Analysis of vaccine effectiveness with respect to herd immunity and the removal of unvaccinated children from classrooms

Dick Atlee, v. 15 April 2019
https://dickatlee.com/vaccines/maine/limits_of_vaccine_effectiveness.html

Given that vaccinated children are presumed to be protected from disease by the vaccinations they receive, the main reason now provided by advocates of requiring childhood vaccination for school attendance is the protection of immunocompromised children, who often cannot be vaccinated. This doesn't address the myriad ways in which children interact outside of the classroom. But, accepting that basic premise, the issue then becomes whether the vaccines on the CDC schedule are sufficiently effective to prevent vaccinated children from offering the same risk to immunocompromised children as that alleged from unvaccinated children..

The analysis below examines this question of effectiveness on a vaccine-by-vaccine basis, using references primarily in peer-reviewed journals and documentation from government agencies and professional medical organizations. The points which are particularly relevant to the classroom issue are *italicized*.

However, the examination does not go into a larger issue of potentially far greater importance to classroom health. That is, whether — as research is beginning to suggest — children who are not fully vaccinated according to the CDC schedule are fundamentally more resistant to disease than vaccinated children, and thus less likely to carry sicknesses in general — i.e., other than the targeted diseases — into the classroom. That this is a possibility is due to vaccines' skewing of the immune system away from the evolutionary balance between its "innate" cellular and "humeral" antibody portions, and toward the antibody portion.

It should also be noted that this *effectiveness* analysis does not address the *safety* side of the issue. This involves considering the balance between the number of immunocompromised children who might possibly be adversely affected by the presence of unvaccinated children in the classroom, and the number of children who have been, and will be, injured or killed by vaccines as a result a one-size-fits-all vaccination policy that does screen for health/genetic issues — many as yet unknown — that might render a child particularly susceptible to damage.

Notes:

1. An asterisk * in the list below indicates one of the many vaccines that use neurotoxic aluminum salts as an adjuvant (immune booster). Research in the last few years has shown that (a) some children (and adults) do not have sufficient aluminum/detoxification capability to remove aluminum from their bodies, and (b) there are clear immune-mediated mechanisms by which the resulting accumulating aluminum can generate autoimmune and/or neurodevelopmental damage, sometimes acutely, sometimes over long periods.

2. Definition (to avoid misunderstanding): to say a disease has been "eliminated" (as opposed to "eradicated") in a region is merely to say it has stopped circulating in that region, not that it no longer occurs — e.g., measles. (https://www.historyofvaccines.org/content/articles/disease-eradication)

The Diseases of the CDC Childhood Vaccine Schedule

schedule in parentheses:
https://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf

***Diphtheria** (DTaP: 2,4,6,12-18mos, 4-6yrs, 11-12yrs; Tdap: 11-12yrs)

This has been wiped out in the U.S — less than five cases in the U.S. in the past decade. [1]

***Hepatitis A** (12-24mos (2 doses)

This affects particular at-risk populations of adults, *children only in specific cases; vaccination is appropriate on a case-by-case basis, not done universally*. [2]

***Hepatitis B** (birth, 1-2,6-18mos)

This is inappropriately given at birth — the disease is not communicable at that age, being spread by sex and drug needles. [3]

It is appropriate only if mother has the disease, <1% do, and all are screened

In 2017, there were only 31 cases (0.4/100,000) under 2 years of age in the US. [4]

***Haemophilus influenzae, type B** (2,4,6,12-18mos)

Originally a useful vaccine, but types A and C-F (not targeted by the vaccine) have been moving in to replace the vaccine-targeted type B, causing serious disease in adults. [5]

***Human Papilloma Virus (HPV)** ("routine" doses: 11-12yrs)

HPV is sexually transmitted, not likely to be an issue in the classroom.

The vaccine's effectiveness is defined by a "surrogate endpoint" — cervical lesions. There is currently no proof of the claim that it prevents cancer.

The body clears 90% of the lesions within 2 years [6]; 0.15% of lesions go on to cancer [7], relatively few of these kill.

There are over 100 virus types, and only 2-9 of these are covered by Gardasil/Cervarix; other types are moving in to replace these. [8]

In the Gardasil clinical trials, serious adverse events (SAEs**) = 0.81%, deaths = 0.13% .[9]

Merck was found to have deliberately avoided including many SAEs, and serious long-term debilitating effects have shown up in post-marketing surveillance, such as postural orthostatic tachycardia syndrome and premature ovarian failure [10], raising the question of whether the vaccine is more problematic than cancer.

Screening by Pap smears or HPV testing is effective and necessary [11], but teens getting the vaccine have been found to have a much lower screening rate subsequently. [12]

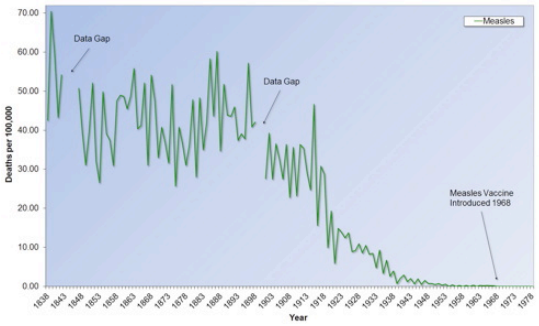
Influenza (6mo, every year)

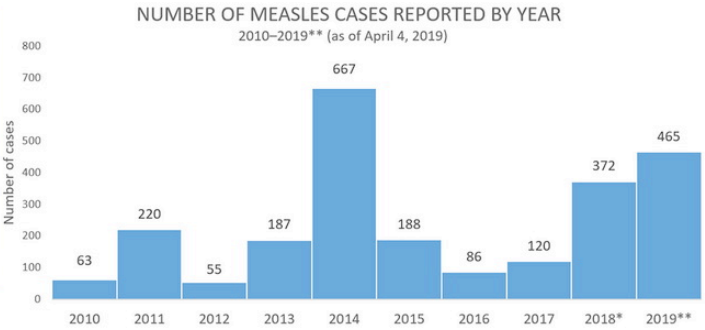
The vaccine's effectiveness varies widely year-to-year, but is widely acknowledged to be poor.

An annual flu vaccination reduces the effectiveness of subsequent annual flu vaccinations [13] or a pandemic-strain vaccine. [14]

Several international studies have shown a four-fold increase in serious non-flu respiratory infections in the months following vaccination compared to unvaccinated. [15]

Measles (MMR II: 12-15mos, 4-6yrs)





Measles is not the deadly disease portrayed these days. Its death rate had plummeted to 1/10,000 even before the vaccine. [16]

Modern vitamin A treatment reduces the risk of pulmonary complications. [17]

Although technically "eliminated" — i.e., not circulating — the number of cases in the U.S. varies from year to year, averaging around 220 from 2010-2018, though higher this year. [18]

Natural measles immunity is lifelong; vaccine-induced "immunity" wanes, and thus requires a booster shot. Subsequent booster shots do nothing. [19]

As a result, periodic outbreaks occur world-wide in highly-vaccinated populations. [20]

Natural immunity is passed along from mother to infant, protecting it in its first months of life. Vaccine immunity passed this way is weaker and wanes faster. [21] Thus, a disease which used to occur in children at an age at which they could conveniently handle it, has now been transferred to the very young and very old, for whom it is more dangerous, and to adults, to whom it presents serious logistical problems.

Meningitis: serogroups ACWY (12-15mos, 4-6yrs)

There were only 107 cases in the U.S. in 2017 [22], of which *only 8 were children in the CDC schedule's target range*. Yet 8 million children are vaccinated against this each year.

On the other hand, the Menactra label reports SAEs** from 1.0 to 1.3% — that would amount to 80-100,000 children. [23]

Interestingly, rates of illness of other serotypes have dropped, with no vaccinations.

Mumps (MMR II: 12-15mos, 4-6yrs)

The vaccine has long been considered ineffective. [24]

Merck is being sued by two scientists who worked on the efficacy trials. Merck committed fraud in trying to improve very poor efficacy by using rabbit antibodies, among other things. [25]

Mumps outbreaks — occurring frequently, numbering in the 100s to 1000s of cases [26], *often in highly vaccinated populations* — appear in part to be due to waning immunity (natural immunity is lifelong). [27]

Pertussis (DTaP: 2,4,6,12-18mos, 4-6yrs, 11-12yrs; Tdap: 11-12yrs)

The vaccine is designed to control symptoms, not disease. *As a result, vaccinated people can and do carry the disease silently and spread it*. [28] *Thus, vaccinated kids may be the greatest threat to classroom health, both immediately after vaccination and later (see footnote for interesting details).*

As with mumps, major outbreaks are occurring in vaccinated populations. In the most recent

example in Los Angeles, where all 90 cases were vaccinated, and *in a heavily-hit school, none of the 18 unvaccinated students caught it.* [29]

The TDaP version for older kids and adults appears to lose most of its effectiveness in 2-4 years [30]

Studies show that waning effectiveness may not be the main problem, but rather that a different strain is moving in (now around 85%), and that *vaccinated people are more susceptible to it than unvaccinated.* [31]

Pneumonia (2,4,6,12-15mos)

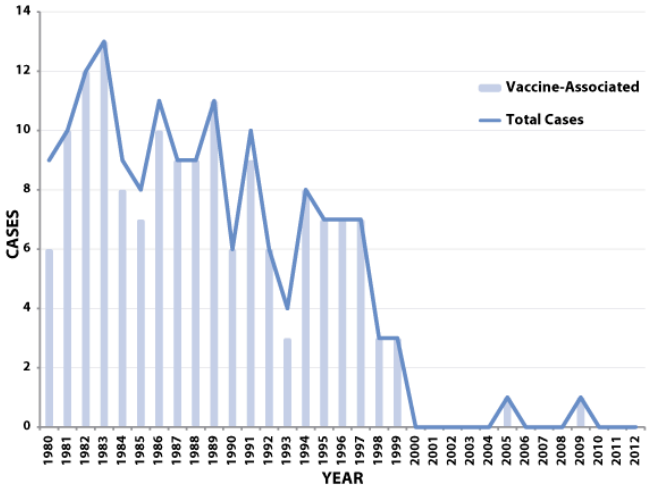
[no information on Prevnar's relevance to this issue]

Polio (2,4,6-18mos, 4-6yrs)

The last U.S. polio case from wild-type virus was in 1979, though several cases were imported until 1993. [32]

In the ensuing 20+ years, all cases (about 30) have been caused by vaccine-strain virus. [33]

The live polio vaccine was abandoned in the U.S. after too many children came down with polio as a result of the vaccination, so the inactivated IPV version is now used.



But *equal quantities of live vaccine have been found in the stool of both vaccinated and unvaccinated children exposed to the virus* [34]*, so vaccinated children can spread the disease*.

3 countries have wild-type polio and 15 have vaccine-strain polio; given its elimination in the U.S., vaccination only makes sense when traveling to those countries.

Rubella (MMR II: 12-15 mos, 4-6 yrs)

The CDC says there are, on average, 11 cases a year (as of 2013), with 50% of cases subclinical; *each evaluation since 2004 has declared it eliminated*. [35]

The principal concern is infection during pregnancy, which is irrelevant to children.

***Tetanus** (DTaP: 2,4,6,12-18mos, 4-6yrs, 11-12yrs; Tdap: 11-12yrs)

Tetanus can't be transmitted interpersonally.

The industry has removed the single tetanus vaccine, so that if you are at risk from an injury (which babies aren't), your choice of a vaccine is combined with either diphtheria (DT) or DT plus pertussis (TDaP, with its own risks (see above)).

Varicella (chickenpox) (12-15mos, 4-6yrs)

Chickenpox was such a mild disease in children that the only argument for approving a vaccine was financial – time lost by adults caring for children.

But CDC-funded research [36] revealed that along with plummeting chickenpox rates came

rising shingles rates, not just in the usual elderly, but at all age levels. Shingles (re-emerging varicella virus) is normally kept at bay by a "booster" from circulating varicella virus due to sick kids. With less kid-contact, the elderly were susceptible. With the elimination of the circulating virus, shingles was freed from that booster protection to infect anyone. *The costs to society of shingles far outweigh the costs of chickenpox.*

** SAE: The FDA defines Serious Adverse Events as involving death, a life-threatening event, hospitalization, disability, permanent damage, congenital anomaly/birth defect, other event requiring medical/surgical intervention. [37]

References

(90% of these are peer-reviewed published journal articles and documents from government agencies and professional medical societies.)

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    The classic study of the acellular vaccine, in which baboons, who have immune systems close to humans, were either vaccinated or not, and then exposed to pertussis virus. In both groups, the virus "colonized" noses and throats and thus could be shed, infecting others; the unvaccinated group "got sick" (showed symptoms); the vaccinated group did not. But the unvaccinated group cleared the virus faster than the vaccinated group.
    After the virus was cleared, both groups were again exposed to the virus. This time the virus again colonized the vaccinated group (silently), but could not colonize the unvaccinated group (i.e., they were now immune). This difference was ascribed to the phenomenon described above — the natural infection's stimulation of both the antibody and innate parts of the immune system as opposed to the vaccine's stimulation of only the antibody part.
    The result showed that vaccinated people are capable of infecting others in both the aftermath of vaccination and during any subsequent (silent) infection, while unvaccinated people can do so only during the first and only (visible) infection, which has direct relevance to classroom risk to immunocomprised children.
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