



March 7, 2023

Good morning,

Thank you to the JCRAR committee for holding today's hearing regarding Clearinghouse Rules CR 19-079.

My name is Amberlee Ohlsen, and I am the Chief Communications Officer for Wisconsin United for Freedom, a 501c4 grassroots organization founded in 2019. Our organization is now over 50,000 Wisconsinites strong in our state and growing. Please accept this written testimony as my full and complete support in suspending all rules contained within DHS CR 19-079.

I am a corporate employee, a mother, a wife and deeply concerned constituent of our great state, as it pertains to the continued and aggressive campaign by Wisconsin DHS and their supporters to NOT give parents a seat at the table when it comes to our children's healthcare decisions. As it was expressed firmly and vehemently in March of 2020, parents do not want any additional vaccines added to the already exorbitant schedule for our children.

I have had the privilege of attending and speaking, at dozens of hearings, in front of various committees and legislators, since the inception of our organization, all in the name of Parental Rights, Medical Freedom and bodily autonomy for our children, ourselves and for, thousands of concerned Wisconsinites. I've been able to participate in the legislative process for protective health freedom bills, as well as to speak in opposition of proposed legislature that infringes on the rights of the individual; including speaking against the rules contained in CR 19-079, put forth by WI DHS. Today, I am here again, in support of suspending these rules. Included for this committee, is my original testimony from the hearing in March of 2020.

As the collective health of our state's children continues to decline, Wisconsin DHS works to further insert themselves into the lives of families and their healthcare decisions. The children in our state are suffering greatly from staggering rates of autoimmune diseases, learning disabilities, speech delays, cancers, diabetes, depression, Autism, ADHD, anxiety, and other serious mental health disorders, but our state's Department of "Health" Services has a solitary focus, seemingly above all else; to add more vaccines to the pediatric vaccine schedule.

If we have learned anything as a society in the last three years, it should be that no single person or entity, should ever be allowed to create rules for the larger community under the name of "public health". Unelected officials have proven that they take advantage of their roles, impose highly damaging mandates on those residing in their jurisdiction and then take their power to the Nth degree, seemingly without oversight, accountability, or recompense, when their actions have proven to be harmful.

Our WI DHS has become a bureaucratic entity, content on endorsing behaviors that make it harder for children to exercise their rights to an education. A prime example of this behavior was when giving her testimony at the hearing in March of 2020, Dr. Schauer stated to the committee her belief in the importance of these rule changes, while reminding the committee that our state still had our three vaccine exemptions (Medical, Religious, Philosophical). Dr. Schauer lied by omission to the committee with regards to the Philosophical exemption, as she had full and complete knowledge of the fact that there was a bill (AB 248) actively circulating in our legislature

to remove our state's Philosophical (personal belief) Exemption. In fact, it was learned after the hearing, that the Advisory Committee that Dr. Schauer claims she helped to form, had in fact, all signed on as supporters of the bill to REMOVE our Philosophical Exemption! This is an absolute conflict of interest and is a prime example of why WI DHS has proven to be an unreliable, un reputable agency.

When I attended and spoke at the DHS hearing in March of 2020, what I heard from the Representatives of WI DHS, most notably, Dr. Stephanie Schauer, was appalling, alarmist and a gross exaggeration of truth. In addition to Dr. Schauer's statements, there were further egregious examples of medical professionals making inflammatory statements, in order to further the agenda to add additional, unneeded vaccines to the childhood schedule, remove a parent's ability to choose and to continue to potentially exclude healthy children from their right to an education. Examples include:

- Using national data instead of state data regarding the hospitalization rates and deaths for Chicken Pox. (Schauer)
- Making egregious statements like "unimmunized children leave a community vulnerable". (Schauer)
- Referring to an "outbreak" of Meningitis in our state but having to refer all back to 2015 to support her claim. (Schauer)
- Calling children "potential threats" who aren't immunized up to date. (Dr. Kim, Children's Hospital)
- Stating that under-immunized children are subject to increased testing because of their vaccination status. (Dr. Kim, Children's Hospital)
- Another Physician, Dr. Heather Paradis exclaimed, that while she "will have the conversations (with parents questioning vaccines), she always recommends vaccinations for all children".

Wisconsin DHS, the representatives from Children's and other healthcare professionals in attendance at the previous hearing repeatedly used the tired phrases of "evidence based" and "safe and effective" while continuing to downplay reports of vaccine injury and the lack of safety studies concerning today's exploding vaccine schedule. With pediatric COVID vaccines now recommended by ACIP and the CDC, it is most certain that WI DHS will again but putting forth additional rules to include these on the list of school required vaccines. While our children continue to get sicker and sicker each passing year, the schedule continues to grow. And let me express this for those who may not wish to know, we will never vaccinate or medicate ourselves into a state of health. If more vaccines and more medication were the answer to health, then those who took the most, would be the healthiest; and we can all see, this is not the case.

During her testimony, Dr. Schauer stated that "vaccines are the most highly monitored biologics and they are held to a higher standard than other medicines". She further states that vaccines are "continuously monitored and re-evaluated for safety".

To this committee: I implore you to request of WI DHS and Dr. Schauer that data. We the parents would like to see the continued safety data of the vaccine schedule as well as the safety data showing that giving all of these vaccines concurrently is safe. We would like to see the exact dates that these reviews were conducted by WI DHS, by whom, under what parameters and the reports of the outcomes.

I further ask of this committee to request of WI DHS how they follow up with reports of vaccine injuries in our state pertaining to all vaccines on the childhood schedule. I also would like for this committee to inquire as to whom at WI DHS is the SME (Subject Matter Expert) regarding vaccine injury and what continued research this person or department is doing to ensure vaccine safety for the children in our state.

During the March of 2020 testimony, it was stated by WI DHS as well as several Physicians and Nurses that the vaccine injury reporting system (VAERS) is so flawed that it's completely unreliable. You cannot tell us that vaccines are the "most studied and research medicine over all others" and then tell us that the VAERS database is unreliable, due its "passive reporting system". How is it, that the most credible agency in the world (per WI DHS) cannot come up with a vaccine injury reporting system better than this, if they (the CDC) are the Gold Standard for safety & efficacy? How is it that a highly educated group of individuals (the medical community) has become so far removed from the human condition that they'd rather mock, impugn and express disdain towards parents who've reported vaccine injury in their children? Why haven't any of you (the medical industry) made vaccine injury a part of your pediatric practice? Calling reactions "rare" is not an acceptable response.

Many wish to paint our organization and community members as a fringe group; a group of "anti-vaxxers or "science deniers". We are none of those things. We are incredibly well-read, well-educated parents whose years of questions, concerns, inquiries and fears, all went unanswered. We were left to fend for ourselves, and we did. Our community has never said to not take a vaccine to anyone who wishes. Our group believes firmly in choice and that choice is for Parents to decide for their children to take or decline any licensed vaccine available.

We believe in informed consent and transparency. We believe in accountability for our agencies, and we absolutely believe that WI DHS and our Public Health groups have taken full advantage of the privileged chairs in which they sit. We believe that WI DHS is long overdue for some oversight. We believe that all Wisconsinites have the right to an education and to a career without medical mandates as a contingency. We believe that parents know their children far greater than any medical professional ever will. We believe that every man, woman & child in this state deserves to move freely without restriction. We believe in bodily autonomy and parental rights. We believe that "NO" is a complete sentence. We believe in choice. We believe in freedom.

We, are Wisconsin United for Freedom

Thank you,

Amberlee Ohlsen

Encl.

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Good morning,

Thank you so much for sitting in for today's session with regards to Clearinghouse Rule 19-079, pertaining the Immunization of Students.

While I come here today with staunch resistance of Clearinghouse Rules 1, 2, 4 and 5; I stand in vehement opposition to Clearinghouse Rule 4, which pertains to adding the Meningococcal vaccine to the already overzealous and aggressive CDC Vaccine Schedule for our children.

With Senate Bill 262 and Assembly Bill 248, regarding the removal of our State's Personal Belief Exemptions from vaccination, currently circulating county by county in our state, adding yet another Mandated vaccine at the behest of Wisconsin DHS is setting a perilous precedent for what may be coming down the pipeline in the future with regards to mandated vaccines for all Wisconsin Children.

Clearinghouse Rule #4 expressly wishes to Mandate the Meningococcal Vaccine against Bacterial Meningitis strains A, C, W & Y – for all 7th graders with the requirement of an additional booster for all 12th graders. This increases the doses of childhood vaccines for all Wisconsin children to 71 by the time they graduate high school – this excludes the currently optional annual flu vaccine and the three-dose HPV Vaccines...but, for how long do these remain optional? Current Events elude to even more vaccines being mandated, if Wisconsin DHS has their way and thusly projecting Wisconsin into a dismal kinship with the states of California, New York, New Jersey and Connecticut, and other threatened with similar legislature.

When most of us hear the word “Meningitis”, we think instant death, no hope and no treatment. And sadly, for some, this can be true; however, this is not anything close to being the norm. Bacterial Meningitis is highly treatable with prompt medical care and proper diagnosis along with antibiotic treatments.

In fact, the Wisconsin Bureau of Communicable Diseases stated in their report from 2016 and I quote, “Most people who come into contact with meningitis do not get sick. However, some people become seriously ill, which may be related to societal factors such as overcrowding or smoke exposure, or physical factors such as a weakened immune system that make more likely to get sick:”

Similarly, on the CDC website, I came across a page last updated on July 26, 2019 that stated the following: I quote

“As part of the licensure process, MenACWY and MenB vaccines showed that they produce an immune response. This immune response suggests the vaccines provide protection, but data are limited on how well they work.”

Wisconsin DHS wants to mandate a vaccine for a product that isn't even proven to work, as stated by the CDC? They want to mandate a vaccine for an illness that reported only 327 cases NATIONALLY in 2018? They want to mandate a vaccine for a bacterial infection that has an amazing opportunity for full recovery with sound medical recognition of symptoms and proper treatment? I further quote from the same CDC page:

“Since meningococcal disease is uncommon, many people need to get these vaccines in order to measure their effectiveness.”

Does anyone else truly hear how absurd this sounds? This disease is very uncommon, we don't know how well the vaccine works or for how long, but, the answer to this is vaccinate everyone for an illness they almost surely never come into contact with or acquire? This is the science that you want us, as parents to blindly follow as “settled”?

The very same page further exclaims:

“Today, meningococcal disease is at a historic low in the United States. Rates of meningococcal disease have been declining in the United States since the 1990s. Much of the decline occurred before the routine use of meningitis vaccines”.

The disease was already on its way out, per the CDC, prior to the vaccine. There have been no widespread outbreaks of meningitis, ever, in the history of our recorded statistics. In fact, the CDCs shares that from 2005 to 2017, there have been a total of 2,889 cases. There are zero fatalities recorded on this report, however, there unfortunately are sure to have been some. Lastly, almost every single adult in this room has never had a Meningococcal vaccine, and Wisconsin has never, seen an outbreak – thus proving the fallacy of herd immunity.

When reviewing the state and national statistics of Meningitis, anyone with Critical Thought and a discerning eye is wondering with great suspicion as to why DHS is proposing this Meningitis Vaccine mandate. Wisconsin currently has a high voluntary vaccine uptake of 83.8%, per Wisconsin DHS data for the MenACWY vaccines, which cover bacterial meningitis strains A, C, W and Y. The Wisconsin Bureau of Communicable Diseases also states that the bacterial strains of meningitis are not spread by casual contact or by simply breathing the air where a person with meningococcal disease has been and once an infected person has been treated with antibiotics for 24 hours they are no longer contagious.

So, I ask: why is DHS pushing the mandate of this vaccine when their own data, coupled with CDC data and that of the National Meningitis Association express that this is not a public health threat or concern. This vaccine is readily available for those who wish and there is no scientific data supporting any need whatsoever for a mandate!

Wisconsin Representatives: we are better than this! We have to stop and ask what is the true vested interest here and why is this being pushed so heavily when there is no threat? This is your opportunity to see where we, the parents of the

potentially affected children recognize the government overreach and the violation of our civil rights! This is why we asked you to hear us today; and thank you all so much; for being here.

All I know is, as a Mother, I never entered into parenthood thinking that I would be speaking in front a group of my elected officials, Wisconsin DHS, health professionals, and my peers - battling in a proverbial war for children's fundamental rights to bodily autonomy. Fighting a war that has nothing to do with public health but, but one perpetuated on the bases of greed, control and force. I never thought we'd all be "here". All I can say is that at the end of the day, I know with every fiber of my being, that I am standing on the right side of history. I'm asking you to stand alongside me. Alongside us. No to every Clearinghouse Rule.

Thank you,

A.Ohlsen

Fitchburg, Wisconsin

Sources

CDC: Meningococcal Vaccination: What everyone should know

<https://www.cdc.gov/vaccines/vpd/mening/public/index.html#types>

Meningococcal Disease – National Meningitis Association

<https://www.nmaus.org/meningococcal-disease/#resources>

Meningococcal Disease – Bureau of Communicable Diseases – Wisconsin DHS

<https://www.dhs.wisconsin.gov/publications/p4/p42072.pdf>

Wisconsin Communicable Disease Report

<https://www.dhs.wisconsin.gov/publications/p02194.pdf>

MENINGOCOCCAL DISEASE

(Meningococcal meningitis,
Meningococemia)



Meningococcal disease includes meningitis (swelling of the tissues that cover the brain and spinal cord) and sepsis (blood infection). Someone with meningococcal disease can have meningitis, sepsis, or both at the same time. Anyone can get meningococcal disease, but it is most common in children under 5 years of age and young adults ages 16 through 23 years.

What causes it?



- ▶ Meningococcal disease is caused by *Neisseria meningitidis* bacteria. *N. meningitidis* bacteria are often found in the nose and throat without causing illness. Most people who come into contact with *N. meningitidis* do not get sick. Only some people become seriously ill, which may be related to societal factors such as overcrowding or smoke exposure, or physical factors such as a weakened immune system that make them more likely to get sick.
- ▶ Meningococcal disease is spread from person to person. *N. meningitidis* bacteria are spread by exchanging respiratory and throat secretions (saliva or spit) during close or lengthy contact (e.g., sharing utensils or kissing), especially if living in the same household.
 - ▶ The bacteria are not as contagious as germs that cause the common cold or the flu. They are not spread by casual contact or by simply breathing the air where a person with meningococcal disease has been.
 - ▶ Someone with meningococcal disease can spread *N. meningitidis* bacteria for several days before they have symptoms. Once people are treated with antibiotics for 24 hours, they are not contagious.
- ▶ There are five serogroups (“strains”) of *N. meningitidis*: A, B, C, W, and Y that cause most disease worldwide. Three of these serogroups (B, C, and Y) cause most of the illness seen in the United States.

What are the signs and symptoms?



Common Symptoms

- ▶ High fever
- ▶ Headache
- ▶ Vomiting
- ▶ Stiff neck
- ▶ Purple or pinpoint red rash
- ▶ Sensitivity to light
- ▶ Sleepiness
- ▶ Confusion

Symptoms in Infants

- ▶ Sluggishness
- ▶ Irritability
- ▶ Vomiting
- ▶ Poor feeding

**Symptoms usually appear three to four days after being exposed, but can start anytime between two and 10 days after exposure. Symptoms may start suddenly and the disease can become severe very quickly. Prompt medical attention is important.*



What are the treatment options?



- ▶ Antibiotics are used to treat meningococcal disease. It is important that treatment with antibiotics begin as soon as possible.
 - ▶ Even with antibiotic treatment, 10-15% of people infected with meningococcal disease will die. Approximately 11-19% of survivors will have long-term disabilities, such as loss of limb(s), deafness, nervous system problems, or brain damage.
- ▶ People who had close, direct contact with someone who had meningococcal disease may need to take antibiotics to reduce their chances of becoming sick.
 - ▶ Close contacts include household members, intimate contacts, day care center contacts, and those who are directly exposed to the oral or nasal secretions of someone who is infected.
 - ▶ Kissing as well as sharing eating utensils, smoking materials, or beverage containers can be classified as direct contact.

How can it be prevented?



- ▶ Keeping up-to-date with recommended immunizations is the best defense against meningococcal disease. There are several vaccines that protect against the different types of *N. meningitidis* bacteria.
 - ▶ Three vaccines (Menomune[®], Menactra[®], and Menveo[®]) protect against four of the five types of *N. meningitidis* bacteria (**serogroups A, C, Y, and W-135**). The Advisory Committee on Immunization Practices (ACIP) recommends children get their first dose of meningococcal vaccine (Menactra[®] or Menveo[®]) when they are between 11 and 12 years and get a booster dose when they are 16 years of age.
 - ▶ Two vaccines (Trumenba[®] and Bexsero[®]) protect against the fifth type of *N. meningitidis* bacteria, **serogroup B**. These were recently licensed for use in the United States. The ACIP recommends the vaccine be given to people aged 16-23 years. The ideal age to vaccinate is between 16 and 18 years, to provide protection when individuals are at greatest risk of getting meningococcal disease.
- ▶ The meningococcal vaccine should also be given to those who are traveling to areas of the world with high rates of meningococcal disease (e.g., areas of Africa) as well as locations having an outbreak of meningitis.
- ▶ Avoid kissing or sharing cups, plates, forks, etc. with someone who is sick.

For more information about the vaccine that protects against *N. meningitidis* bacteria, please visit these websites:

http://www.immunize.org/vis/meningococcal_b.pdf

http://www.immunize.org/vis/meningococcal_mcv_mpsv.pdf



Reported Cases and Deaths from Vaccine Preventable Diseases, United States

| Year | Diphtheria | | Tetanus | | Pertussis | | Polio (paralytic) | | Measles | | Mumps | | Rubella | | CRS |
|------|------------|--------|---------|--------|-----------|--------|-------------------|--------|---------|--------|---------|--------|---------|--------|-------|
| | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases |
| 1950 | 5,796 | 410 | 486 | 336 | 120,718 | 1,118 | 33,300† | 1,904 | 319,124 | 468 | NR | | NR | | NR |
| 1951 | 3,983 | 302 | 506 | 394 | 68,687 | 951 | 28,386† | 1,551 | 530,118 | 683 | NR | | NR | | NR |
| 1952 | 2,960 | 217 | 484 | 360 | 45,030 | 402 | 57,879† | 3,145 | 683,077 | 618 | NR | | NR | | NR |
| 1953 | 2,355 | 156 | 506 | 337 | 37,129 | 270 | 35,592† | 1,450 | 449,146 | 462 | NR | | NR | | NR |
| 1954 | 2,041 | 145 | 524 | 332 | 60,886 | 373 | 18,308 | 1,368 | 682,720 | 518 | NR | | NR | | NR |
| 1955 | 1,984 | 150 | 462 | 265 | 62,786 | 467 | 13,850 | 1043 | 555,156 | 345 | NR | | NR | | NR |
| 1956 | 1,568 | 103 | 468 | 246 | 31,732 | 266 | 7,911 | 566 | 611,936 | 530 | NR | | NR | | NR |
| 1957 | 1,211 | 81 | 447 | 279 | 28,295 | 183 | 2,499 | 221 | 486,799 | 389 | NR | | NR | | NR |
| 1958 | 918 | 74 | 445 | 303 | 32,148 | 177 | 3,697 | 255 | 763,094 | 552 | NR | | NR | | NR |
| 1959 | 934 | 72 | 445 | 283 | 40,005 | 269 | 6,289 | 454 | 406,162 | 385 | NR | | NR | | NR |
| 1960 | 918 | 69 | 368 | 231 | 14,809 | 118 | 2,525 | 230 | 441,703 | 380 | NR | 42 | NR | 12 | NR |
| 1961 | 617 | 68 | 379 | 242 | 11,468 | 76 | 988 | 90 | 423,919 | 434 | NR | 53 | NR | 14 | NR |
| 1962 | 444 | 41 | 322 | 215 | 17,749 | 83 | 762 | 60 | 481,530 | 408 | NR | 43 | NR | 8 | NR |
| 1963 | 314 | 45 | 325 | 210 | 17,135 | 115 | 396 | 41 | 385,156 | 364 | NR | 48 | NR | 16 | NR |
| 1964 | 293 | 42 | 289 | 179 | 13,005 | 93 | 106 | 17 | 458,083 | 421 | NR | 50 | NR | 53 | NR |
| 1965 | 164 | 18 | 300 | 181 | 6,799 | 55 | 61 | 16 | 261,904 | 276 | NR | 31 | NR | 16 | NR |
| 1966 | 209 | 20 | 235 | 158 | 7,717 | 49 | 106 | 9 | 204,136 | 261 | NR | 43 | 46,975 | 12 | NR |
| 1967 | 219 | 32 | 263 | 144 | 9,718 | 37 | 40 | 16 | 62,705 | 81 | NR | 37 | 46,888 | 16 | NR |
| 1968 | 260 | 30 | 178 | 66 | 4,810 | 36 | 53 | 24 | 22,231 | 24 | 152,209 | 25 | 49,371 | 24 | NR |
| 1969 | 241 | 25 | 192 | 89 | 3,285 | 13 | 18 | 13 | 25,826 | 41 | 90,918 | 22 | 57,686 | 29 | 62 |
| 1970 | 435 | 30 | 148 | 79 | 4,249 | 12 | 31 | 7 | 47,351 | 89 | 104,953 | 16 | 56,552 | 31 | 67 |
| 1971 | 215 | 13 | 116 | 64 | 3036 | 18 | 17 | 18 | 75,290 | 90 | 124,939 | 22 | 45,086 | 20 | 44 |
| 1972 | 152 | 10 | 128 | 58 | 3,287 | 6 | 29 | 2 | 32,275 | 24 | 74,215 | 16 | 25,507 | 14 | 32 |
| 1973 | 228 | 10 | 101 | 40 | 1,759 | 5 | 7 | 10 | 26,690 | 23 | 69,612 | 12 | 27,804 | 16 | 30 |
| 1974 | 272 | 5 | 101 | 44 | 2,402 | 14 | 7 | 3 | 22,094 | 20 | 59,128 | 6 | 11,917 | 15 | 22 |
| 1975 | 307 | 5 | 102 | 45 | 1,738 | 8 | 13 | 9 | 24,374 | 20 | 59,647 | 8 | 16,652 | 21 | 32 |
| 1976 | 128 | 7 | 75 | 32 | 1,010 | 7 | 10 | 16 | 41,126 | 12 | 38,492 | 8 | 12,491 | 12 | 22 |
| 1977 | 84 | 5 | 87 | 24 | 2,177 | 10 | 19 | 16 | 57,345 | 15 | 21,436 | 5 | 20,395 | 17 | 29 |
| 1978 | 76 | 4 | 86 | 32 | 2,063 | 6 | 8 | 13 | 26,871 | 11 | 16,817 | 3 | 18,269 | 10 | 30 |
| 1979 | 59 | 1 | 81 | 30 | 1,623 | 6 | 22 | 1 | 13,597 | 6 | 14,255 | 2 | 11,795 | 1 | 57 |
| 1980 | 3 | 1 | 95 | 28 | 1,730 | 11 | 9 | 2 | 13,506 | 11 | 8,576 | 2 | 3,904 | 1 | 14 |
| 1981 | 5 | 0 | 72 | 31 | 1,248 | 6 | 10 | 0 | 3,124 | 2 | 4,941 | 1 | 2,077 | 5 | 10 |
| 1982 | 2 | 1 | 88 | 22 | 1,895 | 4 | 12 | 0 | 1,714 | 2 | 5,270 | 2 | 2,325 | 4 | 13 |
| 1983 | 5 | 0 | 91 | 22 | 2,463 | 5 | 13 | 0 | 1,497 | 4 | 3,355 | 2 | 970 | 3 | 7 |
| 1984 | 1 | 0 | 74 | 20 | 2,276 | 7 | 9 | 0 | 2,587 | 1 | 3,021 | 1 | 752 | 1 | 2 |
| 1985 | 3 | 0 | 83 | 23 | 3,589 | 4 | 8 | 0 | 2,822 | 4 | 2,982 | 0 | 630 | 1 | 2 |
| 1986 | 0 | 0 | 64 | 22 | 4,195 | 6 | 10 | 0 | 6,282 | 2 | 7,790 | 0 | 55 | 1 | 13 |
| 1987 | 3 | 1 | 48 | 16 | 2,823 | 1 | 9 | 0 | 3,655 | 2 | 12,848 | 2 | 306 | 0 | 3 |
| 1988 | 2 | 0 | 53 | 17 | 3,450 | 4 | 9 | 0 | 3,396 | 3 | 4,866 | 2 | 225 | 1 | 2 |
| 1989 | 3 | 0 | 53 | 9 | 4,157 | 12 | 11 | 0 | 18,193 | 32 | 5,712 | 3 | 396 | 4 | 2 |
| 1990 | 4 | 1 | 64 | 11 | 4,570 | 12 | 6 | 0 | 27,786 | 64 | 5,292 | 1 | 1,125 | 8 | 32 |
| 1991 | 5 | 0 | 57 | 11 | 2,719 | 0 | 10 | 1 | 9,643 | 27 | 4,264 | 1 | 1,401 | 1 | 34 |
| 1992 | 4 | 1 | 45 | 9 | 4,083 | 5 | 6 | 0 | 2,237 | 4 | 2,572 | 0 | 160 | 1 | 11 |

†Total reported cases (i.e., including non-paralytic)

| Year | Diphtheria | | Tetanus | | Pertussis | | Polio (paralytic) | | Measles | | Mumps | | Rubella | | CRS |
|------|------------|--------|---------|--------|-----------|--------|-------------------|--------|---------|--------|-------|--------|---------|--------|-------|
| | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases |
| 1993 | 0 | 0 | 48 | 11 | 6,586 | 1 | 4 | 0 | 312 | 0 | 1,692 | 0 | 192 | 0 | 4 |
| 1994 | 2 | 0 | 51 | 9 | 4,617 | 8 | 8 | 0 | 963 | 0 | 1,537 | 0 | 227 | 0 | 7 |
| 1995 | 0 | 1 | 41 | 5 | 5,137 | 6 | 7 | 1 | 309 | 2 | 906 | 0 | 128 | 1 | 3 |
| 1996 | 2 | 0 | 36 | 1 | 7,796 | 4 | 7 | 0 | 508 | 1 | 751 | 1 | 238 | 0 | 2 |
| 1997 | 4 | 0 | 50 | 4 | 6,564 | 6 | 6 | 0 | 138 | 2 | 683 | 0 | 181 | 0 | 9 |
| 1998 | 1 | 1 | 34 | 7 | 6,279 | 5 | 3 | 0 | 100 | 0 | 666 | 1 | 364 | 0 | 9 |
| 1999 | 1 | 1 | 40 | 7 | 7,288 | 7 | 2 | 0 | 100 | 2 | 387 | 1 | 267 | 0 | 6 |
| 2000 | 1 | 0 | 35 | 5 | 7,867 | 12 | 0 | 0 | 86 | 1 | 338 | 2 | 176 | 0 | 8 |
| 2001 | 2 | 0 | 37 | 5 | 7,580 | 17 | 0 | 0 | 116 | 1 | 266 | 0 | 23 | 2 | 3 |
| 2002 | 1 | 0 | 25 | 5 | 9,771 | 18 | 0 | 0 | 44 | 0 | 270 | 1 | 18 | 0 | 1 |
| 2003 | 1 | 1 | 20 | 4 | 11,647 | 11 | 0 | 0 | 56 | 1 | 231 | 0 | 7 | 0 | 4 |
| 2004 | 0 | 0 | 34 | 4 | 25,827 | 16 | 0 | 0 | 37 | 0 | 258 | 0 | 10 | 1 | 0 |
| 2005 | 0 | 0 | 27 | 1 | 25,616 | 31 | 1 [§] | 0 | 66 | NA | 314 | 0 | 11 | 0 | 1 |
| 2006 | 0 | 0 | 41 | 4 | 15,632 | 9 | 0 | 0 | 55 | 0 | 6,584 | 1 | 11 | 0 | 1 |
| 2007 | 0 | 0 | 28 | 5 | 10,454 | 9 | 0 | 0 | 43 | 0 | 800 | 0 | 11 | 1 | 0 |
| 2008 | 0 | 0 | 19 | 3 | 13,278 | 6 | 0 | 0 | 140 | 0 | 454 | 2 | 16 | 0 | 0 |
| 2009 | 0 | 0 | 18 | 6 | 16,858 | 1 | 1 [§] | 0 | 71 | 2 | 1991 | 2 | 3 | 2 | 2 |
| 2010 | 0 | 0 | 26 | 3 | 27,550 | 5 | 0 | 0 | 63 | 2 | 2,612 | 1 | 5 | 2 | 0 |
| 2011 | 0 | 0 | 36 | 6 | 18,719 | 1 | 0 | 0 | 220 | 0 | 404 | 0 | 4 | 1 | 0 |
| 2012 | 1 | 0 | 37 | 4 | 48,277 | 4 | 0 | 0 | 55 | 2 | 229 | 0 | 9 | 0 | 3 |
| 2013 | 0 | 0 | 26 | 3 | 28,639 | 2 | 1 [§] | 0 | 187 | 0 | 584 | 1 | 9 | 0 | 1 |
| 2014 | 1 | 0 | 25 | 1 | 32,971 | 7 | 0 | 0 | 667 | 0 | 1,223 | 0 | 6 | 0 | 1 |
| 2015 | 0 | NA | 29 | NA | 20,762 | NA | 0 | NA | 188 | NA | 1,329 | NA | 5 | NA | 1 |
| 2016 | 0 | NA | 34 | NA | 17,972 | NA | 0 | NA | 85 | NA | 6,369 | NA | 1 | NA | 2 |
| 2017 | 0 | NA | 33 | NA | 18,975 | NA | 0 | NA | 120 | NA | 6,109 | NA | 7 | NA | 5 |

§ Vaccine-associated/derived paralytic polio.

| Year | Hepatitis A | | Hepatitis B | | Haemophilus | | Varicella | |
|------|-------------|--------|-------------|--------|-------------|--------|-----------|--------|
| | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths |
| 1966 | 32,859 | NA | 1,497 | NA | NR | NR | NR | NA |
| 1967 | 38,909 | NA | 2,458 | NA | NR | NR | NR | NA |
| 1968 | 45,893 | NA | 4,829 | NA | NR | NR | NR | NA |
| 1969 | 48,416 | NA | 5,909 | NA | NR | NR | NR | NA |
| 1970 | 56,797 | NA | 8,310 | NA | NR | NR | NR | NA |
| 1971 | 59,606 | NA | 9,556 | NA | NR | NR | NR | NA |
| 1972 | 54,074 | NA | 9,402 | NA | NR | NR | 164,114 | 122 |
| 1973 | 50,749 | NA | 8,451 | NA | NR | NR | 182,927 | 138 |
| 1974 | 40,358 | NA | 10,631 | NA | NR | NR | 141,495 | 106 |
| 1975 | 35,855 | NA | 13,121 | NA | NR | NR | 154,248 | 83 |
| 1976 | 33,288 | NA | 14,973 | NA | NR | NR | 183,990 | 106 |
| 1977 | 31,153 | NA | 16,831 | NA | NR | NR | 188,396 | 89 |
| 1978 | 29,500 | NA | 15,016 | NA | NR | NR | 154,089 | 91 |
| 1979 | 30,407 | 129 | 15,452 | 260 | NR | NR | 199,081 | 103 |
| 1980 | 29,087 | 112 | 19,015 | 294 | NR | NR | 190,894 | 78 |
| 1981 | 25,802 | 93 | 21,152 | 394 | NR | NR | 200,766 | 84 |
| 1982 | 23,403 | 83 | 22,177 | 375 | NR | NR | 167,423 | 61 |
| 1983 | 21,532 | 82 | 24,318 | 438 | NR | NR | 177,462 | 57 |
| 1984 | 22,040 | 77 | 26,115 | 465 | NR | NR | 221,983 | 53 |
| 1985 | 23,210 | 80 | 26,611 | 490 | NR | NR | 178,162 | 68 |
| 1986 | 23,430 | 65 | 26,107 | 557 | NR | NR | 183,243 | 47 |
| 1987 | 25,280 | 77 | 25,916 | 595 | NR | NR | 213,196 | 89 |
| 1988 | 28,507 | 70 | 23,177 | 621 | NR | NR | 192,857 | 83 |
| 1989 | 35,821 | 88 | 23,419 | 711 | NR | NR | 185,441 | 89 |
| 1990 | 31,441 | 76 | 21,102 | 816 | NR | NR | 173,099 | 120 |
| 1991 | 24,378 | 71 | 18,003 | 912 | 2,764 | 17 | 147,076 | 81 |
| 1992 | 23,112 | 82 | 16,126 | 903 | 1,412 | 16 | 158,364 | 100 |
| 1993 | 24,238 | 95 | 13,361 | 1041 | 1,419 | 7 | 134,722 | 100 |
| 1994 | 26,796 | 97 | 12,517 | 1120 | 1,174 | 5 | 151,219 | 124 |
| 1995 | 31,582 | 142 | 10,805 | 1027 | 1,180 | 12 | 120,624 | 115 |
| 1996 | 31,032 | 121 | 10,637 | 1082 | 1,170 | 7 | 83,511 | 81 |
| 1997 | 30,021 | 127 | 10,416 | 1,030 | 1,162 | 7 | 98,727 | 99 |
| 1998 | 23,229 | 114 | 10,258 | 1,052 | 1,194 | 11 | 82,455 | 81 |
| 1999 | 17,047 | 134 | 7,694 | 832 | 1,309 | 6 | 46,016 | 48 |
| 2000 | 13,397 | 106 | 8,036 | 886 | 1,398 | 6 | 27,382 | 44 |
| 2001 | 10,609 | 83 | 7,843 | 769 | 1,597 | 11 | 22,536 | 26 |
| 2002 | 8,795 | 76 | 7,996 | 762 | 1,743 | 7 | 22,841 | 32 |
| 2003 | 7,653 | 54 | 7,526 | 685 | 2,013 | 5 | 20,948 | 16 |
| 2004 | 5,970 | 58 | 6,741 | 643 | 2,085 | 11 | 26,659 | 19 |

| Year | Hepatitis A | | Hepatitis B | | Haemophilus | | Varicella | | Meningococcal ACWY* | | Meningococcal B* | |
|------|-------------|--------|-------------|--------|-------------|--------|-----------|--------|---------------------|--------|------------------|--------|
| | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths |
| 2005 | 4,488 | 43 | 5,119 | 642 | 2,304 | 4 | 32,242 | 13 | 297 | NA | 156 | NA |
| 2006 | 3,579 | 34 | 4,713 | 700 | 2,436 | 4 | 48,445 | 18 | 318 | NA | 193 | NA |
| 2007 | 2,979 | 34 | 4,519 | 719 | 2,541 | 10 | 40,146 | 6 | 325 | NA | 167 | NA |
| 2008 | 2,585 | 37 | 4,033 | 671 | 2,886 | 3 | 30,386 | 18 | 330 | NA | 188 | NA |
| 2009 | 1,987 | 26 | 3,405 | 597 | 3,022 | 7 | 20,480 | 22 | 301 | NA | 174 | NA |
| 2010 | 1,670 | 29 | 3,374 | 588 | 3,151 | 4 | 15,427 | 15 | 280 | NA | 135 | NA |
| 2011 | 1,398 | 25 | 2,903 | 614 | 3,539 | NA | 14,513 | 14 | 257 | NA | 159 | NA |
| 2012 | 1,562 | 23 | 2,895 | 581 | 3,418 | NA | 13,447 | 16 | 161 | NA | 110 | NA |
| 2013 | 1,781 | 24 | 3,050 | 573 | 3,792 | NA | 11,359 | 8 | 142 | NA | 99 | NA |
| 2014 | 1,239 | 26 | 2,791 | 535 | 3,541 | NA | 10,172 | 4 | 123 | NA | 89 | NA |
| 2015 | 1,390 | NA | 3,370 | NA | 4,138 | NA | 9,789 | NA | 120 | NA | 111 | NA |
| 2016 | 2,007 | NA | 3,218 | NA | 4,895 | NA | 8,953 | NA | 126 | NA | 86 | NA |
| 2017 | 3,365 | NA | 3,409 | NA | 5,548 | NA | 8,775 | 2 | 109 | NA | 90 | NA |

*Meningococcal cases were not separated by serogroup prior to 2005.

Notes

NA - Not Available

NR - Not nationally reportable

CRS: Congenital Rubella Syndrome

Prior to 1966, hepatitis A and B were not separated from other types of hepatitis. Prior to 1978, deaths from hepatitis A and B were not separated from deaths from other types of hepatitis.

Haemophilus (Hi) reporting includes all serotypes and all ages. In 2017, 33 cases of invasive Hi type b disease were reported among children younger than 5 years of age.

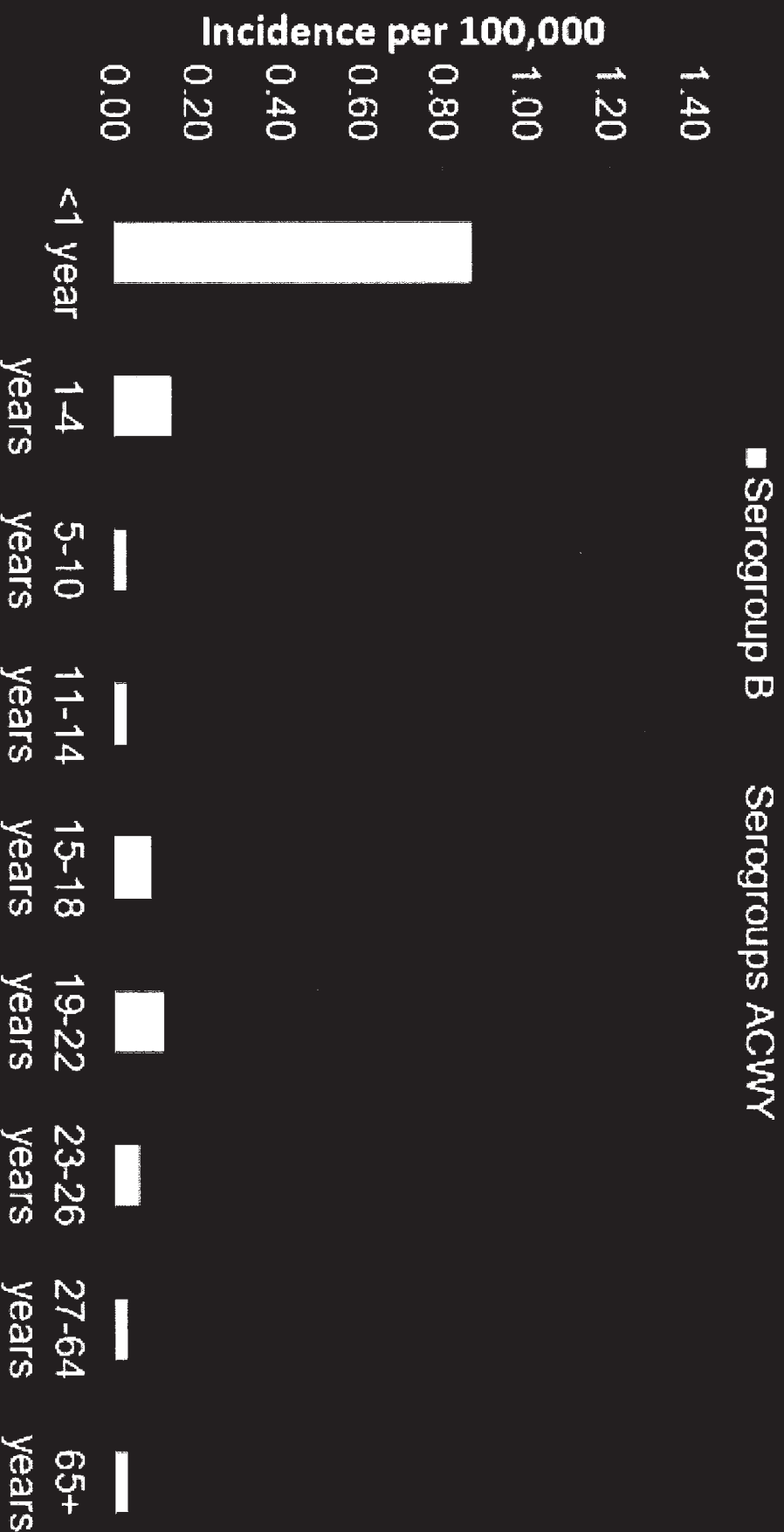
Varicella was removed from the nationally notifiable disease list in 1991. In 2015, varicella cases were reported from 47 states, the District of Columbia, New York City, Guam, Puerto Rico, the Northern Mariana Islands and the U.S. Virgin Islands.

Sources:

Final totals for nationally reportable infectious diseases are reported in *Morbidity and Mortality Weekly Report (MMWR)*. Tables are published for the previous year in August or September of the following year. Final totals for 2016 were published by the National Notifiable Diseases Surveillance System (NNDSS), accessible through *MMWR* 2017;66(38). CDC also publishes a more comprehensive surveillance document, the annual *Summary of Notifiable Diseases*. The most current annual summary was published on August 11, 2017 for calendar year 2015. This document and annual summaries for previous years are available on the MMWR website at <http://www.cdc.gov/mmwr/>. Beginning with data year 2016, links to annual data from the National Notifiable Diseases Surveillance System (NNDSS) are available on the NNDSS Data and Statistics web page at <https://wwwn.cdc.gov/nndss/data-and-statistics.html>.

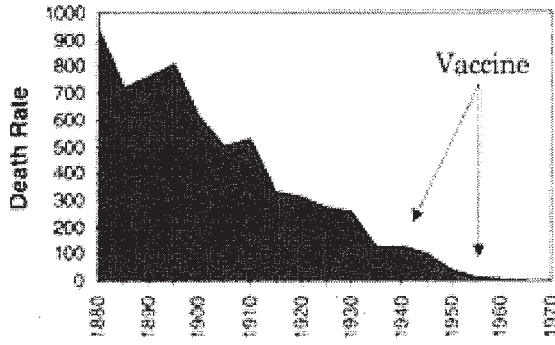
May 2019

Meningococcal Incidence by Serogroup* and Age-Group, 2009-2018

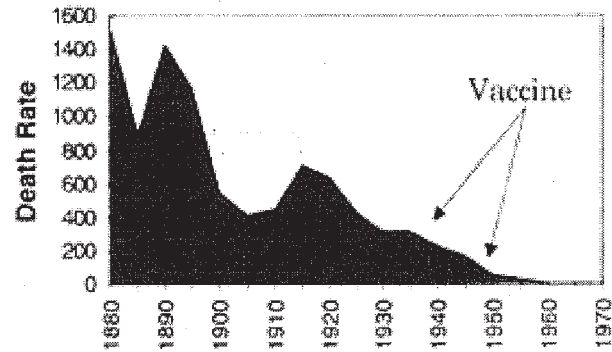


SOURCE: CDC, National Notifiable Diseases Surveillance System with additional serogroup data from Active Bacterial Core surveillance and state health departments.
 Unknown serogroup (16%) and other serogroups (6%) excluded

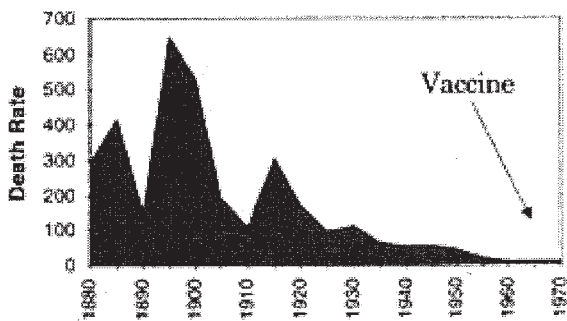
Whooping Cough



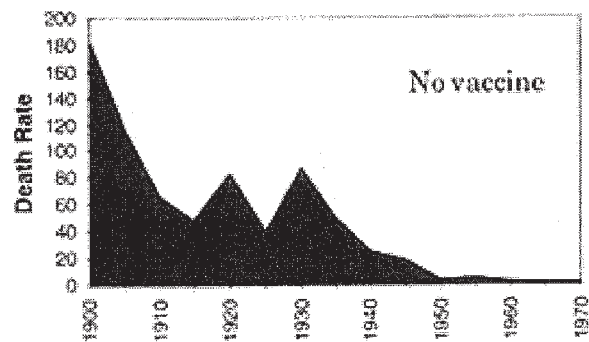
Diphtheria



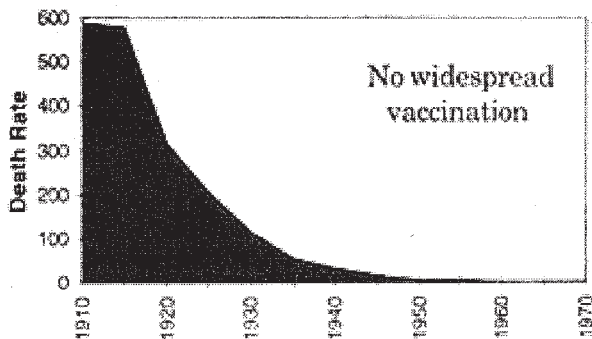
Measles



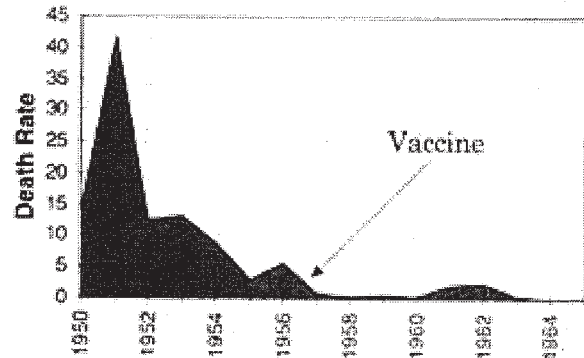
Scarlet Fever



Typhoid Fever



Polio



The above graphs, based on the official death numbers as recorded in the Official Year Books of the Commonwealth of Australia, are taken from Greg Beattie's excellent book "*Vaccination A Parent's Dilemma*" and represent the decline in death rates from infectious disease in Australia. They clearly show that vaccines had nothing to do with the decline in death rates. (Note: Graphical evidence on the decline in death rates from infectious disease for USA, England, New Zealand and many other countries shows the exact same scenario as above).

Vaccine Excipient Summary

Excipients Included in U.S. Vaccines, by Vaccine

In addition to weakened or killed disease antigens (viruses or bacteria), vaccines contain very small amounts of other ingredients – excipients.

Some excipients are added to a vaccine for a specific purpose. These include:

Preservatives, to prevent contamination. For example, thimerosal.

Adjuvants, to help stimulate a stronger immune response. For example, aluminum salts.

Stabilizers, to keep the vaccine potent during transportation and storage. For example, sugars or gelatin.

Others are residual trace amounts of materials that were used during the manufacturing process and removed. These can include:

Cell culture materials, used to grow the vaccine antigens. For example, egg protein, various culture media.

Inactivating ingredients, used to kill viruses or inactivate toxins. For example, formaldehyde.

Antibiotics, used to prevent contamination by bacteria. For example, neomycin.

The following table lists substances, other than active ingredients (i.e., antigens), shown in the manufacturers' package insert (PI) as being contained in the final formulation of each vaccine. **Note: Substances used in the manufacture of a vaccine but not listed as contained in the final product (e.g., culture media) can be found in each PI, but are not shown on this table.** Each PI, which can be found on the FDA's website (see below) contains a description of that vaccine's manufacturing process, including the amount and purpose of each substance. In most PIs, this information is found in Section 11: "Description."

All information was extracted from manufacturers' package inserts.

If in doubt about whether a PI has been updated since this table was prepared, check the FDA's website at:

<http://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm093833.htm>

| Vaccine | Contains |
|--------------------------|--|
| Adenovirus | monosodium glutamate, sucrose, D-mannose, D-fructose, dextrose, human serum albumin, potassium phosphate, pladone C, anhydrous lactose, microcrystalline cellulose, polacrillin potassium, magnesium stearate, cellulose acetate phthalate, alcohol, acetone, castor oil, FD&C Yellow #6 aluminum lake dye |
| Anthrax (Biothrax) | aluminum hydroxide, sodium chloride, benzethonium chloride, formaldehyde |
| BCG (Tice) | glycerin, asparagine, citric acid, potassium phosphate, magnesium sulfate, iron ammonium citrate, lactose |
| Cholera (Vaxchora) | ascorbic acid, hydrolyzed casein, sodium chloride, sucrose, dried lactose, sodium bicarbonate, sodium carbonate |
| DT (Sanofi) | aluminum phosphate, isotonic sodium chloride, formaldehyde |
| DTaP (Daptacel) | aluminum phosphate, formaldehyde, glutaraldehyde, 2-phenoxyethanol |
| DTaP (Infanrix) | formaldehyde, aluminum hydroxide, sodium chloride, polysorbate 80 (Tween 80) |
| DTaP-IPV (Kinrix) | Formaldehyde, aluminum hydroxide, sodium chloride, polysorbate 80 (Tween 80), neomycin sulfate, polymyxin B |
| DTaP-IPV (Quadracel) | formaldehyde, aluminum phosphate, 2-phenoxyethanol, polysorbate 80, glutaraldehyde, neomycin, polymyxin B sulfate, bovine serum albumin |
| DTaP-HepB-IPV (Pediarix) | formaldehyde, aluminum hydroxide, aluminum phosphate, sodium chloride, polysorbate 80 (Tween 80), neomycin sulfate, polymyxin B, yeast protein |
| DTaP-IPV/Hib (Pentacel) | aluminum phosphate, polysorbate 80, sucrose, formaldehyde, glutaraldehyde, bovine serum albumin, 2-phenoxyethanol, neomycin, polymyxin B sulfate |
| Hib (ActHIB) | sodium chloride, formaldehyde, sucrose |
| Hib (Hiberix) | formaldehyde, sodium chloride, lactose |
| Hib (PedvaxHIB) | amorphous aluminum hydroxyphosphate sulfate, sodium chloride |
| Hep A (Havrix) | MRC-5 cellular proteins, formalin, aluminum hydroxide, amino acid supplement, phosphate-buffered saline solution, polysorbate 20, neomycin sulfate, aminoglycoside antibiotic |
| Hep A (Vaqta) | amorphous aluminum hydroxyphosphate sulfate, non-viral protein, DNA, bovine albumin, formaldehyde, neomycin, sodium borate, sodium chloride, other process chemical residuals |
| Hep B (Engerix-B) | aluminum hydroxide, yeast protein, sodium chloride, disodium phosphate dihydrate, sodium dihydrogen phosphate dihydrate |
| Hep B (Recombivax) | formaldehyde, potassium aluminum sulfate, amorphous aluminum hydroxyphosphate sulfate, yeast protein |

| Vaccine | Contains |
|--|---|
| Hep B (Heplisav-B) | yeast protein, yeast DNA, deoxycholate, phosphorothioate linked oligodeoxynucleotide, sodium phosphate, dibasic dodecahydrate, sodium chloride, monobasic dehydrate, polysorbate 80 |
| Hep A/Hep B (Twinrix) | MRC-5 human diploid cells, formalin, aluminum phosphate, aluminum hydroxide, amino acids, sodium chloride, phosphate buffer, polysorbate 20, neomycin sulfate, yeast protein, water |
| Human Papillomavirus (HPV) (Gardasil 9) | amorphous aluminum hydroxyphosphate sulfate, sodium chloride, L-histidine, polysorbate 80, sodium borate, yeast protein |
| Influenza (Afluria) Trivalent & Quadrivalent | sodium chloride, monobasic sodium phosphate, dibasic sodium phosphate, monobasic potassium phosphate, potassium chloride, calcium chloride, sodium taurodeoxycholate, ovalbumin, sucrose, neomycin sulfate, polymyxin B, beta-propiolactone, thimerosal (multi-dose vials) |
| Influenza (Fluad) | squalene, polysorbate 80, sorbitan trioleate, sodium citrate dehydrate, citric acid monohydrate, neomycin, kanamycin, barium, hydrocortisone, egg proteins, cetyltrimethylammonium bromide (CTAB), formaldehyde |
| Influenza (Fluarix) Quadrivalent | octoxynol-10 (TRITON X-100), α -tocopheryl hydrogen succinate, polysorbate 80 (Tween 80), hydrocortisone, gentamicin sulfate, ovalbumin, formaldehyde, sodium deoxycholate, sodium phosphate-buffered isotonic sodium chloride |
| Influenza (Flublok) Quadrivalent | sodium chloride, monobasic sodium phosphate, dibasic sodium phosphate, polysorbate 20 (Tween 20), baculovirus and <i>Spodoptera frugiperda</i> cell proteins, baculovirus and cellular DNA, Triton X-100 |
| Influenza (Flucelvax) Quadrivalent | Madin Darby Canine Kidney (MDCK) cell protein, phosphate buffered saline, protein other than HA, MDCK cell DNA, polysorbate 80, cetyltrimethylammonium bromide, and β -propiolactone, Thimerosal (multi-dose vials) |
| Influenza (Flulaval) Quadrivalent | ovalbumin, formaldehyde, sodium deoxycholate, α -tocopheryl hydrogen succinate, polysorbate 80, thimerosal (multi-dose vials), phosphate-buffered saline solution |
| Influenza (Fluzone) Quadrivalent | formaldehyde, egg protein, octylphenol ethoxylate (Triton X-100), sodium phosphate-buffered isotonic sodium chloride solution, thimerosal (multi-dose vials) |
| Influenza (Fluzone) High Dose | egg protein, octylphenol ethoxylate (Triton X-100), sodium phosphate-buffered isotonic sodium chloride solution, formaldehyde |
| Influenza (FluMist) Quadrivalent | monosodium glutamate, hydrolyzed porcine gelatin, arginine, sucrose, dibasic potassium phosphate, monobasic potassium phosphate, ovalbumin, gentamicin sulfate, ethylenediaminetetraacetic acid (EDTA) |
| Japanese Encephalitis (Ixiaro) | aluminum hydroxide, protamine sulfate, formaldehyde, bovine serum albumin, Vero cell DNA, sodium metabisulphite, Vero cell protein |
| Meningococcal (MenACWY-Menactra) | sodium phosphate-buffered isotonic sodium chloride solution, formaldehyde, diphtheria toxoid |
| Meningococcal (MenACWY-Menveo) | formaldehyde, CRM ₁₉₇ protein |
| Meningococcal (MenB – Bexsero) | aluminum hydroxide, sodium chloride, histidine, sucrose, kanamycin |
| Meningococcal (MenB – Trumenba) | polysorbate 80, aluminum phosphate, histidine buffered saline |
| MMR (MMR-II) | vitamins, amino acids, fetal bovine serum, sucrose, glutamate, recombinant human albumin, neomycin, sorbitol, hydrolyzed gelatin, sodium phosphate, sodium chloride |
| MMRV (ProQuad) (Frozen: Recombinant Albumin) | MRC-5 cells including DNA and protein, sucrose, hydrolyzed gelatin, sodium chloride, sorbitol, monosodium L-glutamate, sodium phosphate dibasic, recombinant human albumin, sodium bicarbonate, potassium phosphate monobasic, potassium chloride; potassium phosphate dibasic, neomycin, bovine calf serum |
| MMRV (ProQuad) (Frozen: Human Serum Albumin) | MRC-5 cells including DNA and protein, sucrose, hydrolyzed gelatin, sodium chloride, sorbitol, monosodium L-glutamate, sodium phosphate dibasic, human albumin, sodium bicarbonate, potassium phosphate monobasic, potassium chloride; potassium phosphate dibasic, neomycin, bovine calf serum |
| MMRV (ProQuad) (Refrigerator Stable) | MRC-5 cells including DNA and protein, sucrose, hydrolyzed gelatin, urea, sodium chloride, sorbitol, monosodium L-glutamate, sodium phosphate, recombinant human albumin, sodium bicarbonate, potassium phosphate, potassium chloride, neomycin, bovine serum albumin |

| Vaccine | Contains |
|--|--|
| Pneumococcal (PCV13 – Prevnar 13) | CRM ₁₉₇ carrier protein, polysorbate 80, succinate buffer, aluminum phosphate |
| Pneumococcal (PPSV-23 – Pneumovax) | phenol |
| Polio (IPV – Ipol) | calf bovine serum albumin, 2-phenoxyethanol, formaldehyde, neomycin, streptomycin, polymyxin B, M-199 medium |
| Rabies (Imovax) | human albumin, neomycin sulfate, phenol red, beta-propiolactone |
| Rabies (RabAvert) | chicken protein, polygeline (processed bovine gelatin), human serum albumin, potassium glutamate, sodium EDTA, ovalbumin, neomycin, chlortetracycline, amphotericin B |
| Rotavirus (RotaTeq) | sucrose, sodium citrate, sodium phosphate monobasic monohydrate, sodium hydroxide, polysorbate 80, cell culture media, fetal bovine serum [<i>DNA from porcine circoviruses (PCV) 1 and 2 has been detected in RotaTeq. PCV-1 and PCV-2 are not known to cause disease in humans.</i>] |
| Rotavirus (Rotarix) | Dextran, Dulbecco's Modified Eagle Medium (sodium chloride, potassium chloride, magnesium sulfate, ferric (III) nitrate, sodium phosphate, sodium pyruvate, D-glucose, concentrated vitamin solution, L-cystine, L-tyrosine, amino acids, L-glutamine, calcium chloride, sodium hydrogenocarbonate, and phenol red), sorbitol, sucrose, calcium carbonate, sterile water, xanthan [<i>Porcine circovirus type 1 (PCV-1) is present in Rotarix. PCV-1 is not known to cause disease in humans.</i>] |
| Smallpox (Vaccinia) (ACAM2000) | HEPES, 2% human serum albumin, 0.5 - 0.7% sodium chloride USP, 5% Mannitol USP, neomycin, polymyxin B, 50% Glycerin USP, 0.25% phenol USP |
| Td (Tenivac) | aluminum phosphate, formaldehyde, ammonium sulfate, sodium chloride, water |
| Td (Mass Biologics) | aluminum phosphate, formaldehyde, thimerosal |
| Tdap (Adacel) | aluminum phosphate, formaldehyde, 2-phenoxyethanol, glutaraldehyde |
| Tdap (Boostrix) | formaldehyde, aluminum hydroxide, sodium chloride, polysorbate 80 |
| Typhoid (Typhim Vi) | formaldehyde, phenol, polydimethylsiloxane, disodium phosphate, monosodium phosphate, sodium chloride, sterile water |
| Typhoid (Vivotif Ty21a) | sucrose, ascorbic acid, amino acids, lactose, magnesium stearate, gelatin |
| Varicella (Varivax) Frozen | MRC-5 human diploid cells, including DNA & protein, sucrose, hydrolyzed gelatin, sodium chloride, monosodium L-glutamate, sodium phosphate dibasic, sodium phosphate monobasic, potassium phosphate monobasic, potassium chloride, EDTA, neomycin, fetal bovine serum |
| Varicella (Varivax) Refrigerator Stable | MRC-5 human diploid cells, including DNA & protein, sucrose, hydrolyzed gelatin, sodium chloride, monosodium L-glutamate, urea, sodium phosphate dibasic, potassium phosphate monobasic, potassium chloride, neomycin, bovine calf serum |
| Yellow Fever (YF-Vax) | sorbitol, gelatin, sodium chloride, egg protein |
| Zoster (Shingles) (Zostavax) Frozen | MRC-5 human diploid cells, including DNA & protein, sucrose, hydrolyzed porcine gelatin, sodium chloride, monosodium L-glutamate, sodium phosphate dibasic, potassium phosphate monobasic, potassium chloride; neomycin, bovine calf serum |
| Zoster (Shingles) (Zostavax) Refrigerator Stable | MRC-5 human diploid cells, including DNA & protein, sucrose, hydrolyzed porcine gelatin, urea, sodium chloride, monosodium L-glutamate, sodium phosphate dibasic, potassium phosphate monobasic, potassium chloride, neomycin, bovine calf serum |
| Zoster (Shingles) (Shingrix) | sucrose, sodium chloride, dioleoyl phosphatidylcholine (DOPC), 3-O-desacetyl-4' monophosphoryl lipid A (MPL), QS-21 (a saponin purified from plant extract <i>Quillaja saponaria</i> Molina), potassium dihydrogen phosphate, cholesterol, sodium dihydrogen phosphate dihydrate, disodium phosphate anhydrous, dipotassium phosphate, polysorbate 80, host cell protein and DNA |

A table listing vaccine excipients and media *by excipient* is published by the Institute for Vaccine Safety at Johns Hopkins University, and can be found at <http://www.vaccinesafety.edu/components-Excipients.htm>.