

# Impact of the bubonic "black death" plague on medicine



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## The Bubonic " Black Death" Plague

Manifesting in Europe, the epidemic referred to as the Bubonic " Black Death" Plague wiped out an estimated one to two-thirds of Europe's population. It also affected some of the surrounding areas near Europe such as Ireland, Italy, Portugal, France and sections of Asia. The plague was bubonic due to the inflamed lymph nodes that appeared on its victims. There are three main areas besides background information that will be touched on, those areas being: How did the plague impact the medical field, how did it affect the body, and lastly how does the plague affect how disease and illness are seen today.

Firstly, some background on the plague. Beginning in the 14th-century medical practitioners and regular folk had no idea on how to combat this strange new plague. They tried numerous methods and practices, one of which being the popular " Plague Doctor" outfits. Although the original origin of the outfits and mask are disputed it can be said that the outfits consisted of a few parts: the mask itself, a cloak or protective garb, (usually made of leather) goggles or glasses to place over the eyes and a cane or prodding device with some carrying surgical tools.

The masks were beak-shaped, looking like something out of a bad horror movie. They were designed in that fashion in order to in the front of the beak, stuff items such as spices, herbs, or other materials thought to " cleanse" or " filter" out the putrid air thought to be the transmitter of the plague. The cane/prodding device would be used to touch or examine patients from a safe distance away without being exposed to bodily fluids or

their "bad air". Speaking of which the actual doctors themselves most of the time weren't even doctors, most of the actual doctors left the town's early on to tend to royalty or parliament, safely surviving behind walls or gates. The plague doctors would be willing volunteers, lower grade physicians or even in some cases barbers being paid to treat the town, most of which to extremely little success.

Now due to the inexperience of most of the doctors, strange rituals were performed thought to treat patients that ended up making infected areas and the body worsens and die. One of such is the practice of "bloodletting". Bloodletting is a practice of slitting open the veins or arteries on arms and legs of the patients because it was thought that they contained "bad blood" and draining the patient of that blood would "fix" them. It would be murder to do this in the present day, the absence of blood would lead to a cutoff of oxygen and nutrients traveling around the body resulting in a horribly slow death. Another practice performed was the use of priests who would pray and try to heal the sick of their ailments. This was also unfortunately unsuccessful, it often, "effectively, served only to spread the infection." (1)

Knowing this, how did the plague impact the medical field? Well for starters the outfits worn were a decent idea. They represent the early rudimentary versions of hazmat suits. Thick leather cloaks with a mask could easily be seen a few years later as a similar rubber suit also with a mask, (and many more modern utilities). The practice of bloodletting has been completely discarded, as well as many, many others, such as, "live chicken treatment" (2) which was the placement of chickens near a sick person's boils or swollen

lymph nodes, sometimes to peck or sometimes simply to "suck" out the poison.

The practice of containment of diseased or infected individuals is still around and in use today. The containment of infected in their homes or separate areas was used commonly, one example being in the city of Dubrovnik, Croatia where, "In 1377, the Great Council passed a law establishing a trentino, or thirty-day isolation period . . . During the next 80 years, similar laws were introduced in Marseilles, Venice, Pisa, and Genoa . . . during this time the isolation period was extended from 30 days to 40 days, thus changing the name trentino to quarantino, a term derived from the Italian word quaranta, which means 'forty'" (3) In conclusion to the question the plague helped advance the medical field through improved medical devices, outfits, and procedures.

Next, how did the plague affect the body? Firstly, there were many symptoms that caused the sick to be ailing. As previously touched on, swollen lymph nodes also known as "buboes" were a big sign of the plague. It also affected the internal body, hemorrhages, muscle weakness, lesions, and vomiting were also all sure signs of the plague. Now when the plague doctors would examine the sick and the bodies of the sick there was a misconception of how the plague was transmitted. Referring back to the idea of "bad air" or "Miasma" which was the belief that putrid or decaying bodies could transmit sickness or disease to a healthy host through the air.

This belief was of course not the transmitter of the plague. The transmitters of the plague were fleas. Specifically, fleas containing the *Yersinia pestis*

bacteria. They would attach to rats living in homes, boats or harbors, making them able to travel to such a wide array of countries and cities and how they were able to break through quarantines designed to stop the plague. The rats would unknowingly carry the fleas right to a food source, humans. The fleas, "...continues to feed (infected with the bacteria), biting with increasing frequency and agitation, and in an attempt to relieve the obstruction (of bacteria) the flea regurgitates the accumulated blood together with a mass of *Yersinia pestis* bacilli directly into the bloodstream of the host. (4)

Lastly, how did all of this affect how disease and illness are seen today? In today's age, there are many types of diseases, illnesses, and plagues, such as Ebola, Zika, and tuberculosis are some examples. It's important to learn from past mistakes, without the steps taken in the 14th-century up to now, modern medicine wouldn't have improved and proper techniques wouldn't have been created to treat the sick and dying. Without the sacrifices of those taken by the plague then there wouldn't have been a treatment developed for it. In present day it has a much lower mortality rate now. In modern day the plague has experienced lots of popular use in modern media, being discussed in books, shows, podcasts, even in things such as children's nursery rhymes, one being " Ring Around the Rosie", which actually refers to the plagues symptoms of rashes, herbs and " all fall down" being the death of the victims.

In conclusion, the plague had numerous effects in past and present day. It impacted the medical field by creating and later forcing the improvement of medicines, practices, and treatments. It had numerous, horrible symptoms such as buboes, hemorrhaging and more. Lastly, it's impacted how disease

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and illness are seen today by influencing how they are handled through proper techniques and medicine, and by influencing modern media from books to nursery rhymes.

### Annotated Bibliography

Benedictow, Ole J. "The Black Death: The Greatest Catastrophe Ever." *History Today*, History Today Ltd., Mar. 2005, [www.historytoday.com/ole-j-benedictow/black-death-greatest-catastrophe-ever](http://www.historytoday.com/ole-j-benedictow/black-death-greatest-catastrophe-ever). This source provides detailed explanations about the process of infection to contamination of fleas, rats, and humans. It also provides an insight into what some of the people who kept records documented found about the plague and how they noted its progression.

Britannica, The Editors of Encyclopaedia. "Black Death." *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., 4 Sept. 2018, [www.britannica.com/event/Black-Death](http://www.britannica.com/event/Black-Death). This source was used for background on the plague's origin.

[1] Duncan, C J. "What Caused the Black Death?" Edited by S Scott, *Postgraduate Medical Journal*, School of Biological Sciences, The Fellowship of Postgraduate Medicine, University of Liverpool, 1 May 2005, <https://pmj.bmj.com/content/81/955/315>. This source was used for information regarding the different plagues that occurred from the 14th-17th centuries.

Eastman, James T. "The Making of a Pandemic: Bubonic Plague in the 14th-Century." Department of Pathology and Laboratory Medicine, 2009. <http://www.jlgh>.

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[org/JLGH/media/Journal-LGH-Media-Library/Past%20Issues/Volume%204%20-%20Issue%201/v4\\_i1\\_Eastman.pdf](http://org/JLGH/media/Journal-LGH-Media-Library/Past%20Issues/Volume%204%20-%20Issue%201/v4_i1_Eastman.pdf). This source was used for information regarding present-day treatments to the plague and its effects.

"The Plague, 1331-1770." *The Black Death*, [hosted.lib.uiowa.edu/histmed/plague/](http://hosted.lib.uiowa.edu/histmed/plague/). This source was used for information on different types of plagues.

[4] Frith, John. "The History of Plague - Part 1. The Three Great Pandemics." *JMVH The History of Plague Part 1 The Three Great Pandemics Comments*, 2012 [jmvh.org/article/the-history-of-plague-part-1-the-three-great-pandemics/](http://jmvh.org/article/the-history-of-plague-part-1-the-three-great-pandemics/). This source was used in regards to information on the Black Death that occurred in Europe.

[2] Heinrichs, Erik. "The Live Chicken Treatment for Buboes: Trying a Plague Cure in Medieval and Early Modern Europe." *The Recipes Project*, 31 Aug. 2017, <https://recipes.hypotheses.org/9891>. This source was used for information on the treatments used during the plague.

[3] Macowiak, Philip A, and Paul S Sehdev. "Origin of Quarantine." *OUP Academic*, Oxford University Press, 1 Nov. 2002, <https://academic.oup.com/cid/article/35/9/1071/330421>. This source was used for information on quarantines and outbreaks.

"Miasma." *Dictionary.com*, Dictionary.com, [www.dictionary.com/browse/miasma](http://www.dictionary.com/browse/miasma). This source was used for the proper definition of 'Miasma'.

Schmid, Boris V., et al. " Climate-Driven Introduction of the Black Death and Successive Plague Reintroductions into Europe." Edited by Kenneth W Wachter, *PNAS* , National Academy of Sciences, 10 Mar. 2015, [www.pnas.org/content/112/10/3020](http://www.pnas.org/content/112/10/3020) . This source was used for information on the spread of the plague.

US. Department of Health & Human Services. " Plague." *Centers for Disease Control and Prevention* , Centers for Disease Control and Prevention, 14 Sept. 2015, [www.cdc.gov/plague/history/index.html](http://www.cdc.gov/plague/history/index.html) . This source was used for background on the plague and the outfits used during the time.