



SCHOOL VACCINATION REQUIREMENTS

CENTRAL QUESTION



Should states allow non-medical exemptions from required school vaccinations?

INTRODUCTION



On April 29, 2019, the Centers for Disease Control and Prevention (CDC) announced that its annual tally of confirmed measles cases in the United States had reached 704 in 22 states—the highest number of annual reported cases since 1994 (and since measles was declared eliminated in the United States in 2000).¹ The vast majority of these cases—88 percent—have appeared in under-vaccinated, close-knit religious or cultural communities.² In this *Close Up in Class Controversial Issue in the News*, we will explore the idea of vaccination, examine the current mandates in place, and ask you to weigh the pros and cons of the paths forward.

BACKGROUND



What Is A Vaccine? A vaccine is a substance that improves the body's immunity to a particular disease. A vaccine typically resembles a disease-causing microorganism, and it is often made from trace amounts of weakened or dead forms of the microbe. When a person is vaccinated, usually with an injection, the immune system rapidly clears the harmless foreign agent from the body. The body learns to remember the agent, so the immune system can recognize and destroy any more of those microbes it later encounters.⁴

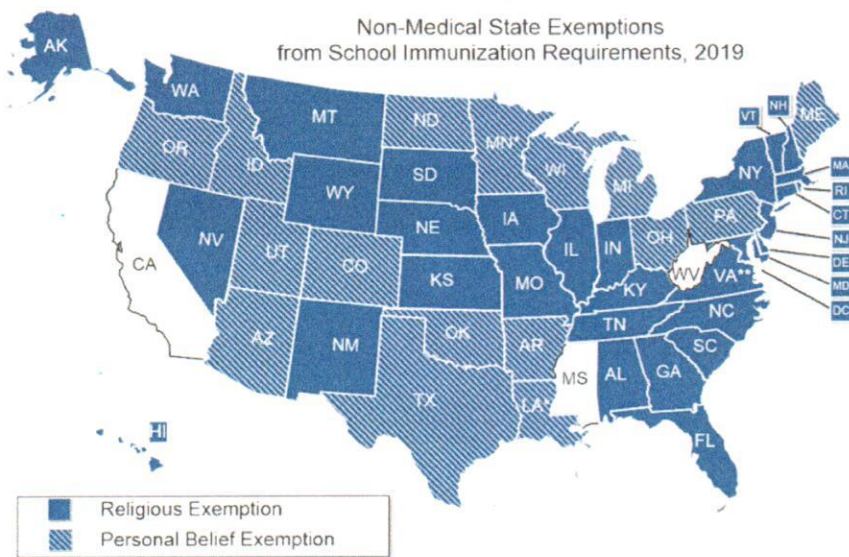
What vaccines does the CDC recommend by age?

The study and practice of vaccination dates back centuries. Dr. Edward Jenner pioneered the first vaccine—for smallpox—in 1796, when he inoculated an uninfected boy with matter from fresh cowpox lesions.⁵ Nearly two centuries later, in 1980, smallpox was officially eradicated worldwide following a global vaccination campaign by the World Health Organization (WHO).⁶

Smallpox, however, is not the only deadly disease that vaccination has helped to combat. Other diseases include:

- VACCINE-PREVENTABLE DISEASES**
- Diphtheria
 - Haemophilus influenzae type b (Hib)
 - Hepatitis A
 - Hepatitis B
 - Herpes Zoster (Shingles)
 - Human Papillomavirus (HPV)
 - Influenza (Flu)
 - Measles
 - Meningococcal Infections
 - Mumps
 - Pertussis (Whooping Cough)
 - Pneumococcal Infections
 - Polio
 - Rotavirus
 - Rubella (German Measles)
 - Tetanus
 - Varicella (Chickenpox)³

- **Polio** is a highly infectious, potentially fatal disease that can invade the brain and spinal cord and cause lifelong paralysis. Before a vaccine became available in 1955, polio outbreaks in the early 1950s caused more than 15,000 cases of paralysis in the United States each year.⁷ Thanks to widespread vaccination, polio has been eliminated in this country (meaning that transmission has stopped in the United States but not worldwide, and that vaccination is still necessary to keep the disease from returning). The last case of polio to originate in the United States occurred in 1979, and a traveler last brought the disease into the country in 1993.⁸
- **Measles** is a highly contagious, potentially fatal virus that lives in the mucus of the nose and throat; it can survive for up to two hours in an airspace where an infected person has coughed or sneezed. In fact, if one person has measles, up to 90 percent of the unvaccinated people close to that person will also become infected. In the decade before a vaccine became available in 1963, almost all children in the United States contracted measles by the age of 15. An estimated three million to four million Americans were infected with the disease each year, which killed 400 to 500 people each year and hospitalized 48,000.⁹ Thanks to a highly effective vaccine, measles was officially eliminated in the United States in 2000.¹⁰
- **Rubella** is a contagious viral disease. During the last major rubella epidemic in the United States from 1964 to 1965, an estimated 12.5 million people were infected, 11,000 pregnant women lost their babies, 2,100 newborns died, and 20,000 babies were born with congenital rubella syndrome. Vaccination began in 1969, and the disease was eliminated in the United States in 2004.¹¹



Source: Adapted from the LexisNexis StateNet Database and the Immunization Action Coalition, Feb. 2018.
 *The existing statute in Minnesota and Louisiana does not explicitly recognize religion as a reason for claiming an exemption, however, as a practical matter, the non-medical exemption may encompass religious beliefs.
 **In Virginia, parents can receive a personal exemption only for the HPV vaccine.
 ***Missouri's personal belief exemption does not apply to public schools, only child care facilities.

So, why do the WHO, the CDC, and other public health organizations urge people to get vaccinated, even for diseases that have been eliminated in the United States? First, some vaccine-preventable diseases have been eliminated in the United States but are still spread in other countries. Therefore, it is possible for travelers to bring those diseases back home and spread them to unvaccinated people. Second, widespread vaccination helps create community immunity, also known as herd immunity. When enough people are vaccinated in a community, germs cannot travel easily from person to person, thus making the entire community less likely to contract a disease and protecting those who are not able to get vaccinated (because they are too young or have a medical condition that makes vaccination impossible). If someone in the community does get sick, it is difficult for the disease to spread.¹²

Is Vaccination Required in the United States? All 50 states have laws that outline vaccination requirements for schoolchildren. These laws apply not only to children attending public schools, but often to those attending private schools and day-care facilities as well.¹³ In California, for example, a student attending transitional kindergarten or a K-12 school in the 2019-2020 school year must have completed five doses of diphtheria, tetanus, and pertussis (whooping cough) vaccine; four doses of polio vaccine; three doses of hepatitis B vaccine; two doses of measles, mumps, and rubella (MMR) vaccine; and two doses of varicella (chickenpox) vaccine.¹⁴

However, as of 2019, state vaccination laws contain certain exceptions:

- All 50 states grant exemptions to children who cannot be vaccinated for medical reasons.
- All but three states (California, Mississippi, and West Virginia) grant exemptions to people who have religious beliefs against vaccination.
- Sixteen states grant philosophical exemptions to people who object to vaccination because of personal or moral beliefs.¹⁵

Research the vaccination requirements and exemptions in your state

So, why do some parents not vaccinate their children? Sometimes, a medical condition—such as a severe, life-threatening allergy, or a disease such as cancer or HIV/AIDS—makes a child ineligible for certain vaccinations.¹⁶ In other cases, parents have personal reasons for declining to vaccinate.

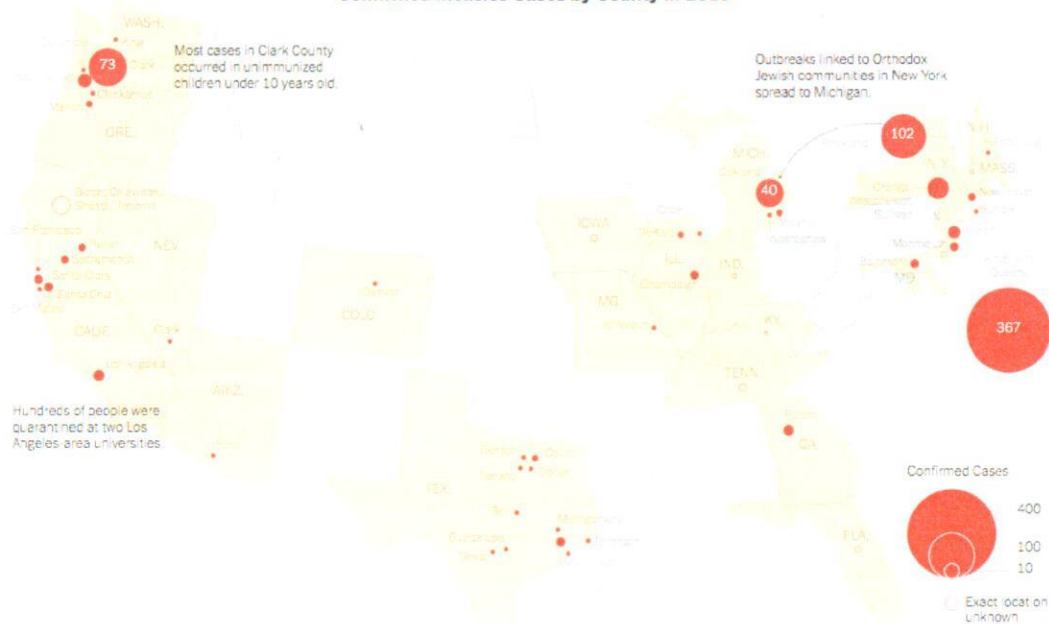
- Some parents believe it is a violation of individual liberty for the government to require vaccinations as an entry ticket to public school, and that it should be up to a parent to decide whether and when to vaccinate a child.
- Some parents say that mandated vaccination forces them to violate their personal religious beliefs, which are protected by the First Amendment. (No major religion opposes vaccination; the Vatican and Jewish and Islamic scholars have endorsed vaccination. Christian Scientists and members of the Dutch Reformed Church have widely rejected vaccination, but doing so is not in their religious doctrine.¹⁷)
- Some parents are swayed by misconceptions and false claims about vaccines, such as the ideas that vaccines are ineffective or unsafe. (Most routine childhood vaccines are effective for 85 percent to 95 percent of recipients; the measles vaccine is about 98 percent effective when used as recommended.¹⁸ And vaccines are safe, with serious side effects occurring extremely rarely. According to the Department of Health and Human Services, if one million doses of a vaccine are given, one to two people may have a severe allergic reaction.¹⁹ Much of the vaccine safety debate stems from a 1998 paper by Andrew Wakefield published in *The Lancet*, suggesting that the MMR vaccine could trigger autism. *The Lancet* retracted the paper in 2010, Wakefield lost his medical license, and investigators concluded that the research was an “elaborate fraud” with selective data and falsified facts, which appears to have taken place for financial gain.²⁰)

THE CURRENT CONTROVERSY



Should states allow non-medical exemptions from required school vaccinations?

Confirmed Measles Cases by County in 2019



Overall, vaccination rates in the United States are high, with the CDC concluding in 2017 that more than 90 percent of children aged 19-35 months had received at least three doses of polio vaccine, at least one dose of MMR vaccine, at least three doses of hepatitis B vaccine, and at least one dose of chickenpox vaccine.²¹



What are the vaccination rates in the United States?

Yet in early 2019, the nation was dealing with its worst measles outbreak in decades. As of April 29, the CDC had tallied 704 confirmed cases of measles for the year in 22 states, despite the fact that the disease was eliminated in the United States in 2000.²² More than 500 of the reported cases were in people who had not been vaccinated, and 88 percent were in under-vaccinated, close-knit religious or cultural communities.²³ As of April, the most significant outbreaks were in Orthodox Jewish communities in Brooklyn and Queens in New York City (367 cases) and in Rockland County, New York (102 cases), where health officials say that anti-vaccine activists have distributed misinformation to influence parents not to vaccinate their children.²⁴

The scope of the 2019 measles outbreak has led policymakers to consider whether or not states should allow non-medical exemptions from required school vaccinations. Supporters of non-medical exemptions argue that it is a violation of individual rights to require vaccinations as an entry ticket to public school, and that it is a slippery slope to allow the government to mandate an action so personal in the name of the greater good. But critics of non-medical exemptions argue that public school parents who do not vaccinate their children are placing entire communities at risk, and that state governments have a responsibility to protect public health.



The 2019 measles outbreak, explained



SHOULD STATES ALLOW NON-MEDICAL EXEMPTIONS FROM REQUIRED SCHOOL VACCINATIONS?



YES: Mandated vaccination is a violation of personal liberty; let parents have a say.

At the heart of this debate is a simple question: Is it the role of government to decide whether and when a baby or a small child is vaccinated, or is that the role of a parent?

To hear some vaccination advocates talk, it would seem that all vaccine-hesitant parents are anti-science conspiracy theorists. However, parents are right to be worried if states erase all non-medical exemptions from required school vaccinations, essentially making childhood vaccination a nationwide mandate. Such an action would be an overreach by state governments, an effort that would deny certain children their right to public education, and a government intrusion into medical decisions that should be made by a parent and their doctor.

"I'm not arguing vaccines are a bad idea; I think they're a good thing," said Senator Rand Paul, R-Ky. "But I think the parent should have some input. The state doesn't own your children. Parents own the children, and it is an issue of freedom."²⁵

"Vaccine-hesitant parents frequently say they worry about putting something foreign into their children's bodies, so young and pure," explained Slate's David Ropeik. "But they also go further: They state that they don't like the government or the medical community telling them what to do."²⁶

State governments would create a dangerous precedent by revoking non-medical vaccination exemptions. What other actions could the government demand of citizens in the name of the greater good? "When you agree to today's mandated vaccine schedule, you also agree (sight unseen) to tomorrow's vaccine schedule," noted Texans for Vaccine Choice. "When you agree to today's mandated medical procedure for the good of 'public health,' you agree (sight unseen) to tomorrow's mandated medical procedure justified by the good of 'public health.'"²⁷

And although no major religion officially opposes vaccination, some individuals say the practice goes against their constitutionally protected personal religious beliefs. Some parents have objected to using vaccines that were originally made from cells of aborted fetuses. (The Catholic Church has approved the use of such vaccines.) Others oppose vaccination in general by citing a biblical passage that says the body is the temple of the Holy Spirit.²⁸

Advocates of vaccination mandates also fail to acknowledge that for some Americans, it is not easy to get their children vaccinated. Some parents do not have reliable transportation to reach a doctor, some work non-traditional hours, and some are living in poverty (a factor that the CDC has found to lower vaccination rates).²⁹ Yet these people could soon see their children turned away from public school.

In the end, Americans must be careful about the powers they give to the government. For once they have given them, it is difficult to take them away.



NO: Parents do not have the right to place others at risk; states must act to protect public health.

When a parent fails to vaccinate their child for personal reasons and sends the child to a public school, that parent is placing the entire community at risk. That is not their right. After all, that parent is taking advantage of a government benefit (public school); it is perfectly reasonable to ask that they adhere to certain public health measures. If parents cannot accept that price, they should home-school their children.

If an unvaccinated child picks up measles, whooping cough, or another vaccine-preventable disease and brings it to school, he or she becomes a direct threat to babies, the elderly, cancer patients, and everyone else in the community who has a compromised immune system or is not eligible for vaccination. As HHS explains, "Some babies are too young to be protected by vaccination, [and] others may not be able to receive certain vaccinations due to severe allergies, weakened immune systems from conditions like leukemia, or other reasons. To help keep them safe, it is important that you and your children who are able to get vaccinated are fully immunized. This not only protects your family, but also helps prevent the spread of these diseases to your friends and loved ones."³⁰

When state governments allow parents to receive non-medical exemptions from required school vaccinations, they not only place others at risk, they make way for the return of previously eliminated diseases, such as measles. The CDC explains it this way: "It's much like bailing out a boat with a slow leak. When we started bailing, the boat was filled with water. But we have been bailing fast and hard, and now it is almost dry. We could say, 'Good. The boat is dry now, so we can throw away the bucket and relax.' But the leak hasn't stopped. Before long we'd notice a little water seeping in, and soon it might be back up to the same level as when we started."³¹

If the government allows vaccination levels to drop, the consequences could be rapid and serious. In Japan, for example, nearly 80 percent of children were vaccinated for whooping cough in 1974, resulting in only 393 nationwide cases and no deaths. But by 1976, a rumor had spread that vaccination was no longer necessary, and only ten percent of infants were being vaccinated. In 1979, there were 13,000 cases of whooping cough in Japan, resulting in 41 deaths.³²

When states grant parents exemptions from mandated school vaccinations on the basis of personal beliefs, they continue to give credence to false information and misconceptions about vaccine necessity, effectiveness, and safety. The truth is that vaccines prevented at least ten million deaths worldwide between 2010 and 2015, according to the WHO.³³ It is up to state governments to continue this good work.



1. Do you believe states should allow non-medical exemptions from required school vaccinations? Explain your reasoning.
2. What do you believe to be the most compelling argument of the opposition? Explain your reasoning.
3. Which do you believe to be the more important responsibility of government: to promote public health or to preserve individual liberty? Explain your reasoning.