

# Immunization Awareness Month: New Laws in the face of Anti-vaccination Movement - AwvoStories

## Immunization Awareness Month: New Laws in the face of Anti-vaccination Movement

### Politics

By the late 20th century, measles and mumps seemed less like “childhood diseases” than historical ones. In 2000, measles was even declared “[eliminated](#)” from the United States. This year a [serious outbreak](#) – more than 1100 cases of measles across 30 states so far – has made legislatures take a closer look at vaccination requirements.

## Vaccination Requirements

[State law](#) determines vaccination requirements, and [all 50 states](#) require vaccination for public school children. Many require immunization for children in private schools and daycare, healthcare workers, and residents of healthcare facilities. All states grant [exemptions](#) for medical reasons. Forty-five states and the District of Columbia grant religious exemptions, while 15 states allow people to opt-out of vaccination for “philosophical” reasons.

There are no federal regulations related to vaccinations, and the Supreme Court has only heard one relevant case. In 1905, [Jacobson v. Massachusetts](#), the court found in favor of the state’s ability to fine citizens who refused the smallpox vaccine.

## New Vaccination Laws

After a measles [outbreak in 2014](#) affecting mostly unvaccinated children, California passed one of the strongest vaccination laws in the country eliminating all non-medical exemptions in legislation drafted by Sen. Richard Pan, a practicing pediatrician. [California reported](#) only 62 measles cases through July this year compared to 642 in [New York](#). In April, a \$1,000 fine for unvaccinated residents of outbreak hotspots Brooklyn and Queens was [upheld in court](#).

Despite a lower incidence of measles in California, it is one of 26 states working to strengthen their [current vaccination requirements](#) in response to this year’s outbreaks. [A new bill](#) would standardize the medical exemption process in an attempt to crack down on doctors who grant medical exemptions at parents’ request. It is expected to pass. In 2019, [Washington](#) state has eliminated philosophical exemptions, while [Maine](#) and [New York](#) have eliminated religious exemptions.

## Public Health vs. Religious Freedom

Despite the respected and protected nature of individual and [religious freedom](#) in the U.S., legislators are supporting stricter vaccination requirements. Unlike, say, nutrition, where individual choices affect individual health, one family’s failure to vaccinate can make other families sick.

This is because of “the herd effect” or “[community immunity](#).” The subset of the population that is unable to be

vaccinated – babies, people with allergies, and people with immune disorders – depends on community immunity to protect them from diseases. The [way vaccines work](#) is by training the immune system to recognize and resist diseases. They do not grant 100% immunity to the disease, and protection can [wear off](#) over time. But if enough people in a community are vaccinated, germs can't travel as easily from person to person and are less likely to encounter vulnerable individuals.

## Risk Evaluation

The current measles outbreak is only possible because vaccination rates have dropped below the “herd effect” threshold ([for measles](#), that's 93-95% of the population). In California, the number of vaccination exemptions has [quadrupled](#) since 2015. [Nonmedical exemption rates](#) have risen in 12 of the states that allow them. The World Health Organization has named “vaccine hesitancy” one of the [top ten threats](#) to global health, while [UNICEF](#) is predicting the return of more preventable diseases to the U.S. if vaccination rates do not improve.

What is making parents “vaccine-hesitant”? While there have always been religious minorities and individuals who resisted vaccination, the anti-vaccination movement began in 1998. A single article by British gastroenterologist Andrew Wakefield linked vaccination to autism. Wakefield's study was [poorly designed](#) (involving only 8 children with autism), and numerous subsequent studies conducted over decades by other researchers countered his results. The journal that published the paper later retracted it. In 2010, Wakefield [lost his medical license](#) for [professional ethics](#) violations that included failing to receive ethical approval of his study from the hospital where he practiced, paying children at his son's birthday party for blood samples, and financial conflict of interest.

People also have concerns over the use of formaldehyde, mercury, or aluminum in vaccines. While [trace amounts](#) of formaldehyde or aluminum may still be found in vaccines, the mercury-based preservative [thimerosal](#) was removed from childhood vaccines in 2001. It is still in some flu vaccines, but thimerosal-free flu vaccines are available and can be requested.

The [verified risks](#) of vaccination are limited to allergic reactions, low-grade fever, fussiness, soreness at the injection site, and for some vaccines, temporary headache, fatigue or loss of appetite. If the current outbreak continues until October, the United States risks joining Venezuela and Brazil as the only countries in the Americas where measles is [endemic](#).

[Leave a comment](#)