Common Childhood Diseases Prior to School-Required Vaccination

School requirements for the currently required vaccinations date back only to 1980. The addition of these vaccinations were not driven or prompted by high mortality numbers.

Mortality rates for all of the potentially vaccine preventable infections had dropped to zero average annually well before school attendance requirements, before vaccines were in broad population use, or in some cases even developed. **Measles mortality** ranged from 1 to 4 annually 1959 to 1967, with 5,500- 22,800 cases/year, and **dropped to zero fatalities in 1968, 12 years before school rules** and before the MMR vaccine was in wide use in the 1970's.

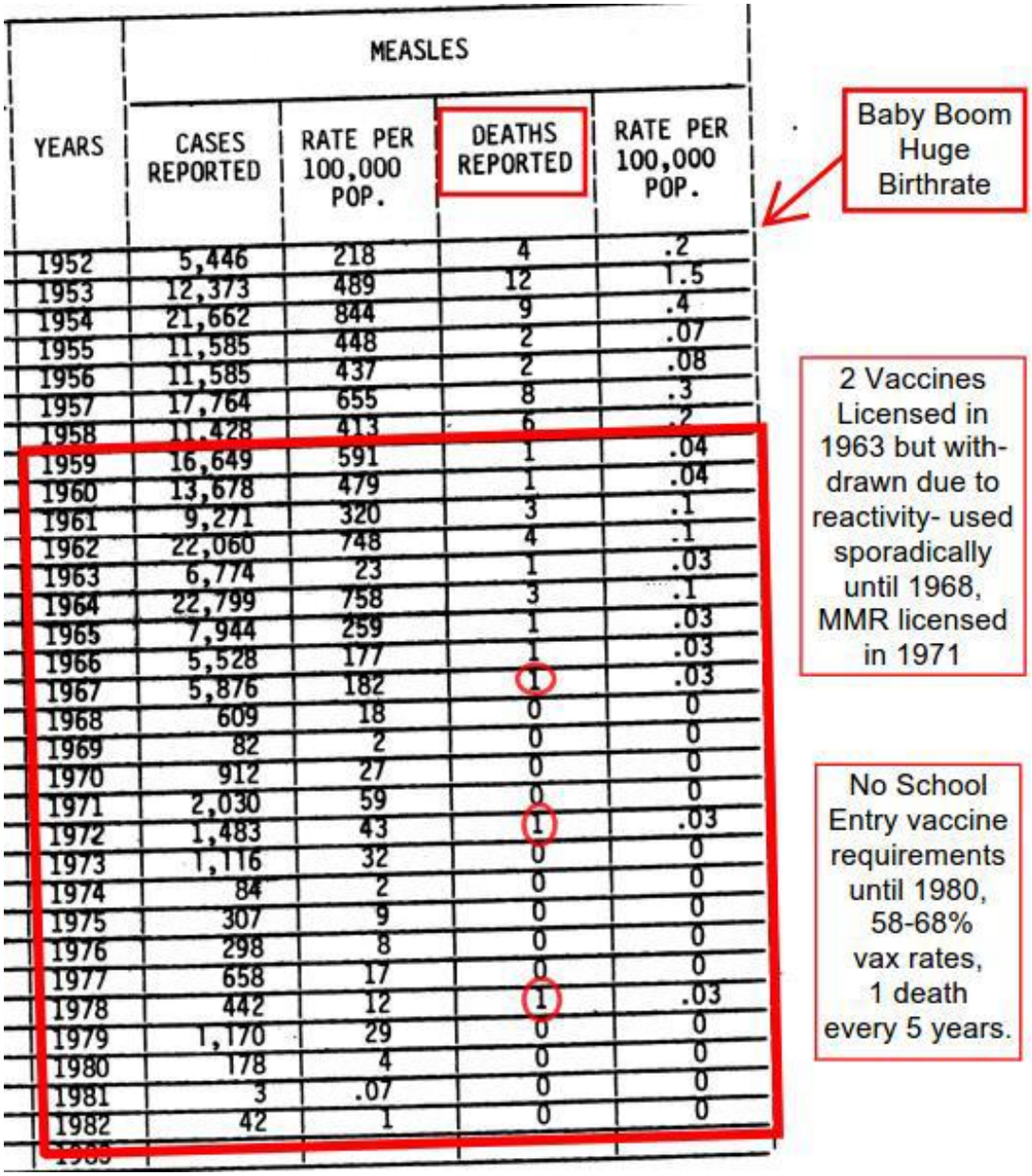
There were only 4 Pertussis mortalities in 21 years from 1959 to 1980. The CDC 1962 to 2009 Vaccination Coverage report shows rates 60%-70% range, 20% to 40% lower than we have today. Chicken Pox mortality dropped to zero 16 years before the vaccine, and 26 years before it became a school requirement.

With vaccination rates in WA state now nearly 97% for all vaccines, the historical data shows that partial or full exemption use cannot negatively impact community health. Chronic health issues associated with adverse reactions to vaccines, however, are impacting individual health. Due to the known limitations of each vaccine (eg. Pertussis vaccine unable to prevent colonization or transmission; individual protection lasting less than five years, and failure of mumps vaccine to provide lasting protection), health agencies should be focused on bolstering other public health tools, such as rapid diagnosis, communicating limitations to the general public, providing up-to-date advice on maintaining immune health, enforcing current requirements for sick children to stay home until not contagious, as well as a calm approach to inevitable mild cases of outbreaks of these mostly mild and nonfatal once common childhood diseases. Exposure of healthy children during outbreaks by remaining in school should be a parental decision, as the exposure could provide lifetime immunity for anyone, even those who are vaccinated.

http://www.doh.wa.gov/DataandStatisticalReports/DiseasesandChronicConditions/CommunicableDiseaseSurveillanceData/AnnualCDSurveillanceReports

HISTORICAL DATA: 1952-1982

MEASLES, PERTUSSIS, MUMPS, CHICKEN POX



YEARS	MEASLES			
	CASES REPORTED	RATE PER 100,000 POP.	DEATHS REPORTED	RATE PER 100,000 POP.
1952	5,446	218	4	.2
1953	12,373	489	12	1.5
1954	21,662	844	9	.4
1955	11,585	448	2	.07
1956	11,585	437	2	.08
1957	17,764	655	8	.3
1958	11,428	413	6	.2
1959	16,649	591	1	.04
1960	13,678	479	1	.04
1961	9,271	320	3	.1
1962	22,060	748	4	.1
1963	6,774	23	1	.03
1964	22,799	758	3	.1
1965	7,944	259	1	.03
1966	5,528	177	1	.03
1967	5,876	182	1	.03
1968	609	18	0	0
1969	82	2	0	0
1970	912	27	0	0
1971	2,030	59	0	0
1972	1,483	43	1	.03
1973	1,116	32	0	0
1974	84	2	0	0
1975	307	9	0	0
1976	298	8	0	0
1977	658	17	0	0
1978	442	12	1	.03
1979	1,170	29	0	0
1980	178	4	0	0
1981	3	.07	0	0
1982	42	1	0	0

Baby Boom Huge Birthrate

2 Vaccines Licensed in 1963 but with-drawn due to reactivity- used sporadically until 1968, MMR licensed in 1971

No School Entry vaccine requirements until 1980, 58-68% vax rates, 1 death every 5 years.

YEARS	PERTUSSIS			
	CASES REPORTED	RATE PER 100,000 POP.	DEATHS REPORTED	RATE PER 100,000 POP.
1952	164	7	1	.04
1953	607	24	1	.04
1954	1,419	55	1	.04
1955	1,005	38	1	.04
1956	341	13	1	.04
1957	286	11	1	.04
1958	1,018	37	1	.04
1959	571	20	0	0
1960	251	9	0	0
1961	344	12	0	0
1962	663	23	0	0
1963	517	17	0	0
1964	275	9	0	0
1965	115	4	1	.03
1966	253	8	0	0
1967	247	8	0	0
1968	97	3	0	0
1969	146	4	0	0
1970	226	6	0	0
1971	106	3	0	0
1972	103	3	0	0
1973	77	2	0	0
1974	87	3	0	0
1975	38	1	0	0
1976	26	.70	0	0
1977	71	2	2	.05
1978	59	2	0	0
1979	11	.30	0	0
1980	77	2	0	0
1981	58	1	1	.03
1982	36	.84	0	0
1983				

YEARS	CHICKENPOX			
	CASES REPORTED	RATE PER 100,000 POP.	DEATHS REPORTED	RATE PER 100,000 POP.
1952	7,855	315	2	.08
1953	9,439	373	1	.04
1954	9,214	359	1	.04
1955	8,713	337	1	.04
1956	6,808	256	1	.04
1957	9,107	336	2	.08
1958	10,511	380	4	.15
1959	12,074	428	4	.15
1960	9,662	339	0	0
1961	4,984	172	1	.04
1962	11,634	395	2	.08
1963	12,607	424	1	.04
1964	14,979	498	6	.20
1965	10,639	347	1	.04
1966	9,521	305	3	.06
1967	9,803	304	2	.06
1968	7,257	218	1	.03
1969	5,361	159	1	.03
1970	8,111	238	2	.05
1971	7,848	228	2	.05
1972	9,613	280	1	.03
1973	11,813	343	2	.05
1974	8,416	240	2	.05
1975	6,381	179	3	.08
1976	6,948	191	2	.06
1977	12,594	339	2	.05
1978	7,689	200	1	.03
1979	11,074	279	0	0
1980	6,982	169	0	0
1981	8,740	206	0	0
1982	6,086	143	0	0
1983				

YEARS	DIPHTHERIA			
	CASES REPORTED	RATE PER 100,000 POP.	DEATHS REPORTED	RATE PER 100,000 POP.
1952	30	1.20	5	.2
1953	38	1.50	6	.2
1954	20	.77	3	.1
1955	23	.88	6	.2
1956	12	.45	3	.1
1957	22	.81	1	.04
1958	3	.10	0	0
1959	0	0	0	0
1960	0	0	0	0
1961	8	.27	1	.04
1962	0	0	0	0
1963	2	.06	0	0
1964	11	.36	0	0
1965	10	.32	0	0
1966	11	.35	0	0
1967	4	.12	0	0
1968	1	.03	1	.03
1969	9	.26	3	.09
1970	10	.29	1	.03
1971	18	.52	0	0
1972	32	.93	3	.9
1973	104	3.00	2	.6
1974	190	5.50	1	.03
1975	246	7.00	0	0
1976	101	2.80	3	.08
1977	64	1.70	0	0
1978	64	1.60	0	0
1979*	0	0	0	0
1980	0	0	0	0
1981	1	.02	0	0
1982	0	0	0	0
1983				

There was never a "Golden Age", in the past when Vaccine Acceptance and Vaccination rates were higher than they are today. The truth is there are more US children getting more vaccines for more infections at younger ages than ever in history.

Vaccine Coverage Levels – United States, 1962-2009

Year	DTP 3+	DTP4+	Polio 3+	MMR*	Hib3+	Var	PCV3+	HepB3+	Combined 4-3-1	Combined 4-3-1-3
1962	67.3									
1963	71.4									
1964	74.6									
1965	72.7									
1966	74.0									
1967	77.9			60.0						
1968	76.8			61.5						
1969	77.4			61.4						
1970	76.4			58.4						
1971	77.8			62.2						
1972	74.1			62.8						
1973	71.7		59.5	61.0						
1974	72.4		60.0	63.4						
1975	73.2		63.6	65.5						
1976	72.7		61.3	66.3						
1977	69.6		62.6	65.0						
1978	66.6		59.5	63.6						
1979	64.4		59.7	66.5						
1080	66.0		58.9	66.6						
1981	68.1		59.2	66.8						
1982	67.1		57.0	67.6						
1983	65.4		56.9	66.3						
1984	65.0		53.2	65.8						
1985	63.6		53.6	61.2						
1986†										
1987†										
1988†										
1989†										
1990†										
1991	68.8		53.2	82.0						
1992	83.0	59.0	72.4	82.5	28.2			8.0	68.7	55.3
1993	88.2	72.1	78.9	84.1	55.0			16.3	67.1	
1994	93.0	77.7	83.0	89.0	86.0			37.0	75.0	
1995	94.7	78.5	87.9	87.6	91.7			68.0	76.2	74.2
1996	95.0	81.1	91.1	90.7	91.7	16.0		81.8	78.4	76.5
1997	95.5	81.5	90.8	90.5	92.7	25.9		83.7	77.9	76.2
1998	95.6	83.9	90.8	92.0	93.4	43.2		87.0	80.6	79.2
1999	95.9	83.3	89.6	91.5	93.5	57.5		88.1	79.9	78.4
2000	94.1	81.7	89.5	90.5	93.4	67.8		90.3	77.6	76.2
2001	94.3	82.1	89.4	91.4	93.0	76.3		88.9	78.6	77.2
2002	94.9	81.6	90.2	91.6	93.1	80.6	40.8	88.9	78.5	77.5
2003	96.0	84.8	91.6	93.0	93.9	84.8	68.1	92.4	82.2	81.3
2004	95.9	85.5	91.6	93.0	93.5	87.5	73.2	92.4	83.5	82.5
2005	96.1	85.7	91.7	91.5	93.9	87.9	82.8	92.9	83.1	82.4
2006	95.8	85.2	92.9	92.4	93.4	89.3	87.0	93.4	83.2	82.3
2007	95.5	84.5	92.6	92.3	92.6	90.0	90.0	92.7	82.8	81.1
2008		84.6	93.6	92.1	90.9	90.7	80.1§	93.5		
2009	94.0	83.9	92.8	90.0	92.1	89.6	92.6	92.4	81.5	

Decades of 30% - 40% unvaccinated population with no epidemics

The 90% plus coverage rates we see today were first achieved in the late 90's, and are the result of the convergence of 3 programs-

1) School attendance requirements, which began in the late 70's & early 80's;

2) The near complete indemnification for liability of vaccine manufacturers and administrators by the NVICP, The National Vaccine Injury Compensation program

3) VFC- Vaccines For Children, a funding scheme whereby the government buys and provides all "required" vaccines, 1993.

Required vaccines are now legislated purchases.

*Previously reported as measles-containing vaccine (MCV)
†No national coverage data were collected from 1986 through 1990.
§In 2008, data are for PCV4+.

Combined 4-3-1: Four or more doses of DTP/DTaP/DT, three or more doses of poliovirus vaccine, and one or more doses of any measles-containing vaccine.

Combined 4-3-1-3: Four or more doses of DTP/DTaP/DT, three or more doses of poliovirus vaccine, one or more doses of any measles-containing vaccine, and three or more doses of *Haemophilus influenzae* type b vaccine.

Data prior to 1993 were collected by the National Health Interview Survey and represent 2-year-old children. Data from 1993 forward are from the National Immunization Survey and represent 19-35 month-old children. Different methods were used for the two surveys.

Data are available for combinations of vaccines not reflected on this table. For more information about annual coverage figures from 1994 to the present, see http://www.cdc.gov/vaccines/stats-surv/nis/default.htm.

This document can be found on the CDC website at:
http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/G/coverage.pdf

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School funding formulas are based on enrollment. Barring children who have less than 16/16 vaccines or less than 17/17 vaccines will disproportionately negatively impact small school districts.