

## Justification for Philosophical Exemptions to Vaccines The Coalition for SafeMinds 3/20/2012

Philosophically when it pertains to medical interventions, a parent should not intentionally subject their child to increased risk. Thus if it is reasonable for a parent to think that the risk from a particular vaccine exceeds the benefit of that vaccine, then that parent should philosophically exempt or delay that particular vaccine. The question, then, is whether it is reasonable for a parent to think that a vaccine's risk exceeds its benefits.

### 1) Risk vs benefits of vaccines administered at age 12 months:

Dec 2011 Canadian study (Wilson et al, *Adverse Events following 12 and 18 month vaccinations*) found a 33% increase in emergency room visits or hospital admissions 4-12 days post 12-month vax, which equated to 1 incremental emergency room visit or hospital admission for every 168 children vaccinated. Study also found an additional 20 febrile seizures for every 100,000 vaccinated at 12 months (a 1 in 5,000 risk). A key vaccine administered at age 12 months is the MMR (Measles/Mumps/Rubella) vaccine. Of those diseases, measles is the highest risk. As comparison, the [SmartVax Weigh The Risks of Vaccination](#) analysis by SafeMinds found that the incremental risk from measles if a child doesn't vaccinate until age 5 to be:

- 1 in 16M injury and 1 in 19M death in a highly-vaccinated population
- 1 in 15,851 injury and 1 in 18,924 death in a low-vaccinated population

Given these numbers, it is reasonable for a parent to think that the vaccines administered at age 12 months have higher risk than benefit.

#### Details: Incremental Infectious Disease Risk to a Child who doesn't Vaccinate until age of five:

	Highly Vaccinated Population (Cumulative Incremental Risk)		Low Vaccinated Population (Cumulative Incremental Risk)	
	Permanent injury	Death	Permanent Injury	Death
Hepatitis B <sup>1</sup>	8,000,000	7,600,000	33,000	127,000
Rotavirus	No Incremental Risk	108,000	No Incremental Risk	108,000
Diphtheria	No Incremental Risk	No Incremental Risk	No Incremental Risk	16,000
Tetanus	No Incremental Risk	759,000	No Incremental Risk	759,000
Pertussis <sup>2</sup>	No Incremental Risk	432,000	No Incremental Risk	99,000
Hib	483,000	5,000,000	3,400	35,000
Pneumococcal disease	No Incremental Risk	No Incremental Risk	19,000	No Incremental Risk
Influenza (flu)	No Incremental Risk	No Incremental Risk	No Incremental Risk	No Incremental Risk
Varicella (chicken pox)	508,000	1,900,000	74,000	218,000
Hepatitis A	No Incremental Risk	48,000,000	No Incremental Risk	20,000,000
Measles	16,000,000	19,000,000	16,000	19,000
Mumps	40,000,000	28,000,000	2,600,000	1,800,000
Rubella	30,000,000,000	No Incremental Risk	63,000,000	1,000,000
Polio	623,000,000	18,000,000,000	1,900	55,000

<sup>1</sup> Risk to infant if mother has tested negative for HepB

<sup>2</sup> Incremental risk excludes deaths & injury risks before vaccination series is completed

### 2) Risk vs benefits of Hepatitis B vaccine administered at birth:

The Hepatitis B vaccine provides a protective benefit to a newborn if the mother is HepB-positive (1 in 480 chance); otherwise, risk factors for Hepatitis B transmission begin during teen years (unsafe sex and illegal intravenous drug use). HepB vaccines administered at birth, 1-2 months, and 6 months provide immunity that may wane prior to the teen years. Many countries screen pregnant women for HepB and administer HepB to infants only if mother is HepB-positive (such as UK, Denmark, Netherlands, Switzerland, Sweden, Norway, Finland, Ireland, Iceland, Japan).

2009 study indicated that boys who received HepB vaccine had a 3x greater risk of developing autism and a 9x greater risk of needing special education services. The current published autism prevalence rate in the USA is 1 in 110, per the CDC. In comparison, the [SmartVax Weigh The Risks of Vaccination](#) analysis by SafeMinds found that the incremental risk from Hepatitis B to a child if not vaccinated by age 5 and mother tested negative for HepB to be:

- 1 in 8M injury and 1 in 7.6M death in a highly-vaccinated population
- 1 in 33K injury and 1 in 127K death in a low-vaccinated population

Given these numbers, it is reasonable for a parent to think that the Hepatitis B vaccine administered in the first six months of life has higher risk than benefit.

### 3) Risk vs benefits of Diphtheria, Pertussis, & Tetanus (DTaP) vaccine administered at age 2, 4, and 6 months:

Diphtheria & Tetanus are low disease risks in modern-day USA, so risk focus is on pertussis. Despite record high vaccination rates, pertussis outbreaks remain cyclical approximately every five years because the vaccine is not very effective. A large Canadian study indicated that there is a 1 in 13 risk of developing vaccine-induced asthma from administering pertussis vaccine per recommended schedule, but that this risk goes away by delaying administration to age 6, 8, and 10 months. In comparison,

the [SmartVax Weigh The Risks of Vaccination](#) analysis by SafeMinds found that the incremental risk from pertussis to a child if not vaccinated by age 5 to be:

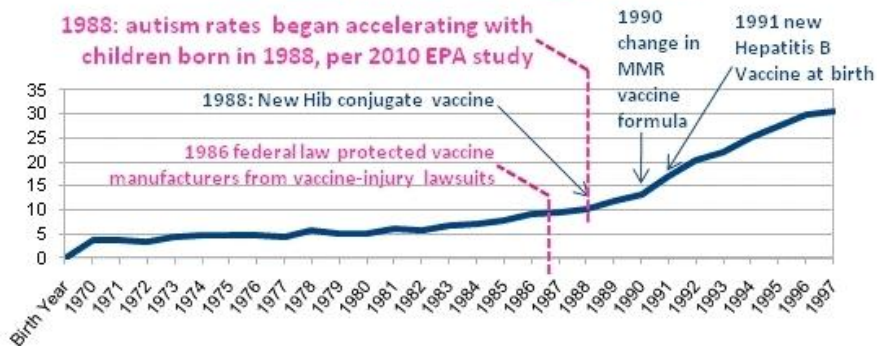
- 1 in 432K death in a highly-vaccinated population
- 1 in 99K death in a low-vaccinated population

Given these numbers, it is reasonable for a parent to think that DTaP vaccine administration should be delayed until after the first six months of life because administration prior to that has higher risk than benefit.

#### 4) Risk of autism vs benefits of vaccines:

Autism prevalence in the USA amongst children has risen to 1 in 110, per the CDC.

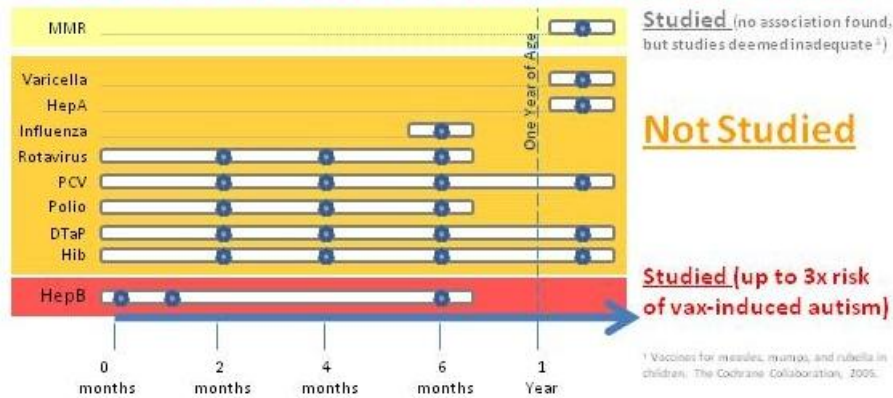
### California Dept of Developmental Services Autism Prevalence per 10,000



The vaccine-autism link has generally not been studied, despite assertions to the contrary by some public health officials. 6 of the 7 vaccines administered to children in first year of life (Hib, DTaP, Polio, PCV, Rotavirus, & Influenza) have not been studied for autism rates in children who received vs did not receive the vaccine. The 7<sup>th</sup>, the Hepatitis B vaccine, was shown in recent research to be associated with a 3x increased risk of autism.

- Several plausible vaccine-autism hypotheses have not been studied, including:
  - conjugate vaccines (introduced in 1988) causing an immune response that disrupts neuron myelination<sup>2</sup>
  - aluminum adjuvants (greatly increased exposure to infants beginning 1988) which carry a risk of autoimmunity & long-term brain inflammation<sup>3</sup>
- Two hypotheses have been studied: MMR vaccine and mercury preservative
  - Studies designed to exonerate vaccines have found no association with autism, but there are significant questions about the validity of those findings<sup>1</sup>

### Most Vaccines not studied for Autism in children who received vs didn't receive the vaccine



More information can be found at:

- Website for the Coalition for SafeMinds: [www.safeminds.org](http://www.safeminds.org)
- SafeMinds website on SmartVax: [www.smartvax.com](http://www.smartvax.com)
- Talking Points on Vaccine-Injury Concerns: <http://www.smartvax.com/images/PDF/talking%20points%20on%20vaccine-injury%20concerns.pdf>

- Autism primer for the general public:  
[http://www.smartvax.com/images/PDF/autism\\_primer\\_from\\_safeminds\\_for\\_general\\_public.pdf](http://www.smartvax.com/images/PDF/autism_primer_from_safeminds_for_general_public.pdf)