

Measles is one of the leading causes of death among children according to the World Health Organization. Despite being preventable by vaccines, parents are delaying and refusing to vaccinate their children due to fears about vaccine safety.

Our goal is to demonstrate to the general public through visualizations that vaccines are a necessary tool for preventing diseases. This visualization, which supports comparison between disease incidence and vaccination rates across the past 18 years, has two main applications.

The first and primary application is to enable a direct comparison between disease incidence and vaccination rates for a given year. As we can see for Measles in 2003, the relationship between disease rates and vaccination coverage is clearly visible. Mission accomplished!

We augmented this visualization by including a second application: Direct comparison between diseases at different points in time. The broad impact of the measles vaccine can be easily seen when comparing incidence rates in 2001 to those in 2016.

The fear of vaccination is founded in misinterpretation of science so our visualization is designed to be accessible to parents disinclined to vaccinate their children by being simple, direct, and easy to understand.

Detracting from this visualization is the lack of data. We have the ability to display data from other diseases such as rubella and pertussis. However, as you can see, developed countries such as the United States, Canada, and various European countries have not contributed their data. More complete data would make visualizations such as these even more powerful.

Therefore, we believe that this visualization is useful not only to advocate for vaccination, but also to advocate for proper record-keeping and public dissemination of this information.