

**Request for a revision of
Montana Code Annotated 2005**

**Explanations for requested changes in:
20-5-405. Medical or religious exemption.
52-2-735. Health protection -- certification required.**

The first priority is to make a change in law which makes day-care available to children of parents claiming a religious exemption for their child. (Requires a change of 52-2-735.)

Important:

In general, daycare operators should be free to set the policy of who they accept for daycare clients: All vaccinated, all unvaccinated or a mixed group.

Thus, there is no desire to force owners and operators of daycare to accept children with a religious exemption with one exception and that is that daycare centers which are subsidized by taxes MUST accept children with the religious exemption. [Requires added language in both 52-2-735 and 20-5-405]

The second priority is to remove the discriminatory language from 20-5-405 (3) which says that a healthy child may be removed from school if the child has been exposed to a communicable disease and only if that child has not been vaccinated.

The law should be made to read such that only children who show obvious symptoms of disease should be removed from school and without regard to their vaccination status.

The third and fourth changes requested are the additions of "by artificial means," and "preschool or" to the first sentence of 20-5-405 (1) as follows: "... a notarized affidavit on a form prescribed by the department stating that immunization by artificial means, is contrary to the religious tenets and practices of the signer, immunization of the person seeking to attend the preschool or school, must not be required prior to attendance at the preschool or school.

No religion, that I am aware of, teaches that immunization, in the broadest sense of the word, is bad or forbidden. What religions forbid is vaccination rather than immunization.

Some religious teachings forbid vaccination for various reasons of which the following are common objections:

Vaccination uses blood polluting ingredients.

Some vaccines use aborted fetal tissue.

Some vaccines use forbidden animal ingredients such as ingredients from pigs.

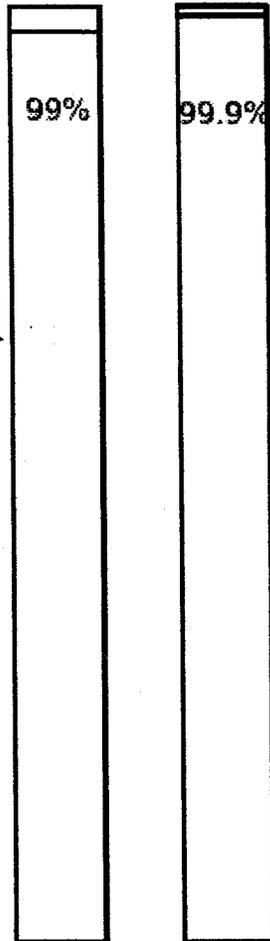
Inhumane treatment of animals occurs in the creation of some vaccines.

Vaccines always pose a risk to the life or health of the recipient and thus some people interpret this fact to mean that vaccination is an unethical or unmoral choice.

Reading Vaccine Statistics

Immunity
pre-vaccine
of 99%.
susceptibility
= 1 percent.

1000 children
= 10 cases/year.



Immunity post-vaccine
of 99.9 percent.
Susceptibility = .1 percent.

1000 children = 1 case/year.

**In this case, is the vaccine
.9 percent effective?**

**Or is the vaccine 90 %
effective?**

**You can bet it will be
advertised as 90%
effective.**

Summary of Natural Immunity:

Hepatitis B: prior to recommendation of Infant Vaccination in 1992, disease incidence was less than 4 per 100,000 for individuals less than 19 years of age.

Rotavirus: Recent placebo-controlled trials by Merck show over 90% natural immunity in the placebo group for the first rotavirus season following vaccination.

Diphtheria: In the USA, prior to using diphtheria vaccine there was a 95 percent decline in mortality due to the disease. (Source: the records of the Metropolitan Life Insurance Co.) It is not uncommon for diphtheria incidence rates to rise following vaccination campaigns. Natural immunity is above 99%.

Tetanus is not contagious. Incidence had dropped to about 1 case per 250,000 population per year prior to tetanus incidence being officially counted and tracked by public health officials and prior to widespread civilian use of tetanus vaccine.

Pertussis: Current incidence rate among the vaccinated is about 1 per 100,000 with an admitted poor immunization rate in younger children. Natural immunity will be above 99%.

Hib: Natural immunity in the prevaccine era was about 99.5 percent through age 5.

Pneumococcal disease: Lifetime natural immunity in 1999, before the introduction of a vaccine was greater than 96-99%. (I.E. 19 cases per 100,000 whites and 55 cases per 100,000 blacks)

Polio: In the Netherlands, a group numbering about 183,400 unvaccinated in a subpopulation of 275,000 had a polio incidence rate between 1978 and 1993 of 11 cases per year. Because 110 cases occurred in 1978, there was no polio incidence in 14 of the 16 years of the study. (99.9999% immunity.)

Influenza: The flu vaccine is admitted to be ineffective some years, and it is controversial that the vaccine has any effectiveness other years. In any case, clinical influenza is always less than 15% of Influenza Like Illness (ILI) and thus natural immunity is typically above 85% to clinical influenza in any season.

Measles: It is believed that in 1900, all children had measles. By 1962, the CDC puts measles incidence at 10 percent of the birth rate. By 1974, natural immunity was about 97.5 % and continued to rise.

Mumps: A disease with the highest rates among children over 5 years of age. The natural immunity to mumps in 1967, prior to the licensure of mumps vaccine was 96.2 percent and is expected to exceed 99 percent today.

Rubella: a very mild illness. At one point the American Medical Association Journal reported that more than 90% of the obstetricians and gynaecologists had refused vaccination even though their patients are at high risk for Rubella occurring in pregnancy. Results of a recent trial by Merck, the pharmaceutical giant, suggests that natural immunity to rubella is above 98 percent.

Hepatitis A: According to the CDC, the prevaccine Hepatitis A incidence ranged from 9 to 15 cases per 100,000 population.

Meningococcal disease: In the USA, 1400 to 2800 total cases per year or about .5 to 1 per 100,000 population. A CDC graph shows this rate to have been true since 1967.

Varicella: see next page:

Varicella (Chickenpox)

Contrary to popular opinion, the incidence of chickenpox was declining prior to the introduction of the first vaccine.

In 1990-1994, natural immunity to chickenpox may have been as high as 83 percent, that is only 17 cases per hundred children. Natural immunity was about 94% in the 1 to 4 year old range according to National Health Interview data published by the CDC. Natural immunity was about 96 % among less than one year olds.

A group health cooperative estimated it had an 18 % data capture based on the concept of 100 percent susceptibility but its raw rates before "correction" were similar to the above National Health Interview. Also, for the 18% estimate to be correct, only about 1 in 5.5 people would have sought health care for chickenpox. The actual incidence in the first year of life would have been as low as 2 per hundred (if 82% immune) or as high as about 9 cases per hundred infants (zero immune). Using the group health data, the incidence in the age 1-4 years age group would have been as low as 1.6% or as high as 9 percent. (91.2 - 98.4% immunity.)

Data published in 1998 shows the following:

"Four to 10 percent of VZV vaccine recipients may develop a generalized maculo-papular rash within 7-21 days post vaccination, consisting of usually less than 50 lesions."

Several other studies have reported that each year post vaccination 1% to 3% of vaccinated children develop a mild varicella disease (mild varicella like syndrome, or MVLS) after exposure to wild-type varicella (31-33).

Using the above data, I have calculated the late prevaccine era incidence in 100 children based on the concept of zero immunity, moderate immunity and the early vaccine incidence in the same number of children.

Age 1-4, a four years span (From first birthday to 5th birthday)

Worst case scenario	82-83% immune scenario	Vaccinated
100 Unvaccinated zero immunity:	100 Unvaccinated 83% immunity	100 Vaccinated 97% immunity.
4 years x 8.8 = 35 cases	4 x 2, or 4 x 6 = 8 - 24 cases	4 x 3%/yr = 12 cases
		4%-10% * 4 - 10
		Total 8 - 22 cases

*MMRV package insert currently lists 2.1% for varicella rash following vaccination.

As far as cases go, without taking into account the severity, moderate immunity versus vaccinated immunity in the 1-4 year old range will show about the same number of cases for a 4 year span of 100 moderately immune versus 100 vaccinated in the 1 - 4 year old range.

Given that a child in the first year of life is only unvaccinated and exposed to others for one year, the relative risks for the three classes for one year are: 9 cases, 2-6 cases, and 7-13 cases. For a one year exposure, the vaccinated expose the unvaccinated children to about as many cases as the unvaccinated, although these cases are said to be "mild" and less contagious. This is due to the cases that are "triggered" by the vaccine itself.

http://findarticles.com/p/articles/mi_m0838/is_n79/ai_18223186 Sometimes active natural immunity can develop even without clinical symptoms of disease. For example, about 70 percent of adults who say they have not had chickenpox do have antibodies to varicella, the chickenpox virus.

<http://www.cdc.gov/nip/faqs/varicella-faqs.htm>

Varicella Immunity

Just because you don't remember having chickenpox doesn't mean you are not immune. There are some adults who actually have not had chickenpox, but many people who think they did not have chickenpox turn out to be immune if tested.

FIGURE 1. Recommended immunization schedule for persons aged 0–6 years — United States, 2007

Vaccine	Age	1 month	2 months	4 months	6 months	12 months	15 months	18 months	19–23 months	2–3 years	4–6 years
Hepatitis B ¹		HepB		See footnote 1		HepB			HepB Series		
Rotavirus ²			Rota	Rota	Rota						
Diphtheria, Tetanus, Pertussis ³			DTaP	DTaP	DTaP	DTaP	DTaP	DTaP			DTaP
Haemophilus influenzae type b ⁴			Hib	Hib	Hib ⁴	Hib			Hib		
Pneumococcal ⁵			PCV	PCV	PCV	PCV				PCV	PPV
Inactivated Poliovirus			IPV	IPV	IPV	IPV					IPV
Influenza ⁶							Influenza (Yearly)				
Measles, Mumps, Rubella ⁷						MMR					MMR
Varicella ⁸						Varicella					Varicella
Hepatitis A ⁹							HepA (2 doses)				HepA Series
Meningococcal ¹⁰											MPSV4

Range of recommended ages

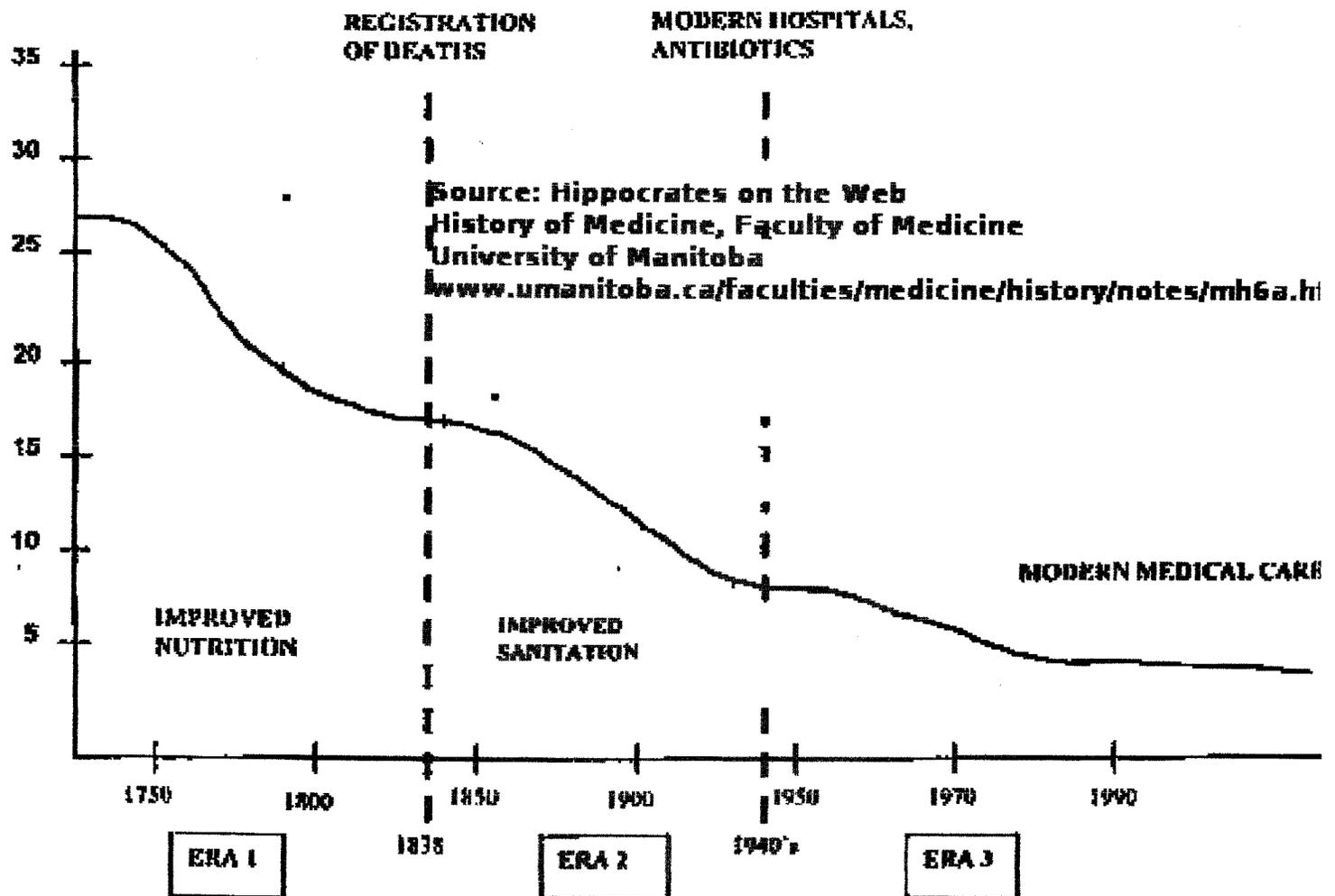
Catch-up immunization

Certain high-risk groups

Figure 1: Changes in population health status/historical markers in public health

CRUDE DEATH RATE PER 1,000

Figure has had time-line comments removed to leave only basic decline in death rate information



United States Mortality Rates 1900-1965

* References: Vital Statistics of the United States 1937, 1938, 1943, 1944, 1949, 1960, 1967, 1976, 1987, 1992; Historical Statistics of the United States - Colonial Times to 1970 Part 1

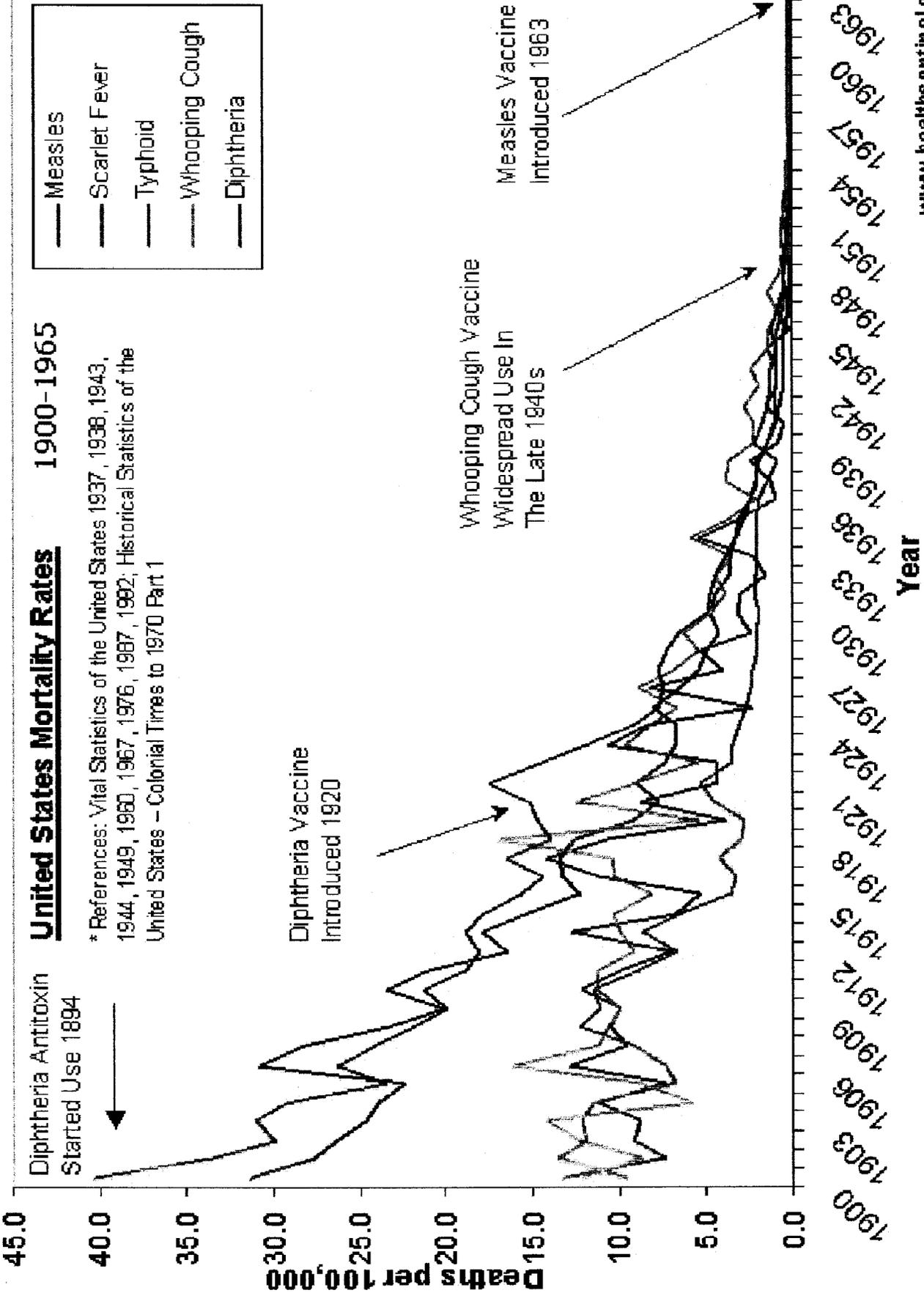
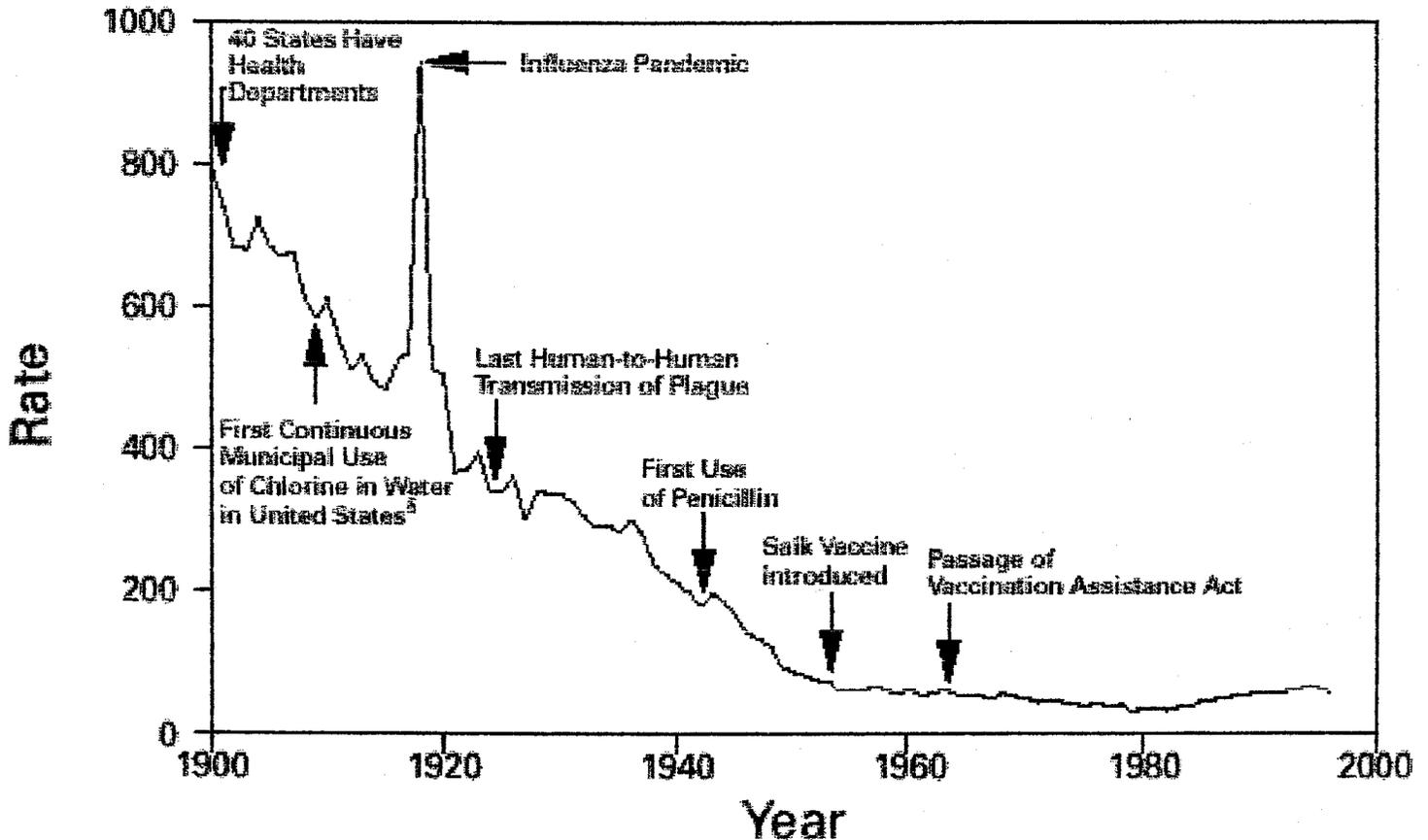


FIGURE 1. Crude death rate* for infectious diseases — United States, 1900–1996†



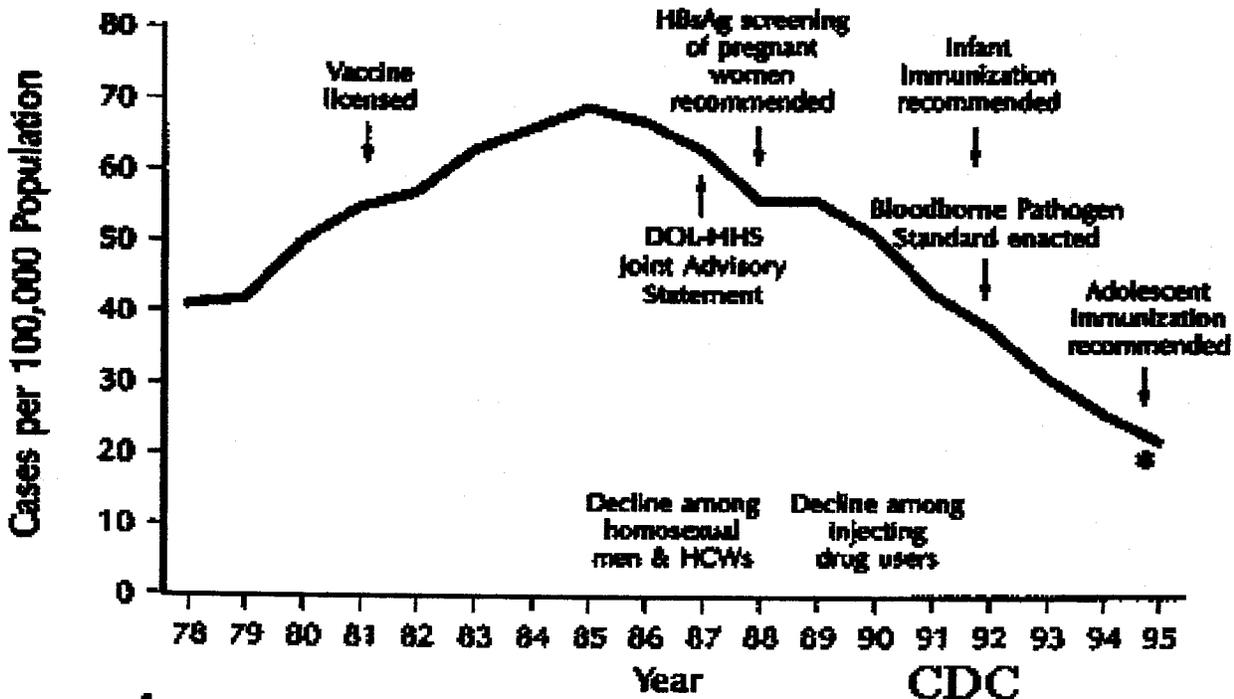
*Per 100,000 population per year.

†Adapted from Armstrong GL, Conn LA, Pinner RW. Trends in infectious disease mortality in the United States during the 20th century. *JAMA* 1999;281:61–6.

§American Water Works Association. Water chlorination principles and practices: AWWA manual M20. Denver, Colorado: American Water Works Association, 1973.

Hepatitis B

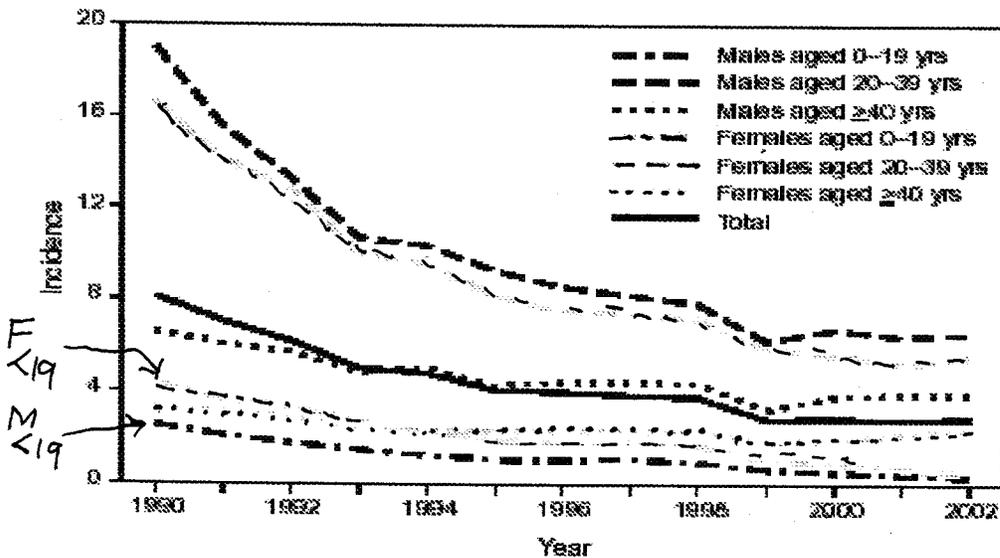
Estimated Incidence of Acute Hepatitis B United States, 1978-1995



Provisional data

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5251a3.htm>

FIGURE. Incidence* of acute hepatitis B, by age group, sex, and year — United States, 1990–2002



* Per 100,000 population.

Rotavirus

http://www.merck.com/product/usa/pi_circulars/r/rotateq/rotateq_pi.pdf

[Natural immunity about 90% in placebo group.]

Overall, 72,324 infants were randomized in 3 placebo-controlled, phase 3 studies conducted in 11 countries on 3 continents. The data demonstrating the efficacy of **RotaTeq** in preventing rotavirus gastroenteritis come from **6,983** of these infants from the **US** (including Navajo and White Mountain Apache Nations) and **Finland** who were enrolled in 2 of these studies: the Rotavirus Efficacy and Safety Trial (REST) and Study 007. The third trial, Study 009, provided clinical evidence supporting the consistency of manufacture and contributed data to the overall safety evaluation.

Study 007

Primary efficacy against any grade of severity of rotavirus gastroenteritis caused by naturally occurring serotypes G1, G2, G3, or G4 through the first rotavirus season after vaccination was 72.5% (95% CI: 50.6, 85.6) and the ITT efficacy was 58.4% (95% CI: 33.8, 74.5). Primary efficacy against severe rotavirus gastroenteritis caused by naturally occurring serotypes G1, G2, G3, or G4 through the first rotavirus season after vaccination was 100% (95% CI: 13.0, 100.0) and ITT efficacy against severe rotavirus disease was 100%, (95% CI: 30.9, 100.0) as shown in Table 4.

Table 4
Efficacy of RotaTeq against any grade of severity of and severe* G1-4 rotavirus gastroenteritis through the first rotavirus season postvaccination in Study 007

	Per Protocol		Intent-to-Treat [†]	
	RotaTeq	Placebo	RotaTeq	Placebo
Subjects vaccinated	650	660	650	660
Gastroenteritis cases				
Any grade of severity	15	54	27	64
Severe*	0	6	0	7
Efficacy estimate % and (95% confidence interval)				
Any grade of severity	72.5 (50.6, 85.6)		58.4 (33.8, 74.5)	
Severe*	100.0 (13.0, 100.0)		100.0 (30.9, 100.0)	

*Severe gastroenteritis defined by a clinical scoring system based on the intensity and duration of symptoms of fever, vomiting, diarrhea, and behavioral change

[†]ITT analysis includes all subjects in the efficacy cohort who received at least one dose of vaccine.

Multiple Rotavirus Seasons

The efficacy of RotaTeq through a second rotavirus season was evaluated in a single study (REST). Efficacy against any grade of severity of rotavirus gastroenteritis caused by rotavirus serotypes G1, G2, G3, and G4 through the two rotavirus seasons after vaccination was 71.3% (95% CI: 64.7, 76.9). The efficacy of RotaTeq in preventing cases occurring only during the second rotavirus season postvaccination was 62.6% (95% CI: 44.3, 75.4). The efficacy of RotaTeq beyond the second season postvaccination was not evaluated.

Seizures reported as serious adverse experiences occurred in <0.1% (27/36,150) of vaccine and <0.1% (18/35,536) of placebo recipients (not significant).

Table 5
Solicited adverse experiences within the first week after doses 1, 2, and 3 (Detailed Safety Cohort)

Adverse experience	Dose 1		Dose 2		Dose 3	
	RotaTeq	Placebo	RotaTeq	Placebo	RotaTeq	Placebo
Elevated temperature	n=5,616 17.1%	n=5,077 18.2%	n=5,215 20.0%	n=4,725 19.4%	n=4,965 18.2%	n=4,382 17.6%
Vomiting	n=6,130 6.7%	n=5,560 5.4%	n=5,703 5.8%	n=5,173 4.4%	n=5,496 3.8%	n=4,989 3.2%
Diarrhea	10.4%	9.1%	8.6%	6.4%	6.1%	5.4%
Irritability	7.1%	7.1%	6.0%	6.5%	4.3%	4.5%

*Temperature $\geq 100.5^{\circ}\text{F}$ [38.1°C] rectal equivalent obtained by adding 3 degree F to axillary and oral temperatures and 2 degrees F to axillary temperatures

Table 10
 Adverse events that occurred at a statistically higher incidence within 42 days of any dose
 among recipients of RotaTeg as compared with placebo recipients

Adverse event	RotaTeg	Placebo
	N=6,138	N=5,573
	n (%)	n (%)
Diarrhea	1,479 (24.1%)	1,186 (21.3%)
Vomiting	929 (15.2%)	758 (13.6%)
Otitis media	887 (14.5%)	724 (13.0%)
Nasopharyngitis	422 (6.9%)	325 (5.8%)
Bronchospasm	86 (1.1%)	49 (0.7%)

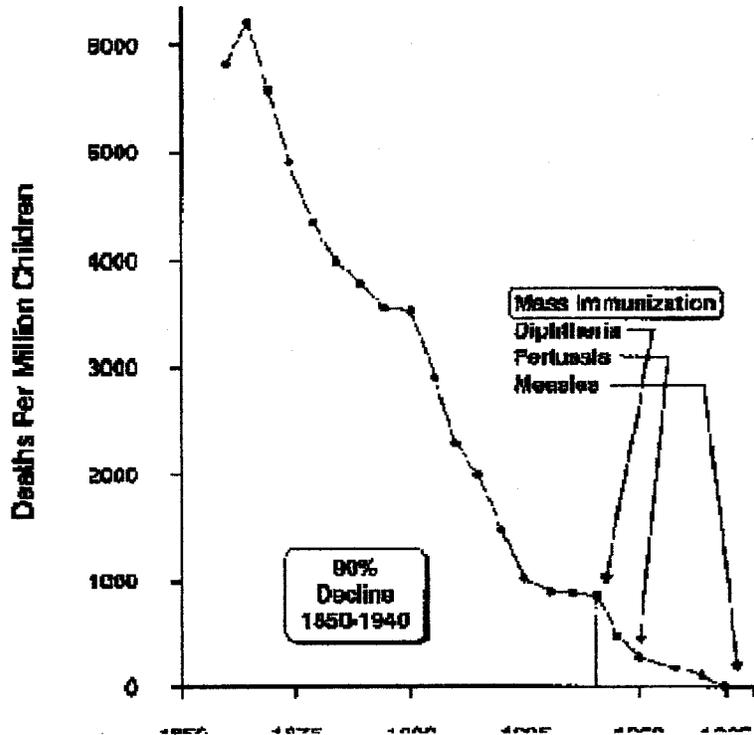
Note: The extra Adverse events that occurred in the vaccinated group following the three vaccinations approximately canceled any "benefits" of the reduced rota-virus associated disease in the first season.

Diphtheria

Excerpts from: *UNIVERSAL IMMUNIZATION*
Medical Miracle or Masterful Mirage
 By Dr. Raymond Obomsawin

Table I--shows that in England and Wales there was a 90 percent decline in child mortality from the combined infectious diseases of scarlet fever, diphtheria, whooping cough, and measles in the period of 1850 to 1940. The first vaccine made available was for diphtheria in the early 40's, whereas the pertussis (whooping cough) vaccine became available in the early 50's and the measles vaccine in the late 60's (no vaccine was provided for scarlet fever).⁵⁵

**England & Wales: Deaths of Children Under 15 Years
 Attributed to Scarlet Fever, Diphtheria,
 Whooping Cough, and Measles**



**Nigeria: Reported Cases of Diphtheria
 1973-1982**

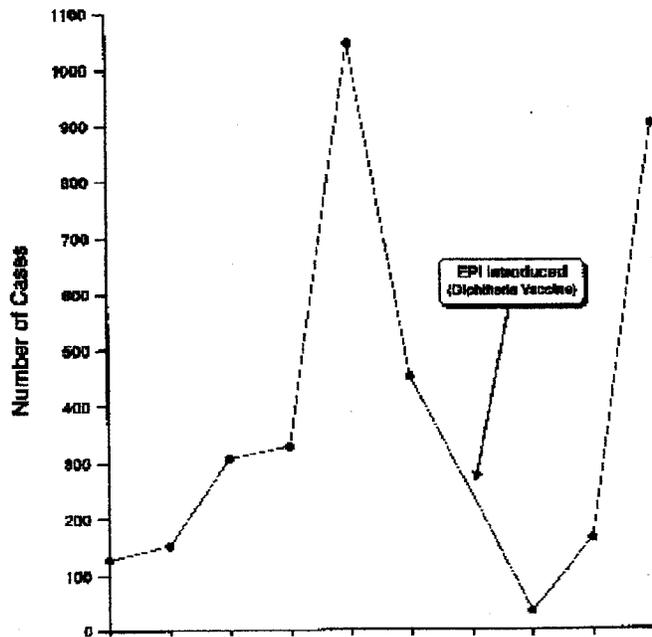


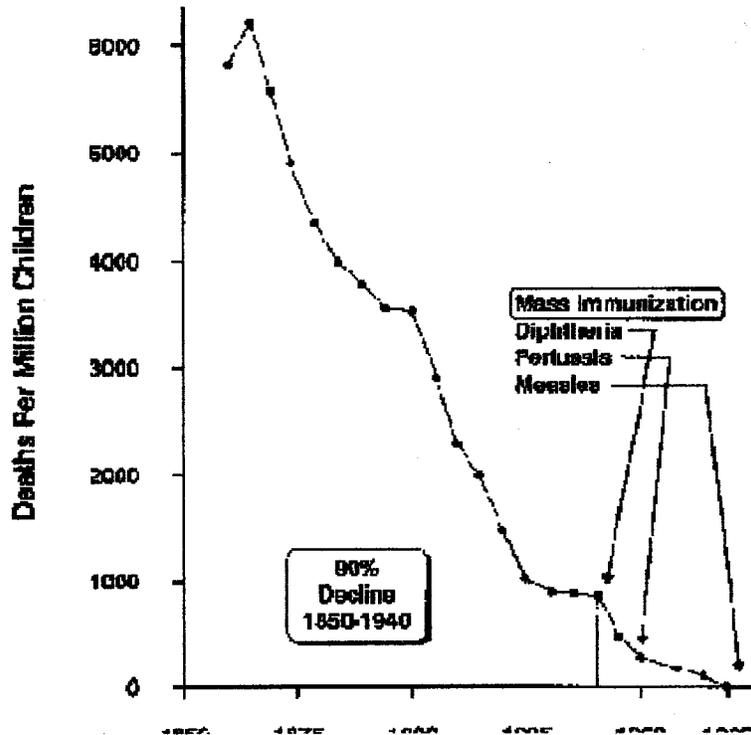
Table XI--[Diphtheria (Nigeria)] shows that following a significant increase in the diphtheria morbidity rate which peaked in 1977, the disease underwent two years of rapid natural decline--equivalent to 73.5 percent--in the number of cases, with such decline occurring prior to the implementation of EPI in 1979. This decline pattern continued during implementation of EPI to 1980, after which--by 1982--the incidence of diphtheria exhibited a major increase of nearly 30 fold. 65

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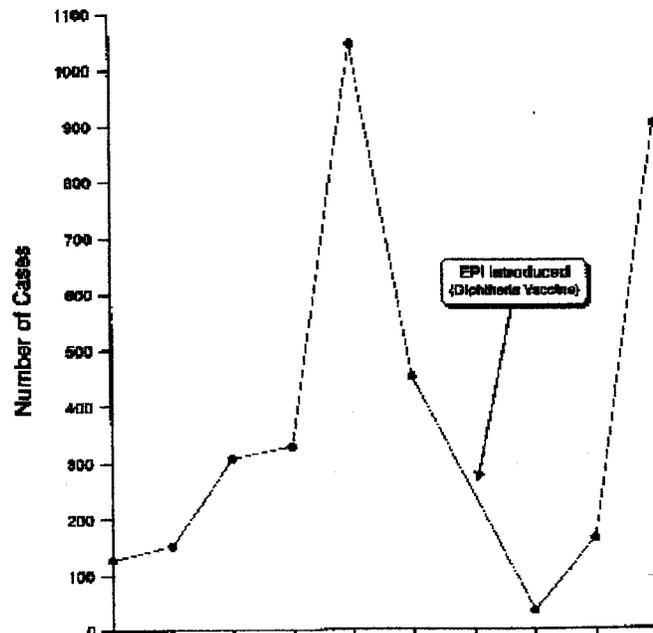
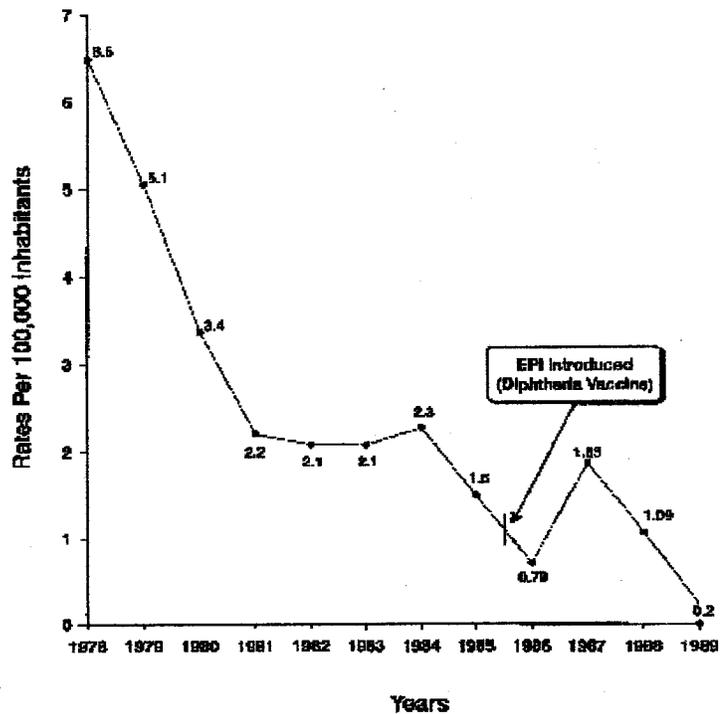


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Dominican Republic: Diphtheria 1978-1989

Table XV: Diphtheria (Dominican Republic)

Table XV--shows that in the period of 1978 to mid 1985--before implementation of EPI--the diphtheria morbidity rate underwent a natural decline equivalent to 81.5 percent. Upon introduction of EPI in mid 1985, the natural decline continued for a brief period, and then by 1987 the diphtheria case rate more than doubled from its 1986 level. The disease then returned to its natural rate of decline, proceeding to a very low level in 1989.⁶⁹



Data on Diphtheria

Ekanem's earlier noted research (Table XI), reveals an increase of 215 percent in the number of diphtheria cases by the end of the three year period following implementation of UNICEF's Expanded Program of Immunization. Robert Mendelsohn (Assoc. Prof. of Preventive Medicine and Community Health, University of Illinois) reports "that children who have been immunized [for diphtheria] fare no better than those who have not." He went on to describe an outbreak of diphtheria in which "fourteen of twenty-three carriers had been fully immunized." This means that just over 60 percent of the carriers who were presumed to be protected by the toxoid, contracted the disease. In his words "Episodes such as these shatter the argument that immunization can be credited with eliminating diphtheria or any of the other . . . childhood diseases."⁷³

The following conclusion is extracted from the *Minutes of the 15th Session* (November 20-21, 1975) of the *Panel of Review of Bacterial Vaccines and Toxoids with Standards and Potency* (data presented by the US Bureau of Biologics, and the Food and Drug Administration).

*For several reasons, diphtheria toxoid, fluid or absorbed, is not as effective an immunizing agent as might be anticipated. Clinical (symptomatic) diphtheria may occur . . . in immunized individuals--even those whose immunization is reported as complete by recommended regimes . . . the permanence of immunity induced by the toxoid . . . is open to question.*⁷⁴

Earlier historical data on protective toxoiding efforts in N. America clearly verify not only the FDA's conclusion, but the fact that the toxoid actually exacerbated the seriousness of the disease. North American data on various diphtheria outbreaks in the early 40's, reveal the following facts.

- In the Halifax Canada epidemic, of the cases admitted for hospital treatment, 66 had previously received one or more doses of diphtheria toxoid or antitoxin, or were found Shick negative. In fact, of this number five cases had been immunized within the preceding two

- month period.⁷⁵
- In the Ottawa Canada epidemic, of 99 cases (all under the age of 15), 36 were found to have previously received all three doses of the toxoid.⁷⁶
 - In the Baltimore USA epidemic, 63 percent of all cases had a record or history of prior immunization with toxoid. Among the fatal and more serious "Bull-neck" cases, 77.8 percent had previously been toxoided.⁷⁷
 - During roughly the same historic period, we find in various European countries a gripping picture suggesting that the use of Diphtheria toxoid in fact precipitated epidemics of the disease.⁷⁷
 - Throughout 1941 to 1944 "The Ministry and Dept. of Health, Scotland, admitted almost 23,000 cases of diphtheria in immunized children," with 180 fatalities.⁷⁸
 - By the year 1941, the majority of children in France had been inoculated for diphtheria, the case rate standing at 13,795 by the end of that year. Mass immunization efforts continued, and "by 1943, the diphtheria cases were more than tripled to 46,750."⁷⁹
 - Diphtheria increased by 55 percent in Hungary and tripled in Geneva, Switzerland after the introduction of compulsory immunization laws. In Germany, with compulsory mass immunization "introduced in 1940, the number of cases increased from 40,000 per year to 250,000 by 1945, virtually all among immunized children." Norway, during the same time frame--just noted--remained unvaccinated, and had only 50 recorded cases of diphtheria.⁸⁰
 - **"In Sweden, diphtheria virtually disappeared without any immunization."**⁸¹
 - According to Cournoyer's research, official US Military records show that enlisted men and women who are thoroughly vaccinated--manifest a morbidity and mortality rate from diphtheria four times higher, than that of unvaccinated civilians.⁸²

55 Table I--Data presented at the British Association for the Advancement of Sciences (Presidential Address), in *The Dangers of Immunization*, The Humanitarian Society, Quakertown Penn., USA, 1979; source cited: Porter 1971

65 Table XI--Based on Taylor, R., *Medicine Out of Control*, Figure 1.3, p. 12; sources cited: Glover, J., "Incidence of Rheumatic Diseases," *Lancet*, 1:499, 1930; and WHO, Geneva, "Annual Epidemiological and Vital Statistics 1950-196 I," *World Health Annual Statistical Reports* (causes of death) 1962-1975

67 Table XIII--Epidemiology data for years 1978-1987 taken from *UNICEF Evaluation Publication No. 6*, Santo Domingo, Dominican Republic, May 27, 1988; and data for years 1988 and 1989, obtained in personal communication from the Pan American Health Organization, EPI Unit, August 21, 1990

68 Table XIV--Ibid 69 Table XV--Ibid

75 Morton, A.R., "The Diphtheria Epidemic in Halifax," *Canadian Medical Association Journal*, Vol. 45, 1941, p. 171

76 McCormick, W.J., "The Changing Incidence and Mortality of Infectious Disease in Relation to Changed Trends in Nutrition," *The Medical Record*, Toronto, Canada, September, 1947, Reprint No. 5a, Lee Foundation for Nutritional Research, Milwaukee, Wisconsin, USA, p. 4

77 Eller, C.H., and Frobisher, M. Jr., "An Outbreak of Diphtheria in Baltimore in 1944," *American Journal of Hygiene*, Vol. 42, 1945, P. 179

78 Dettman, G., and Kalokerinos, A., "Second Thoughts About Disease," p. 16

79 Cournoyer, C., *What About Immunization? A Parent's Guide to Informed Decision Making*, Private Research Publication, Canby, Oregon, USA, 4th Edition, 1987, p. 5

80 Clymer, E.M., et al, *The Dangers of Immunization*, The Humanitarian Society, Quakertown, Penn., USA, 1983 Edition, p 47

See also:

- Neustaedter, R., *The Immunization Decision--A Guide for Parents*, The Family

Health Series, North Atlantic Books, Berkeley, California, 1990, pp. 50 and 51

81 James, W., *Immunization*, p. 31

82 Cournoyer, C., *What About Immunizations?*, p. 5

Then there was the study in JAMA Nov 19, 1982, Volume 248, No 19, in which a large number of the unvaccinated Amish showed serological evidence of immunity to both diphtheria and tetanus.

DISPELLING VACCINATION MYTHS: by Alan Phillips

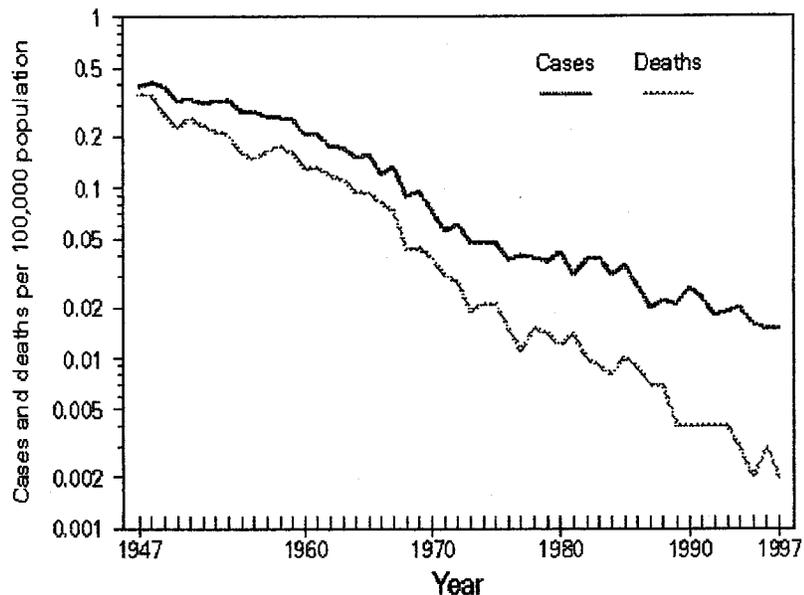
The clinical evidence for vaccines is their ability to stimulate antibody production in the recipient. What is not clear, however, is whether or not antibody production constitutes immunity. For example, agamma globulin-anemic children are incapable of producing antibodies, yet they recover from infectious diseases almost as quickly as other children.⁴¹ [And further demonstrated immunity thereafter.] Furthermore, a study published by the British Medical Council in 1950 during a diphtheria epidemic concluded that there was no relationship between antibody count and disease incidence; researchers found resistant people with extremely low antibody counts and sick people with high counts.⁴² Natural immunization is a complex interactive process involving many bodily organs and systems; it cannot be replicated merely by the artificial stimulation of antibodies.

⁴¹ *Id.* at 21.

⁴² *Id.* at 21 (British Medical Council Publication 272, May 1950).

Tetanus: Is not a contagious disease

FIGURE 1. Tetanus morbidity and mortality rates, by year — United States, 1947–1997



<http://www.cdc.gov/nip/publications/fs/gen/WhatIfStop.htm>

From 1922-1926, there were an estimated 1,314 cases of tetanus per year in the U.S. **In the late 1940's**, the tetanus vaccine was introduced, **and tetanus became a disease that was officially counted and tracked by public health officials.** In 2000, only 41 cases of tetanus were reported in the U.S.

Source: <http://www.vaccinetruth.org/tetanus.htm>

Hillary Butler on Tetanus:

Lets look at a bit more history from the medical literature. It has always been known that war-time historically showed up the highest rate of tetanus. Far higher than in civilians. Bullet/schrapnel wounds and all, and the stress of fighting.

Boer war .28 of every thousand wounded got tetanus.

Crimean war 2.0 per 1,000

Am. Civil war 2.0 per thousand

Western front (Flanders horse country WWI average 1.47/thousand wounded. 2nd world war varied from .06 - .43 per thousand. (and not everyone there was vaccinated either. In the paper on the American Tetanus cases, most who got tetanus had been vaccinated....)

Rusty nails account for less that 40% of tetanus. Most tetanus comes where there is no discernable "portal of entry".

[Birth]

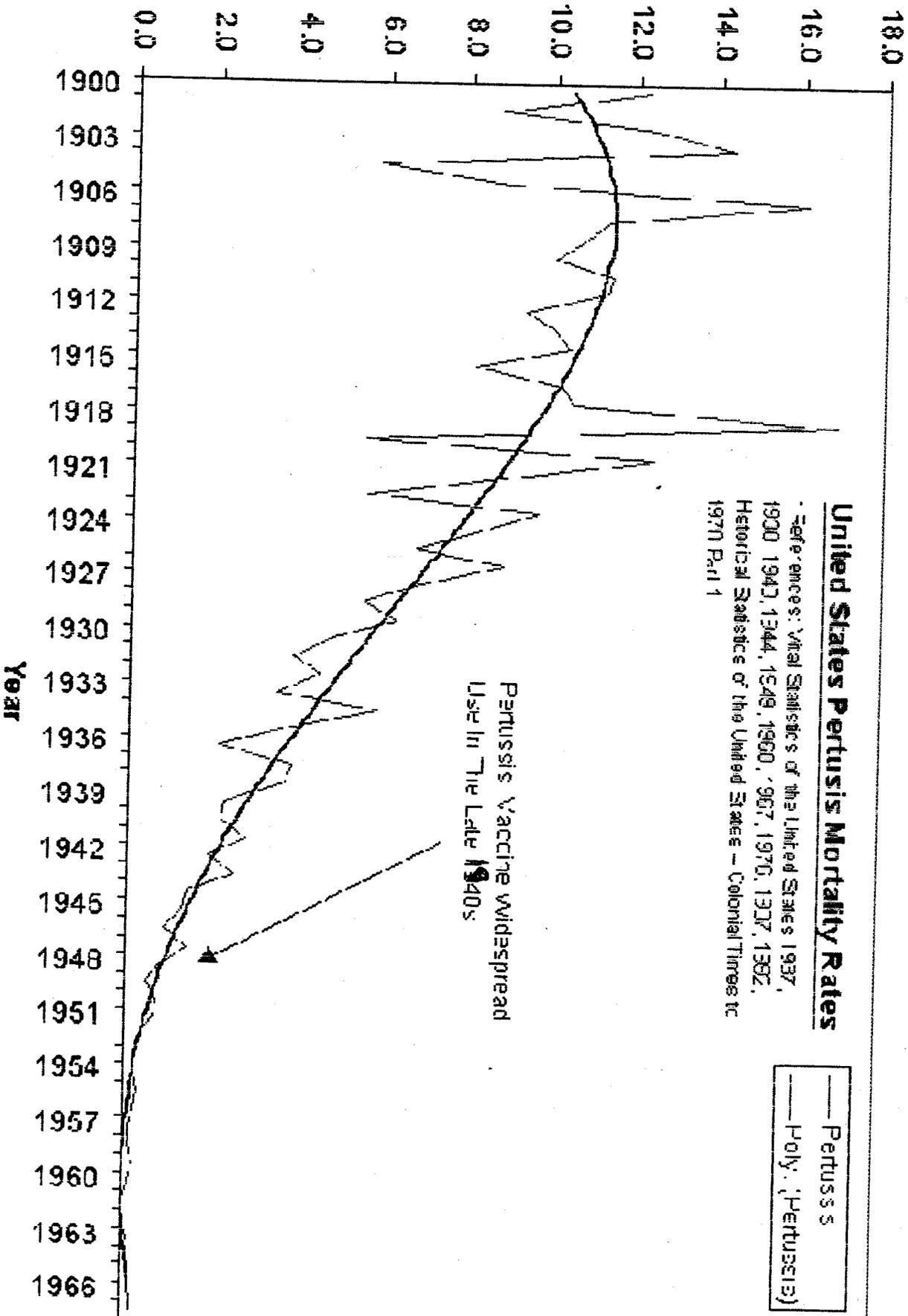
Now, if you have a look at Tetanus in America, one of the most interesting articles is a 1969 one from the New England Medical Journal, Volume 280, Number 11, March 13. And on pages 570 there is a really interesting decline graph for mortality rates, which shows that the mortality rate plummeted dramatically from 64/100,000 in 1900 to 8/100,000 in 1940. By 1950, with most mothers still unvaccinated, it was 4.5/100,000.

Then there was the study in JAMA Nov 19, 1982, Volume 248, No 19, in which a large number of the unvacciated Amish showed serological evidence of immunity to both diphtheria and tetanus.

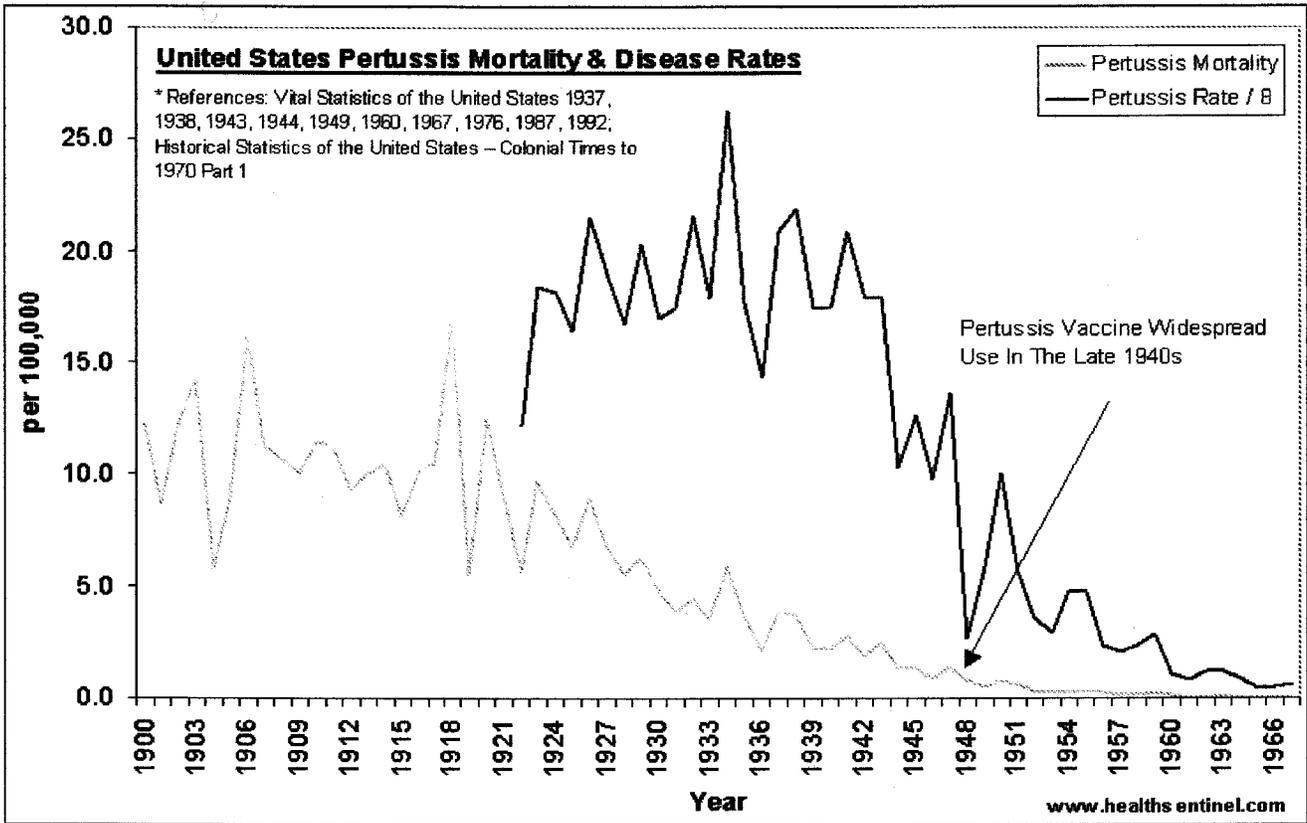
SUMMARY

- Tetanus incidence and mortality declined greatly before the widespread use of tetanus vaccine. (In excess of 99%)
- The bacteria associated with tetanus is present virtually everywhere. However, when the human body does not present the bacteria a proper environment for growth, this constitutes a **natural immunity to the tetanus bacteria.**
- The only preventives for tetanus are general good health and wound hygiene.
- There is **NO immunity to dirty wounds.** Wound hygiene is essential.
- Tetanus incidence in the vaccinated is about the same or higher than incidence in the unvaccinated.
- Tetanus vaccine is not only ineffective but also toxic. It's use causes numerous adverse side effects.

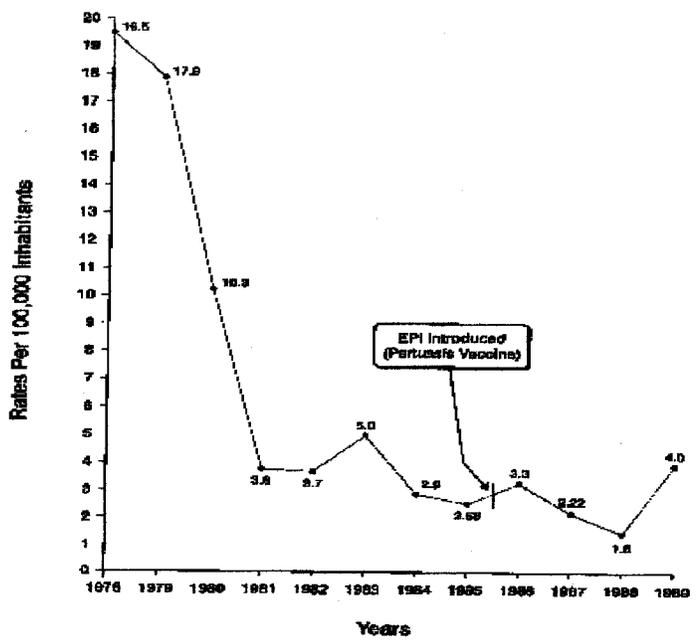
Deaths per 100,000



Pertussis



Dominican Republic: Pertussis 1978-1989



In the nineteenth century whooping cough was most definitely a killer disease. "Deaths from whooping cough remained at around 10 000 a year from 1847 until the 1900s and then declined steeply as the health and care of children improved and had reached less than 400 a year by 1950. Immunisation started in the 1950s, deaths continued to fall and notifications fell sharply." (1)

It is undoubtedly the case that whooping cough became a milder disease in this country over the course of the first half of the twentieth century. The death rate had fallen by over 99% before vaccination against pertussis was introduced in the 1950s (Fig 1). The introduction of the vaccine reduced the number of notified cases of whooping cough but peaks continued to occur every three to four years as they always had. Deaths continued their steady decline. This was most clearly seen in the 1970s and 80s when the vaccine coverage fell to less than 40% in 1976 because of health scares. In 1978 and 1982 there were over 65,000 notified cases of whooping cough but no concomitant rise in the number of deaths (Fig 2). Between 30% and 70% of children in outbreaks are vaccinated (2,3,4).

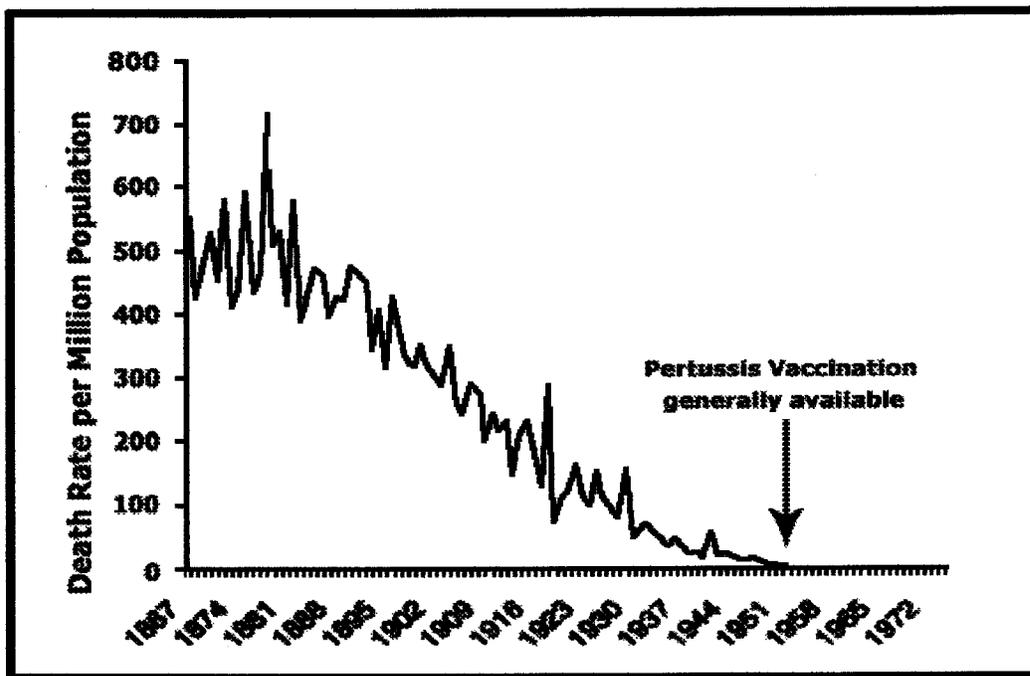


Fig. 1 Pertussis death rates (England & Wales) (22)

1. The Health of Adult Britain: 1841-1994 Vols 1,11 Ed Charlron J, Murphy M. London. The Stationary Office, ONS 1997: 15.3.5.

2. Stewart GT. Re: 'whooping cough and whooping cough vaccine: the risks and benefits debate.' Amj Epid 1984;119(1):135-9

3. Dirchburn RK. Whooping cough after stopping immunization, BMJ 1979;1:1601-1603

4. Stewart GT. Vaccination against whooping cough. Efficacy versus risks. Lancet 1977; Jan 29 :234-7

Excerpt

During the last half of the twentieth century, pertussis vaccine has been at the center of controversies over the evaluation and marketing of vaccines for children. This controversy has transcended the simple confines of scientific research to redefine relationships among industry, government, law, and consumer advocacy. The dangerous side effects of whole-cell pertussis vaccine have been known for at least the last five decades, and for the last four a safer alternative has been available. But not until the late 1990s has that safer alternative become routine for American children. This paper explains why and how this transformation in care took place. We were part of the transformation, supporting the advocates for the new, acellular vaccine with scientific testimony. Although our appearance in this story takes place in the 1980s, the history of the vaccine began much earlier in the twentieth century.

Even though there was incidental medical evidence as early as the 1930s and clear-cut evidence by the 1950s that whole-cell pertussis vaccine caused neurological sequelae, American pharmaceutical companies by and large persisted in marketing whole-cell vaccines until the end of 2000 because the acellular versions, in their opinion, were too costly to produce, test, and sell. Nevertheless, U.S. manufacturers were granted at least one patent in every decade since the 1920s to produce acellular pertussis vaccines, and several countries either legislated the use of the acellular form only or stopped using pertussis vaccination altogether. Change finally began in the United States in the 1990s and was completed by 2000, largely because of the combined pressures of litigation and political action on the part of groups of parents whose children were damaged by the whole-cell vaccines. These groups pressured the federal government to study and ameliorate the adverse effects of the vaccine, but the federal government was also pressured by...

<http://www.wellbeingjournal.com/vaccine-notes.htm>

PHYSICIANS CONCERN about vaccinations. **In a recent study almost one-third of physicians fear there is a risk of serious adverse reaction to the pertussis (whooping cough) vaccine**, and 13 percent thought the same about the measles vaccine. Many are concerned about litigation from parents. Many said they were unlikely to recommend a third dose of the DTP (diphtheria-tetanus-pertussis) vaccine. Findings were based on a survey of 1,236 doctors in the U.S." (*Arch Ped & Adolesc Med*, 1998; 152: 12-19.) For up-to-date information subscribe to the *Vaccine News*, 251 W Ridgeway Dr., Dayton, OH 45459, 937-435-4750.

"According to the records of the Metropolitan Life Insurance Co., from 1911 to 1935 the four leading causes of childhood deaths from infectious diseases in the U.S. were diphtheria, pertussis (whooping cough), scarlet fever, and measles. However, by 1945 the combined death rates from these causes had declined by 95 percent. This [decline happened] before the implementation of mass immunization programs. The greatest factors in this decline were not vaccines but better sanitation, improved nutrition, better housing with less crowded conditions, antibiotics, ...

DISPELLING VACCINATION MYTHS: by Alan Phillips

[Excerpt]

England actually saw a drop in pertussis deaths when vaccination rates dropped to 30% in the mid 70's. Swedish epidemiologist B. Trollfors' study of pertussis vaccine efficacy and toxicity around the world found that "pertussis-associated mortality is currently very low in industrialised countries and no difference can be discerned when countries with high, low, and zero immunisation rates were compared." He also found that England, Wales, and West Germany had more pertussis fatalities in 1970 when the immunization rate was high than during the last half of 1980, when rates had fallen.(17)

In the U.S. in 1986, 90% of 1300 pertussis cases in Kansas were "adequately vaccinated."³³
72% of pertussis cases in the 1993 Chicago outbreak were fully up to date with their vaccinations.³⁴

Vaccine advocates point to incidence rather than mortality statistics as evidence of vaccine effectiveness. However, statisticians tell us that mortality statistics are a better measure of disease than incidence figures, for the simple reason that the quality of reporting and record keeping is much higher on fatalities. For instance, a survey in New York City revealed that only 3.2% of pediatricians were actually reporting measles cases to the health department. In 1974, the CDC determined that there were 36 cases of measles in Georgia, while the Georgia State Surveillance System reported 660 cases.³⁹ In 1982, Maryland state health officials blamed a pertussis epidemic on a television program, "D.P.T. —Vaccine Roulette," which warned of the dangers of DPT, but when former top virologist for the U.S. Division of Biological Standards, Dr. J. Anthony Morris, analyzed the 41 cases, he confirmed only 5, and all had been vaccinated.⁴⁰ Such instances as these demonstrate the fallacy of incidence figures, yet vaccine advocates tend to rely on them indiscriminately.

Most childhood infectious diseases have few serious consequences in today's modern world. Even conservative CDC statistics for pertussis during 1992-94 indicate a 99.8% recovery rate. In fact, when hundreds of pertussis cases occurred in Ohio and Chicago in the fall 1993 outbreak, an infectious disease expert from Cincinnati Children's Hospital said, "The disease was very mild, no one died, and no one went to the intensive care unit."

But the clinic's flyer contained a contradiction: my child's chances of a serious adverse reaction to the DPT vaccine were one in 1750, while his chances of dying from pertussis were one in several million.

17 Trollfors B, Rabo, E. 1981. Whooping cough in adults. *British Medical Journal* (September 12), 696-97.

33 Neil Miller, *Vaccines: Are They Really Safe and Effective?* Fifth Printing, 1994, at 33.

34 Chicago Dept. of Health.

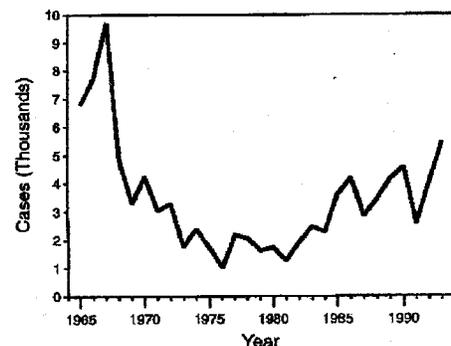
39 Quoted from the internet, credited to Keith Block, M.D., a family physician from Evanston, Illinois, who has spent years collecting data in the medical literature on immunizations.

40 See Trevor Gunn, *supra*, note 29, at 15

Pertussis incidence is usually characterized by a cyclical pattern, with peaks occurring at 3- to 4-year intervals; the increase in reported cases in 1993 coincides with the expected cyclical peak. However, the total number of reported cases has increased in each successive peak year since 1977 (Figure 1); reasons for this resurgence of pertussis are unclear. Vaccination coverage with three or more doses of DTP among children aged 2 years has remained relatively stable but low (approximately 70%) since 1962 (CDC, unpublished data). Furthermore, the proportion of reported pertussis cases among children aged 1-4 years has not increased during 1980-1993. These observations suggest that the recent

increase in pertussis incidence is related neither to a decrease in vaccination coverage nor to a substantive reduction in DTP vaccine efficacy. <http://www.cdc.gov/mmwr/preview/mmwrhtml/00023030.htm>

FIGURE 1. Reported cases of pertussis — United States, 1965-1993*



*Data for 1993 are provisional through December 4.

TABLE 1. Number of pertussis-related hospitalizations, complications, and deaths, by age group -- United States, 1992-1995

Age group	No. persons with pertussis	Complications					
		Hospitalized		Pneumonia *	Seizures	Encephalopathy	Deaths
		No.	(%)	No.	(%)	No.	(%)
<6 mos	4,524	3,217 (71.1)	671 (14.8)	87 (1.9)	11 (0.2)	25 (0.5)	
6-11 mos	1,894	512 (46.8)	153 (14.9)	27 (2.5)	2 (0.2)	3 (0.3)	
1-4 yrs	2,582	580 (21.6)	248 (9.2)	45 (1.7)	3 (0.1)	1 (<0.1)	
5-9 yrs	1,551	124 (8.0)	66 (4.3)	8 (0.5)	0	3 (0.2)	
10-19 yrs	2,223	78 (3.5)	45 (2.0)	10 (0.4)	1 (<0.1)	0	
>=20 yrs	1,541	57 (3.7)	41 (2.7)	7 (0.5)	0	0	
Total	13,615 +	4,568 & (33.6)	1,224 @ (9.0)	184 (1.4)	17 (0.1)	32 (0.2)	

* Radiographically confirmed
+ Excludes 19 (0.1%) patients of unknown age with pertussis.
& Excludes six hospitalized patients of unknown age.
@ Excludes one hospitalized patient of unknown age.

Pertussis -- United States
January 1992-June 1995
July 21, 1995/44(28):525-529
Weekly MMWR/CDC

[Note: because there is an admitted little immunization due to vaccination before 6 months of age, the above figure of 4524 cases in the under 6 month age infants is a reflection of an un-immunized population. Vaccine effectiveness is believed to become greater at the 3rd vaccination at 6 months of age. There are about 2 million under age 6 month infants in the USA at any one time. Incidence rate is about 2.3 % or 97.7 percent immunity.]

Hib *Haemophilus Influenza Type b*

"... among children younger than 5 years of age; approximately one in 200 children in this age group developed invasive Hib disease." [Referring to prevaccine era.]

Source: www.cdc.gov/nip/publications/pink/hib.pdf

http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/97vol23/23s4/23s4g_e.html [Health Canada]
[Excerpts]

Mortality associated with Hib disease is between 1% and 5%, and permanent neurologic sequelae occur in 20% to 30% of children who survive meningitis.

Very little was known about the frequency of Hib infections in Canada prior to 1979 when Hib meningitis became reportable nationally. Reporting improved gradually until 1988, which accounts for the change observed in Figure 5. Before the introduction of the first line of Hib vaccines in 1987, it was estimated that one in every 200 children developed invasive Hib disease by the age of 5 years⁽¹⁰⁾. This represented about an estimated 2,000 cases in Canada annually; a little more than one-half were meningitis. After the introduction of the vaccine, the incidence fell rapidly by more than 50% in Canada; similar reductions were reported in the United States. Although vaccination was limited initially to children aged 15 to 18 months or older, a decline in incidence was also reported in children < 18 months of age, suggesting either a herd-immunity effect of vaccination or a reduced transmission of the bacteria.

In 1994 and 1995, the percentage of reported cases < 5 years of age was approximately 41%, which is about one-half that estimated prior to infant vaccination.

DISPELLING VACCINATION MYTHS: by Alan Phillips

In Minnesota, a state epidemiologist concluded that the Hib vaccine increases the risk of illness when a study revealed that vaccinated children were five times more likely to contract meningitis than unvaccinated children.⁴⁵

⁴⁵ See Neil Miller, *supra* note 33 at 34.

<http://0-www.cdc.gov.mill1.sjlibrary.org/mmwr/preview/mmwrhtml/00041736.htm>

MMWR January 11, 1991

Haemophilus b Conjugate Vaccines for Prevention of *Haemophilus influenzae* Type b Disease Among Infants and Children Two Months of Age and Older Recommendations of the ACIP

Efficacy

Results of efficacy trials among infants are available for the three conjugate vaccines. The first efficacy trial of an Hib conjugate vaccine among infants was completed in Finland using the PRP-D vaccine. In a systematic, unblinded trial involving 60,000 infants (30,000 of whom received the vaccine at 3, 4, and 6 months of age), the point estimate of efficacy was 87% (95% CI = 50%-96%) (10). In a randomized, double-blind, placebo-controlled study of 2,102 Alaskan Natives, however, the point estimate of efficacy was 35% (95% CI = (-57%)-73%) (11). Immunogenicity of the vaccine was limited in both trials. In the Finnish trial, less than 40% of infants had attained an antibody level of greater than 1 ug/mL 1 month after receiving the third of three doses (geometric mean titer (GMT) = 0.42 ug/mL). In Alaska, infants with a similar vaccination schedule had lower mean titers (GMT = 0.2 ug/mL) 3 months after receiving the third dose. A subsequent immunogenicity study documented antibody responses that were similar to those in the Alaskan and Finnish efficacy trials (Table 2).

The reason for the observed differences in efficacy estimates between Alaskan Native and Finnish infants is unclear. These populations have been observed to have differences in age distribution of Hib disease as well as differences in other risk factors. For example, in Finland 28% of the reported cases of Hib disease among less than 5-year-old children occur before the children are 1 year of age; this percentage is 64% for Alaskan Natives (12) and 54% for the United States population.

A recent study of HbOC vaccine was conducted among 60,000 infants who were enrolled in the Northern California Kaiser Permanente Health Plan and who were vaccinated at 2, 4, and 6 months of age. Approximately one-half of these infants received HbOC vaccine. Twelve of the unvaccinated

children and none of the children who had received a full series of vaccine (i.e., three doses) subsequently had Hib disease, an efficacy of 100% (lower 95% CI = 68%). Three children who had received one dose of the vaccine and none of the children who had received two doses had Hib disease (13). Although children were not randomly assigned to vaccine and comparison groups, analysis of the results suggests that the observed efficacy was not due to lack of comparability between the two groups.

A randomized, placebo-controlled, double-blind trial of PRP-OMP vaccine was performed among Navajo infants vaccinated at 2 and 4 months of age. Vaccine efficacy was evaluated for 3,486 infants who completed the primary two-dose regimen. Fourteen cases of invasive Hib disease occurred in the placebo group compared with one case in the vaccine group, an efficacy of 93% (95% CI = 45%-99%) (M. Santosham, personal communication). Among infants who received only one dose of vaccine or placebo, eight cases of Hib disease occurred in the placebo group, compared with none in the vaccine group ($p=0.008$).

PCV (Pneumococcal disease)

Surprising discovery about natural immunity to pneumococcus

<http://www.news-medical.net/?id=8763>

Lipsitch and Malley first conducted epidemiologic studies in unvaccinated toddlers in the U.S., Israel, and Finland. As they reported in January in the online journal PLoS Medicine, the incidence of invasive disease from almost all pneumococcal strains fell by nearly half between 1 and 2 years of age. Yet, anti-capsular antibody concentrations increased only slightly, suggesting that a mechanism other than antibody to the pathogen's outer capsule may be conferring natural protection against pneumococcal disease.

<http://jama.ama-assn.org/cgi/content/abstract/291/18/2197>

Impact of Childhood Vaccination on Racial Disparities in Invasive *Streptococcus pneumoniae* Infections

Context Historically, incidence of pneumococcal disease in the United States has been higher among blacks than among whites. Following recommendation of a new 7-valent pneumococcal conjugate vaccine for children in October 2000, the incidence of invasive pneumococcal disease has declined dramatically, but the impact of vaccination on racial disparities in incidence of pneumococcal disease is unknown.

Objective To assess the effect of conjugate vaccine introduction on rates of pneumococcal disease among whites and blacks in the United States.

Design, Setting, and Patients Analysis of data from the Active Bacterial Core Surveillance (ABCs)/Emerging Infections Program Network, an active, population-based surveillance system in 7 states. Patients were 15 923 persons with invasive pneumococcal disease occurring between January 1, 1998, and December 31, 2002.

Main Outcome Measures Age- and race-specific pneumococcal disease incidence rates (cases per 100 000 persons), rate ratios, and rate differences.

Results **Between 1998 and 2002, annual incidence rates for invasive pneumococcal disease decreased from 19.0 to 12.1 cases per 100 000 among whites and from 54.9 to 26.5 among blacks.** Due to these declines, 14 730 fewer cases occurred among whites and 8780 fewer cases occurred among blacks in the United States in 2002, compared with 2 prevaccine years, 1998 and 1999. Before vaccine introduction, incidence among blacks was 2.9 times higher than among whites (95% confidence interval [CI], 2.7-3.0); in 2002, the black-white rate ratio had been reduced to 2.2 (95% CI, 2.0-2.4). Incidence among black children younger than 2 years went from being 3.3 times higher (95% CI, 3.0-3.7) than among white children in the prevaccine period to 1.6 times higher (95% CI, 1.1-2.2) in 2002. By 2002, 74% of white children and 68% of black children aged 19 to 35 months in the 7 states had received at least 1 dose of pneumococcal conjugate vaccine; 43% of white and 39% of black children received 3 or more doses.

POLIO

1. Before the modern era, polio was a mild disease seldom resulting in paralysis.
2. The largest epidemic occurred about 1950 and had significantly declined by 1955 when vaccine was first introduced.
3. Disease can not be 'conquered' without addressing the disease cause.
4. Disease is **not** caused by a lack of "cow-pus", rotting material or carcinogenic poisons in the bloodstream.
5. Polio causes included:

- pre-polio vaccines
- nutritional imbalances
- environmental poisons most notably pesticides

6. Creation of and introduction of the Salk vaccine was motivated by fear that, without the vaccine, contributions to 'polio research' charities would drop.

Test results on the Salk vaccine were biased by throwing out polio cases 'after the first vaccination'. Test results were also biased by including only data from the '11 most accurate states' while ignoring the data from the other 33 states included in the test. I wonder what the '33 least accurate states' data would have shown?

7. Introduction of the Salk vaccine was beset first with known deaths related to the vaccine and then by a rise in polio cases.

8. Truth of the vaccine's true detriment was withheld from the public. Several states had rises in polio rate following vaccine introduction.

9. In the 3 years following the introduction of the vaccine:

- The definition of epidemic was changed from 20 cases to 35 cases [per 100,000]!
- The definition of polio was changed from paralysis occurring for 24 hours or more to paralysis occurring for 2 months!
- The remaining polio cases were then diagnosed as meningitis!

Thus the factor(s) which caused the 1950 and onward decline was **in no way contributed to by vaccine**. The vaccine was a cause of disease, not a preventive of disease!

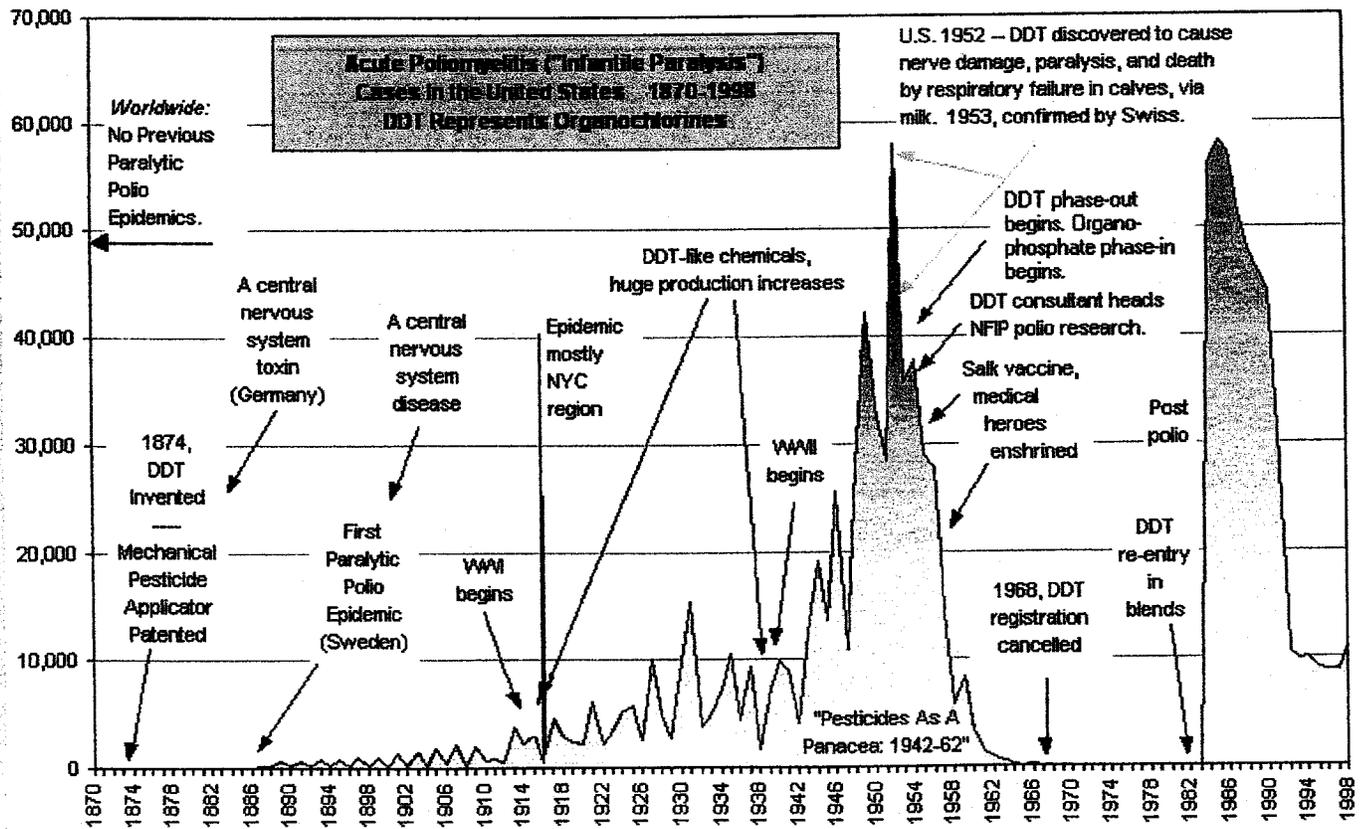
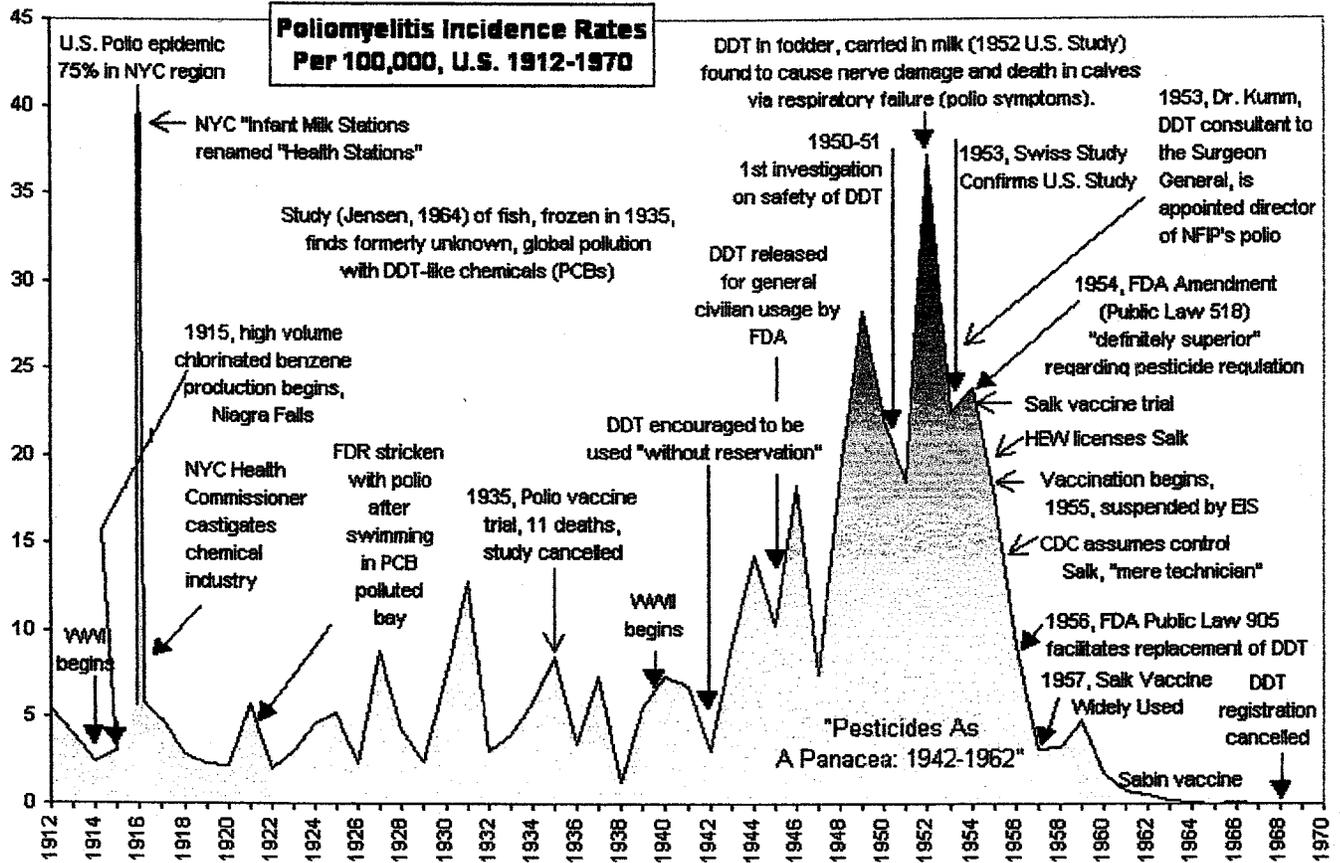
"Jonas Salk, inventor of the IPV, testified before a Senate subcommittee that nearly all polio outbreaks since 1961 were caused by the oral polio vaccine."

"Official data shows that large scale vaccination has failed to obtain any significant improvement of the diseases against which they were supposed to provide protection" - Dr. Sabin, developer of Polio vaccine.

"Many here voice a silent view that the Salk and Sabin Polio Vaccines, being made from monkey kidney tissue, has been directly responsible for the major increase in leukaemia in this country." - Dr F. Klenner, M.D.

"Provocation polio. That is the truth about those outbreaks of polio. And I offer a well considered personal opinion that polio is a man made disease." -Viera Scheibner, Ph.D.

"Poliomyelitis trends in Pondicherry, south India, 1989-91" (Journal of Epidemiology and Community Health [London], vol. 51, no. 4, August 1997, pages 443-48): About 54 percent of children lamed as a result of poliomyelitis had received three doses of oral polio vaccine before the onset of paralysis.



**Polio Incidence
And
Pesticide Production
In U.S. 1940-1970
(millions of pounds)**

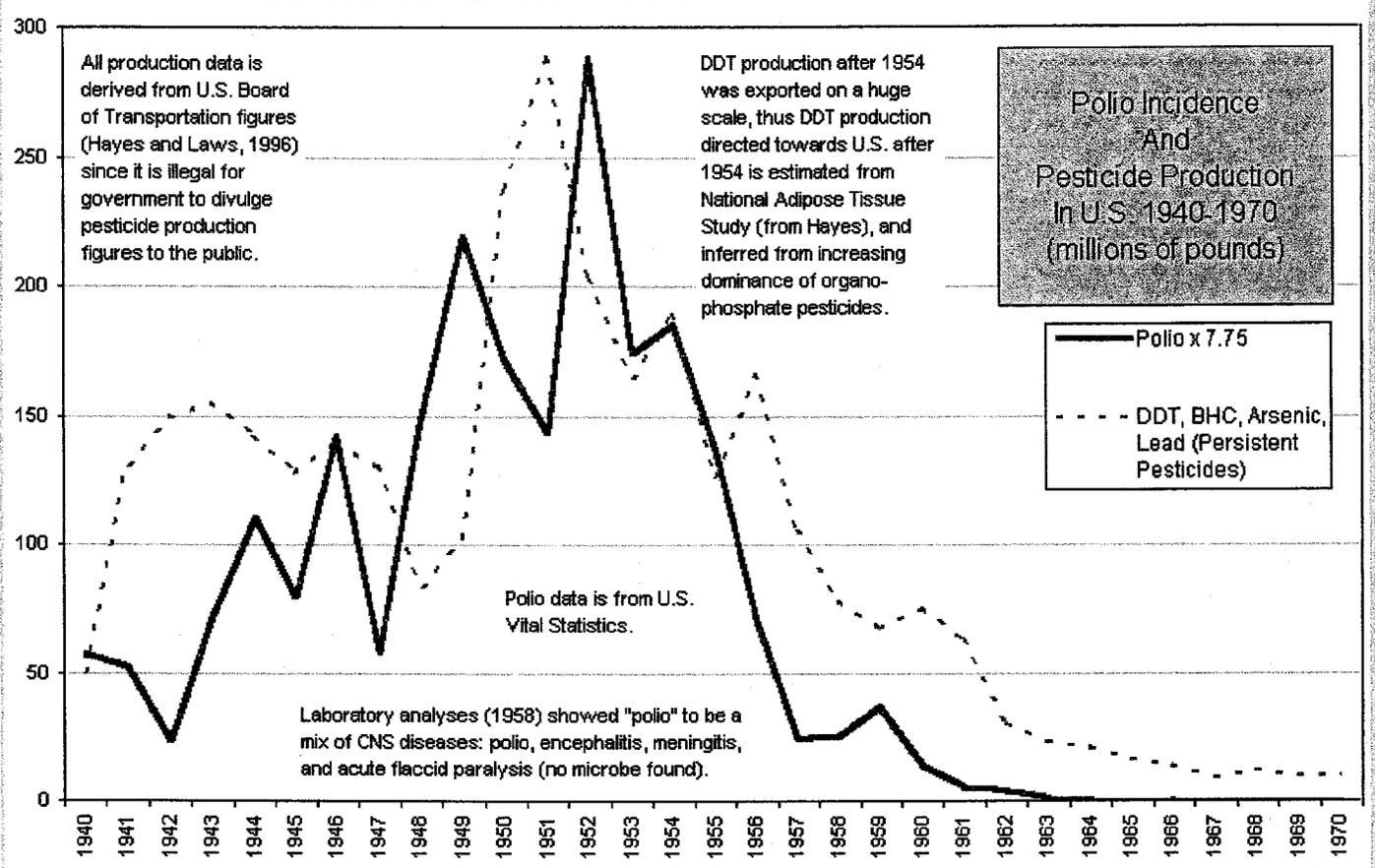
— Polio x 7.75
 - - - DDT, BHC, Arsenic,
 Lead (Persistent
 Pesticides)

All production data is derived from U.S. Board of Transportation figures (Hayes and Laws, 1996) since it is illegal for government to divulge pesticide production figures to the public.

DDT production after 1954 was exported on a huge scale, thus DDT production directed towards U.S. after 1954 is estimated from National Adipose Tissue Study (from Hayes), and inferred from increasing dominance of organo-phosphate pesticides.

Polio data is from U.S. Vital Statistics.

Laboratory analyses (1958) showed "polio" to be a mix of CNS diseases: polio, encephalitis, meningitis, and acute flaccid paralysis (no microbe found).



IPV (Polio)

<http://aje.oxfordjournals.org/cgi/content/full/153/3/207>

Abstract (American Journal of Epidemiology)

Antibody prevalence Netherlands: Polio types 1,2, and 3

in 97% vaccinated population: 96.6% 93.4% and 89.7%

in unvaccinated Religious group: 65% 59% 68.7%.

(Polio outbreaks with 110 cases type 1 in 1978 and 71 cases type 3 in 1992-93 in an unvaccinated population of about 2/3 of 275,000. [183,400 approximately])

Poliomyelitis

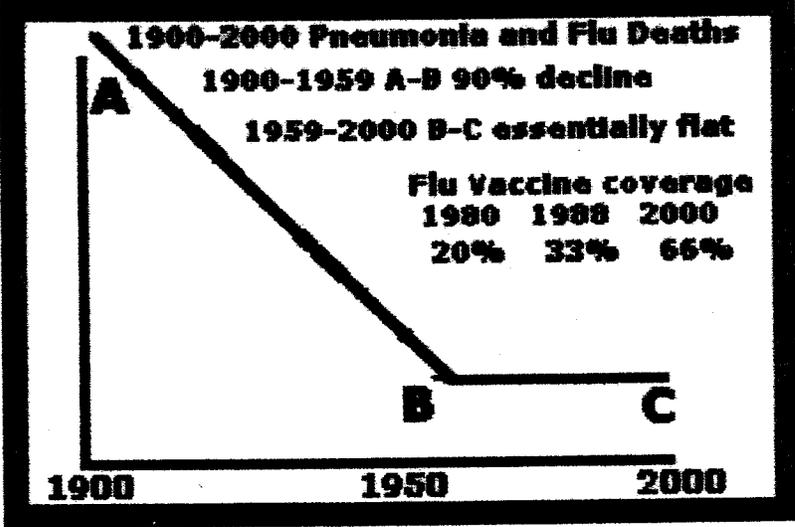
The poliovirus produces no illness at all in over 90 percent of those exposed to it; among others, it causes, at most, an ordinary flu syndrome with fever, weakness, gastrointestinal symptoms, aches, and pains. Even in epidemic conditions, poliomyelitis (the severe central nervous system complication) develops only in relatively few anatomically susceptible persons, most of whom eventually recover.

<http://whale.to/a/scheibner34.html>

Viera Scheibner, Principle Research Scientist (Retired)

History repeats itself because people forget history

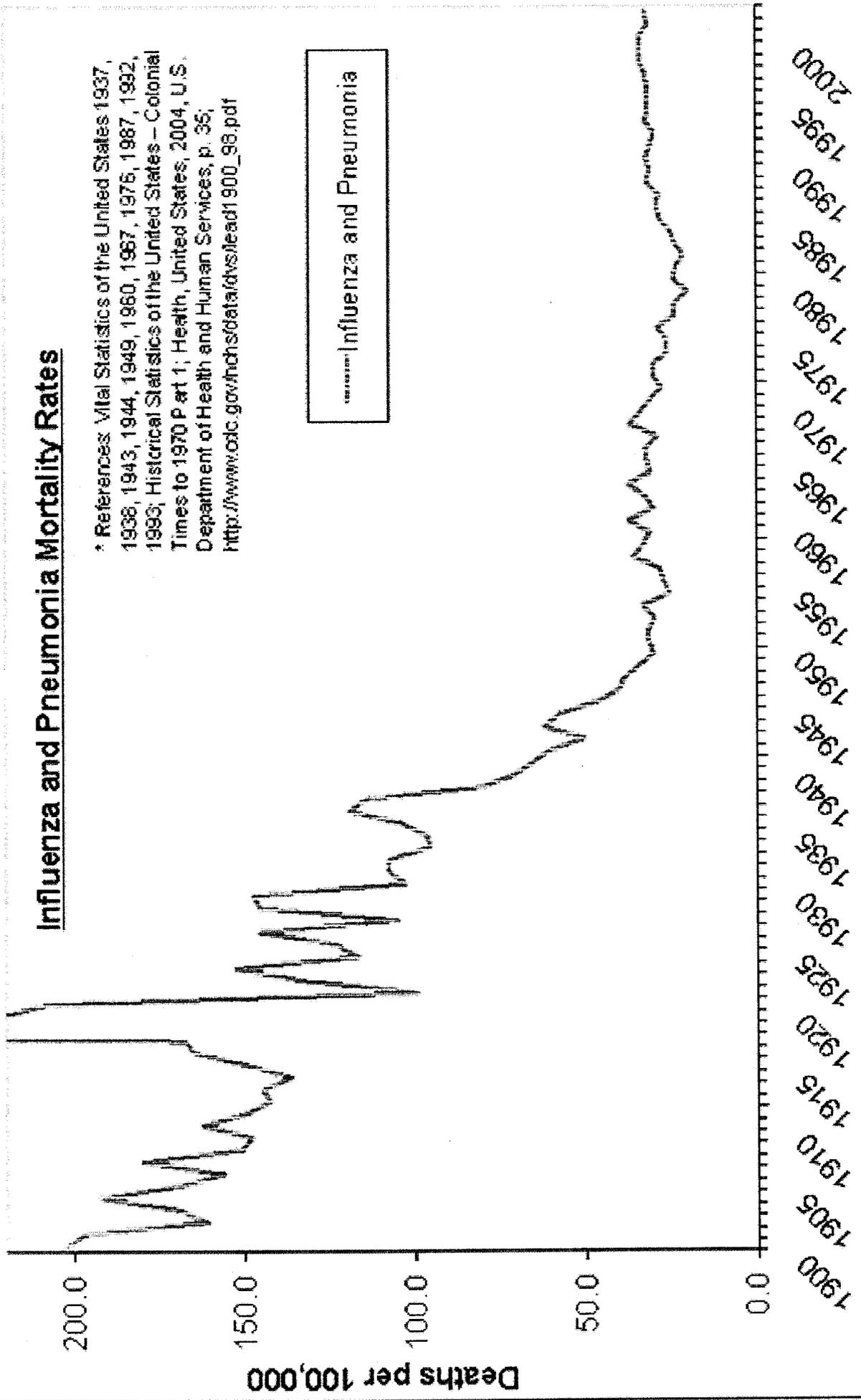
"The logistics behind the switch to the injectable polio vaccine has been quoted as its inability to cause paralysis. Wrong again! Provaccinators forgot (or probably have never heard of) the Cutter incident. Within days of the first mass trial of the Salk injectable polio vaccine in 1.8 million children the United States in 1955, hundreds of its recipients and their contacts developed paralysis. The US Surgeon General stopped the trial and instead of proclaiming the vaccine not only useless but also causing polio, the provaccinators redefined the polio disease: the classical definition of polio as a disease with residual paralysis which resolves within 60 days changed into a new definition of polio as a disease with residual paralysis persisting for more than 60 days. The cases of paralysis which resolve within 60 days are then classified as viral or aseptic meningitis, Guillain-Barre Syndrome, lower motor neuron disease, infective polyneuritis, symmetrical paralysis and other names. According to MMWR 1997 (Vol. 46, No. 10:221-222), the incidence of aseptic meningitis in the United States amounts to 30,000 to 50,000 cases per year. When one considers that that many cases had occurred only occasionally in the pre-vaccine era, vaccination actually increased the incidence of polio; these days it is 30,000 to 50,000 cases every year, year by year and not just twenty years apart. This explanation is feasible also because 99% of polio cases were not paralytic and even the paralytic cases mostly resolved within days and certainly within 60 days."



Influenza and Pneumonia Mortality Rates

* References: Vital Statistics of the United States 1937, 1938, 1943, 1944, 1949, 1960, 1967, 1976, 1987, 1992, 1993; Historical Statistics of the United States – Colonial Times to 1970 Part 1; Health, United States, 2004, U.S. Department of Health and Human Services, p. 35; http://www.cdc.gov/hchs/data/ids/lead1900_98.pdf

Influenza and Pneumonia



Trends in Acute Pneumonia and Influenza Death Rates for Selected Age Groups: US and Maine, 1979-1998

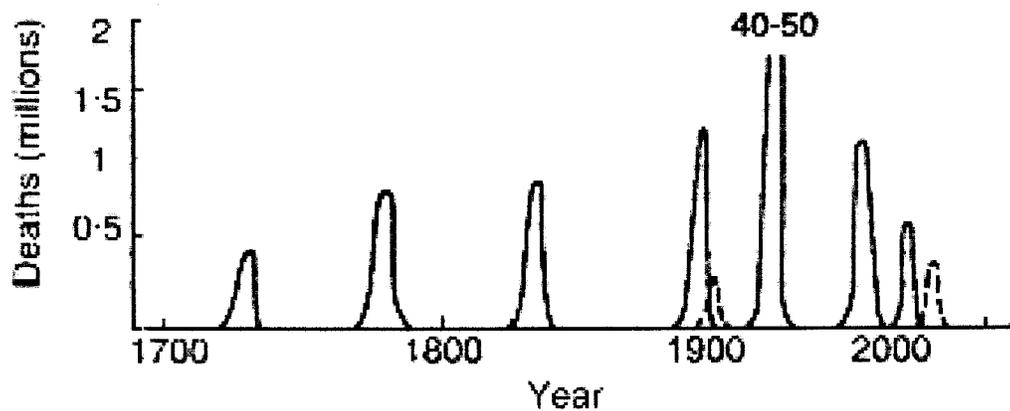
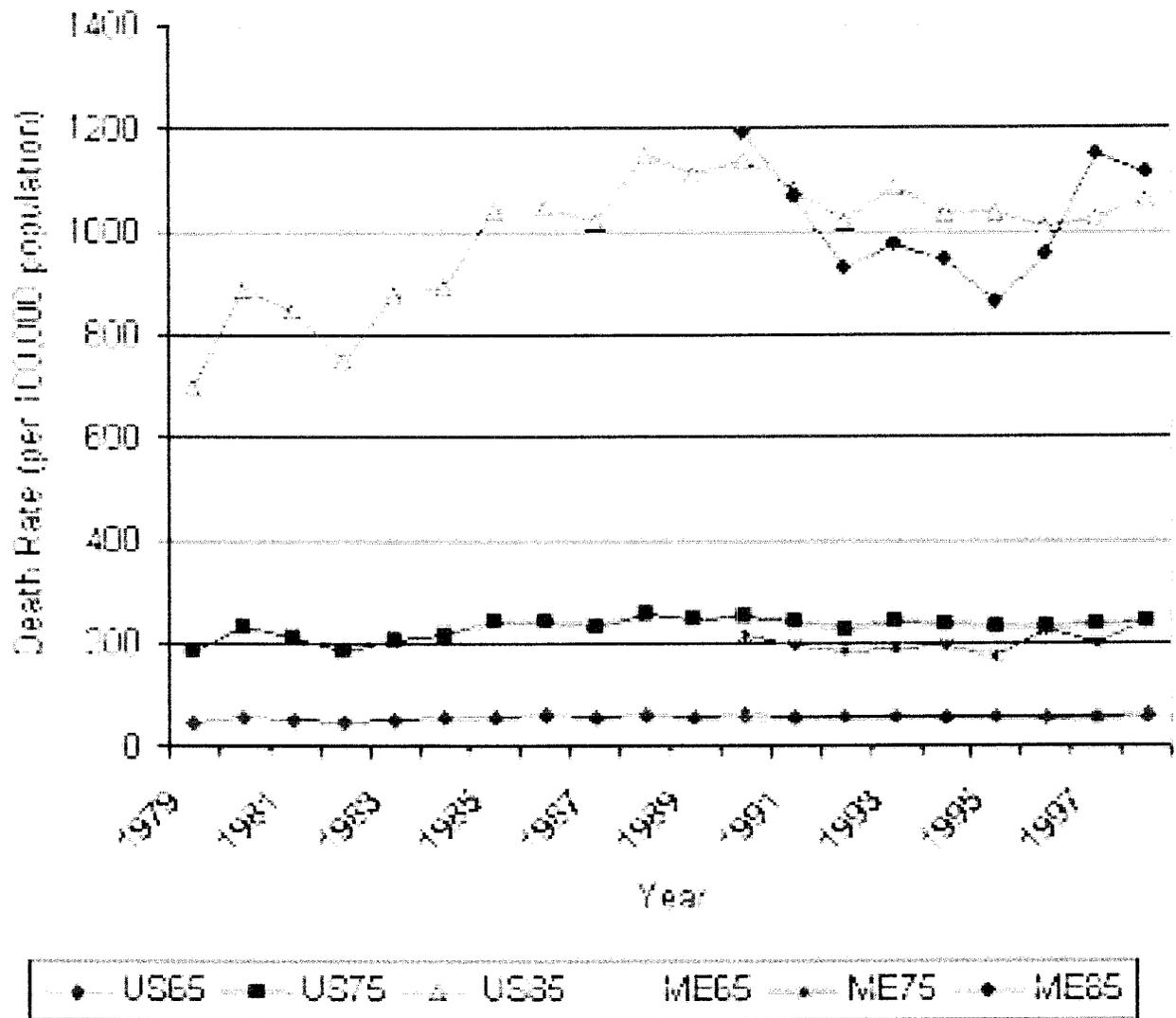


Fig. 2 History of influenza pandemics 1700-2000. Not to exact scale

Influenza (Flu)

The flu vaccine was licensed in 1945 and usage in individuals over age 65 increased from 20 percent in 1980 to 65 percent in the year 2000. This over three times increase of vaccination was unfortunately accompanied by an increase in deaths associated with flu and pneumonia. Did our elderly population increase in this time period? Yes, about 40 percent in the over 65 and about double in those over 85 years old, but this does not account for a triple increase of vaccinations failing to lower the influenza associated death rate. Is it hard to measure the effectiveness of flu vaccine? Somewhat, but it is less difficult to measure the difference in influenza like illness between vaccinated and unvaccinated groups than it is for vaccine proponents to accept the evidence that over 60 years of use shows the vaccine to be useless.

Do flu vaccinations benefit children? In Japan, after several seasons of vaccinating large numbers of school children, results showed that vaccinations had failed to reduce influenza incidence. In addition, the vaccine's use generated very costly lawsuits due to adverse side effects. The Japanese government wisely terminated the mandatory vaccination of school children. What twist of logic would dictate that a failed program for school children, never-the-less in some way, perhaps magical, is connected in a cause and effect relationship with saving grandparents lives? A scientific mind would look further than the failed flu vaccine program to find an explanation of changes in elderly death rates. The New England Journal of Medicine stated, "Only one country, Japan, has ever based its policy for controlling influenza on a strategy of vaccinating school children rather than elderly persons." Excess deaths in the elderly during Japan's flu seasons began a sharp decline well over a decade before the school vaccination program began. Vaccinating school children in Japan had no cause-effect relationship to either the decline or the later increase in death rates in the elderly. It is curious indeed that few older Japanese were vaccinated in the period of their lowest flu incidence, while high vaccination rates and high flu incidence rates occurred in the youth.

According to the Cochrane Collaboration, an international organization that evaluates medical research, two efficacy studies involving about 1,000 toddlers, indicate that flu shots containing inactivated virus - the only vaccine approved for this under age two group - are no more effective at preventing the flu than placebo.

NEWS FROM JAPAN

Earlier this year a two-day conference was held in Naples, Italy (31st May-1st June 1997) entitled "Should vaccinations be compulsory or free choice?" Doctors from various areas of the world were invited to present the situation in their country and also to highlight problems surrounding some of the vaccines.

I (Informed Parent) recently received a copy of the presentation made by Dr Yamamoto entitled 'Why Japanese Government had to cease compulsory vaccinations.' A viewpoint from a pediatrician. Reproduced here are some the points he presented (The English translation is reasonably clear.)

INFLUENZA IN JAPAN

Mass influenza vaccination programmes for school aged children had been started in 1960, and about 3 million children were vaccinated. In 1976, the compulsory vaccination system had been introduced and 17 million children from primary to high school had to be vaccinated twice annually. This was a unique vaccination programme in the world, which the government believed would avoid the social influenza epidemics. This was a wrong hypothesis which was not verified for a long time.

Since the 80s the vaccination uptake was constant at about 60% every year but the incidence rate per 100,000 changed from 5 to 60 without concern to the vaccination rate. Since 1989 the vaccination uptake decreased rapidly to 20%, but the incidence rate did not increase.

Influenza incidence rate between non-vaccinated city and neighbouring vaccinated cities -

1984

City A ceased compulsory Influenza vaccination in 1980.

City B to D continued compulsory vaccinations.

City A - The number of school children were about 25,000 City B - Number of school children were about 21,000. Statistically, they were almost the same groups.

The results

City A - Vaccination uptake below

1%. Influenza incidence 43%

City B - Vaccination uptake 90%

Influenza incidence 40%

City C - Vaccination uptake 77%

Influenza incidence 43%

City D - Vaccination uptake 76%

Influenza incidence 52% A similar study was documented in 1985 with similar results. It was an important epidemiologic study for compulsory influenza

vaccination programme to be ceased.

ADVERSE REACTIONS TO INFLUENZA VACCINATION

A **mass study of adverse reactions** against the influenza vaccine was conducted in 1987 involving about 400,000 children.

The total adverse reaction rate was 254.3 per million. (10 per million children had complained of neurological symptoms.)

This study was revealing, since from 1971 the government had changed the flu vaccine from a whole body type to a split particle type announcing that adverse reactions were almost nothing with the new one. The previous type, used in the 1960s had resulted in between 5-9 deaths occurring every year.

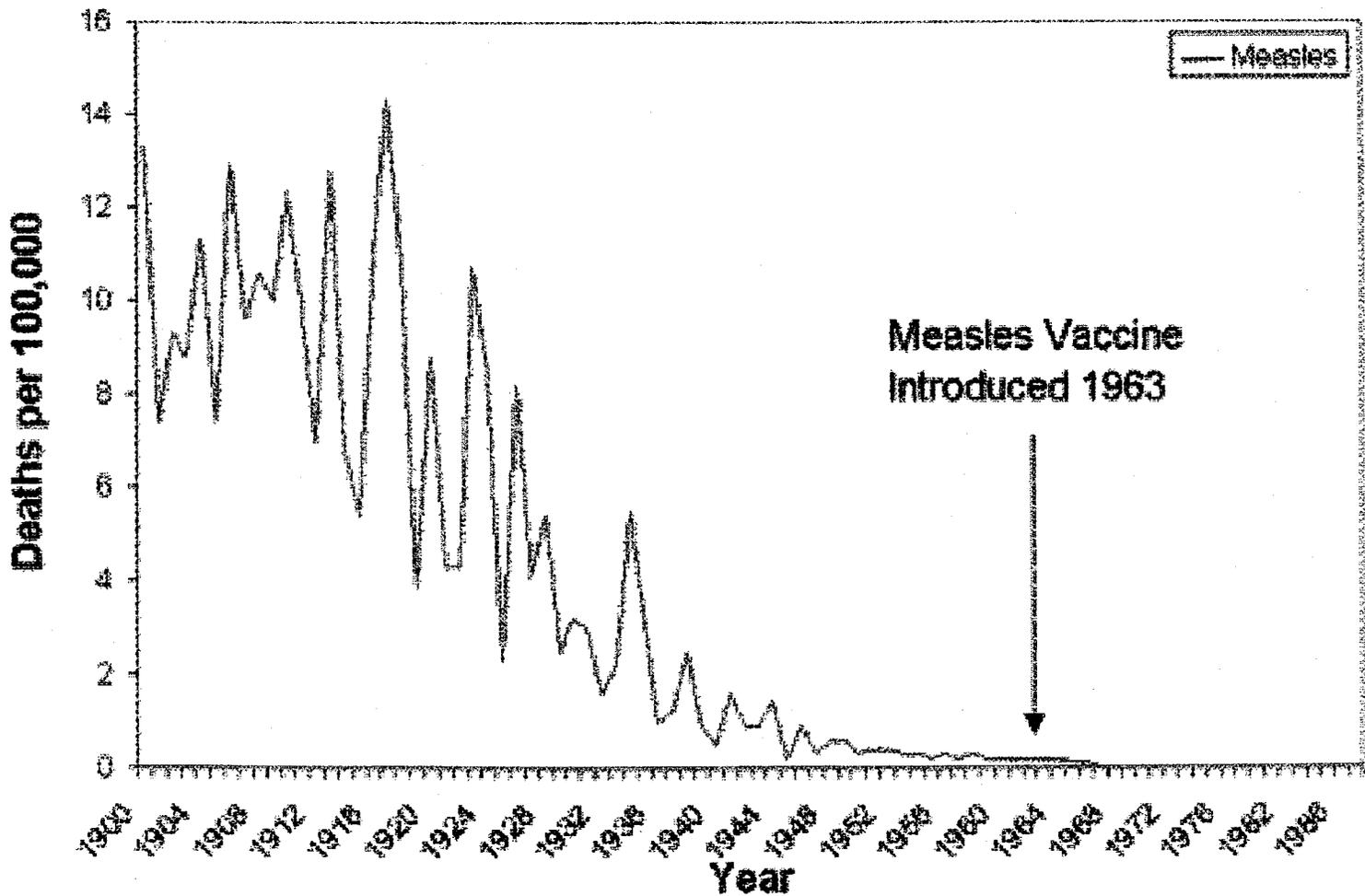
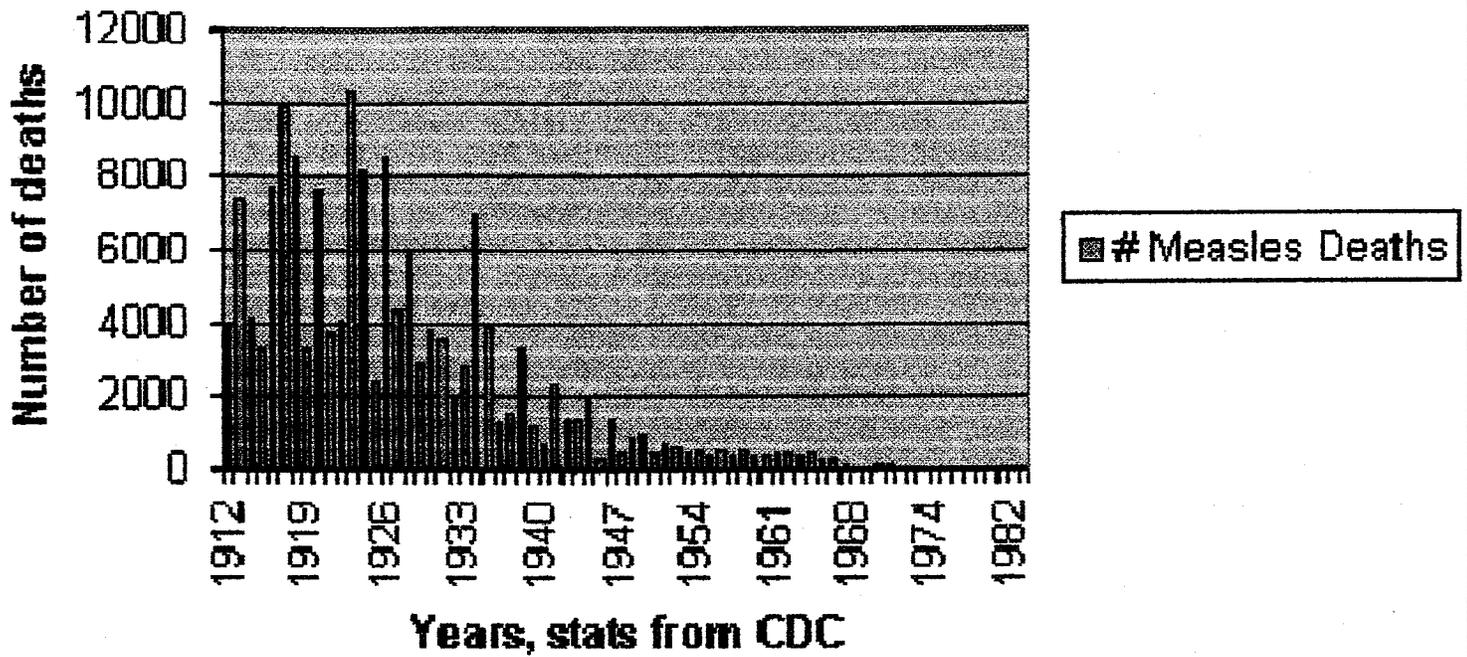
In 1987 the government changed the vaccine from compulsory to free choice.

From 1972 to 1979, a total number of 142 children and families sued the government for damages. The total number of deaths were 50, severe developmental retardation were 65, and intractable epilepsy were 35.

In 1992, the government lost the case in the court after about 20 years of legal proceedings.

Source: <http://whale.to/vaccines/flu7.html>

Measles Deaths, U.S., 1912-1983



WHAT ARE THE VACCINES FOR MEASLES, MUMPS, AND RUBELLA?

Before the vaccine became available, about 56,000 cases of rubella occurred annually in the US. *Rubella (German Measles)*. When rubella, commonly known as German measles, infects children or adults, it causes a mild illness that includes a rash, enlarged lymph nodes, and sometimes a fever.

Side Effects of Live Measles Mumps-Rubella (MMR) Vaccines

Common side effects from the MMR vaccination include fever, rash, and joint pain. Children are more likely to experience such side effects from the second dose (at 10 to 12 years) than from the first (at four to six years).

Fever. About 5% to 15% of people who are vaccinated with any live measles virus vaccine develop a fever of 103 degrees or greater, usually between five and 15 days after the vaccination. It usually lasts one or two days but can persist up to five days. In very young children, seizures can occur from high fever eight to 14 days after vaccination, but they are rare and almost never have any long-term effects.

Swollen Glands. The live-mumps vaccine can cause mild swelling in the glands that are situated near the ears.

Joint Pain. Up to 25% of women have joint pain one to three weeks after a vaccination with a live-rubella virus; it lasts for one day to three weeks. Such pain does not usually interrupt daily activities. Rarely, it recurs or becomes persistent.

Allergic Reaction. People who have known anaphylactic allergies (very severe reactions) to eggs or to neomycin are at high risk for a severe allergic response to the MMR vaccine. People with allergies that do not cause anaphylactic shock to these substances are not at higher risk for a serious allergic reaction to the vaccine. Mild allergic reactions may occur in some people, including rash and itching. A rash occurs in about 5% of people who are vaccinated with a live-measles vaccine. A live-mumps vaccination has caused rash and itching, but these symptoms are usually mild.

Interaction with Tuberculosis Test. The live-measles vaccine may interfere with a tuberculosis test, so the two should be administered at least four to six weeks apart. No evidence exists that the vaccine has an adverse effect on tuberculosis itself.

Mild Infection. One study suggests that a mild form of measles that has no symptoms may develop in previously immunized people who are exposed to the virus, although this mild infection may not be significant.

Severe Side Effects. Much controversy has arisen over severe side effects of the MMR. This is of great concern since the evidence of any serious problems is very weak and studies refuting them tend to be stronger. It should be noted that in 2000, measles caused about a million deaths in children in countries where the vaccine is not used.

Researchers have confirmed that MMR can cause a rare bleeding disorder called idiopathic thrombocytopenic purpura (ITP). This can cause a purple bruise-like discolorations that can spread across the body, nosebleeds, or tiny red spots. It is nearly always mild and temporary. The risk for this is about one in 22,300 doses. (The risk is much higher with the actual infections, particularly rubella.)

There have been a few reports of encephalitis (inflammation in the brain) associated with the live-measles vaccine, although the incidence of these events is no higher in immunized children than in nonimmunized children. (Encephalitis is extremely rare in either case).

Much publicity has centered on a possible link between the MMR vaccine, which was introduced in 1988, and a variant of autism that includes inflammatory bowel disease (IBD) and impaired behavioral development. Such findings have been rigorously reviewed and refuted in a number of well-conducted studies. Of special note was a 2002 analysis of vaccinations records of children with autism, with or without behavioral problems and gastrointestinal disorders who were born between 1979 and 1998. It found no higher incidence in autism during those years. (Reports of symptoms related to autism did increase after widespread publicity of this supposed side effect.) In the study, there was a link between impaired behavioral development and bowel problems, but they were not related to the vaccine.

University of Maryland Medical Center

The University of Maryland Medical Center is listed as part of the National Institutes of Health (NIH) Vaccine Trials Network and that have been included in trials of Flu vaccine, HIV Vaccine, Avian Flu Vaccine,

The University of Maryland information from its own site:<http://www.umm.edu/pediatrics/research.html>

Center for Vaccine Development

Back in 1974, Myron Levine, M.D., and Richard Hornick, M.D., established the Clinical Research Center for Vaccine Development at the University of Maryland Medical Center. In 1976, because of its expanded work-scope and size, the Clinical Research Center was renamed the Center for Vaccine Development (CVD).

The CVD rapidly became an international leader in vaccine research. It has earned a reputation for the genetic engineering of new vaccine candidates against cholera, typhoid fever, shigellosis and malaria, as well as for the innovative clinical evaluation of a variety of new vaccines.

The CVD is unique in that it incorporates within it the full range of vaccinology activities. It initiates basic laboratory science programs to generate new vaccine candidates and follows those candidates through clinical evaluation, field studies and, finally, public policy analysis.

The Center is dedicated to controlling infectious diseases that afflict children and adults throughout the United States and in developing countries. The Center is involved in projects to control cholera, typhoid fever, malaria, shigellosis, E. coli diarrheal disease and invasive infections (such as meningitis) caused by Haemophilus influenzae type b, pneumococcus and meningococcus. The CVD maintains field units in Chile and Mali, which help it to fulfill its mission in developing countries.

In 2000, the CVD received a \$20.4 million, five-year grant from the Bill and Melinda Gates Foundation to develop a "stealth" measles vaccine. This vaccine is being designed to protect infants in sub-Saharan Africa and other developing regions of the world who are at high risk of developing severe or fatal measles, but who are too young to receive the current measles vaccine.

Despite the fact that there already exists a measles vaccine, about 900,000 infants and young children continue to die each year from measles in developing countries, particularly in sub-Saharan Africa. One of the reasons for this is that, based on World Health Organization recommendations, the current measles vaccine should not be given to infants younger than 9 months of age.

The period from about 4 to 8 months of age, however, represents a high-risk period for infants in developing countries, where measles is common and the chance of exposure is high. When measles is contracted during this young age, the disease is often severe. Up to 20 percent of exposed infants may suffer fatal outcomes.

CVD researchers think that it may be possible to successfully protect infants younger than 9 months of age using a new vaccine that applies advances in biotechnology. Instead of injecting the measles vaccine, researchers prefer administering DNA vaccines and "live vector" vaccines via mucosal surfaces -- either orally or by nose drops.

As Director of the Center for Vaccine Development and lead investigator of the Stealth Measles Vaccine Project, Levine is directing the effort to develop a mucosally delivered measles vaccine. Levine and a team of researchers are preparing for early clinical trials of the new vaccine to be conducted in Mali and Mozambique. It will take a collaboration of genetic engineers, immunologists, epidemiologists and clinical vaccine specialists from several different medical organizations around the world to complete the trials.

Measles

<http://ije.oxfordjournals.org/cgi/content/abstract/15/1/95>

International Journal of **Epidemiology**

Natural Immunity to Measles, Rubella and Mumps among Spanish Children in the Pre-Vaccination Era
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Prior to the start of mass vaccination campaigns against measles, rubella and mumps, a prevalence study of natural immunity to these diseases was undertaken in a sample of 1700 unvaccinated Spanish children. They were representative of the 3-7 year-old population in terms of age, regional distribution and urban or rural environment. Measles infection prevalence was significantly higher than that for rubella and mumps from 3 (48.3%, 14.2%, 25.5%, respectively) through 7 years of age, (64%, 40.9%, 39%). As a function of age, naturally-acquired immunity increased according to parabolic progressions. In the 3-5 year-old group, rural environment, low socioeconomic status, no school attendance and lack of brothers were associated with statistically lower levels of measles, rubella, or mumps infection. In the 6-7 year-old group, only 12% of the children showed antibodies against the three diseases and 18.7% exhibited triple susceptibility.

Received 1 June 1985

This above article may also be found at PubMed.gov (National Institutes of Health):

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=3957548&dopt=Abstract

http://science.education.nih.gov/supplements/nih1/diseases/activities/activity5_measles-database.htm

(National Institute of Health) Measles

In 1920, the United States had 469,924 measles cases and 7,575 deaths due to measles. From 1958 to 1962, the United States had an average of 503,282 cases and 432 deaths each year. (Measles reporting began in 1912; prior to this time, no statistics are available.) In large cities, epidemics often occurred every two to five years.

[Note: the 1920 figure above of 469,924 cases may be REPORTS. The 1958-1962 figure is as it says, CASES and may be inflated. The 503,282 cases per year is 12.6 % of 4 million births. The CDC puts the pre vaccine figure at 10%. By 1974-76, measles incidence was down to 30,000 cases annually. Even if one said that all of those occurred in the 20 percent unvaccinated under age 5 years, the natural immunity would be in excess of 99%.]

Mumps [Also see page on MMRV]

See: <http://www.cdc.gov/MMWR/preview/mmwrhtml/00038546.htm>

During the prevaccine era and for greater than 10 years after vaccine licensure, the risk for mumps was highest among children 5-9 years of age. Results: After the licensure of mumps vaccine in the United States in December 1967 and the subsequent introduction of state immunization laws in an increasing number of states, the reported incidence of mumps decreased substantially. The 1,692 cases of mumps reported for 1993 represent the lowest number of cases ever reported to NNDSS and a 99% decrease from the 152,209 cases reported for 1968. During 1988-1993, most cases occurred in children 5-14 years of age (52%) and in persons greater than or equal to 15 years of age (36%).

[Note: $152,209/4,000,000 = .038$, expressed alternately, 96.2 percent natural immunity to mumps in 1967.]

Rubella

Rubella, or German measles, is the mildest of all the illnesses for which vaccines are presently required, and very often escapes detection entirely. In the adolescent and young adult populations--those presently most likely to develop it--the illness may be somewhat bothersome, with arthritic symptoms more likely; the same symptoms are often encountered after vaccination of these age groups. In children, there is no reason to treat rubella at all, in most cases.

This brings us to the final question of the long-term impact of mass vaccination programs on individual and community health. Since I have expressed my concerns on this score, many people have asked if any research has been done to substantiate them. I can only appreciate the irony in the fact that the compulsory feature of these programs is precisely what makes it so conveniently impossible to study them--so much so, that parents refusing to vaccinate their children deserve to be congratulated for making such research possible, and should, in fact, be recruited when it is ready to be carried out.

Richard Moskowitz, MD (48) received his undergraduate degree from Harvard and his medical degree from New York University. He has studied classical homeopathy with Professor George Vithoulkas in Athens, Greece. Dr. Moskowitz practices at the Turning Point Wellness Center in Watertown, Massachusetts and is a past President of the National Center for Homeopathy

<http://freespace.virgin.net/ahcare.qua/literature/medical/vaccination.html>

A Critical Look at Vaccination by Dr Patrick Quanten MD

"Dr Archie Kalokerinos: "There has only been one controlled trial of **smallpox** vaccine and that was in the Philippines at the turn of the century when they were under Australian control. The figures were clearly startling. There were twice as many deaths amongst the vaccinated as amongst the unvaccinated. The only people who got smallpox twice were the vaccinated ones."

The greatest threat of **rubella** is to the unborn child and one would anticipate that obstetricians would be sure to have had immunisation to prevent them infecting their female patients. The American Medical Association Journal reported that more than 90% of the obstetricians and gynaecologists had refused vaccination.

The combined death rate for **scarlet fever, diphtheria, whooping cough** and **measles** from 1860 to 1965 for children up to 15 years of age shows that nearly 90% of the total decline in the death rate over this period had occurred before the introduction of antibiotics and widespread immunisation against diphtheria. [UK, 95% USA]

<http://www.cps.ca/english/statements/ID/id98-04.htm>

Prevention of congenital rubella syndrome

Infectious Diseases and Immunization Committee, Canadian Paediatric Society (CPS)

Canada: Average annual incidence of rubella per 100,000 population 109 during 1941-1958.
If the same rate prevailed in the USA, natural immunity would have been about 94%.

CDC archive: epo-xdv-www.epo.cdc.gov/.../00001229.gif

zero cases in Montana 1994-1996

Rubella, the year of vaccine license, was at 28/100,000 reported cases. Natural immunity => 98%.

Varicella

<http://www.cdc.gov/mmwr/preview/mmwrhtml/00056339.htm>

Evaluation of Varicella Reporting to the National Notifiable Disease Surveillance System -- United States, 1972-1997

MMWR Weekly January 29, 1999/ 48(03);55-58

Before 1995, an estimated 4 million cases of varicella occurred each year in the United States, approximately 100 patients died (1), and approximately 10,000 persons were hospitalized because of varicella and related complications. Approximately 95% of cases (2), 66% of hospitalizations, and 45% of the varicella-related deaths occurred among persons aged less than 20 years (CDC, unpublished data, 1998). In 1972, varicella became nationally notifiable in the United States; subsequently, 46 states * and the District of Columbia (DC) provided weekly reports to CDC's National Notifiable Disease Surveillance System (NNDSS). **In 1981, varicella was deleted from the weekly morbidity report, and in 1982, states were encouraged to report varicella to NNDSS annually.** In 1995, a live, attenuated varicella vaccine was licensed in the United States for routine use in children. This report describes changes in the annual reported incidence of varicella from 1972 to 1997 and discusses the need for increased surveillance with the availability of a vaccine.

Varicella cases reported to NNDSS during 1972-1997 were reviewed. The annual population estimates for the states, DC, and the nation from the Bureau of the Census were used to calculate annual incidence. Because, without a vaccination program, the average annual number of cases of varicella is approximately equal to the size of the birth cohort each year (2), the annual birth cohort was used to estimate the completeness of reporting.

In 1972, the reported national incidence of varicella was 78.4 cases per 100,000 population. During 1972-1987, the reported incidence of varicella ranged from 66.3 in 1974 to 94.1 in 1984, peaking every 3-5 years. From 1987 to 1997, the reported national incidence decreased 58%, from 88.0 to 36.9 (Figure 1). [next page]

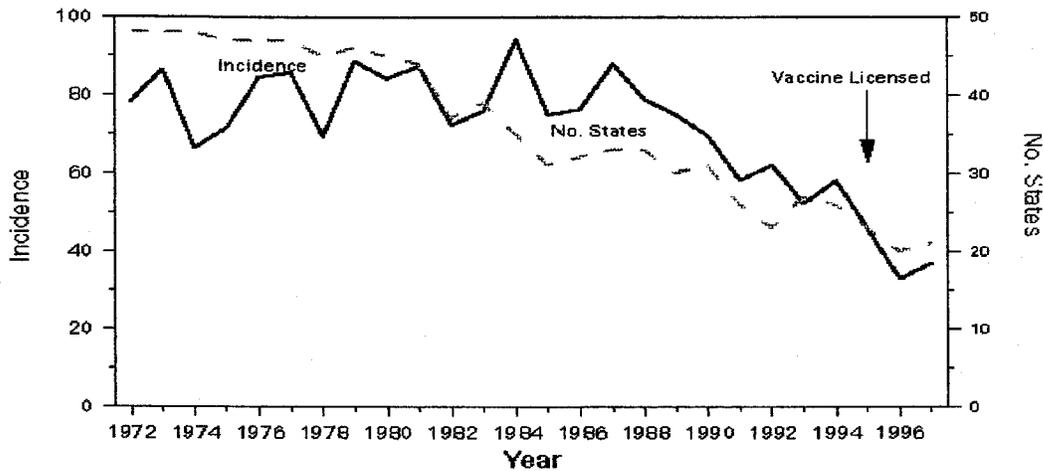
[78 *2500=195000 = 4.875% of 4 million, or less than 1 in 20.]

The decrease from 1987 to 1997 corresponded with decreases in the number of states reporting to NNDSS and the completeness of reporting. The number of areas reporting varicella weekly to NNDSS declined from 46 states and DC in 1972 to 20 states ** and DC in 1997. In 1972, cases constituting greater than or equal to 3% of the birth cohort were reported in 27 states and DC (range: 0.1%-34.3%); the number of states reporting cases constituting greater than or equal to 3% declined to 21 in 1982 and 17 in 1994. By 1997, of 20 states and DC reporting varicella, 10 states reported cases constituting greater than or equal to 3% of their birth cohorts; three reported greater than or equal to 10% (range: less than 0.1%-20.4%)

During 1972-1997, 14 states maintained continuous reporting to CDC of varicella. In these states, the incidence of reported varicella increased from 107.0 in 1972 to 212.1 in 1987, then decreased to 95.9 in 1996 and 107.1 in 1997. These rates corresponded with levels of reporting, which were 6.2%-9.7% of the birth cohort in the 1970s, 9.1%-14.4% in the 1980s, and 6.6%-11.8% in the 1990s.

Editorial Note The data presented in this report suggest that the decline in the reported national incidence of varicella since 1987 resulted from the changes in state reporting requirements and practices. The low number of reporting states in 1997 and the incomplete reporting from participating states limits the use of NNDSS data to monitor the impact of vaccination against varicella at the national level. Three states have stopped reporting varicella since vaccine licensure. Among the 14 states that have reported continuously, the decline in incidence is due to a decrease in their level of reporting, which will make it difficult to interpret the expected decline in those states resulting from the varicella vaccination program. In these states, annual decreases in incidence that are higher than decreases for previous years might reflect the impact of the vaccination program. Improvements in the quality of varicella reporting are needed to properly monitor vaccine use and its impact on disease trends.

FIGURE 1. Incidence* of reported varicella and number of states reporting cases — United States, 1972–1997



* Per 100,000 population.

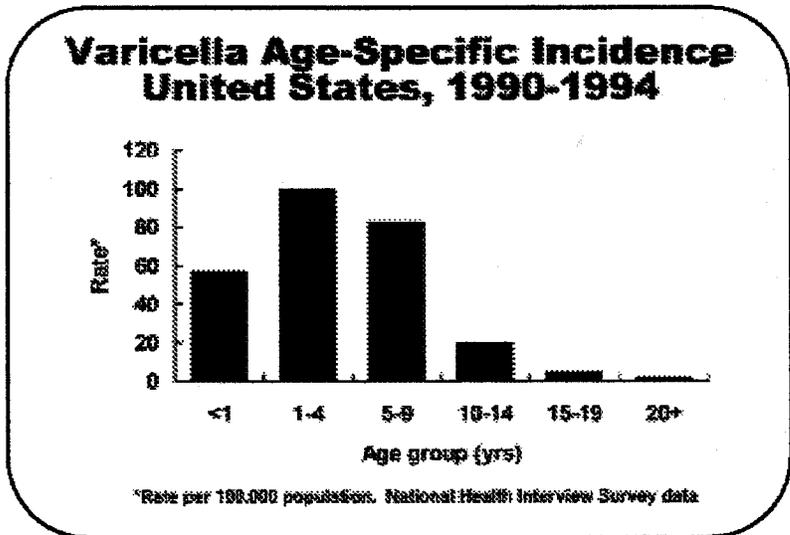
Source for Graph below: www.cdc.gov/nip/publications/pink/varicella.pdf

Age <1yr
 $60 * 2490 = 149400 = 3.7\%$
 immunity = 96.3% for 1 year.

Age 1-4
 $100 * 2490 = 249000 = 6.225\%$
 immunity = 93.8% /year.

<http://www.hsph.harvard.edu/Organizations/DDIL/varicella.htm>
 Four to 10 percent of VZV vaccine recipients may develop a generalized maculo-papular rash within 7-21 days post vaccination, consisting of usually less than 50 lesions. ...trial there were 1% asymptomatic seroconversions in susceptible household contacts in the eight weeks following vaccination.

Several other studies have reported that each year post vaccination 1% to 3% of vaccinated children develop a mild varicella disease (mild varicella like syndrome, or MVLS) after exposure to wild-type varicella (31-33).



*Rate per 100,000 population. National Health Interview Survey data

Reference the graph at the above right:

The population of the USA in 1990 was 249 million. Taking the numbers for each age group above and adding:

$60+100+85+20+5+1 = 271 * 2490 = 674790 / 4,000,000 = .1686975$ **about 17% of birth cohort.**

Death at 1 per 60,000 cases, and 103 deaths * 60,000 = 6,180,000 cases = 155 percent of birth cohort. (Only 45% of deaths occur in age 20. $45 * 60,000 = 2.7$ million or 67.5 % of birth cohort.)

Prevaccine Hospitalization at 11,000 per year associated with varicella and

2-3 hospitalizations per 1000 cases = $4400 * 1000$ or 4,400,000 or 110 percent of birth cohort.

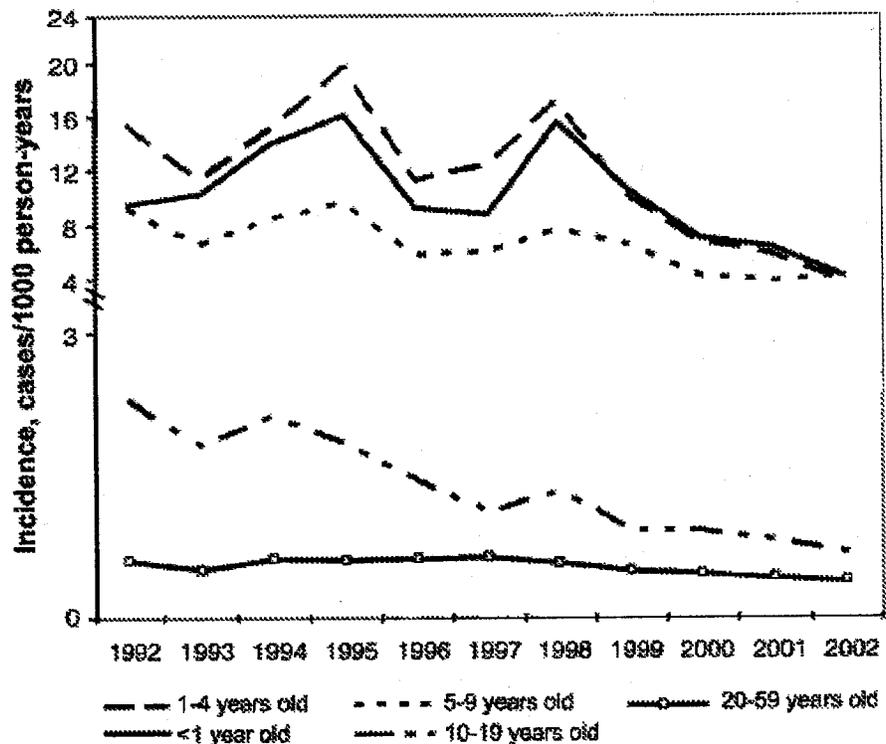
Incidence of Herpes Zoster, Before and After Varicella-Vaccination-Associated Decreases in the Incidence of Varicella, 1992-2002

Aisha O. Jumaan,¹ Onchee Yu,² Lisa A. Jackson,² Kari Bohlke,² Karin Galil,³ and Jane F. Seward¹

1 Centers for Disease Control and Prevention, Atlanta, Georgia; 2 Group Health Cooperative, Seattle, Washington; 3 Cubist Pharmaceuticals, Lexington, Massachusetts

Varicella vaccine coverage increased progressively in all age groups over time. Coverage was highest among children 2 years old, ranging from <1% in 1995 to 65% in 2002, followed by coverage among children 6 years old, ranging from <0.1% to 45%. Coverage among older children (12 and 15 years old), increased modestly, to 9% and 5%, respectively, in 2002.

Figure 2. Age-specific incidence rates of varicella, 1992-2002



[Note: the relative incidence of varicella changed in the under 1 year old group from less than 10 per 1000 person years in 1992 to about 4 per 1000/person years in 2002. This drop is in a totally unvaccinated population (<1 yr olds) and reflects the downward trend that was established pre-vaccine use. The above graph reflects the trend based on annual incidence rates divided by person-years for the age group registered with the HMO (Seattle). Roughly one child in a hundred under one year old and one in 62 in the one to four years old range had registered cases of varicella. The vaccinated and unvaccinated alike registered similar downward trends.]

Source: lifeissues.net

During March 1995 to July 1998, a total of 9.7 million doses of varicella vaccine were distributed in the United States. During this time, the CDC's Vaccine Adverse Event Reporting System (VAERS) received 6,580 reports of adverse reactions to the vaccine, which included 14 deaths. Routine underreporting of adverse vaccine reactions suggests mortality and morbidity rates were far higher.¹¹ The GAO estimates as few as 1 percent of all serious adverse reactions are actually reported to VAERS: "Studies show that adverse events are often substantially underreported in a passive surveillance system ... only about 1 percent of serious events attributable to drug reactions are reported to FDA."¹²

Varicella [See also MMRV]

<http://www.journals.uchicago.edu/cgi-bin/resolve?id=doi:10.1086/341089&erFrom=8099531348341338059Guest>

Younger Age at Vaccination May Increase Risk of Varicella Vaccine Failure

Author(s) Karin Galil, Elizabeth Fair, Norine Mountcastle, Phyllis Britz, and Jane Seward

Identifiers *The Journal of Infectious Diseases*, volume 186 (2002), pages 102–105

DOI: 10.1086/341089

PubMed ID: 12089668

Abstract To determine vaccine effectiveness (VE), a varicella outbreak in a highly vaccinated day-care center (DCC) population in Pennsylvania was investigated. In Pennsylvania, proof of immunity is required for children ≥ 12 months old for DCC enrollment. Questionnaires were administered to parents of children who had attended the DCC continuously during the study period (1 November 1999–9 April 2000) to determine history of varicella disease or vaccination and for information about any recent rash illnesses. VE was calculated for children ≥ 12 months old without a history of varicella. There were 41 cases of varicella among 131 attendees, with 14 cases (34%) among vaccinated children. VE was 79% against all varicella and 95% against moderate or severe varicella. Vaccination at < 14 months was associated with an increased risk of breakthrough disease (relative risk, 3.0; 95% confidence interval, 0.9–9.9). Despite varicella vaccination coverage of 80%, a sizeable outbreak occurred. **Early age at vaccination may increase the risk of vaccine failure.**

See MMRV trial for suggestion that natural immunity to Varicella (Chicken Pox) is about 97.9 percent.

[Also note that small studies often fail to take into account the true reasons why both the vaccinated and unvaccinated alike actually contacted the disease. Basic sanitation, diet, perhaps hygiene, etc will affect disease incidence rates as well as mortality rates.]

Hepatitis A (Only for high risk groups)

[According to CDC, in 1980-1995 HepA incidence ranged from 9-15 per 100,000]
<http://www.metrokc.gov/health/epilog/vol4507.htm> [Public Health Seattle/King Co.]
2003 Nationwide Hepatitis A Incidence at a 40-Year Low

A recent article by Wasley, et al in the Journal of the American Medical Association¹ described the changing incidence and epidemiology of hepatitis A in the from the pre-vaccination era (1990-1997) to 2003.

Since surveillance began approximately 40 years ago, hepatitis A incidence in the has followed a cyclical pattern, with peaks and nadirs typically occurring every ten years; the use of hepatitis A vaccination may have interrupted this cyclical pattern. Between the pre-vaccination baseline period (1990-1997) and 2003, **the incidence of hepatitis A, 10.7 per 100,000** and 2.6 per 100,000 respectively, decreased 76 percent. In addition, the 2003 incidence rate was the lowest recorded in 40 years of surveillance, and was significantly lower than rates during the two previous nadirs of 9.2 /100,000 in 1983, and 9.1/100,000 in 1992. The provisional hepatitis A incidence rate for 2004 is even lower, at 1.9/100,000.

In order to evaluate the role that hepatitis A immunization may have played in these trends, Wasley, et al, compared the incidence of hepatitis A in states that had instituted recommendations to vaccinate, or to consider vaccinating children with hepatitis A vaccine, to states that did not. During the pre-vaccination baseline period (1990 to 1997), the hepatitis A incidence rate in the "vaccinating" states was four times higher than the rate in the "non-vaccinating" states. By 2003, however, there was no significant difference in the rates between vaccinating and non-vaccinating states.

In the , Hepatitis A vaccine is currently recommended for:

- All children 2 through 18 years of age.
- Gay and bisexual men.
- Illicit drug users (injecting and non-injecting).
- International travelers to areas where hepatitis A is common:
 - includes all areas of the world **except** Canada, Western Europe, Scandinavia, Japan, New Zealand, and Australia.
- Persons with chronic liver disease, including chronic hepatitis B and hepatitis C.
- Persons with clotting factor disorders, such as hemophiliacs.
- Anyone else who wants protection against hepatitis A.

¹Wasley A, Samandari T, Bell B. Incidence of hepatitis a in the in the era of vaccination. *JAMA* 2005;294:194-201

Meningococcal (high risk groups only)

<http://jmm.sgmjournals.org/cgi/reprint/51/9/717.pdf>

J. Med. Microbiol. Vol. 51 (2002), 717-722 copyright by society for General Microbiology

Impact of meningococcal C conjugate vaccine in the UK

In November 1999, the UK became the first country to introduce a national immunisation programme for meningococcal serogroup C conjugate (MCC) vaccines.

Table 1. Percentage reduction in attack rate in unimmunised cohorts after the MCC campaign (England)

Age scheduled for MCC (years)	Rate per 10 ³ pre-MCC campaign	Rate per 10 ⁵ post-MCC campaign	Percentage reduction (95% CI)
15-17	9.28	3.62	61 (39-75)
9-14	4.49	2.95	34 (-11-61)
5-8	2.03	0.87	57 (-37-87)
1-4	4.67	2.34	50 (13-71)

Table 2. MCC vaccine efficacy estimates (England, September 2001) obtained by the screening method

Age groups	Number of doses	Vaccine efficacy (95% CI)
2-5 months	Exactly 3	91.5% (64.9-98.0)
2-5 months	2 or 3	88.6% (58.4-96.9)
2-5 months	Any	79.7% (38.2-93.3)
1-2 years	1	89.3% (72.7-95.8)
3-4 years	1	100% (84.9-100)
5-14 years	1	95.3% (88.3-98.6)
15-17 years	1	91.9% (73.3-98.4)

<http://www.blackwell-synergy.com/doi/abs/10.1111/j.1524-4733.2006.00113.x>

Value in Health

Volume 9 Issue 4 Page 236 - July/August 2006

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Managing Meningococcal Disease in the United States: Hospital Case Characteristics and Costs by Age

ABSTRACT

Objective: Meningococcal disease occurs worldwide. Approximately 1400 to 2800 cases are reported in the United States annually. The goal of this analysis was to examine hospitalized cases of meningitis and meningococemia to identify case characteristics, resource use, and inpatient care costs.

Results: Of 1654 cases of meningococcal disease identified, meningococemia was coded for 51%. Adults accounted for 33% of the cases.

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[Measles, Mumps, Rubella and Varicella (Oka/Merck) Virus Vaccine Live]

DESCRIPTION

ProQuad* is a combined attenuated live virus vaccine containing measles, mumps, rubella, and varicella viruses. ProQuad is a sterile lyophilized preparation of (1) the components of M-M-R*II (Measles, Mumps and Rubella Virus Vaccine Live): Measles Virus Vaccine Live, a more attenuated line of measles virus, derived from Enders' attenuated Edmonston strain and propagated in chick embryo cell culture; Mumps Virus Vaccine Live, the Jeryl Lynn™ (B level) strain of mumps virus propagated in chick embryo cell culture; Rubella Virus Vaccine Live, the Wistar RA 27/3 strain of live attenuated rubella virus propagated in WI-38 human diploid lung fibroblasts; and (2) Varicella Virus Vaccine Live (Oka/Merck), the Oka/Merck strain of varicella-zoster virus propagated in MRC-5 cells. The cells, virus pools, bovine serum, and human albumin used in manufacturing are all tested to provide assurance that the final product is free of potential adventitious agents.

ProQuad, when reconstituted as directed, is a sterile preparation for subcutaneous administration. Each 0.5-mL dose contains not less than 3.00 log₁₀ TCID₅₀ (50% tissue culture infectious dose) of measles virus; 4.30 log₁₀ TCID₅₀ of mumps virus; 3.00 log₁₀ TCID₅₀ of rubella virus; and a minimum of 3.99 log₁₀ PFU (plaque-forming units) of Oka/Merck varicella virus.

Each 0.5-mL dose of the vaccine contains no more than 21 mg of sucrose, 11 mg of hydrolyzed gelatin, 2.4 mg of sodium chloride, 1.8 mg of sorbitol, 0.40 mg of monosodium L-glutamate, 0.34 mg of sodium phosphate dibasic, 0.31 mg of human albumin, 0.17 mg of sodium bicarbonate, 72 mcg of potassium phosphate monobasic, 60 mcg of potassium chloride; 36 mcg of potassium phosphate dibasic; residual components of MRC-5 cells including DNA and protein; <16 mcg of neomycin, bovine calf serum (0.5 mcg), and other buffer and media ingredients. The product contains no preservative.

CLINICAL STUDIES

Formal studies to evaluate the clinical efficacy of ProQuad have not been performed.

Efficacy of the measles, mumps, rubella and varicella components of ProQuad was previously established in a series of clinical studies with the monovalent vaccines. A high degree of protection from infection was demonstrated in these studies.2-9

ADVERSE REACTIONS

Children 12 to 23 Months of Age

ProQuad was administered to 4497 children 12 to 23 months of age in clinical trials without concomitant administration with other vaccines. The safety of ProQuad was compared with the safety of M-M-R*II and VARIVAX given concomitantly at separate injection sites. The safety profile for ProQuad was similar to the component vaccines. Children in these studies were monitored for up to 42 days post-vaccination. The only systemic vaccine-related adverse experiences that were reported at a significantly greater rate in individuals who received ProQuad than in individuals who received M-M-R*II and VARIVAX concomitantly at separate injection sites were fever ($\geq 102^\circ\text{F}$ [$\geq 38.9^\circ\text{C}$] oral equivalent or abnormal) (21.5% versus 14.9%, respectively), and measles-like rash (3.0% versus 2.1%, respectively). Both fever and measles-like rash usually occurred within 5 to 12 days following the vaccination, were of short duration, and resolved with no long-term sequelae.

Pain/tenderness/soreness at the injection site was reported at a statistically lower rate in individuals who received ProQuad than in individuals who received M-M-R*II and VARIVAX concomitantly at separate injection sites (22.0% versus 26.7%, respectively). The only vaccine-related injection-site adverse experience that was more frequent among recipients of ProQuad than recipients of M-M-R*II and VARIVAX was rash at the injection site (2.3% versus 1.5%, respectively). Table 1 summarizes the frequencies of injection-site and systemic adverse experiences that were reported as vaccine related by the investigator among $\geq 1\%$ of children in these clinical trials.

REPORTED IN 21% OF CHILDREN WHO RECEIVED 1 DOSE OF PROQUAD OR M-M-RII AND VARIVAX
 at 12 to 23 Months of Age
 (0-42 Days Postvaccination)

Adverse Experiences	ProQuad (N = 4497) %	M-M-RII and VARIVAX (N = 2038) %
<i>Injection Site[†]</i>		
Pain/tenderness/soreness [‡]	22.0	26.7
Erythema [‡]	14.4	15.8
Swelling [‡]	8.4	9.8
Ecchymosis	1.5	2.3
Rash	2.3	1.5
<i>Systemic</i>		
Fever $\geq 102^{\circ}\text{F}$ ($\geq 38.9^{\circ}\text{C}$) [§]	21.5	14.9
Irritability	6.7	6.7
Measles-like rash [‡]	3.0	2.1
Varicella-like rash [‡]	2.1	2.2
Rash (not otherwise specified)	1.6	1.4
Upper respiratory infection	1.3	1.1
Viral exanthema	1.2	1.1
Diarrhea	1.2	1.3

[†] Injection-site adverse experiences for M-M-RII and VARIVAX are based on occurrence with either of the vaccines administered.

[‡] Designates a solicited adverse experience. Injection-site adverse experiences were solicited only from Days 0-4 postvaccination.

[§] Temperature reported as oral equivalent or abnormal.

The following additional vaccine-related clinical adverse experiences (incidence $\geq 0.2\%$ but $< 1\%$) were observed in individuals following a single dose of ProQuad. Solicited adverse experiences are designated with the symbol (‡).

Infections and infestations: otitis, otitis media, pharyngitis, viral infection.

Metabolism and nutrition disorders: anorexia.

Psychiatric disorders: crying, insomnia, sleep disorder.

Nervous system disorders: somnolence.

Respiratory, thoracic, and mediastinal disorders: cough, nasal congestion, respiratory congestion, rhinorrhea.

Gastrointestinal disorders: vomiting.

Skin and subcutaneous tissue disorders: miliaria rubra, rubella-like rash‡.

General disorders and administration site conditions: malaise.

Adverse Experiences after vaccination with M-M-RII or VARIVAX

Other adverse experiences have been reported in clinical studies and with marketed use of either M-M-RII, the monovalent component vaccines of M-M-RII, or VARIVAX. These adverse effects are listed below without regard to causality or frequency.

Infections and infestations

Atypical measles, candidiasis, cellulitis, herpes zoster, infection, influenza, measles, orchitis, parotitis, respiratory infection, skin infection.

Blood and the lymphatic system disorders

Lymphadenitis, regional lymphadenopathy, thrombocytopenia.

Immune system disorders

Anaphylactoid reaction, anaphylaxis and related phenomena such as angioneurotic edema, facial edema, and peripheral edema, anaphylaxis in individuals with or without an allergic history.

Psychiatric disorders

Agitation, apathy, nervousness.

Nervous system disorders

Afebrile convulsions or seizures, aseptic meningitis (see below), Bell's palsy, cerebrovascular accident, dizziness, dream abnormality, encephalitis (see below), encephalopathy (see below), Guillain-Barré syndrome, headache, hypersomnia, measles inclusion body encephalitis (see CONTRAINDICATIONS), ocular palsies, paraesthesia, polyneuritis, polyneuropathy, subacute sclerosing panencephalitis (see below), syncope, transverse myelitis, tremor.

Eye disorders

Edema of the eyelid, irritation, optic neuritis, retinitis, retrobulbar neuritis.

Ear and labyrinth disorders

Ear pain, nerve deafness.

Vascular disorders

Extravasation.

Respiratory, thoracic and mediastinal disorders

Bronchial spasm, bronchitis, epistaxis, pneumonitis (see CONTRAINDICATIONS), pneumonia, pulmonary congestion, rhinitis, sinusitis, sneezing, sore throat, wheezing.

Gastrointestinal disorders

Abdominal pain, flatulence, hematochezia, mouth ulcer.

Skin and subcutaneous tissue disorders

Erythema multiforme, Henöch-Schonlein purpura, herpes simplex, impetigo, panniculitis, pruritus, purpura, skin induration, Stevens-Johnson syndrome, sunburn.

Musculoskeletal, connective tissue and bone disorders

Arthritis and/or arthralgia (usually transient and rarely chronic [see below]), musculoskeletal pain, myalgia, pain of the hip, leg, or neck, swelling.

General disorders and administration site conditions

Injection-site complaints (burning and/or stinging of short duration, eczema, edema/swelling, hive-like rash, discoloration, hematoma, induration, lump, vesicles, wheal and flare), inflammation, lip abnormality, papillitis, roughness/dryness, stiffness, trauma, varicella-like rash, venipuncture site hemorrhage, warm sensation, warm to touch.

A short history of Smallpox Vaccine

Vaccination was not discovered by the famous Dr. Jenner. Some believe a form of inoculation was practiced by Egyptians thousands of years ago. There is some question about if both inoculation and vaccination were used in India circa 1500 BC.

In China, a dried powder made of dried smallpox scabs was blown into the nostrils as a preventive of smallpox from before the birth of Christ until about 1100 AD and then variolation, the taking of smallpox infected matter from one human to another, was practiced from 1100 through the 17th century.

The Arabs practiced inoculation from the Middle ages onward. This practice was used in Denmark, Poland and Scotland in the late 1600s. and was introduced to England in 1717. This common place practice originated in the pre-scientific age as a superstition.

1763 Epidemic of smallpox in France attributed to inoculation. Practice prohibited for 5 years.

1791 Jenner inoculates his 18 month old son with swine-pox. In 1796 repeats using 'cow-pox-milkmaid' vaccine.

1796 First two vaccine test subjects, James Phipps and Jenner's son, both die later of TB before age 21.

1798 Jenner claims it was the "horse-grease cowpox" to have all the virtue against smallpox.

1802 Jenner extols to parliament, "the merits of cowpox alone which in his Inquiry he had condemned." (in 1798)

1839 A smallpox epidemic swept England and killed 22,081 people.

1840 Smallpox inoculation, the method brought from Turkey in 1717 was condemned by Parliament.

1853 Smallpox vaccination made mandatory. Refusal punishable by fine.

1857-1859 Smallpox epidemic killed 14,244 people.

1863-1865 A second epidemic killed 20,059 lives.

1867 A more stringent compulsory vaccination law was passed. Refusal punishable by jail time.

1871 Population was 97.5% vaccinated.

1871-1880 During this period of compulsory vaccination, the death rate from smallpox leapt from 28 to 46 per 100,000 population.

1872 England experienced its worst ever smallpox epidemic which claimed 44,840 lives.

1878-1898 Leicester, drops vaccination, installs sanitation with the result that during 20 years the death-rate from smallpox is one third that of the vaccinated Army and Navy.

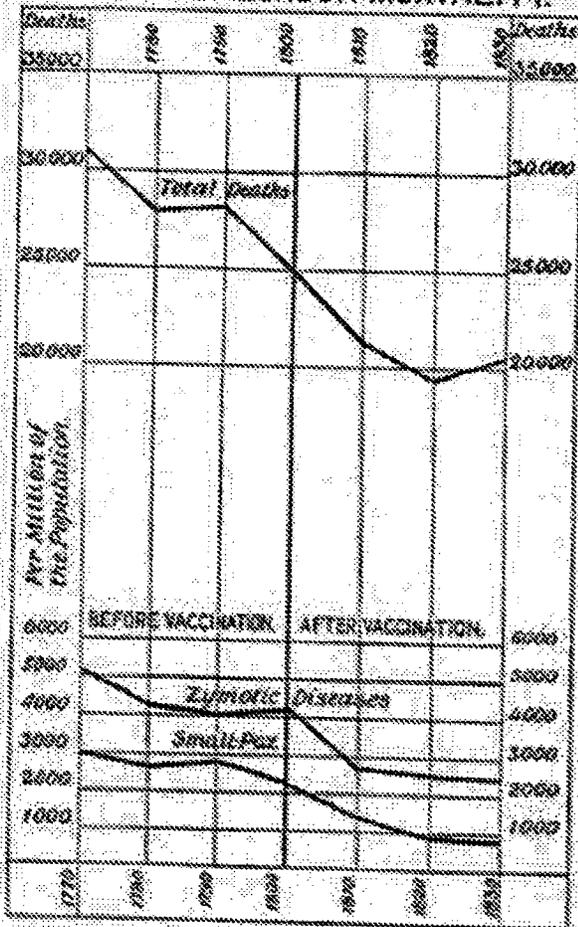
1898 Parliament passed the "conscience Clause" of the Vaccination Acts. This repeal of mandatory vaccination followed 14 volumes of data refuting the value of vaccination.

Stopped Mandatory Vaccination: England 1907. Holland 1928. Australia 1925. USA 1971.

(In the USA, by 1929, all states but nine had removed compulsory vaccination.)

1973 "Professor George Dick, speaking at an environmental conference in Brussels in 1973, admitted that in recent decades, 75% of British people who contracted smallpox had been vaccinated. This, combined with the fact that only 40% of children (and a maximum of 10% of adults) had been vaccinated, clearly shows that vaccinated people have a much higher tendency to contract the disease." Source: Should I Vaccinate My Child? by Jini Patel Thompson

DIAGRAM OF LONDON MORTALITY.



Below is pictured a table, capable of being tilted into either horizontal or vertical positions. A calf would be strapped to the table, and when the calf became horizontal, its belly would be shaved. A young calf would 30-50 three inch long deep scratches or cuts, while a young cow would endure 100-150 such three inch long cuts would be made in its belly. Into these cuts would be rubbed some lymph or pus from a human suffering from small pox. The calf or young cow would then be confined in a stall in which its head was confined so that it could not lick its wounds. After a week, the vaccinator would return with a special pliers to harvest a combination of blood watered down with lymph. Some pus, a few hairs and scabs were also harvested. The hair and scabs were then filtered out with a fine bronze screen. The resultant "pure" blood/lymph mixture would then be stabilized with glycerin. Later polymyxin B sulfate, streptomycin sulfate, chlortetracycline hydrochloride, and neomycin sulfate were added.

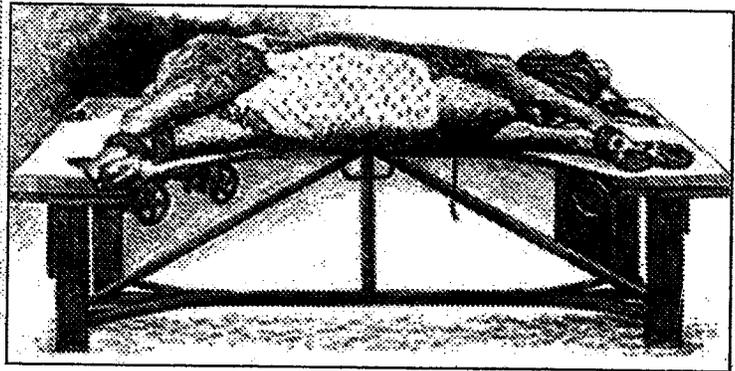
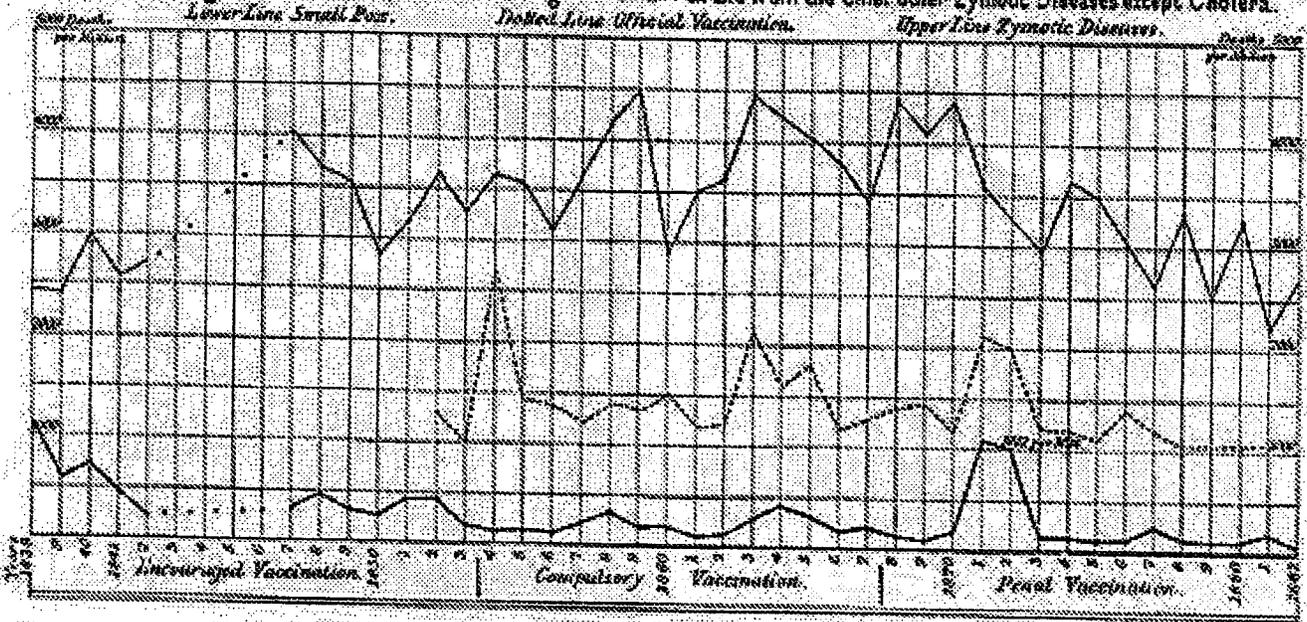


DIAGRAM II.
 Deaths in England and Wales per Million Living from Small Pox and from the Chief other Zymotic Diseases except Cholera.



London, England

Note: smallpox decline prior to introduction of vaccination.

Note: decline of death from all causes prior to 1800.

Was this general decline, and the specific decline in smallpox due to sanitary reforms begun in the mid 1700's, or the practice of variolation? (the inoculation of human pus from smallpox sufferers into other humans.) This question must be given a good answer. More information is first required.

<http://www.wku.edu/%7Esmithch/wallace/S616.htm>

A Summary of the Proofs That Vaccination Does Not Prevent Small-pox but Really Increases It (S616: 1904)

[Doctors are not the best judges of the results of vaccination. (Incorrect training & financial bias.) Statisticians require the best statistics, over wide areas, large populations, long times and with a comparison of vaccinated to unvaccinated. Diseases have cycles, overall death rates are a good indication of progress.]

V. Thirty Years of Rapidly Decreasing Vaccination in Leicester, and its Teachings.

(1) The great manufacturing town of Leicester, with nearly 200,000 inhabitants, affords the most conclusive proof of the uselessness of vaccination that it is possible to have; and the doctors and government officials carefully avoid dealing with it except to prophesy evils which have never come to pass.

Down to 1872 Leicester was one of the most completely vaccinated towns in the kingdom, the number of vaccinations, owing to alarm after epidemics, several times *exceeding* the number of births. Yet in 1871, at the very height of its good vaccination record, it was attacked by the epidemic with extreme severity, its small-pox deaths during that year being more than 3,500 per million of the population, or about a thousand per million *more* than the mortality in London during the same epidemic. If ever a test experiment existed it is this of Leicester, where an almost completely vaccinated community suffered more than unvaccinated and terribly insanitary London, on the average of the last forty years of the eighteenth century.

But even more conclusive evidence is to come.

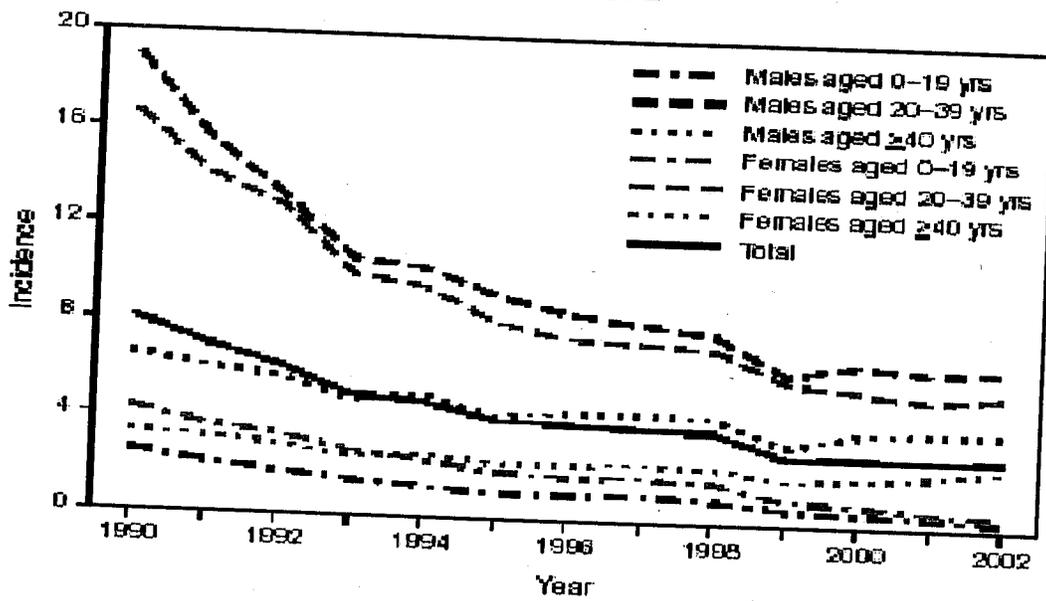
(2) That fearful mortality destroyed the faith of Leicester in vaccination. Poor and rich alike, the workers and even the municipal authorities began to refuse vaccination for their children. This refusal continued till, in 1890, instead of 95 per cent. the vaccinations reached only 5 per cent. of the births! As this ominous decrease of vaccination went on the doctors again and again prophesied against it, that once small-pox was introduced it would run through the town like wildfire and decimate the population. Yet it *has* been introduced again and again, but it has never spread; and from that day to this no town in the kingdom of approximately equal population has had such a very low small-pox mortality as this almost completely unvaccinated and--as the doctors say--*unprotected* population! Surely this completes the demonstration that vaccination, instead of preventing, increases the liability to small-pox, and that the only way to abolish the disease is to do as Leicester did, leave off vaccination altogether and devote our energies to sanitation, and the isolation of such rare cases as do occur.

Germany: 1870-1871 Over 1,000,000 people had smallpox of which 120,000 died. 96% of these had been vaccinated.

Philippines: 1918-1919 Smallpox epidemic resulted in 60,855 deaths. (2) with over 95% of the population vaccinated, the worst epidemic in the Philippine's history occurred resulting in a case mortality of 65%. The highest percentage occurred in the capital Manila, the most thoroughly vaccinated place. The lowest percentage occurred in Mindanao, the least vaccinated place owing to religious prejudices. (2)

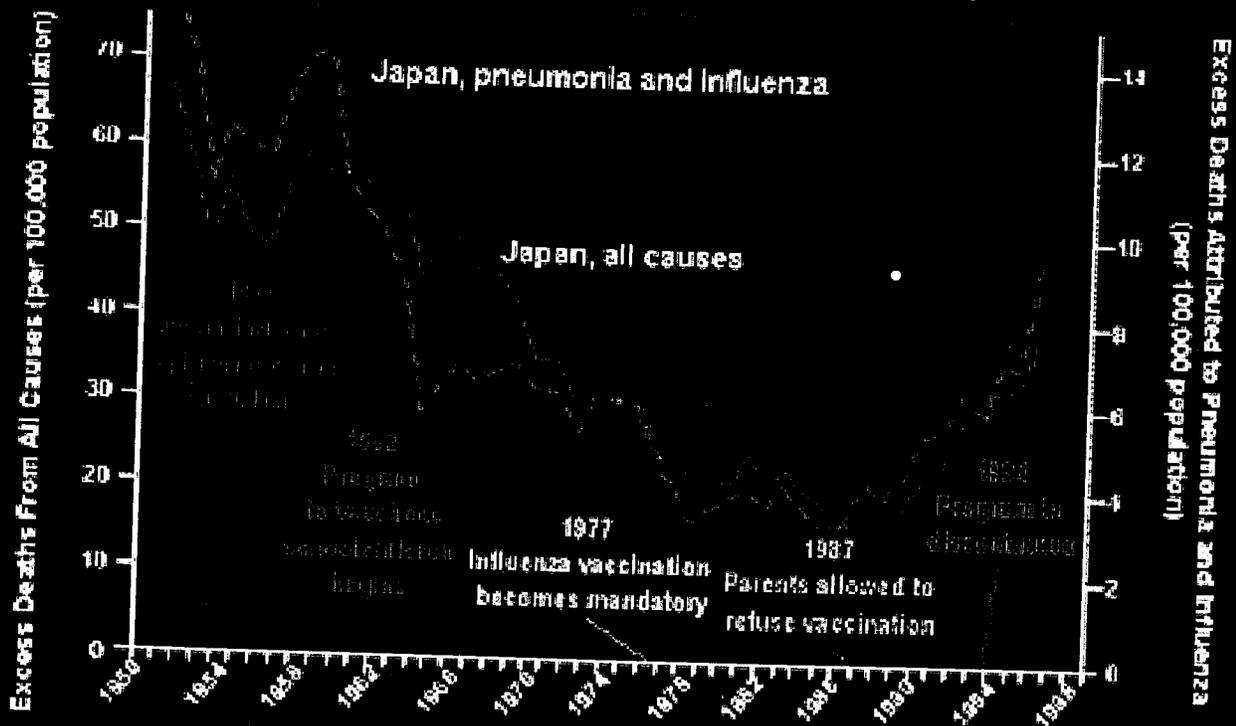
Scotland: 1855-1875 over 9,000 children under 5 died of smallpox despite Scotland being, at that time, one of the most vaccinated countries in the world.
1907-1919 with only a third of the children vaccinated, only 7 smallpox deaths were recorded for children under 5 years of age.

FIGURE. Incidence* of acute hepatitis B, by age group, sex, and year — United States, 1990–2002



* Per 100,000 population.

A Mass Vaccination Program in Japan



Adapted with permission from Reichert TA, et al. *N Engl J Med* 2001;344:689-696

