

Vaccination FAQs for Lawmakers

1. Are vaccination rates decreasing, and exemption rates increasing, across America?

No. Vaccination rates have been very high in America for decades. According to data reported by HHS' Healthy People 2020, the kindergarten 2-dose MMR uptake rate has **consistently been between 94.7% and 95.8%** for every year reported. According to the CDC, America's MMR vaccination rate for toddlers has been between 90% and 93% for the last two decades.

2. Is social media anti-vaccination talk causing measles outbreaks?

No. According to the CDC's tracking data, measles outbreaks predictably peak every three to four years. The peaks were in 2011, 2014, and 2018. This is not surprising data and is not impacted by social media. **America is the third most populous nation, yet it has one of the lowest measles rates in the world.** With only 372 cases of measles in 2018 across the population of 326 million, America most recently had 1.1 cases of measles per million people. According to the European Centre for Disease Prevention and Control, during the months of June 2017 to May 2018, that is a far lower rate of measles infection per capita than any country in Europe excluding Denmark, Lithuania, Malta and the Netherlands. In fact, our measles rate was half that of Japan, which reported 287 cases in 2018, or 2.2 cases per million people.

3. Should lawmakers and public health officials be concerned about non-vax "hotspots?"

No. In a small school of 17 children, an exemption rate of 12% would create a so-called "hotspot" and **yet be made up of only two people.** A kindergarten class with 25 students and an exemption rate of 20% would have only five unvaccinated children. This is not a scientifically-founded concept and should not be regarded as such.

4. Does the American public rely on herd immunity to protect both the vaccinated and the unvaccinated?

No, the theory of herd immunity is not mathematically possible, which is why we have continued disease outbreaks in highly vaccinated populations. According to the CDC's measles home page, after one dose of MMR, **7% of children will not develop measles immunity.** Americans who were born after 1957 but before 1985 have received only one dose of measles vaccine. This group is currently aged 34 to 62 and comprises almost one-third of the US population. The measles non-responder 7% of this group totals more than seven million people.

Research also shows that 15 years after vaccinating children with two doses of MMR, **only 75% retained effective quantities of measles antibodies** as teenagers. (Source: *Persistence of Measles, Mumps, and Rubella Antibodies in an MMR-Vaccinated Cohort: A 20-Year Follow-up*, National Public Health Institute, Finland, 2008)

5. Isn't there a large group of immune-compromised children who can't be vaccinated and rely on herd immunity to stay alive?

No. This claim is incorrectly based on the assumption that children with compromised immune systems cannot be vaccinated. Children who are born with HIV receive all vaccines, as do children with Primary Immunodeficiency Disease, and children with kidney and spleen failure. Children who have received transplanted organs receive all vaccines except MMR and chicken pox. Children who are on chemotherapy receive all vaccines except MMR and chickenpox, but they receive those vaccines once they are in remission. Further, children with suppressed immune systems can fall ill from any number of diseases we don't vaccinate for, such as the common cold, RSV, or norovirus. The safest place for compromised children is at home.

6. Isn't it true that parents are skipping vaccines because they're afraid of having kids with autism?

Not always. Most parents who forgo vaccines have already vaccinated one of their children and witnessed high pitched screaming, inconsolable crying, a loss of consciousness, SIDS, seizures, tics, rashes, or eczema. Many children went on to develop gastrointestinal illness, mitochondrial dysfunction, food allergies leading to anaphylaxis, or suffer from type 1 diabetes or asthma. These are parents who stopped vaccinating and spared future siblings the same fate.

7. "Anti-vaxxers" are usually white, college educated, and wealthy, isn't that right?

No, but the media would like you to believe this a matter of financial privilege. While it's true that children who have never been vaccinated tend to come from white, educated mothers, the children who have had a few vaccines before their parents began to refuse them belong to black, often inner-city mothers. (See *Children who have received no vaccines: who are they and where do they live*, CDC, 2004) This fact is used to paint the picture that black mothers have a financial barrier preventing them from vaccinating their children. However, a 2016 YouGov poll found that 44% of black Americans believe that vaccines definitely or probably cause autism. Likewise, a Pew survey conducted before the 2016 election found that 44% of black Americans did not see the health benefits of the MMR. The CDC reported in November 2017 that only 64% of black mothers completed the "combined series" of shots for their infants. Researchers remove this finding by "adjusting for poverty status," which is a presumptuous way of saying that poor black mothers could not possibly be making the decision to stop vaccinating.

8. Doesn't measles kill one or two children per 1,000 who are infected?

No, that is a miscalculation on the CDC's website. In the year before the measles vaccine was available, there were 450 deaths out of an estimated 3.5 million measles infections. **That is one death per 7,777 cases.** The CDC's miscalculated number was based on 450 deaths over 500,000 reported cases, but only 15% of cases were reported.

9. I was vaccinated, and my children were vaccinated, and we all turned out fine. Should I be concerned about the vaccine schedule?

Yes. A child born in the 1970s received only five DPT vaccines, three polio vaccines, and one MMR. Counted separately, this is 21 vaccines in a lifetime. **Today's children are facing 72 doses from the womb to 18 years in a schedule that is untested for safety in its entirety.** We are in an epidemic of childhood chronic illness. Today's kids are not turning out fine.

10. Isn't it true that today's vaccine schedule is safe because vaccines contain fewer antigens than in decades past?

The number of antigens is not relevant to parents' safety concerns. Vaccines contain two types of aluminum adjuvant ingredients along with one that was made by mistake. In addition, the CDC Vaccine Excipient & Media Summary states that childhood vaccines contain casein milk protein, lactose, soy, pig gelatin, cow heart, cow blood, monkey kidney cells, chick embryo cells, egg protein, MSG, polysorbate 80, human diploid cells from aborted fetuses, antibiotics, and formaldehyde as vaccine ingredients.

Of particular concern is Merck's secretive aluminum adjuvant, aluminum hydroxyphosphate sulfate, AAHS, which was created inadvertently in a manufacturing error and not disclosed to federal regulators as a vaccine ingredient for two decades. (See *Aluminum Compounds Used as Adjuvants in Vaccines*, Purdue University, 1990)

According to the Vaccine Adverse Events Reporting System, since Merck's AAHS-containing hepatitis B vaccine was taken off the market in June 2017, deaths after hep B vaccination have dropped 75%. (See *Merck's Recombivax Vaccine Shortage Causes Reduced Deaths in Babies*, Children's Health Defense, 2019) This vaccine is returning in 2020 as a component of Vaxelis.

11. Isn't vaccine injury just one injury per million doses of vaccines administered?

No. That claim is based on dividing the number of vaccine doses administered over a decade (3 billion) by the number of Vaccine Injury Compensation Program awards made in that same time (3,000). **It is a scientifically unfounded number.** A 2014 Government Accounting Office report on the VICP stated that "one of the critical issues facing the program was that parents, the general public, attorneys, and health care professionals were not aware the VICP existed."

Additionally, the FDA has estimated only 1% of vaccine injuries are reported to the Vaccine Adverse Events Reporting System. Scaled up to 100%, injuries such as encephalitis, seizures, swollen limbs, and rashes occur in about 1 in 100 doses. This is without accounting for long-term chronic illnesses.

12. Haven't our scientists debunked the link between vaccines and autism?

No. Unfortunately, our CDC has only studied one vaccine (the MMR) out of the 10 vaccines on the infant schedule, and one ingredient (thimerosal mercury), out of more than three dozen.

Dr. Thomas Verstraeten, the lead author of the CDC's 2003 *Safety of Thimerosal* study, found that mercury-based thimerosal preservative was causing a 760% increase in autism prevalence. Thimerosal was used in hepatitis B and DTaP vaccines up until 2003 and is still used in flu shots today. Dr. Verstraeten resigned from the CDC and accepted employment with GlaxoSmithKline before the study was published, which Congress found to be an ethical violation. The study was published without his autism increase, and the CDC claims to have lost the study's raw data sets used from the Vaccine Safety Datalink.

Dr. William Thompson, a scientist on the CDC's 2004 *Age at First Measles-Mumps-Rubella Vaccination* study, was granted whistleblower protection by President Obama in 2014 after recordings were released of him admitting that their study originally showed that the MMR was correlated with a 240% increase in autism in African American boys— and that his co-authors at the CDC conspired to hide that finding.

In 2018, pediatric neurologist Dr. Andrew Zimmerman signed an affidavit stating that, in 2007, he was prepared to testify before the VICP regarding his opinion that some children with a preexisting mitochondrial disorder were becoming autistic after failing to mount an adequate immune response when given the MMR vaccine. This science is not settled.

13. Isn't it true that autism rates are rising because we've moved away from giving children the diagnosis of "mental retardation?" Or we're better at diagnosing autism now? Or because we've expanded the definition?

No, "expanded criteria" and "better recognition" do not account for the dramatic increase to 1 in 59 children over the last 50 years. The State of California's Department of Developmental Services has tracked their state's 680% increase in autism cases from 1992 to 2007, showing the increasing autism caseload was not offset by a decrease in children with other diagnosis.

Additionally, autism cases were meticulously counted in Wisconsin in 1970, before the epidemic began. The rate was found to be 3 cases in 10,000 children under 12. (See *The Epidemiology of Infantile Autism*, 1970) Dr. Donald Treffert, who conducted that study, wrote recently for the Wisconsin Medical Society that "even allowing that expansion of diagnostic criteria has contributed to the apparent increase in autism, there does appear to a real increase of the disorder as well."

14. Aren't people who skip vaccines bringing back mumps?

No. According to the Arkansas Health Department, where thousands of mumps cases were diagnosed in 2016-2017, there is evidence that the outbreaks are not due to vaccine waning.

The health department explained that in the event of a waning vaccine, they would expect to find very few mumps infections in people who were vaccinated in recent years, with most cases appearing in those who are several years out from their last MMR vaccine. However, the equal distribution of mumps infections across a wide age range of highly vaccinated people in Arkansas indicates that vaccine waning is not to blame. This should be interpreted to mean that **there is a problem with the mumps vaccine efficacy at the time of vaccine administration**, which correlates with the claims in ongoing litigation against Merck in two *qui tam* lawsuits in the eastern district of Pennsylvania: *U.S. v. Merck* (case number 2:10-c-v-04374) and *Chatom v. Merck* (case number 2:12-cv-03555). These cases stem from two former Merck virologists who allege that Merck used falsified test results to fraudulently overstate the efficacy of the mumps component of their MMR vaccine to the FDA. In other words, the issue isn't that Merck's mumps vaccine wanes. The problem is that since at least 1999, the vaccine was nowhere near as effective as Merck represented to regulators.

15. Doesn't the mumps virus cause deafness and infertility?

If it does, it happens so rarely that numbers are hard to find. According to the UK's NHS website, if a boy caught mumps after the age of 13, which was rare, he had a 25% chance of experiencing a temporarily swollen testicle. Of that very small group, 10% would experience a sperm count drop that was not significant enough to impact fertility.

In males who caught mumps as adults, which again was rare, the CDC's Pinkbook says that 4.1% had a *temporary hearing loss*, and 1 in 20,000 had some level of permanent hearing loss in one ear. There are not statistics for mumps causing infertility or deafness.

16. Aren't "anti-vaxxers" responsible for infant whooping cough deaths?

No. It is more likely that **close friends and family members contracted whooping cough (pertussis) but did not show symptoms due to recent vaccination, and doctors failed to diagnose the illnesses or provide medical care**. 3 to 16 infants under one year old have died of whooping cough infection each year since 2012. Using Healthypeople.gov's 2008-2017 data, compliance rates for children receiving four doses of DTaP before entering kindergarten is between 95.2% to 97.2%. Yet, the average whooping cough infection rates of children under one year old has risen 47%. Additionally, the infection rate of 11 to 18-year-olds has risen 66%, despite the near-90% of teens who now receive a 5th dose of a pertussis-containing vaccine.

In 2014 the FDA announced that the acellular pertussis component used in the DTaP and Tdap vaccines "fails to prevent colonization or transmission" of whooping cough infection in primates. The whooping cough vaccine is effective at reducing whooping cough symptoms in the vaccinated person if received in the past year. However, our FDA has stated that it cannot prevent a whooping cough infection from forming in the vaccinated person, which is contagious to other people. **There is always a risk that an asymptomatic carrier of whooping cough infection can transmit the disease to an infant who is too young for the DTaP vaccine.** (See

Acellular pertussis vaccines protect against disease but fail to prevent infection and transmission in nonhuman primate model, US Food and Drug Administration, January 2014)

Additionally, Kaiser Permanente released a 2016 study detailing the extreme waning problems with the Tdap vaccine in teenagers. Kaiser concluded, “Routine Tdap did not prevent pertussis outbreaks. Among adolescents who have only received DTaP vaccines in childhood, **Tdap provided moderate protection during the first year and then waned rapidly so that little protection remained 2 to 3 years after vaccination.**” (See *Waning Tdap Effectiveness in Adolescents*, Kaiser Permanente, Bnai Zion Medical Center, March 2016)

Sadly, there is a near-unreported problem compounding our pertussis vaccine failures. An LA Times investigation revealed that, up to the date of the article publication, all eight California infants who died from pertussis in 2010 were repeatedly misdiagnosed by doctors and denied life-saving medical care. (See *Diagnoses lagged in baby deaths*, LA Times September 7, 2010)

17. I’ve heard that children with autism just think in a different way, and many have savant abilities. Is this true?

Not for the most part, no. While the media have done a spectacular job at portraying autistic children as quirky geniuses, more than half of autistic people have an IQ of less than 70. **30% of autistic children never speak more than a few words**, they are sickened by bowel disease at a much higher rate than the average person, and many suffer from debilitating anxiety. By the most conservative estimates, almost 20% of children with autism also have epilepsy. Over 90% of autistic children who die prematurely do so because of drowning. The most severely affected kids may never be toilet trained and many struggle with frustrations that lead them to self-assault or assault a caregiver.

18. Aren’t vaccines a victim of their own success? They’re the reason smallpox was eradicated around the world.

This is unlikely. The WHO admits that mass vaccination in high populations was ineffective and that their eradication success was due to **locating and quarantining infected individuals**. Only people who were in close contact with an infected person were “treated” with a vaccine. This “ring vaccination” method was previously used to stop the 1947 New York City smallpox outbreak before millions were vaccinated. It was also used in the late 1880s in Leicester, England, where the majority of the town refused the smallpox vaccine due to the infant deaths it was causing.

19. Don’t vaccines save tens of millions of lives every year?

No. According to a World Health Organization 2015 press release, the measles vaccine has saved an average of 1.13 million lives each year across the globe, and the polio vaccine saves or impacts another 624,000 lives.

Using the World Health Organization's poliomyelitis fact sheet, the total number of lives saved and improved in the **entire history of their worldwide measles and polio vaccine campaigns** adds up to 34.5 million, which is less than the number of people who died of starvation last year.

The big life-saving numbers are in UNICEF's clean water program, which created drinkable water for 2.6 billion people since 1990, and a UNICEF program that brought toilets to 11 million people in just 12 months. Additionally, 45 million children a year receive crucial vitamin A supplementation — which is key to withstanding a measles infection— through Helen Keller International.

20. If we get rid of religious and philosophical exemptions to attend school, and tightly regulate who can receive a medical exemption, isn't it true that vaccination rates will rise to 99.99%?

No, they won't. There are millions of children whose parents conscientiously object to injecting aluminum, mercury, food proteins, preservatives, animal cells and contaminant human DNA into their children. Fundamentally, they object to long-term immune stimulation and inflammation, regardless of the route of administration. They are educated about the consequences of vaccination, they have witnessed side-effects first-hand, and no amount of coercion or incentives will change their minds. They will not contribute to any goal of achieving a near-100% vaccination rate with an ever-expanding schedule of new vaccines, new combinations, and new formulas. Their children represent the profit that pharmaceutical companies will never make.

These are parents who will move state to state, go underground, and eventually leave the country. This artificial method of raising vaccine compliance rates will not translate to higher profits. When these Americans are driven out of the country it will result in each state losing hundreds of millions in funding for public schools.

Lawmakers must seriously weigh the importance of their state's economy and public education funding against the public health sector and pharmaceutical industry's fruitless pursuit of snuffing out a few dozen or few hundred cases of measles in a year.

Consider the fact that the 1.1% of parents who now opt out of every vaccine total 700,000 infants, children and teens, who carry a potential of \$8 billion in lost funding to public school systems across America. Add in parents who only selectively vaccinate with what they feel to be core vaccines, and the number goes up by a factor of five. Add in parents who will adamantly refuse to give their children the inevitable mandated doses of HPV and flu vaccine, and the number goes up by a factor of 60. If even 1% of parents expatriate to other countries, the lost consumer spending would be staggering.