

Suggested Reading List

1 *Polio: An American Story*, by David M. Oshinsky

2 *The Ghost Map: The Story of London's Most Terrifying Epidemic--and How It Changed Science, Cities, and the Modern World*, by Steven Johnson

3 *Partner to the Poor: A Paul Farmer Reader*, by Paul Farmer

4 *Strength in What Remains*, by Tracy Kidder

5 *The Impact of Inequality: How to Make Sick Societies Healthier*, by Richard Wilkinson

6 *Why Zebras Don't Get Ulcers*, by Robert Sapolsky

7 *A Primate's Memoir: A Neuroscientist's Unconventional Life Among the Baboons*, by Robert Sapolsky

8 *The First Human: The Race to Discover Our Earliest Ancestors*, by Ann Gibbons

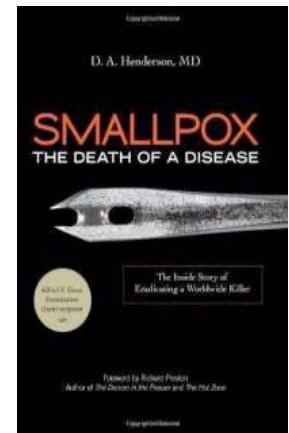


Smallpox-the Death of a Disease: The Inside Story of Eradicating a Worldwide Killer

Book by D.A. Henderson; Reviewed by Lauren-Elizabeth Palmer

It has been said that a single incidence of smallpox anywhere in the world would constitute an epidemic. Smallpox was eradicated in India, the last strong hold of the disease, in 1974. In D.A. Henderson's telling work *Smallpox- the Death of a Disease: The Inside Story of Eradicating a Worldwide Killer*, the author tells the story of the 115,000 volunteers, public health professionals and healthcare workers who bravely ventured in to the many remote villages and communities of India in a successful and concerted effort to squash this deadly disease. Even more engaging, however, is the account of events leading up to this effort which Henderson recounts. Henderson's background as a physician and public health professional coupled with his history as Director of the Center for Disease Control's Epidemic Intelligence Service and subsequently as the Director of The Eradication, the World Health Organization's initiative to end smallpox, lend great credence to this work.

Smallpox is a viral disease which presents as a rash and eventually fluid-filled blisters on the skin roughly two weeks after a person has come into contact with the virus. It is fatal in an estimated 50% of those who contract the disease, with fatality rates being higher in children and the immunocompromised. Smallpox is highly contagious and quickly spread amongst families. As early as the 10th century, smallpox was combated by the process of variolation. Variolation involved the extraction of pus from the pustules of an affected individual and the direct injection of said pus beneath the skin of a healthy individual. Much like modern vaccinations, this process was intended to expose the healthy individual in such a way that he or she might create antibodies to the virus without becoming ill. Unlike modern vaccinations which primarily use inactive strains of a virus, this process utilized a live strain of the virus and thus frequently worked not as a



vaccine, but as an exposure point to the virus after which the healthy individual became ill.

Henderson recounts how the much safer, cowpox vaccine, was discovered in 1796. It was after this discovery that vaccinations became mandatory in many states and in the U.S. army. During this same time period, smallpox made its way out of Europe and Asia and into the Americas. Many Europeans had antibodies to smallpox, having contracted it and survived the disease earlier in life. By the time the cowpox vaccine was discovered, however, the Native American population had already suffered greatly from this deadly virus. Because the

virus was foreign to the Americas, no Native Americans had antibodies to the disease nor did they have any knowledge of the disease progression and treatment. Thus, by the time that the thirteen colonies rose up against England, much of the Native American population in what is now the United States had been completely decimated.

Henderson's account of the only official, successful eradication of a disease in history is a must-read for anyone interested in the world of contagious disease, of preventative medicine and of epidemics.

Water Wars: Privatization, Pollution, and Profit

Book by Vandana Shiva ; Reviewed by Lauren-Elizabeth Palmer

Most Americans are acutely aware of the problems caused by the ownership, privatization, commercialization and shortage of oil. Oil has become a deciding factor in politics, war and global poverty. It seems, however, that oil may soon lose its status as most fought over natural resource and be replaced by none other than water, basic H₂O. It may seem hard to imagine a world in which something so seemingly plentiful and available as water becomes a commodity in the developed world.

In Vandana Shiva's *Water Wars: Privatization, Pollution and Profit*, the reader is exposed to just such a world and then made to realize that this world is neither fictional nor futuristic, but our very own.

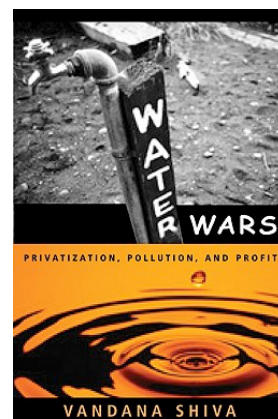
Vandana Shiva is a leading physicist and environmental leader. She has written profusely on environmental issues and, in 1993, was awarded the alternative Nobel Prize (the Right Livelihood Award). Vandana writes that "[t]he water crisis is the most pervasive, most severe, and most invisible dimension of the ecological devastation of the earth".¹ The book greatly benefits from the fact that Shiva is first a scientist and thus her book is brilliantly researched and explained. Shiva gives basic and easily understood explanations for the global water shortage: deforestation reduces the capacity for water storage in tree canopies and forest floors, irrigation systems for agriculture use water at an unsustainable rate, cash crops which can draw in a higher profit, but are also more water-dependent have replaced the locally bred, more suitable crops and the mining of the earth's surface is destroying underground caverns.

Shiva describes this global problem as indicative of branching value systems. The problematic value system is one which treats water as a private good which can be sold, bought, transferred and owned in a market. Shiva investigates the ways in which privatization has affected many different populations. She begins with anecdotal evidence of her travels throughout her home country of India before delving into the complex ways in which the country of Bolivia has been adversely affected. In the 1990s, water in the country of Bolivia was privatized and the cost of a monthly water bill rose to roughly

20% of the average individual's monthly income. Great public outrage and protests led to a reversal of the decision to privatize the nation's water supply. Bolivia benefited in a way many remote communities have not in that Bolivians had the ability to effectively organize and dissent in a way many populations are not able or allowed to effectively do.

Shiva beautifully and clearly describes different people of the world view water. Some view it as the natural resource which it surely is, as belonging to the people. Others see it as a market good which must be quickly possessed for the most profit. She describes how villagers in India have successfully returned to traditional ways of managing communal water sources. She concludes by investigating the nature of the Ganges River, traditionally one of the holiest sites in India. The sacred, religious or even mythical status of water in people all over the world. She suggests that this view of water, as sacred, has led to successful communities for generations.

Shiva delves into the ways in which ethnic wars across the world are truly water wars, even suggesting that much conflict regarding the West Bank rests in part on scarcity of water resources. Shiva describes the ways in which global food scarcity and water waste, thus global water scarcity, are inextricably linked problems. For anyone interested in the roots of water scarcity, this surprisingly short book is an excellent primer on this overwhelming topic.



Reviewed Book Information

Smallpox- the Death of a Disease, D.A. Henderson, Prometheus Books,

Water Wars: Privatization, Pollution, and Profit, Vandana Shiva, South End Press.