of Italy's 'boot'. Later fleeing vessels bypassed the closed port of Messina and made for Genoa, Italy.
- Click the 'Bookmarks' tab and select 'Genoa, Italy'. Turn on the layers Genoese Land
  Trade Routes and Genoese Sea Trade Routes.
- ? What immediate problems arise with regards to Genoa's location in Italy? [Answers will vary but may include, it is a located in Northern Italy and therefore has access to land trade routes into mainland Europe (e.g. France) and has access to sea trade routes that lead to Spain, other Mediterranean islands and Northern Africa]

### **Explain**

Why did the Black Death spread so quickly through mainland Europe?

- ➤ In the 'Details' pane, under the heading 'Content', add the layers Venice Land Trade Routes and Venice Sea Trade Routes. Adjust the scale of the map as necessary by using your scroll wheel or the '+ and -' symbols.
- **?** Have the Genoese trade routes led to further spread in Europe? [*Yes, the Genoese trade routes directly connect with Venice trade routes, furthering the plague's spread into Northern and Eastern Europe.*]
- → Add the layer Major European Land Trade Routes, Major European Sea Trade Routes and Medieval European Trade Cities. Adjust the scale of your map as necessary to incorporate the whole range of land and sea trade routes. Discuss how Italy has acted as 'ground zero' for the spread of the Black Death in Europe.
- ? After viewing this, what contributed to the rapid spread of the plague throughout Europe? [land and sea trade routes operated as major conduits, similar to the arteries of a body; trade routes were used for commercial purposes like trade but were also roads that lots of people used for travel from one destination to another as they were often safer; further to this, people fleeing the plague used these routes and unknowingly perpetuated its further spread]
- Under the 'Details' pane, click 'Content' and turn off all layers. Click the 'Bookmarks'



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tab and select Europe and Northern Africa.

→ Turn on the Black Death Extents layer. This layer is a timed layer. You can begin the timer by pressing the 'play' icon at the bottom of the map. You may wish to pause it at various points to discuss how the Black Death spread from year to year.

### Extend

How did people in the Middle Ages react to the Black Death?

- → In the 'Details' pane, under the heading 'Content', turn on the Seriously affected cities layer. Turn off all other layers. Adjust the scale of the map as necessary.
- → Locate London and click on the city to enable a pop-up window.
- Other than trade routes, what other factors lead to a greater spread of the plague.
  [overcrowded homes and cities; narrow streets flooded with sewage providing the perfect breeding grounds for both the disease and waves of rats]
- Locate Florence and click on the city to enable a pop-up window. Hint: It is located in Italy.
- ? How does the Italian writer Boccaccio describe the reaction of the population of Florence? [family members abandoned family members; they were so fearful of contracting the plague, due to its terrifying death rate, that they were willing to isolate themselves from loved ones in the hope of survival]
- Further research: You may wish to turn the layers 1347, 1348, 1349, 1350, 135 and 1352 to see further details into how the plague spread across Europe.

### Next Steps:

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