

# VACCINES ARE IMPORTANT

While a majority of parents choose to immunize their children against disease, vocal opposition to vaccines is compromising immunization rates across the country and causing vaccine preventable diseases to reemerge - the anti-vaccine movement is endangering our families.

The choice to vaccinate affects the entire community by breaking down herd immunity. Herd immunity - or community immunity - is when a large percentage of the population is vaccinated and protects the entire community - those who are vaccinated and those who cannot be vaccinated. So, when a family chooses not to vaccinate they not only put their children at risk of vaccine preventable disease but they also jeopardize the safety of others. This includes: infants<sup>1</sup> too young to be vaccinated, pregnant women and their unborn babies, the immunocompromised, those that cannot be vaccinated, and the small percentage of healthy vaccinated children whose vaccine was not 100% effective

While vaccines are extremely effective, they do not come with a 100% guarantee so it is important to maintain high vaccination rates in the community so that everyone is protected<sup>2,3</sup>

Vaccines are some of the most rigorously tested medicines in the world<sup>4,5</sup> and have some of the largest data sets available with which to determine safety and effectiveness. In fact, in order for a vaccine to be licensed in the United States it must be proven safe and effective. It is then reviewed thoroughly by members of the Advisory Committee on Immunization Practices before it can be added to the immunization schedule.

**VoicesForVaccines.org**

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While vaccines, like all medicines, do come with some risk<sup>6</sup>, most side effects are mild such as soreness at the site of the injection. The risk of developing complications from a preventable disease is far greater than the risk of having an adverse reaction from the vaccine.

The fallout of the anti-vaccine movement has already been seen, and children have been hurt and have died. There was a measles epidemic in 2011 that involved 222 people in the United States - the largest we've seen since 1996. There was a mumps epidemic in 2006 in the Mid-West United States and another in 2009 in New York and New Jersey. The most recent affected 1500 people and rendered some deaf. There was a haemophilus influenzae type B (HiB) outbreak in Minnesota, and again in Pennsylvania in 2009. Three children near Philadelphia died from that infection. There was a whooping cough epidemic in California in 2010 that infected 10,000 people, killing 10 children. We haven't witnessed an outbreak of whooping cough that severe since 1947 -- the year the whooping cough vaccine was invented. These are the most contagious diseases, so these are the first to spread, but if anti-vaccine misinformation continues to affect vaccination rates we could actually see a reemergence of horrific and largely eradicated diseases such as polio in the developed world.

1 <http://momswhovax.blogspot.com/2012/02/everlees-story.html>

2 <http://pediatrics.aappublications.org/content/early/2013/09/24/peds.20130878>

3 <http://www.niaid.nih.gov/topics/pages/communityimmunity.aspx>

4 <http://www.cdc.gov/vaccines/parents/infographics/journeyofchildvaccine.html>

5 <http://www.historyofvaccines.org/content/articles/vaccinedevelopmenttestingandregulation>

6 <http://www.cdc.gov/vaccines/vacgen/6mishome.htm#risk>