The myth that improved sanitation eradicated vaccine-preventable diseases was one that I was absolutely sure of. Suzanne Humphries, renowned anti-vaxxer, caused quite a ruckus when she came out with her book, *Dissolving Illusions*. As an anti-vaxxer myself at the time, I bought a copy and ate up everything she had to say. Her main claim was that sanitation and better hygiene, not vaccines, wiped out diseases such as measles and polio. She uses fancy graphs to prove that diseases were already declining due to clean water and sanitation when vaccines were introduced. She did such a compelling job at backing up her argument, that unless you really dug into the other side of the story, one could easily believe her.

But that's the thing about the anti-vax world, you really do have to learn the other side of the story to see how very wrong the anti-vax side is. The problem with some lies is that they are so close to the truth that they become hard to differentiate. Did sanitation and clean water slow the spread of disease in general? Sure. Did it stop diseases? Absolutely not.

Vincent Fonseca, MD, a public health and general preventable medicine specialist in San Antonio, states, “Out of all the anti-vax arguments, it’s the easiest to prove that it’s simply not true.”
The most compelling evidence that disease was not wiped out by simple sanitation and clean water are the dates that each disease was wiped out in the U.S.

Vaxopedia.org does an amazing job of breaking this down:

- Yellow fever (1905)
- Polio (1979)
- Smallpox (1980)
- Measles (2000)
- Neonatal tetanus (2000)
- Respiratory diphtheria (2009)

If vaccines "don't really work and it is just sanitation and hygiene", then why aren’t the dates that these diseases are eradicated or controlled all the same?

In the article, "Misconceptions About Vaccines", we can see that chickenpox is one of the most compelling arguments for vaccines being responsible for disease disappearing. They say that if hygiene was enough to drop disease rates, it would have been eradicated long before the vaccine was introduced. The number of cases in the early 1990’s in the US was about 4 million per year. The vaccine was introduced in 1995, and cases dropped by about 85% by 2004.

Still believe this myth? Then ask yourself why better sanitation and hygiene only prevents chickenpox in countries that routinely use the chickenpox vaccine?

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