

# Vaccine Refusers Fuel Rise of Disease Outbreaks, Study Says



By Lila Abassi — March 17, 2016



Vaccines via shutterstock

Perhaps it's because many of us old enough to make decisions regarding immunizations for our children are also too young to remember what it was like to live through the days of measles, diphtheria or whooping cough, that we make stupid decisions.

Recently, the United States has seen waves of outbreaks of vaccine-preventable diseases. A recent *JAMA* [study](#) [1] sought to provide concrete epidemiological evidence for how much of the measles and whooping cough (also called pertussis) outbreaks are attributable to parents who delay or seek exemptions from vaccinations.

According to the authors of the study's paper, individual investigations have uncovered that refusal of vaccines has seen outbreaks of *Haemophilus influenzae* type b, varicella, pneumococcal, measles and pertussis. These outbreaks are a direct measure of nonmedical exemptions provided to parents who do not immunize their children. Additionally, refusal rates have steadily climbed in the last 20 years.

The incident of a measles outbreak among 111 kids (two-thirds of the total measles cases in the U.S., Mexico and Canada) who visited Disneyland in 2014 was a very obvious example of what happens when parents opt out of vaccinations, as roughly half the cases occurred in children who were not vaccinated but were eligible to receive the vaccines.

An analysis of data from the CDC spanning the years 1985 through 1992 revealed that measles outbreaks were clustered in areas that had high local vaccine exemption rates and unvaccinated children were *35 times* more likely to contract measles. Children between the ages of 3 to 10 years had the highest absolute and relative risk of disease. And among those children that had been vaccinated, 11 percent were infected from an unvaccinated source.

With regards to pertussis, there have also been steadily rising rates of infection. However, the resurgence of whooping cough is multifactorial. The switch from whole cell vaccines to less effective acellular pertussis vaccines are used because they cause fewer symptoms and systemic reactions.

Another factor for the increase in pertussis infections has been caused by waning immunity. The longer the duration between the last vaccine and the booster, the greater the risk of getting the disease.

Achieving immunity against pertussis requires multiple vaccinations so that children are neither unvaccinated or undervaccinated. In a literature review of the five largest epidemics that included over 10,000 reported pertussis cases, the bulk of the infections occurred in either vaccinated or undervaccinated people of varying ages.

The case with pertussis, however, also revealed situations where epidemics occurred in regions with high pertussis vaccination rates, which the authors attribute to waning immunity in the population. There were also studies that indicated pertussis transmission occurred in persons with waning immunity by individuals who were intentionally unvaccinated.

The article provides cites study after study of cases of pertussis in vaccine refusal situations. High rates of increased pertussis risk occurred in regions where there were high rates of vaccine exemption. All the data reviewed by the authors point strongly to vaccine refusal and high incidence of pertussis that was not attributable to waning immunity.

I am going to side-track for a moment and go on a bit of a rant, because of the blatant hypocrisy of these anti-vaxxer parents. They claim they don't trust the government to have their best interests in mind when it comes to recommending vaccines. And that somehow, big pharma is driving the big vaccine business when there really is minimal profit to be made through vaccine sales.

Yet, somehow, these are the same people who are encouraging the same government that they claim not to trust with demands of GMO labeling laws – creating more bureaucracy and more government involvement. Sounds a bit counterintuitive if you ask me.

Okay, back to science.

There are no data supporting an altered vaccine schedule, and it is clear that parents who claim exemption are irresponsibly contributing to the resurgence of diseases that are preventable. This cannot continue and governing bodies cannot allow nonmedical exemptions.

---

COPYRIGHT © 1978-2016 BY THE AMERICAN COUNCIL ON SCIENCE AND HEALTH

---

**Source URL:** <https://www.acsh.org/news/2016/03/17/vaccine-refusers-fuel-rise-of-disease-outbreaks-study-says>

**Links**

[1] <http://jama.jamanetwork.com/article.aspx?articleid=2503179&resultClick=3>