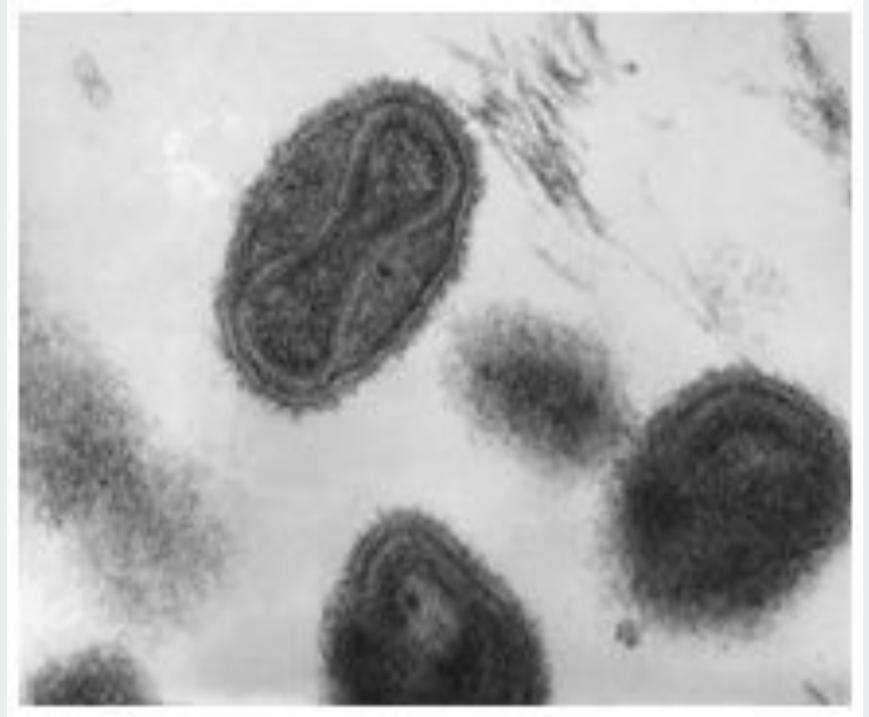




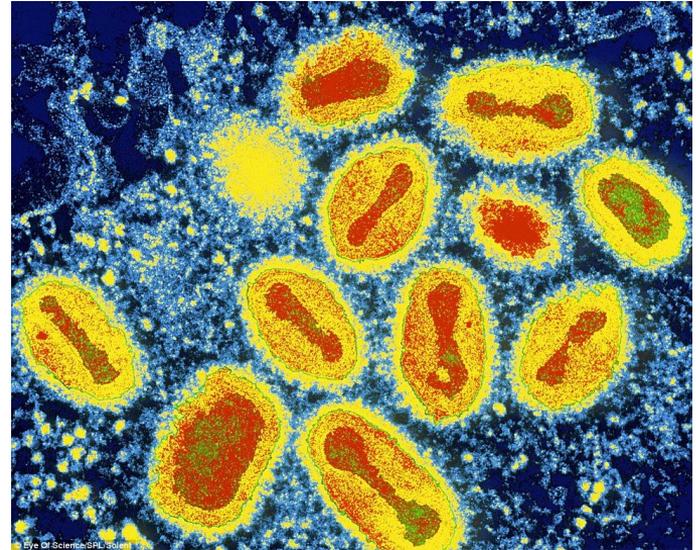
Smallpox

October 8th, 2020
Biology 11



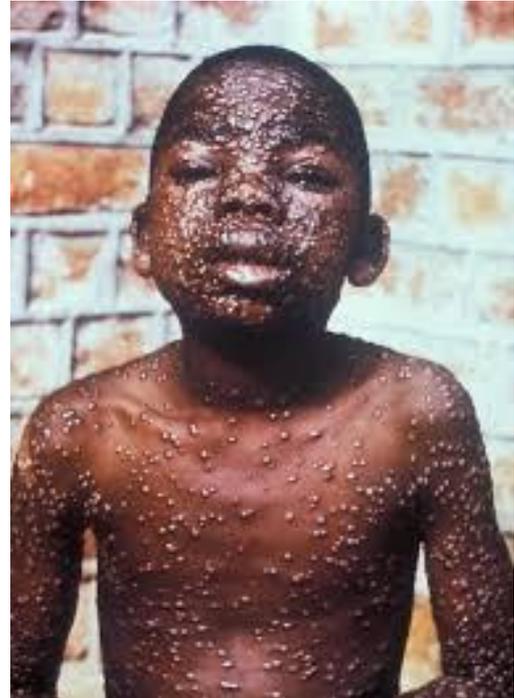
Variola Virus

- The Variola Virus is the virus that causes the smallpox disease.
- The Variola Virus is an oval shape with proteins on the outside. Inside some of them have a rectangular shape and some of them have a peanut shape.
- Unlike other DNA viruses, it multiplies inside the cytoplasm of the host cell.



What is Smallpox

- Smallpox is a disease caused by the variola virus
- Smallpox caused infected patients to get these red spots that would turn to blisters with pus in them and would leave scars.
- The disease was transmitted person to person through droplets from close contact with an infected person



History of SmallPox Disease

Smallpox has been around for a long time. The earliest evidence found was on 3 mummies that found a smallpox like rash on them. Which dates back to the Egyptian Empire in the 3rd century. The earliest evidence that resembles smallpox closer was in the 4th century CE in China. Over the next 13 centuries the smallpox disease spread with the spread of civilization, exploration, and expanding trade routes.

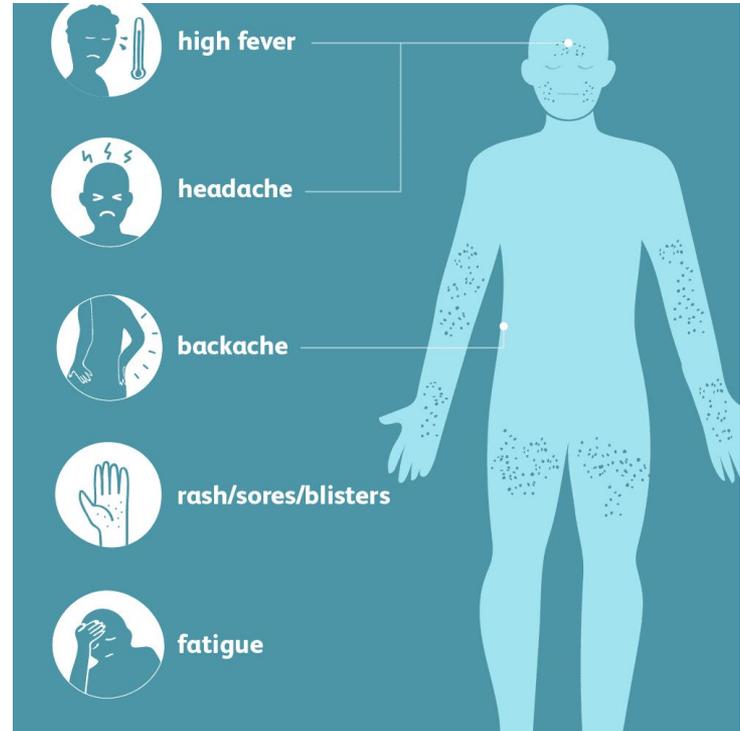
Smallpox was very deadly considering 3 out of every 10 people who got it would die. Based off of this there were some early control efforts to contain this disease. One of the control efforts was called variolation. Variolation was this process where people would take the pus from the smallpox disease was scratched into or inhaled through the nose by people who had never had it before. These people would get symptoms but a lot less people died by doing this.



Smallpox Symptoms

- Fever
- Discomfort
- Headache
- Severe fatigue
- Severe back pain
- Vomiting

Then you get these red spots starting on your face, hands and forearm. Then those red spots turn to blisters with liquid in them. Then they turn to scabs the leave deep scars on your body.



Smallpox Vaccination

- The first smallpox vaccine to be created was made in 1796 by Edward Jenner. He saw how some milk maids the contracted a virus called cowpox would not get smallpox. So he made the vaccine using cowpox.
- Smallpox was fully eradicated by 1977 and was the first disease that humans have fully eradicated through vaccination.





Recourses

- <https://www.who.int/csr/disease/smallpox/en/>
- https://go.gale.com/ps/retrieve.do?tabID=Reference&resultListType=RESULT_LIST&searchResultsType=MultiTab&hitCount=10&searchType=BasicSearchForm¤tPosition=3&docId=GALE%7CCV1648500557&docType=Topic+overview&sort=Relevance&contentSegment=ZXBE-MOD1&prodId=SCIC&pageNum=1&contentSet=GALE%7CCV1648500557&searchId=R2&userGroupName=42gass&inPS=true
- <https://www.who.int/csr/disease/smallpox/vaccines/en/>
- <https://www.mayoclinic.org/diseases-conditions/smallpox/symptoms-causes/syc-20353027>
- <https://emedicine.medscape.com/article/237229-overview>
- <https://www.cdc.gov/smallpox/history/history.html>