## **Annotated Bibliography**

# **Primary Sources**

#### **Interviews**

Radke, Vincent, Registered Sanitarian, Certified Professional in Food Safety. Personal Interview, 2016.

Vincent Radke gave us powerful sources such as a book about smallpox eradication, and a training video for smallpox to use throughout our website. He shared stories about himself and his colleagues working to eradicate smallpox in Ethiopia, Bangladesh, and Kenya. Radke worked in Ethiopia for the Peace Corps as a surveillance officer. He went door-to-door searching for smallpox cases to report as well as vaccinating people.

### **Photos**

[Photograph]. (1967-1970). CDC's Scrapbook: Campaign to Eradicate Smallpox in West and Central Africa, CDC David J. Sencer Museum, Atlanta.

Eight photos were used from this collection. Each one of these photos showed the smallpox eradication program throughout West and central Africa. The photos showed people in these countries with and without smallpox and the harsh conditions the doctors and volunteers worked against. They also showed people being vaccinated against smallpox.

Records for the Centers for Disease Control and Prevention. (1921-2006) Accession Number 442-03

(WHO Smallpox Documents; Administrative Records, 1964-1965, Cases and Deaths Reported by Continents, T5464). National Archives and Records Administration, Atlanta, GA.

This chart used on the Victims page shows the amount of smallpox cases on each continent. It shows viewers where smallpox greatly affected the world. This document was retrieved through the National Archives in Morrow, Georgia. It was difficult to find because the CDC documents were put in specific folders, but not organized well.

Records for the Centers for Disease Control and Prevention. (1921-2006) Accession Number 442-03 (WHO Smallpox Documents; Administrative Records, 1964-1965, Resolution of the World Health Assembly, T5464). National Archives and Records Administration, Atlanta, GA.

The Resolution of the World Health Assembly document explains one of the first strategies used to eradicate smallpox. It helps viewers understand what the smallpox eradication program was like in its early stages. The document explains that in order to eradicate smallpox, 100 percent of the population needed to be vaccinated in order to eradicate smallpox. However, with later strategies, this proved to be untrue.

### **Books**

Henderson, D. A. (2009). *Smallpox the death of a disease*. Amherst, N.Y: Prometheus Books.

\*\*Smallpox the Death of a Disease was written by D.A. Henderson, the head of the Smallpox Eradication Program. This book describes in detail the legacy of the Smallpox Eradication

Program from Henderson's perspective. Personal stories, images, and challenges were documented.

Foege, W. H. (2011). House on Fire: The Fight to Eradicate Smallpox.

House on Fire was written by Dr. William Foege, the creator of the ring vaccination method and leader in the fight to eradicate smallpox. This book describes Foege's early life and his personal accounts of working in the field. Dr. Foege mentioned that not many doctors documented their failures and successes in treating infectious diseases. He created the book in order to tell the story of the many doctors and volunteers that worked to fight and eventually eradicate smallpox.

### **Journal Articles**

Fenner, F. (1982). A successful eradication campaign. Global eradication of smallpox. Reviews of Infectious Diseases, 4(5), 916–930.

This article gives a short explanation of the global eradication of the smallpox disease. This article was used for analysis on Global Eradication page. *A Successful Eradication Campaign* described how and why the campaign was successful.

Henderson, D. A. (1976). *The eradication of smallpox*. Scientific American, 235(4), 25–33. *The Eradication of Smallpox* explains how smallpox is transferred from person to person.

Smallpox is transferred through two types of contact, direct and indirect. An example of direct is

touching or caring for a patient with smallpox. Indirect contact occurs when someone cleans the touches the bedding of a smallpox patient.

Henderson, D. A. (1977). Smallpox Eradication. Proceedings of the Royal Society of London B:

Biological Sciences, 199(1134), 83–97. https://doi.org/10.1098/rspb.1977.0122

This is a paper written by D.A. Henderson explains one of many challenges faced by the program. Henderson was given ten years of funding by the World Health Organization to fully eradicate smallpox from the public. The program lasted for ten years, nine months, and 26 days; however for the last nine months and 26 days the program had to fund itself.

Jenner, E. (1798). *The Three Original Publications On Vaccination Against Smallpox*. Vol. 38, Part 4. Retrieved September 2, 2016, from <a href="http://www.bartleby.com/38/4/">http://www.bartleby.com/38/4/</a>
These publications explained Dr. Edward Jenner's vaccine and how it was created. The vaccine was created using the cowpox virus. Jenner inoculated James Phipps with the cowpox virus and waited until the virus passed. He then inoculated the boy with smallpox and discovered that James seemed to be immune. This discovery led the creation of the smallpox vaccine.

Ring Vaccination and Smallpox Control - Volume 10, Number 5—May 2004 - Emerging Infectious

Disease Journal - CDC. (2004). Retrieved August 26, 2016, from

<a href="http://wwwnc.cdc.gov/eid/article/10/5/03-0419\_article">http://wwwnc.cdc.gov/eid/article/10/5/03-0419\_article</a>

Ring Vaccination and Smallpox Control explains how ring vaccination was used against smallpox. Ring vaccination is a method used to contain and control smallpox outbreaks by

vaccinating the person most likely to contract smallpox from a victim. By doing this, the chain of transmission is broken and smallpox is unable to infect anyone else.

Smallpox: can we still learn from the journey to eradication? - PubMed - NCBI. (n.d.). Retrieved February 23, 2017, from <a href="https://www.ncbi.nlm.nih.gov/pubmed/23760373">https://www.ncbi.nlm.nih.gov/pubmed/23760373</a>

This article explains more about the smallpox vaccine and how it was an important part in the smallpox eradication program. This program went on to inspire other doctors to attempt eradicating other diseases such as Guinea worm, polio, and measles.

Tekeste, A. Y., Wickett, J. F., Health, E. M. of, Ethiopia, I. C. for the C. of S. E. in, & Eradication, W. H. O. G. C. for the C. of S. (1979). Smallpox eradication in Ethiopia: report to the International Commission for the Certification of Smallpox Eradication. Retrieved from <a href="http://www.who.int/iris/handle/10665/68277">http://www.who.int/iris/handle/10665/68277</a>

*Smallpox eradication in Ethiopia* explained why stopping smallpox from spreading was so difficult. Smallpox patients would not necessarily stay in the same place; therefore, they could potentially spread the diseases to another village or location.

### Letters

Letter from George Washington to John Hancock. (n.d.). Retrieved February 8, 2017, from <a href="https://catalog.archives.gov/id/824626">https://catalog.archives.gov/id/824626</a>

The letter from George Washington to John Hancock was used to explain a historical occurrence of bioterrorism. This source was found at the National Archives and showed evidence of

bioterrorism in 1775. This source was used on the Smallpox Today page as both a picture and for information.

### Video

Smallpox Movies: Training and Education Compilation Disc 1. (1972). Centers for Disease Control.

This training movie was given to us by Vincent Radke during our interview. It was used to teach volunteers and doctors about the conditions they were going to be working in, how they were going to fight the disease, and what a smallpox patient looked like. The video's images were gruesome, but a true picture of what a smallpox patient went through.

# **Secondary Sources**

#### **Books**

Hopkins, D. R. (2002). *The greatest killer: smallpox in history*. Chicago: University of Chicago Press.

The Greatest Killer explains the early history of smallpox up to present day. Hopkins explains that because of smallpox the world is a much different place. It shaped the course of world events and took the lives of over 300 million.

Roy, J. P. (2010). Smallpox zero: an illustrated history of smallpox and its eradication.

Johannesburg, South Africa: Umlando Wezithombe.

Vincent Radke gave us *Smallpox Zero* during an interview. This non-fiction graphic novel explains the smallpox eradication program from beginning to end. Photographs and quotes were used from this text.

Tucker, J. B. (2002). *Scourge: the once and future threat of smallpox*. New York: Grove Press. *Scourge* was written about how smallpox could be used for bioterrorism. It was used for quotes about the future threat of smallpox on the Smallpox Today page.

### **Journal Articles**

Riedel, S. (2005a). *Edward Jenner and the history of smallpox and vaccination*. Proceedings (Baylor University. Medical Center), 18(1), 21–25.

This paper explains how Edward Jenner created the first vaccine. It also explains when and where smallpox began in history.

#### Videos

TED-Ed. (n.d.). How we conquered the deadly smallpox virus - Simona Zompi. Retrieved from <a href="https://www.youtube.com/watch?v=yqUFy-t4MlQ">https://www.youtube.com/watch?v=yqUFy-t4MlQ</a>

This video had information on Edward Jenner and Smallpox. The video was used for beginning research and information.

#### Websites

BBC - History - Edward Jenner. (2014). Retrieved September 2, 2016, from <a href="http://www.bbc.co.uk/history/historic figures/jenner edward.shtml">http://www.bbc.co.uk/history/historic figures/jenner edward.shtml</a>

This website gave us insight on who Edward Jenner was as a person. It also explained how Edward Jenner conducted his experiments as well as why.

CDC Smallpox | Smallpox Overview. (2007). Retrieved August 26, 2016, from http://emergency.cdc.gov/agent/smallpox/overview/disease-facts.asp The CDC website describes the symptoms and transmission of smallpox and gave a basic overview of the disease. It was used for beginning research and led us to Dr. William Foege.

Child with smallpox. (1967). Retrieved from <a href="http://globalhealthchronicles.org/items/show/3347">http://globalhealthchronicles.org/items/show/3347</a>
This photograph shows a small child with smallpox. It shows viewers what a terrible disease smallpox was and how painful it must have been.

D.A. Henderson, "disease detective" who eradicated smallpox, dies at 87 - Chicago Tribune. (n.d.).
Retrieved September 9, 2016, from
<a href="http://www.chicagotribune.com/news/nationworld/ct-henderson-eradicated-smallpox-dies-20160">http://www.chicagotribune.com/news/nationworld/ct-henderson-eradicated-smallpox-dies-20160</a>

This article showed a picture that was used on the Taking a Stand page. It shows D.A. Henderson, the head of the smallpox eradication program, vaccinating a child.

820-story.html

de Quadros, C. A. (2011). Experiences with smallpox eradication in Ethiopia. Vaccine, 29 Suppl 4, D30–35. https://doi.org/10.1016/j.vaccine.2011.10.001

This journal article explained the smallpox eradication program and how it was used throughout Ethiopia. *Experiences with Smallpox Eradication* was used for for information on how the eradication program was run in Ethiopia.

Ebola: Symptoms, Causes and Treatments. (n.d.). Retrieved January 20, 2017, from <a href="http://www.medicalnewstoday.com/articles/280598.php">http://www.medicalnewstoday.com/articles/280598.php</a>

Ebola was the second disease that ring vaccination was used against. This website explains how ebola spreads and symptoms of the disease. Ebola is similar to smallpox because both diseases are spread from human-to-human transmission and because of this ring vaccination could be successful against ebola as well.

Ebola vaccine gives 100% protection, study finds. (2016, December 23). Retrieved from <a href="http://wtvr.com/2016/12/22/ebola-vaccine-gives-100-protection-study-finds/">http://wtvr.com/2016/12/22/ebola-vaccine-gives-100-protection-study-finds/</a>

This article was used for a picture on the Ring Vaccination page. The picture shows how one patient can easily infect thousands of people.

Science Museum. Brought to Life: Exploring the History of Medicine. (n.d.). Retrieved November 4, 2016, from <a href="http://www.sciencemuseum.org.uk/broughttolife/people/edwardjenner">http://www.sciencemuseum.org.uk/broughttolife/people/edwardjenner</a>
This website provided quotes to use on the Smallpox page about Edward Jenner. The website explained Jenner's experiments and how they were conducted.

Federation of American Societies for Experimental Biology. (2010). *Mystery solved: Scientists now know how smallpox kills*. The FASEB Journal, 24(5), 1479–1488.

https://doi.org/10.1096/fj.09-144733

This journal article explains how smallpox kills the person that is infected. The virus ultimately overwhelms the immune system and leads to death.

Fox, M. (2015, September 3). Dr. J. Donald Millar, 81, Dies; Led C.D.C. Mission That Helped Eradicate Smallpox. *The New York Times*. Retrieved from

 $\frac{http://www.nytimes.com/2015/09/04/health/dr-j-donald-millar-who-led-cdc-mission-that-helped-eradicate-smallpox-dies-at-81.html}{}$ 

This article shows a picture with Dr. William Foege and his colleagues stating that "Smallpox is Dead!" This image shows Foege completing his impossible goal of eradicating smallpox. The photograph symbolises success.

Griffin, T. (n.d.). *Calling the Shots: Dr. William Foege*. Retrieved August 26, 2016, from <a href="https://www.washington.edu/alumni/columns/top10/calling\_the\_shots.html">https://www.washington.edu/alumni/columns/top10/calling\_the\_shots.html</a>

This website was the first that was found while conducting research. It provided many quotes from the author and Foege that were used throughout the website. Griffin also explained how Dr. Foege created ring vaccination.

Guinea Worm Eradication Program. (2017). Retrieved February 23, 2017, from <a href="https://www.cartercenter.org/health/guinea">https://www.cartercenter.org/health/guinea</a> worm/

This website explains where the Guinea worm eradication program is today and how it is continuing to progress. It was used on the Global Impact page to explain how ring vaccination is being used to fight other diseases.

Learn. (2012). Retrieved February 23, 2017, from

 $\underline{http://measles rubella initiative.org/learn/}$ 

This website was used for information about measles and the eradication program. The measles eradication program has continued to move forward because of the smallpox program successes.

National Museum of Health and Medicine (NMHM). (n.d.). Retrieved February 8, 2017, from <a href="http://www.medicalmuseum.mil/index.cfm?p=search">http://www.medicalmuseum.mil/index.cfm?p=search</a>

The National Museum of Health and Medicine was used for a picture on the Victims page. A woman with smallpox is shown with her vaccinated baby. This demonstrates that ring vaccination is successful. Sophie called the museum in order to find the accurate citation for the photograph. Their research staff was helpful and emailed her the correct date in order to complete the citation.

Our Mission – GPEI. (n.d.). Retrieved February 23, 2017, from <a href="http://polioeradication.org/who-we-are/our-mission/">http://polioeradication.org/who-we-are/our-mission/</a>

The global polio eradication program is described and discussed. Methods used to eradicate smallpox are also being used to try and eliminate polio.

Proposed Destruction of Smallpox Virus Creates Controversy. (n.d.). Retrieved September 30, 2016, from <a href="http://www.livescience.com/13667-smallpox-virus-destruction-variola-vaccination.html">http://www.livescience.com/13667-smallpox-virus-destruction-variola-vaccination.html</a>
This website was used for a picture on the Smallpox page. This photo gave an example of someone with smallpox.

Smallpox Eradication in India, 1972-1977. (2017). Retrieved March 24, 2017, from <a href="https://www.lib.umich.edu/online-exhibits/exhibits/show/smallpox-eradication-india">https://www.lib.umich.edu/online-exhibits/exhibits/show/smallpox-eradication-india</a>
This website contains primary sources that were used for telling the story about smallpox eradication in India. Dr. Foege worked for the Peace Corps in India and this is where he began his fight against smallpox. He witnessed the devastating effects of the disease for the first time.

Smallpox Virus | CDC. (n.d.). Retrieved February 8, 2017, from https://www.cdc.gov/smallpox/
The CDC website provided information regarding what labs smallpox remains in. Smallpox still exists only in two labs. One at the CDC, in Atlanta, Georgia and one in VECTOR, a lab in Russia.

Smallpox. (2016). Retrieved September 2, 2016, from

http://www.museumofhealthcare.ca/explore/exhibits/vaccinations/smallpox.html

This website showed what smallpox was and what countries it affected. It was used for basic information in beginning research.

What was the primary mode of smallpox transmission? Implications for biodefense. (2012). Retrieved August 26, 2016, from <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3509329/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3509329/</a>
This article explains how smallpox is transmitted and how the government will respond to a bioterrorism attack. It was used to write the Bioterrorism section on the Smallpox Today page.

WHO | Archives of the Smallpox Eradication Programme. (n.d.). Retrieved February 6, 2017, from <a href="http://www.who.int/archives/fonds">http://www.who.int/archives/fonds</a> collections/bytitle/fonds 6/en/

This website had a picture that was used on the timeline for the Taking a Stand page. It shows a picture of smallpox eradication in Africa.

WHO | Frequently asked questions and answers on smallpox. (n.d.). Retrieved October 28, 2016, from <a href="http://www.who.int/csr/disease/smallpox/faq/en/">http://www.who.int/csr/disease/smallpox/faq/en/</a>

This website answered frequently asked questions on smallpox. It also had information on smallpox as well as pictures.

WHO | William Foege. (n.d.). Retrieved November 4, 2016, from

http://www.who.int/social\_determinants/thecommission/foege/en/

This WHO website has information on Dr. William Foege and a small biography. The biography explains his role at the CDC and what he did for the smallpox eradication program. It was the WHO that granted the smallpox eradication program their funding for the first ten years.

William H. Foege to Receive Public Welfare Medal, Academy's Highest Honor. (2005, January 26).

Retrieved February 16, 2017, from

http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=01262005

This source had information on Dr. William Foege's early life as well as his life on the field.

This website was used to write about him and his life throughout the project.