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

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

| Table 4 <br> 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 ${ }^{\dagger}$ |  |
|  | 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 \% an | confidence |  |  |  |
| Any grade of severity |  |  |  |  |
| Severe* |  |  |  |  |

${ }^{*}$ Severe gastroenteritis defined by a clinical scoring system based on the intensity and duration of symptoms of fever, vomiting, diarrhea, and behavioral change
${ }^{\dagger}$ 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 $71.3 \%(95 \% \mathrm{Cl}: 64.7,76.9)$. The efficacy of RotaTeq in preventing cases occurring only during the second rotavirus season postvaccination was $62.6 \% ~(95 \% ~ C l: ~ 44.3,75.4)$. 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 9

| Solicited adverse experiences within the first week atter doses 1, 2, and 3 (Detailed Safety Cohort) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adverse experience | Dose 1 |  | Dose 2 |  | Dose 3 |  |  |
|  | RotaTeq | Placebo | RotaTeq | Placebo | RotaTeq | Placebo |  |
| Elevated temperature | $\mathrm{n}=5,616$ | $\mathrm{n}=5,077$ | $\mathrm{n}=5,215$ | $\mathrm{n}=4,725$ | $\mathrm{n}=4,865$ | $\mathrm{n}=4,382$ |  |
|  | $17.1 \%$ | $16.2 \%$ | $20.0 \%$ | $19 \%$ | $18.2 \%$ | $17.6 \%$ |  |
| Vomiting | $\mathrm{n}=6,130$ | $\mathrm{n}=5,560$ | $\mathrm{n}=5,703$ | $\mathrm{n}=5,173$ | $\mathrm{n}=5,496$ | $\mathrm{n}=4,989$ |  |
|  | $6.7 \%$ | $5.4 \%$ | $5.0 \%$ | $4.4 \%$ | $3.6 \%$ | $3.2 \%$ |  |
| Irritability | $10.4 \%$ | $9.1 \%$ | $8.6 \%$ | $6.4 \%$ | $6.1 \%$ | $5.4 \%$ |  |
|  | $7.1 \%$ | $7.1 \%$ | $6.0 \%$ | $6.5 \%$ | $4.3 \%$ | $4.5 \%$ |  |

${ }^{\circ}$ Temperature $\geq 100.5^{\circ} \mathrm{F}\left[38.1^{\circ} \mathrm{C}\right]$ rectal equivalent obtained by adding 1 degree F to otic 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 <br> among recipients of RotaTeq as compared with placebo recipients |  |  |
| :--- | :---: | :---: |
|  | $R 0 t a T e q$ | N lacebo |
|  | $\mathrm{N}=6,138$ | $\mathrm{~N}=5,573$ |
|  | $\mathrm{n}(\%)$ | $\mathrm{n}(\%)$ |
| Adverse event | $1,479(24.1 \%)$ | $1,186(21.3 \%)$ |
| Diarrhea | $929(15.2 \%)$ | $758(13.6 \%)$ |
| Vomiting | $887(14.5 \%)$ | $724(13.0 \%)$ |
| Otitis media | $422(6.9 \%)$ | $325(5.8 \%)$ |
| Nasopharyngitis | $66(1.1 \%)$ | $40(0.7 \%)$ |
| Bronchospasm |  |  |

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, diptheria, whooping cough, and measles in the period of 1850 to 1940. The first vaccine made available was for diptheria 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). ${ }^{55}$

Table XI--[Diphtheria (Nigeria)] shows that following a significant increase in the diptheria 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 immplementation of EPI in 1979. This decline pattern continued during implementation of EPI to 1980, after which--by 1982--the incidence of diptheria exhibited a major increase of nearly 30 fold. 65

## England \& Wales: Deaths of Ghildren Under 15 Years <br> Altributed to Scarlet Fever, Dlphtheria, Whooping Cough, and Measles

Nlgeria: Reported Cases of Diphtheria 1973-1982


## Dominican Republic: Diphtheria <br> 1978-1989

Table XV: Diphtheria (Dominican Republic)
Table XV--shows that in the period of 1978 to mid 1985--before implementation of EPI--the diptheria 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 diptheria case rate more than doubled from its 1986 level. The disease than returned to its natural rate of decline, proceeding to a very low level in 1989. ${ }^{69}$


Years

## 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 $46,750.179$
- 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 Coumoyer'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 Diptheria 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 Diptheria 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, $4^{\text {th }}$ 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

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/WhatlfStop.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 thehighest 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 plummetted 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 unvaccianted 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 fortetanus 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.


## Pertussis



Dominican Republic: Pertussls 1978-1989


## http://www.vran.org/vaccines/dpt/jdonegan-dpt.htm

In the nineteenth century whooping cough was most definitely a killer disease. "Deaths from whooping cough remained at around 10000 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 fill 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 aher stopping immunization, BMJ 1979;1:1601-1603
2. 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 <br> [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 FIGURE 1. Reported cases of pertussis - United States, 1965-1993* during 1980-1993. These observations suggest that the recent

*Data for 1993 are provisional through December 4 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

[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." [Refering 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 $87 \%(95 \% \mathrm{Cl}=50 \%-96 \%)$ (10). In a randomized, double-blind, placebo-controlled study of 2,102 Alaskan Natives, however, the point estimate of efficacy was $35 \%$ ( $95 \% \mathrm{CI}=(-57 \%)-73 \%$ ) (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 $1 \mathrm{ug} / \mathrm{mL} 1$ month after receiving the third of three doses (geometric mean titer (GMT) = $0.42 \mathrm{ug} / \mathrm{mL}$ ). In Alaska, infants with a similar vaccination schedule had lower mean titers (GMT $=0.2$ $\mathrm{ug} / \mathrm{mL}$ ) 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 $95 \% \mathrm{Cl}=68 \%$ ). 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 $93 \%$ ( $95 \% \mathrm{Cl}=45 \%$ 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 <br> 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 15923 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 100000 persons), rate ratios, and rate differences.

## Results Between 1998 and 2002, annual incidence ratesfor invasive pneumococcal disease decreased from 19.0 to 12.1 cases per 100000 among whites and from 54.9 to 26.5 among blacks. Due to these declines, 14730

 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], 2.73.0); in 2002, the black-white rate ratio had been reduced to 2.2 ( $95 \% \mathrm{Cl}, 2.0-2.4$ ). Incidence among black children younger than 2 years went from being 3.3 times higher ( $95 \% \mathrm{Cl}, 3.0-3.7$ ) than among white children in the prevaccine period to 1.6 times higher ( $95 \% \mathrm{Cl}, 1.1-2.2$ ) 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.
## 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 then 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 (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.

## 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 M ARROYO*, J M ALIA* ${ }^{*}$, L MATEOS* ${ }^{*}$, L CARRASCO**, F BALLESTEROS**, R LARDINOIS $\dagger$ and Paediatric Collaborative Group $\ddagger$
*Clinical Analysis Laboratory, Residencia Sanitaria "N ${ }^{\text {tra }}$ S $^{\text {ra }}$ de Alarcos", Ciudad Real Spain
**Biostatistics Department, Facultad de Medicina, Universidad Autónoma Madrid, Spain $\dagger$ Medical Department, Merck Sharp \& Dohme Spain

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 altemately, 96.2 percent natural immunity to mumps in 1967.]


#### Abstract

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.

Ricbard 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 tbe Turning Point Wellness. Center in Watertown, Massachusetts. and is a past President of the National Center for Homeopathy

\section*{http://freespace.virgin.net/ahcare.qua/literature/medical/vaccination.html}

\section*{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 [See also MMRV]<br>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


#### Abstract

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 $\geqslant 12$ 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 $\geqslant 12$ 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.]
http://www.medscape.com/viewarticle/416372_4Varicella Epidemiology: Prevaccine Varicella Epidemiology: Prevaccine Era
Before the vaccine became available, more than $90 \%$ of individuals were infected by 14 years of age; the annual incidence rate was estimated to approximate the birth cohort. ${ }^{[89,90,95]}$ In a prevaccine study of 8,000 youths aged 5 to 19 years at Kaiser Permanente Medical Care Program, Northern California, the annual incidence of varicella was $10.3 \%$ in 5 - to 9 -year-olds, $1.9 \%$ in 10 - to 14 -year-olds, and $1.2 \%$ in 15 - to 19 -year-olds. ${ }^{[96]}$
Nonetheless, data from both the United States and the United Kingdom indicate an unexplained shift in the age-distribution of cases over the last 20 years, which predates the introduction of the vaccine. ${ }^{[95]}$ In England and Wales, the incidence of reported cases in persons older than 14 years of age doubled between 1967 and 1970 and 1991 and 1995, as did the death rate. ${ }^{[95]}$ While similar incidence rates are unavailable in the United States, the hospital admission rates among Army personnel increased 4-fold between 1980 and 1988, and increased 18-fold between 1975 and 1988 among Navy personnel. ${ }^{[95]}$ Possible explanations include the emigration of susceptible individuals from tropical climates to temperate climates.

## Varicella Epidemiology: Postvaccine Era

Varicella epidemiology data in the postvaccine era are limited. In a study of 11 daycare centers in North Carolina, the rate of vaccine coverage increased from 4\% in 1995 to 63\% in December 1999. ${ }^{[97]}$ During that same period, the incidence of disease decreased from 17 cases/1000 personmonths to 2 cases/ 1000 person-months.

## 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 Association ${ }^{1}$ 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, $\mathbf{1 0 . 7}$ 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.
${ }^{1}$ Wasley 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 copyrisght 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 <br> for MCC <br> (years) | Rate per $10^{5}$ <br> pre-MCC <br> campaign | Rate per $10^{5}$ <br> post-MCC <br> campaign | Percentage <br> reduction <br> $(95 \% ~ C I)$ |
| :--- | :---: | :---: | :---: |
| $15-17$ | 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
To cite this article: Judith A. O'Brien RN, J. Jaime Caro MDCM, Denis Getsios BA (2006)
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 meningococcemia to identify case characteristics, resource use, and inpatient care costs.

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


http://www.wellbeingjournal.com/vaccine-notes.htm
GOVERNMENT OFFICIALS WHO OWN DRUG STOCK. As far as reform of Medicare, healthcare and costs of drugs go in the coming congress and administration of the U.S. government, here is partial list of individuals and families to watch regarding legislation (and listed are approximate amounts of dollars held in shares of pharmaceutical company stocks): The George W. Bush family ( $\$ 62,000-$ $\$ 234,000$ ); Dick Cheney ( $\$ 150,000-\$ 350,000$ ); Hadassa Lieberman ( $\$ 15,000-\$ 50,000$ ); Rep. Robin Hayes (over $\$ 11$ million as of 12-31-99); Rep. Jim Sensenbrenner (ranking Republican on a judiciary subcommittee "that often reviews patent legislation that can deliver windfalls to name-brand drug companies," $\$ 2.2$ million- $\$ 7.1$ million in five drug companies); Teresa Kerry, wife of Sen. John Kerry ( $\$ 2.1$ million- $\$ 4.2$ million in eight drug companies). It should be noted that George W. Bush put all his stock into a blind trust before the election and Dick Cheney, "on leave" during the presidential campaign as a director of Proctor \& Gamble, planned to do the same if elected and to relinquish 11,000 options in P\&G stock. The Bush senior healthcare advisor, Gail Wilensky, held $\$ 10.5$ million in shares and stock options in healthcare companies. McClatchy Newspapers Washington Bureau reviewed 180 congressmen's latest financial disclosure statements and found that 36 members or their families owned drug company stocks. (International Council for Health Freedom Newsletter, Winter 2001, Vol. IV., No. 4, page 49; 1-619-702-1282.)
http://www.goodnessdirect.co.uk/ogi-local/frameset/article/125.html

## At a Glance Ways to Strengthen your Child's Immunity

by Melanie Waxman

- Breastfeed your baby
- Offer a wide variety of organic, natural foods
- Create a non-toxic home environment
- Avoid un-necessary vaccines and anti-biotics
- Give your child lots of love and affection
- Create routines in daily life
- Eat together as a family
- Make sure your child has enough sleep
- Spend time outdoors in nature Read more about Melanie Waxman and Healthy Macro Kids http://www.macrobiotics.co.uk/kids.htm

