Slide 1

Vaccine Toxins

What's All the Fuss About?

Leslie Manookian
Producer of *The Greater Good*, an award winning documentary on vaccines

Slide 2

Childhood Vaccine Schedule

1983		2013	
Vaccines	Doses	Vaccines	Doses
Diphtheria	5	Diphtheria	6
Tetanus	6	Tetanus	6
Pertussis	5	Pertussis	6
Measles	2	Measles	1
Mumps	2	Mumps	1
Rubella	2	Rubella	1
Polio	4	Polio	4
		Hepatitis B	3
Total:	7	Rota Virus	3
		Hib	4
		Pneumococcal	4
		Influenza	19
		Chicken Pox	2
		Hepatitis A	2
		HPV	3
		Meningococcal	2
		Total:	16
			70

Slide 3

Adult Vaccine Schedule:

- Flu shot every year
- Shingles - one
- TDaP - one
- Tetanus-Diphtheria (every 10 years)
- Varicella – two
- HPV – three
- MMR – two
- Pneumococcal – one

Slide 4

Vaccine Ingredients: Safe for a baby's bottle?

Cells from aborted fetuses	Aluminum
Monkey kidneys	Mercury
Chicken embryos	Formaldehyde
Mouse brain	Yeast
Chicken kidneys	Antibiotics
Monkey lung tissue	MSG
Cow milk protein	Polysorbate 80
Sheep blood	Disinfectant
Cow heart	Soy protein
Cow pancreatic enzymes	Antibacterials
Human blood protein	Viruses
Gelatin – various animals	Bacteria
Calf serum	Genetically engineered organisms

Source: http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf

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What we're taught:

- Vaccines are safe
- The vaccine schedule has been properly studied for safety
- Vaccine ingredients have been studied for safety
- Vaccines alone are responsible for low disease rates seen today
- Vaccines are effective

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Are Vaccines Safe? How vaccines are studied:

- Placebos are not placebos
- Vaccines studied singly but given in large combinations
- Vaccine research compares vaccinated to vaccinated populations
- No long term clinical study comparing vax to unvax

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Vaccine Toxins

- Thimerosal (Mercury)
- Aluminum
- Polysorbate 80
- Formaldehyde
- Foreign protein
- Co-toxicity
- Genetically engineered components

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Thimerosal (Mercury)

- Used in manufacturing process in some vaccines
- Used as a preservative in some vaccines
- Cannot be completely filtered out
- Trace amounts can cause harm
- Given to pregnant women and infants

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Thimerosal-Small Doses Cause Harm

- 0.5 ppb mercury kills human neuroblastoma cells (Parran et al., Toxicol Sci 2005; 86: 132-140)
- 2 ppb mercury = U.S. EPA limit for drinking water (http://www.epa. gov/safewater/ contaminants/ index.html# mcls)
- 20 ppb mercury destroys neurite membrane structure. Alzheimer's! (Leong et al., Neuroreport 2001; 12: 733-37)
- 200 ppb mercury in liquid - EPA classifies as hazardous waste.
- 700 ppb mercury = level of mercury in large predator fish.

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Thimerosal Still in Vaccines

- Roughly 50% of all flu shots
- DPT
- HIB
- DT
- Meningococcal

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Thimerosal in Vaccines

- 1 microgram (mcg) /Liter = 1 part per billion (ppb)
- 1 mcg in a vaccine dose ("trace") = 2,000 ppb
- 25 mcg (amount in many flu shots) = 50,000 ppb
- 50,000 ppb = mercury in multi-dose flu, H1N1, meningococcal and tetanus vaccines as preservative
- 25,000 ppb = mercury in multi-dose, Hepatitis B vaccine given at birth from 1991-2001 in the U.S.
- 50,000 ppb = mercury in multi-dose DTaP and HIB vaccine given in the 1990's to children at 2, 4, 6, 12 and 18 months of age

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Thimerosal

- CDC scientist Thomas M. Verstraeten in 1999: "high exposure to ethylmercury from thimerosal-containing vaccines in the first month of life increases the risk of subsequent development of neurologic development impairment"

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Aluminum

- Used as an adjuvant in many vaccines
- Used as a preservative
- Not filtered out
- Very little safety investigation
- Science shows toxic to all forms of life
- No biological need

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Aluminum: Concern since 1911

- William Gies:

These studies have convinced me that the use in food of aluminum or any other aluminum compound is a dangerous practice. That the aluminum ion is very toxic is well known, That aluminized food yields soluble aluminum compounds to gastric juice (and stomach contents) has been demonstrated. That such soluble aluminum is in part absorbed and carried to all parts of the body by the blood can no longer be doubted. That the organism can 'tolerate' such treatment without suffering harmful consequences has not been shown…"

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Effects of Aluminum Toxicity in Humans and Animals

- Learning delay and disabilities
- Speech impairment
- Ossification of skull of infants
- Movement disorders
- Cognitive impairment
- Confusion
- Repetitive Behavior
- Memory loss
- Dementia
- Death
- Headache
- Seizures
- Motor neuron cell death
- Immune System Disorders
- Autoimmune Disease

Tomljenovic L, Shaw CA, Curr Med Chem. 2011;18(17):2630-7.

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Aluminum in Vaccines

- Toxicity not evaluated in same way as mercury
- Much larger doses in vaccines than Hg
- Quantity ranges from 125 mcg to 850 mcg
- Designed to persist in body
- Causes immune reaction absent antigen
- Crosses blood brain barrier in healthy adults
- Most susceptible are infants and elderly

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Aluminum in Vaccines

- Hep A
- Hep A & B
- Tetanus-Diphtheria
- Pneumococcal
- Hib
- HPV
- TDaP
- DTP-Polio-Hib
- DTaP-Polio
- Anthrax

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Aluminum: Scientific Concerns

- Highly neurotoxic

  Tomljenovic L, Shaw CA, *Lupus* February 2012 vol. 21 no. 2 223-230.
- Impairs pre- and postnatal brain development in humans and animals

  Bishop NJ, Morley R, Day JP, Lucas A. *N Engl J Med* 1997; 336: 1557-1561.
  Wang M, Chen JT, Ruan DY, Xu YZ *Neuroscience* 2002; 113: 411-419.
- Linked to dialysis-associated encephalopathy syndrome, aka dialysis dementia

  Tomljenovic L, Shaw CA, Curr Med Chem. 2011;18(17):2630-7.

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Aluminum: Scientific Concerns

- Leads to cognitive dysfunction in
  Couette M, Boisse MF, Maison P, et al. *J Inorg Biochem* 2009; 103: 1571-1578.
- Autism
  Tomljenovic L, Shaw CA, *J Inorg Biochem*, 2011 Nov;105(11):1489-99.
- Triggers immune response absent antigen
  Shaw CA, Tomljenovic L, Immunol Res. 2013 Jul;56(2-3):304-16.
- Leads to autoimmunity in adults: ASIA
  Shoenfeld Y., Agmon-Levin N., *J Autoimmun* 2011; 36: 4-8.

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Aluminum: Scientific Concerns

- Crosses blood brain barrier – HPV
  Tomljenovic and Shaw, Pharmaceut Reg Affairs 2012, S12:001
- Migrates from injection site to CNS
  Khan Z, Combadière C, Authier FJ, et al, *BMC Med.* 2013 Apr 4;11:99.
- Linked to Autism, Guillain-Barre, Gulf War syndrome, Alzheimer's, ALS, MS, ASIA, CNS cell death, lupus, transverse myelitis
  Shaw CA, Tomljenovic L, Immunol Res. 2013 Jul;56(2-3):304-16.

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Other Vaccine Toxins

- Polysorbate 80 – allergic reactions, nausea, vomiting, diarrhea, abnormal heart rhythm, heart attack, stroke, death, infertility in women, http://www.drugs.com/cdi/darbepoetin-alfa-polysorbate-80.html, http://voices.yahoo.com/dangerous-food-additives-polysorbate-80-could-7546884.html?cat=5
- Formaldehyde – known human carcinogen
  http://www.iarc.fr/en/media-centre/pr/2004/pr153.html
- Foreign protein – unknown impact
- Co-toxicity - unknown

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Are Vaccines safe?
Studies on Autism:

- Sorting out the spinning of autism: heavy metals and the question of incidence
- Do aluminum vaccine adjuvants contribute to the rising prevalence of autism?
- Abnormal measles-mumps-rubella antibodies and CNS autoimmunity in children with autism
- Hepatitis B Vaccination of Male Neonates and Autism, NHIS 1997–2002
- Neurodevelopmental disorders following thimerosal-containing childhood immunizations: a follow-up analysis

Source: http://www.greatergoodmovie.org/learn-more/science/autism/metals-and-environmental-toxins-in-autism/

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Are Vaccines safe?
Studies on Brain damage and inflammation:

- Neurological Complications of Pertussis Immunization
- The smallpox vaccine and postvaccinal encephalitis
- Acute disseminated encephalomyelitis following influenza vaccination
- A Case Series of Children with Apparent Mercury Toxic Encephalopathies

Source: http://www.greatergoodmovie.org/learn-more/science/brain-inflammation-encephalitis-post-vaccination/

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Are Vaccines Safe?
Studies on Cognitive Impairment:

- Aluminum hydroxide injections lead to motor deficits and motor neuron degeneration
- Neurodevelopmental disorders following thimerosal-containing childhood immunizations: a follow-up analysis
- Long-term Persistence of Vaccine-Derived Aluminum Hydroxide is Associated with Chronic Cognitive Dysfunction

Source: http://www.greatergoodmovie.org/learn-more/science/link-between-neurologic-and-immune-disorders/

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Are Vaccines safe?
Studies on Autoimmune Disorders:

- Autoimmune Syndrome Induced by Adjuvants
- Vaccines and the risk of insulin-dependent diabetes (IDDM)
- Recombinant Hepatitis B Vaccine and the Risk of Multiple Sclerosis: a Prospective Study
- Is infant immunization a risk factor for childhood asthma or allergy?
- Chronic Arthritis after Rubella Vaccination
- Autoimmune hazards of hepatitis B vaccine
- Systemic lupus erythematosus following HPV immunization or infection?

Source: http://www.greatergoodmovie.org/learn-more/science/autoimmune-disease/

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Are Vaccines safe?
Studies on Chronic Illness

- Emergent Human Pathogen Simian Virus 40 and Its Role in Cancer
- Aluminum as an adjuvant in Crohn's disease induction
- The common immunogenic etiology of chronic fatigue syndrome: from infections to vaccines
- Thimerosal-Derived Ethylmercury Is a Mitochondrial Toxin in Human Astrocytes

Source: http://www.greatergoodmovie.org/learn-more/science/chronic-illness/

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Are Vaccines safe?
Studies on Unexplained Infant Death:

- Unexplained cases of sudden infant death shortly after hexavalent vaccination
- Infant mortality rates regressed against number of vaccine doses routinely given: is there a biochemical or synergistic toxicity?
- Treatment of lethal pertussis vaccine reaction with histamine H1 antagonists.
- Primary Immunization of Premature Infants with Gestational Age <35 Weeks: cardiorespiratory Complications and C-Reactive Protein Responses Associated with Administration of Single and Multiple Separate Vaccines Simultaneously

Source: http://www.greatergoodmovie.org/learn-more/science/unexplained-infant-death/

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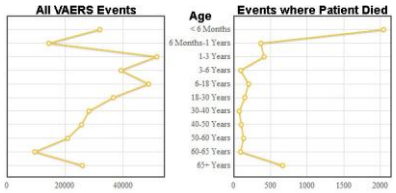
Are Vaccines Safe?
Unexplained Infant Mortality



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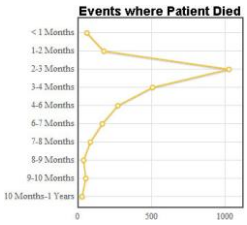
Are Vaccines Safe?
Unexplained Infant Mortality



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Are Vaccines Safe?

We don't have all the answers but science demonstrates serious cause for concern.

FOR MORE INFORMATION:
Go to: greatergoodmovie.org

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