Food For Thought...

China is taking down our kids without so much as firing a shot!
Over HALF of them are chronically sick. Half of all our kids will get cancer in their lifetime. One third have a neurological disorder like delayed speech, ADHD, serious brain injuries and learning disabilities. One is 5 have autoimmune diseases which are slowly and painfully killing them, 1 in 9 have deadly food allergies. 1 in 20 have constant life threatening seizures. Sure is great that China makes 83% of our kids vaccines and put the cells from aborted Chines baies in them, along with an aluminum adjuvant that makes the injectee's immune system attack all human cells, even its own!
Guess what folks.. now more than 80% of you and your children's vaccines are made in COMMUNIST CHINA with FDA inspections of the manufactures every 13 (THIRTEEN) years (as opposed to every 2 years with domestic manufacturers).
They've proven they can't even make safe PET FOOD or toothpaste. Their toys were caught with lead in the paint. There is no quality control and there is top to bottom corruption.
China has been making U.S. vaccines for about 6 years now. 83% of the vaccines used in the US are made in China. Since then we have added 50 - 80 million Americans to the list of people dying a slow death by Autoimmune Disease, 30 million who could be killed any moment by a food allergy, 14 million who are slowly dying from Alzheimer's Disease, THE HIGHEST INFANT MORTALITY RATE in the Industrialized World, 1 in 3 Children with Neurological Damage, 1 in 2 people with cancer, and are slated to have 80% of all vaccinated male children to have a serious brain injury making it impossible for them to speak, get out of diapers (ever) or ever care for themselves by 2032.
I would say the Chinese have conquered a nation without lifting so much as one gun
83% of Vaccines Are Made in China
China's food and drug safety record in recent years hardly inspires confidence: in 2007, Chinese cough syrup killed 93 people in Central America; one year later, contaminated blood thinner led to dozens of deaths in the United States while tainted milk powder poisoned hundreds of thousands of Chinese babies and killed six.
The government has since imposed more regulations, stricter inspections and heavier punishments for violators. Perhaps because of that, regulators routinely crack down on counterfeit and substandard drugmaking.
While welcoming WHO's approval of China's drug safety authority, one expert said it takes more than a regulatory agency to keep drugmakers from cutting corners or producing fakes.
...And Americans are expected to take them without question
"Four years ago, Beijing promised to clean up its act following the deaths of at least 149 Americans who received contaminated Chinese supplies of the blood-thinner heparin. But an examination by Reuters has found that unregulated Chinese chemical companies making active pharmaceutical ingredients (API) are still selling their products on the open market with few or no checks.
Interviews with more than a dozen API producers and brokers indicate drug ingredients are entering the global supply chain after being made with no oversight from China's State Food and Drug Administration (SFDA), and with no Good Manufacturing Practice (GMP) certification, an internationally recognized standard of quality assurance.
"There is falsification of APIs going on, we know it," said Lembit Rago, coordinator for Quality Assurance and Safety in Medicines with the World Health Organisation (WHO).
THINK ABOUT IT!
http://vitals.nbcnews.com/.../13529298-drug-ingredients-made-...
http://www.who.int/bulletin/volumes/92/9/14-020914/en/
http://usatoday30.usatoday.com/.../China-prepares-.../51464282/1
http://www.nytimes.com/.../china-investigates-vaccine-maker-a...
http://www.lifenews.com/.../scientists-in-china-create-new-v.../
http://www.nytimes.com/.../wor.../asia/china-vaccine-sales.html...
http://www.march-against-monsanto.com/how-hillary-clintons.../
BREAKING NEWS: NEW VACCINE SCANDAL IN CHINA...WHERE MILLIONS OF VACCINES ARE MADE
Did you know that every year MILLIONS of vaccines and pharmaceutical drugs and their ingredients are made in China, including ones given to Americans?
Yes, that's right. The land of tainted baby formula, toxic toys and wood floors that cause cancer, now supplies many US pharmaceutical companies with products that line your doctor's shelves.
According to the US FDA, 80% of ingredients in U.S.-made drugs — and 40% of finished medications Americans take — come from abroad. (1)
But you may NEVER know where that vaccine or pill was made because manufacturers hide the details.
https://www.cnbc.com/.../fresh-scandal-erupts-over-vaccine-sa...
According to the Chinese Food & Drug Administration, China has 34 vaccine manufacturers, of which four are international joint ventures, seven are state run and the rest are private.
"China is currently producing nearly all of the commonly-used vaccines for viral diseases such as influenza, measles, rabies (for humans), mumps, rotavirus, hepatitis A and B and for bacterial diseases, including typhoid, tetanus and diphtheria," says Dr Xu Ming, Vice President of the China Chamber of Commerce for Import and Export of Medicines and Health Products.
Do you want to entrust your health to China??

News Articles – Fully/Mostly vaccinated and still got disease. May need to go to site archives to see article.

Over 100 infected, most vaccinated.
http://vaccineimpact.com/2019/more-evidence-of-mmr-vaccine-failure-university-mumps-outbreak-among-vaccinated-students/

All vaccinated...
https://www-m.cnn.com/2019/03/13/politics/us-warship-quarantined-virus/index.html?r=http%3A%2F%2Fm.facebook.com

Pertusis...90 total in area. All vaccinated.
https://losangeles.cbslocal.com/2019/02/27/whooping-cough-harvard-westlake/?fbclid=IwAR3MDI-5zeaTwllsibzLvzdmmj_xezJrd7T8rIlkhGe-LSNJWyqBIX74EzQ

https://m.chron.com/houston/article/Three-cases-of-measles-confirmed-in-Harris-County-13587566.php
3/3 were vaccinated.

http://wivb.com/2017/10/11/14-syracuse-univ-students-diagnosed-with-mumps-were-vaccinated/

Quebec measles... http://www.ncbi.nlm.nih.gov/pubmed/1884314

http://m.ky3.com/6-university-of-missouri.../21050392_34391724 Mumps – 6/6 were vaccinated; July 28, 2015

diagnowhttp://www.kwch.com/.../70-diagnosed-with-whooping-c.../34378784ith-whooping-c.../34378784 pertussis - 70/70 were vaccinated; July 27, 2015

http://broomenorthps.wa.edu.au/.../.../kimberley-mumps-outbreak/ Mumps – 49/49 were vaccinated; July 24, 2015

http://www.nbclosangeles.com/.../Del-Mar-Mom-Frustrated-Famil... Pertussis – 2/2 in family were vaccinated; January 12, 2015

http://www.news-gazette.com/.../23-case-c-u-mumps-outbreak-co... Mumps - 23/23 were vaccinated; June 12, 2015

http://www.statesmanjournal.com/.../whooping-cough-.../28172681/ Pertussis – 10/11 were vaccinated; May 29, 2015

http://www.eastoregonian.com/.../weaker-vaccine-blamed-for-wh... Pertussis – "vast majority" were vaccinated; April 22, 2015

http://www.mainlinemedianews.com/.../doc552e6ac55789d24869547... Pertussis - 6/7 were vaccinated: April 17, 2015

http://fox13now.com/.../19-kids-in-summit-co-diagnosed-with-.../ Pertussis – 19/19 were vaccinated; March 27, 2015

http://www.mainlinemedianews.com/.../doc55096b683d9f209908844... Pertussis – 3/3 were vaccinated; March 23, 2015

http://q13fox.com/.../man-vaccinated-against-measles-in-1970.../ Measles – 5/5 were vaccinated; March 13, 2015

http://dailyjournalonline.com/.../article_8c06f651-f5a7-5e51-... Pertussis - 2/2 were vaccinated; February 19, 2015

http://www.crowrivermedia.com/.../article_c4a7e525-e90c-5546-... Pertussis - 2/2 were vaccinated; February 11, 2015

http://www.huffingtonpost.ca/la.../mumps-in-nhl_b_6351358.html
Mumps in NHL players – all sick were vaccinated; December 19, 2014

http://www.forbes.com/.../nhl-mumps-outbreak-whats-up-with-t.../ Mumps – 14/14 were vaccinated; December 16, 2014

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6342a3.htm... Flu - onboard ship 25/25 vaccinated; October 24, 2014

http://www.news10.net/.../toddler-contracted-whoopin.../9531047/ Pertussis – 18 month old gets pertussis from fully vaccinated healthcare worker who was sick with it; May 23, 2014

http://www.myfoxny.com/.../8-confirmed-mumps-cases-at-stevens... Mumps - 18/18 were vaccinated; April 18, 2014

http://www.reuters.com/.../us-usa-health-ohio-mumps-idUSBREA3... Mumps - 113/116 were vaccinated; April 1, 2014

http://news.sciencemag.org/.../measles-outbreak-traced-fully-... Measles - Measles Mary - outbreak tracked to fully vaccinated person; April 11, 2014

http://www.ksbw.com/.../pertussis-outbreak-at-monter.../31881324 pertussis in school - 99.5% vaccinated, all sick were vaccinated; March 19, 2015

http://7online.com/archive/9438450/ Mumps – 14/14 were vaccinated; February 21, 2014

http://www.southcoasttoday.com/apps/pbcs.dll/article... H1N1 – woman dies, was vaccinated; February 8, 2014

http://www.thenewscenter.tv/.../Athens-Woman-Dies-From-H1N1-2... H1N1- woman dies, was vaccinated; January 10, 2014

http://www.kptv.com/.../doctors-confirm-oregon-boy-5-dies-fro... H1N1 - boy dies, was vaccinated; January 3, 2014

http://www.sanjuanjournal.com/news/238314341.html# Chicken pox – child got pox 11 days after vaccination; December 31, 2013

http://nsnbc.me/.../bill-gates-polio-vaccine-program-caused-.../ Polio – oral polio causes 47,500 cases of paralysis; May 8, 2013

http://www.reuters.com/.../us-whoopingcough-idUSBRE8320TM2012... Pertussis; vast majority vaccinated; April 3, 2012

http://7online.com/archive/8203711/ pertussis in schools – all sick were vaccinated; June 22, 2011

http://nursingcenter.com/static?pageid=1204097 Pertussis – vaccinated nurse gets pertussis and spr

http://www.nbcnews.com/.../polio-outbreak-sparked-vaccine-e.../... polio from the polio vaccine, 69 get it; October 5, 2007

http://www.greenmedinfo.com/blog/vaccine-derived-polio-spreading-polio-free-india

http://mobile.reuters.com/article/idUSN1744524120070518... Smallpox – 2 year old gets smallpox after dad is vaccinated (shedding); May 18, 2007

http://www.ncbi.nlm.nih.gov/pubmed/14993534 Chickenpox - 409/422 (97%) students were vaccinated; March 11, 2004

http://www.nejm.org/doi/full/10.1056/NEJM198703263161303 Measles - 14/14 were vaccinated, outbreak in fully immunized school; March 26, 1987

https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6438a7.htm

2004-2018 Flu vaccine has had an average efficacy of less than 41% - it fails approximately 60 percent of time. https://www.cdc.gov/flu/professionals/vaccination/effectiveness-studies.htm

April 10, 2019

Dear Committee Members,

My name is Susan VanMeter. This is my son, Weston. We are here today because HB19-1312 would revoke his medical vaccine exemption, despite being permanently disabled due to two strokes that he suffered as a baby, each after a vaccine.

HB19-1312 section 3 (3) (page 8, lines 11-13) seeks to limit medical exemptions to those individuals who exhibit ONLY the contraindications laid out by ACIP, which state only "severe *allergic reaction* (e.g. anaphlaxis)." Pursuant with this definition, my son would no longer be eligible for vaccine exemption. This is absolutely outrageous! By giving ACIP the power to determine how Colorado issues medical exemptions, we would circumvent the ability of medical professionals to provide individualized care to their patients.

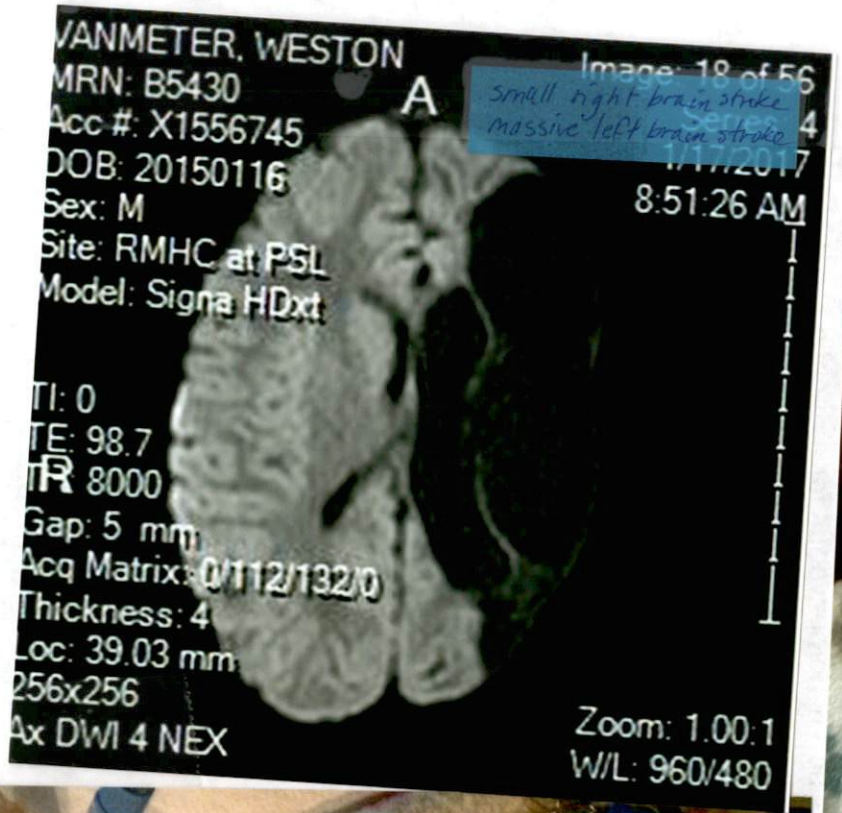
Weston had two strokes (one in utero and one on the day of his birth). He currently holds a medical vaccine exemption. This exemption was granted after his pediatrician realized that my son's strokes were almost certainly triggered by the vaccines that he received in utero (Tdap and Flu) and on his day of birth (Hep B). The pediatrician came to this conclusion after discovering that my son is homozygous for a genetic variant that predisposes him to vaccine injury. He analyzed the evidence to support a likely link between that variant and pediatric stroke, triggered by vaccination. I have with me today extensive evidence to prove this causation. Several articles are included in your folders, as well as pictures of my son before and after Hepatitis B.

Furthermore, my other three children, who all have similar genetic makeup to their brother, would be subjected to discriminatory practices at school if this bill passes. Amendment C (page 7, lines 10-17) seeks to force parents who choose religious or philosophical vaccine exemptions to utilize standardized state forms. This is unacceptable, since the current forms used for this purpose often indicate abuse or neglect. Is it abusive for me, as the parent of a severely vaccine injured child, to exempt that child's siblings from potential similar harm? I think not. And yet, under this legislation I would be forced to put my name to a form that indicates that it is. This is something that I will never do, meaning that my children will no longer be able to attend school if this legislation passes.

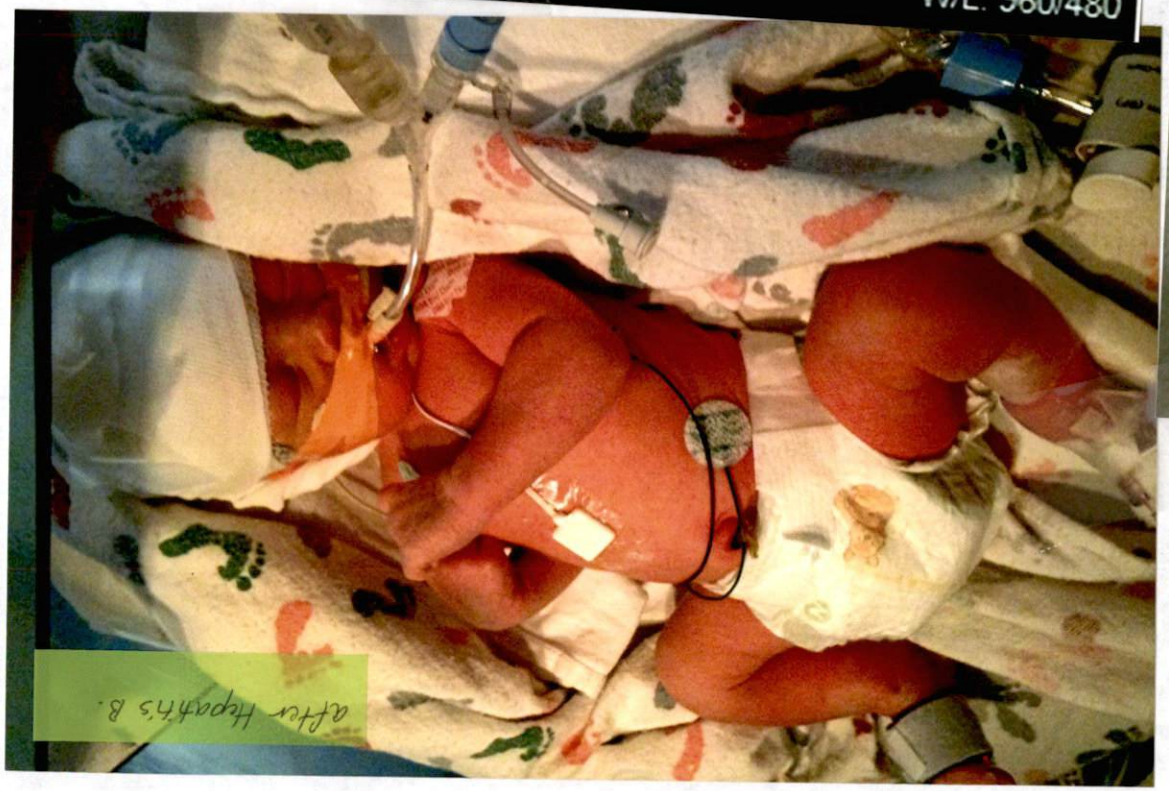
Please consider the unintended ramifications of this bill and vote NO on HB19-1312.

Thank you.

Susan VanMeter
Lakewood, CO


VANMETER, WESTON
MRN: B5430
Acc #: X1556745
DOB: 20150116
Sex: M
Site: RMHC at PSL
Model: Signa HDxt
A
Image: 18 of 56
small right brain stroke
massive left brain stroke
8:51:26 AM
TI: 0
TE: 98.7
TR 8000
Gap: 5 mm
Acq Matrix: 0/112/132/0
Thickness: 4
Loc: 39.03 mm
256x256
Ax DWI 4 NEX
Zoom: 1.00:1
W/L: 960/480


minutes after birth, see drooping L. lip + eyelid


after Hypothy's B.

Format: Abstract

Eur J Intern Med. 2008 Dec;19(8):575-8. doi: 10.1016/j.ejim.2007.06.035. Epub 2008 Apr 18.

Systemic polyarteritis nodosa following hepatitis B vaccination.

de Carvalho JF[1], Pereira RM, Shoenfeld Y.

Author information

Abstract

The authors report a patient who developed systemic polyarteritis nodosa two months after hepatitis B vaccination and review the literature concerning this vaccination and the development of autoimmune conditions, mainly vasculitis. A 14-year-old boy who had no relevant previous history and who was not taking any drugs presented with a livedo reticularis, fever, loss of weight, testicular pain, and paresthesias two months after receiving the third dose of a hepatitis B vaccination. Inflammatory parameters (ESR and CRP) were high. The patient met the ACR diagnostic criteria for polyarteritis nodosa. He received corticosteroids and immunosuppressants and showed improvement. After reviewing the 27 cases of vasculitis after hepatitis B vaccination reported in the current literature, the authors suggest that, in some cases, vaccination may be the triggering factor for vasculitis in individuals with a genetic predisposition. Physicians should be aware of this possible association.

PMID: 19046721 DOI: 10.1016/j.ejim.2007.06.035

[Indexed for MEDLINE]

Journal of Stroke & Cerebrovascular Diseases

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Gene Mutations and Stroke in the Young Adult

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DOI: https://doi.org/10.1016/j.jstrokecerebrovasdis.2014.05.027

Article Info

Abstract | Full Text | References

Background

y is to evaluate the existence of the genetic mutation in the different types of cerebral viously healthy young adults.

Materials and Methods

We performed a retrospective study of the medical records of 35 young adults who presented to our institution with the diagnosis of acute cerebrovascular insult. We defined the localization of their stroke, specified their risk factors, defined their genetic mutation, and correlated these variables to assess their significance in the predisposition of stroke in the young.

Results

We found that the MTHFR and Factor V gene mutations are the most likely mutations to be associated with cerebral strokes in young adults. Spinal strokes are also associated with beta fibrinogen, factor XIII, and prothrombin II mutations. We did not find that a homozygous gene mutation is more thrombogenic than its heterozygous component.

Conclusions

We concluded that the major etiologies for stroke in young adults were multiple gene mutations rather than systemic illnesses. We found out that mutation of the MTHFR gene in isolation or in combination with other gene mutations is the most important risk factor for stroke in the young.

Key Words:
Young, stroke, hypercoagulable state, MTHFR, Factor V

Format: Abstract

Full text links

SAGE journals

Lupus. 2012 Feb;21(2):223-30. doi: 10.1177/0961203311430221.

Mechanisms of aluminum adjuvant toxicity and autoimmunity in pediatric populations.

Tomljenovic L[1], Shaw CA.

Author information

Abstract

Immune challenges during early development, including those vaccine-induced, can lead to permanent detrimental alterations of the brain and immune function. Experimental evidence also shows that simultaneous administration of as little as two to three immune adjuvants can overcome genetic resistance to autoimmunity. In some developed countries, by the time children are 4 to 6 years old, they will have received a total of 126 antigenic compounds along with high amounts of aluminum (Al) adjuvants through routine vaccinations. According to the US Food and Drug Administration, safety assessments for **vaccines** have often not included appropriate toxicity studies because **vaccines** have not been viewed as inherently toxic. Taken together, these observations raise plausible concerns about the overall safety of current childhood vaccination programs. When assessing adjuvant toxicity in children, several key points ought to be considered: (i) infants and children should not be viewed as "small adults" with regard to toxicological risk as their unique physiology makes them much more vulnerable to toxic insults; (ii) in adult humans Al vaccine adjuvants have been linked to a variety of serious autoimmune and inflammatory conditions (i.e., "ASIA"), yet children are regularly exposed to much higher amounts of Al from **vaccines** than adults; (iii) it is often assumed that peripheral immune responses do not affect brain function. However, it is now clearly established that there is a bidirectional neuro-immune cross-talk that plays crucial roles in immunoregulation as well as brain function. In turn, perturbations of the neuro-immune axis have been demonstrated in many autoimmune diseases encompassed in "ASIA" and are thought to be driven by a hyperactive immune response; and (iv) the same components of the neuro-immune axis that play key roles in brain development and immune function are heavily targeted by Al adjuvants. In summary, research evidence shows that increasing concerns about current vaccination practices may indeed be warranted. Because children may be most at risk of vaccine-induced complications, a rigorous evaluation of the vaccine-related adverse health impacts in the pediatric population is urgently needed.

PMID: 22235057 DOI: 10.1177/0961203311430221

[Indexed for MEDLINE]

Publication type, MeSH terms, Substances

Vaccine Excipient & Media Summary

Excipients Included in U.S. Vaccines, by Vaccine

In addition to weakened or killed disease antigens (viruses or bacteria), vaccines contain very small amounts of other ingredients – excipients or media.

Some excipients are added to a vaccine for a specific purpose. These include:
Preservatives, to prevent contamination. For example, thimerosal.
Adjuvants, to help stimulate a stronger immune response. For example, aluminum salts.
Stabilizers, to keep the vaccine potent during transportation and storage. For example, sugars or gelatin.

Others are residual trace amounts of materials that were used during the manufacturing process and removed. These include:
Cell culture materials, used to grow the vaccine antigens. For example, egg protein, various culture media.
Inactivating ingredients, used to kill viruses or inactivate toxins. For example, formaldehyde.
Antibiotics, used to prevent contamination by bacteria. For example, neomycin.

The following table lists all components, other than antigens, shown in the manufacturers' package insert (PI) for each vaccine. Each of these PIs, which can be found on the FDA's website (see below) contains a description of that vaccine's manufacturing process, including the amount and purpose of each substance. In most PIs, this information is found in Section 11: "Description."

All information was extracted from manufacturers' package inserts.
If in doubt about whether a PI has been updated since this table was prepared, check the FDA's website at:
http://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm093833.htm

Vaccine	Contains
Adenovirus	human-diploid fibroblast cell cultures (strain WI-38), Dulbecco's Modified Eagle's Medium, fetal bovine serum, sodium bicarbonate, monosodium glutamate, sucrose, D-mannose, D-fructose, dextrose, human serum albumin, potassium phosphate, plasdone C, anhydrous lactose, microcrystalline cellulose, polacrilin potassium, magnesium stearate, cellulose acetate phthalate, alcohol, acetone, castor oil, FD&C Yellow #6 aluminum lake dye
Anthrax (Biothrax)	amino acids, vitamins, inorganic salts, sugars, aluminum hydroxide, sodium chloride, benzethonium chloride, formaldehyde
BCG (Tice)	glycerin, asparagine, citric acid, potassium phosphate, magnesium sulfate, iron ammonium citrate, lactose
Cholera (Vaxchora)	casamino acids, yeast extract, mineral salts, anti-foaming agent, ascorbic acid, hydrolyzed casein, sodium chloride, sucrose, dried lactose, sodium bicarbonate, sodium carbonate
DT (Sanofi)	aluminum phosphate, isotonic sodium chloride, formaldehyde, casein, cystine, maltose, uracil, inorganic salts, vitamins, dextrose
DTaP (Daptacel)	aluminum phosphate, formaldehyde, glutaraldehyde, 2-phenoxyethanol, Stainer-Scholte medium, casamino acids, dimethyl-beta-cyclodextrin, Mueller's growth medium, ammonium sulfate, modified Mueller-Miller casamino acid medium without beef heart infusion
DTaP (Infanrix)	Fenton medium containing a bovine extract, modified Latham medium derived from bovine casein, formaldehyde, modified Stainer-Scholte liquid medium, glutaraldehyde, aluminum hydroxide, sodium chloride, polysorbate 80 (Tween 80)
DTaP-IPV (Kinrix)	Fenton medium containing a bovine extract, modified Latham medium derived from bovine casein, formaldehyde, modified Stainer-Scholte liquid medium, glutaraldehyde, aluminum hydroxide, VERO cells, a continuous line of monkey kidney cells, Calf serum, lactalbumin hydrolysate, sodium chloride, polysorbate 80 (Tween 80), neomycin sulfate, polymyxin B
DTaP-IPV (Quadracel)	modified Mueller's growth medium, ammonium sulfate, modified Mueller-Miller casamino acid medium without beef heart infusion, formaldehyde, aluminum phosphate, Stainer-Scholte medium, casamino acids, dimethyl-beta-cyclodextrin, MRC-5 cells, normal human diploid cells, CMRL 1969 medium supplemented with calf serum, Medium 199 without calf serum, 2-phenoxyethanol, polysorbate 80, glutaraldehyde, neomycin, polymyxin B sulfate

Vaccine	Contains
DTaP-HepB-IPV (Pediarix)	Fenton medium containing a bovine extract, modified Latham medium derived from bovine casein, formaldehyde, glutaraldehyde, modified Stainer-Scholte liquid medium, VERO cells, a continuous line of monkey kidney cells, calf serum and lactalbumin hydrolysate, aluminum hydroxide, aluminum phosphate, aluminum salts, sodium chloride, polysorbate 80 (Tween 80), neomycin sulfate, polymyxin B, yeast protein.
DTaP-IPV/Hib (Pentacel)	aluminum phosphate, polysorbate 80, sucrose, formaldehyde, glutaraldehyde, bovine serum albumin, 2-phenoxyethanol, neomycin, polymyxin B sulfate, modified Mueller's growth medium, ammonium sulfate, modified Mueller-Miller casamino acid medium without beef heart infusion, Stainer-Scholte medium, casamino acids, dimethyl-beta-cyclodextrin. MRC-5 cells (a line of normal human diploid cells), CMRL 1969 medium supplemented with calf serum, Medium 199 without calf serum, modified Mueller and Miller medium
Hib (ActHIB)	sodium chloride, modified Mueller and Miller medium (the culture medium contains milk-derived raw materials [casein derivatives]), formaldehyde, sucrose
Hib (Hiberix)	saline, synthetic medium, formaldehyde, sodium chloride, lactose
Hib (PedvaxHIB)	complex fermentation media, amorphous aluminum hydroxyphosphate sulfate, sodium chloride
Hep A (Havrix)	MRC-5 human diploid cells, formalin, aluminum hydroxide, amino acid supplement, phosphate-buffered saline solution, polysorbate 20, neomycin sulfate, aminoglycoside antibiotic
Hep A (Vaqta)	MRC-5 diploid fibroblasts, amorphous aluminum hydroxyphosphate sulfate, non-viral protein, DNA, bovine albumin, formaldehyde, neomycin, sodium borate, sodium chloride
Hep B (Engerix-B)	aluminum hydroxide, yeast protein, sodium chloride, disodium phosphate dihydrate, sodium dihydrogen phosphate dihydrate
Hep B (Recombivax)	soy peptone, dextrose, amino acids, mineral salts, phosphate buffer, formaldehyde, potassium aluminum sulfate, amorphous aluminum hydroxyphosphate sulfate, yeast protein
Hep B (Heplisav-B)	vitamins and mineral salts, yeast protein, yeast DNA, deoxycholate, phosphorothioate linked oligodeoxynucleotide, phosphate buffered saline, sodium phosphate, dibasic dodecahydrate, monobasic dehydrate, polysorbate 80
Hep A/Hep B (Twinrix)	MRC-5 human diploid cells, formalin, aluminum phosphate, aluminum hydroxide, amino acids, sodium chloride, phosphate buffer, polysorbate 20, neomycin sulfate, yeast protein
Human Papillomavirus (HPV) (Gardasil 9)	vitamins, amino acids, mineral salts, carbohydrates, amorphous aluminum hydroxyphosphate sulfate, sodium chloride, L-histidine, polysorbate 80, sodium borate, yeast protein
Influenza (Afluria) Trivalent & Quadrivalent	sodium chloride, monobasic sodium phosphate, dibasic sodium phosphate, monobasic potassium phosphate, potassium chloride, calcium chloride, sodium taurodeoxycholate, ovalbumin, sucrose, neomycin sulfate, polymyxin B, beta-propiolactone, thimerosal (multi-dose vials)
Influenza (Fluad)	squalene, polysorbate 80, sorbitan trioleate, sodium citrate dehydrate, citric acid monohydrate, neomycin, kanamycin, barium, egg proteins, cetyltrimethylammonium bromide (CTAB), formaldehyde
Influenza (Fluarix) Quadrivalent	octoxynol-10 (TRITON X-100), α-tocopheryl hydrogen succinate, polysorbate 80 (Tween 80), hydrocortisone, gentamicin sulfate, ovalbumin, formaldehyde, sodium deoxycholate, sodium phosphate-buffered isotonic sodium chloride
Influenza (Flublok) Quadrivalent	sodium chloride, monobasic sodium phosphate, dibasic sodium phosphate, polysorbate 20 (Tween 20), baculovirus and *Spodoptera frugiperda* cell proteins, baculovirus and cellular DNA, Triton X-100, lipids, vitamins, amino acids, mineral salts
Influenza (Flucelvax) Quadrivalent	Madin Darby Canine Kidney (MDCK) cell protein, phosphate buffered saline, protein other than HA, MDCK cell DNA, polysorbate 80, cetyltrimethlyammonium bromide, and β-propiolactone, Thimerosal (multi-dose vials)
Influenza (Flulaval) Quadrivalent	ovalbumin, formaldehyde, sodium deoxycholate, α-tocopheryl hydrogen succinate, polysorbate 80, thimerosal (multi-dose vials), phosphate-buffered saline solution
Influenza (Fluzone) Quadrivalent	formaldehyde, egg protein, octylphenol ethoxylate (Triton X-100), sodium phosphate-buffered isotonic sodium chloride solution, thimerosal (multi-dose vials)

Vaccine	Contains
Influenza (Fluzone) High Dose	egg protein, octylphenol ethoxylate (Triton X-100), sodium phosphate-buffered isotonic sodium chloride solution, formaldehyde
Influenza (FluMist) Quadrivalent	monosodium glutamate, hydrolyzed porcine gelatin, arginine, sucrose, dibasic potassium phosphate, monobasic potassium phosphate, ovalbumin, gentamicin sulfate, ethylenediaminetetraacetic acid (EDTA)
Japanese Encephalitis (Ixiaro)	aluminum hydroxide, protamine sulfate, formaldehyde, bovine serum albumin, host cell DNA, sodium metabisulphite, host cell protein
Meningococcal (MenACWY-Menactra)	Watson Scherp media containing casamino acid, modified culture medium containing hydrolyzed casein, ammonium sulfate, sodium phosphate, formaldehyde, sodium chloride
Meningococcal (MenACWY-Menveo)	formaldehyde, amino acids, yeast extract, Franz complete medium, CY medium
Meningococcal (MenB – Bexsero)	aluminum hydroxide, *E. coli*, histidine, sucrose, deoxycholate, kanamycin
Meningococcal (MenB – Trumenba)	defined fermentation growth media, polysorbate 80, aluminum phosphate, histidine buffered saline
MMR (MMR-II)	chick embryo cell culture, WI-38 human diploid lung fibroblasts, vitamins, amino acids, fetal bovine serum, sucrose, glutamate, recombinant human albumin, neomycin, sorbitol, hydrolyzed gelatin, sodium phosphate, sodium chloride
MMRV (ProQuad) (Frozen)	chick embryo cell culture, WI-38 human diploid lung fibroblasts, MRC-5 cells, sucrose, hydrolyzed gelatin, sodium chloride, sorbitol, monosodium L-glutamate, sodium phosphate dibasic, human albumin, sodium bicarbonate, potassium phosphate monobasic, potassium chloride; potassium phosphate dibasic, neomycin, bovine calf serum
MMRV (ProQuad) (Refrigerator Stable)	chick embryo cell culture, WI-38 human diploid lung fibroblasts, MRC-5 cells, sucrose, hydrolyzed gelatin, urea, sodium chloride, sorbitol, monosodium L-glutamate, sodium phosphate, recombinant human albumin, sodium bicarbonate, potassium phosphate, potassium chloride, neomycin, bovine serum albumin
Pneumococcal (PCV13 – Prevnar 13)	soy peptone broth, casamino acids and yeast extract-based medium, CRM197 carrier protein, polysorbate 80, succinate buffer, aluminum phosphate
Pneumococcal (PPSV-23 – Pneumovax)	phenol
Polio (IPV – Ipol)	Eagle MEM modified medium, calf bovine serum, M-199 without calf bovine serum, vero cells (a continuous line of monkey kidney cells), phenoxyethanol, formaldehyde, neomycin, streptomycin, polymyxin B
Rabies (Imovax)	human albumin, neomycin sulfate, phenol red indicator, MRC-5 human diploid cells, beta-propriolactone
Rabies (RabAvert)	chicken fibroblasts, β-propiolactone, polygeline (processed bovine gelatin), human serum albumin, bovine serum, potassium glutamate, sodium EDTA, ovalbumin, neomycin, chlortetracycline, amphotericin B
Rotavirus (RotaTeq)	sucrose, sodium citrate, sodium phosphate monobasic monohydrate, sodium hydroxide, polysorbate 80, cell culture media, fetal bovine serum, vero cells *[DNA from porcine circoviruses (PCV) 1 and 2 has been detected in RotaTeq. PCV-1 and PCV-2 are not known to cause disease in humans.]*
Rotavirus (Rotarix)	Vero cells, dextran, Dulbecco's Modified Eagle Medium (sodium chloride, potassium chloride, magnesium sulfate, ferric (III) nitrate, sodium phosphate, sodium pyruvate, D-glucose, concentrated vitamin solution, L-cystine, L-tyrosine, amino acids solution, L-glutamine, calcium chloride, sodium hydrogenocarbonate, and phenol red), sorbitol, sucrose, calcium carbonate, sterile water, xanthan *[Porcine circovirus type 1 (PCV-1) is present in Rotarix. PCV-1 is not known to cause disease in humans.]*
Smallpox (Vaccinia) (ACAM2000)	African Green Monkey kidney (Vero) cells, HEPES, 2% human serum albumin, 0.7% sodium chloride USP, 5% Mannitol USP, neomycin, polymyxin B, 50% Glycerin USP, 0.25% phenol USP
Td (Tenivac)	aluminum phosphate, formaldehyde, modified Mueller-Miller casamino acid medium without beef heart infusion, ammonium sulfate, sodium chloride, water

Vaccine	Contains
Td (Mass Biologics)	aluminum phosphate, formaldehyde, thimerosal, modified Mueller's media which contains bovine extracts, ammonium sulfate
Tdap (Adacel)	aluminum phosphate, formaldehyde, 2-phenoxyethanol, Stainer-Scholte medium, casamino acids, dimethyl-beta-cyclodextrin, glutaraldehyde, modified Mueller-Miller casamino acid medium without beef heart infusion, ammonium sulfate, modified Mueller's growth medium
Tdap (Boostrix)	modified Latham medium derived from bovine casein, Fenton medium containing a bovine extract, formaldehyde, modified Stainer-Scholte liquid medium, glutaraldehyde, aluminum hydroxide, sodium chloride, polysorbate 80
Typhoid (Typhim Vi)	hexadecyltrimethylammonium bromide, formaldehyde, phenol, polydimethylsiloxane, disodium phosphate, monosodium phosphate, semi-synthetic medium, sodium chloride, sterile water
Typhoid (Vivotif Ty21a)	yeast extract, casein, dextrose, galactose, sucrose, ascorbic acid, amino acids, lactose, magnesium stearate. gelatin
Varicella (Varivax) *Frozen*	MRC-5 human diploid cells, including DNA & protein, sucrose, hydrolyzed gelatin, sodium chloride, monosodium L-glutamate, sodium phosphate dibasic, sodium phosphate monobasic, potassium phosphate monobasic, potassium chloride, EDTA, neomycin, fetal bovine serum
Varicella (Varivax) *Refrigerator Stable*	MRC-5 human diploid cells, including DNA & protein, sucrose, hydrolyzed gelatin, sodium chloride, monosodium L-glutamate, urea, sodium phosphate dibasic, potassium phosphate monobasic, potassium chloride, neomycin, bovine calf serum
Yellow Fever (YF-Vax)	sorbitol, gelatin, sodium chloride, egg protein
Zoster (Shingles) (Zostavax) *Frozen*	MRC-5 human diploid cells, including DNA & protein, sucrose, hydrolyzed porcine gelatin, sodium chloride, monosodium L-glutamate, sodium phosphate dibasic, potassium phosphate monobasic, potassium chloride; neomycin, bovine calf serum
Zoster (Shingles) (Zostavax) *Refrigerator Stable*	MRC-5 human diploid cells, including DNA & protein, sucrose, hydrolyzed porcine gelatin, urea, sodium chloride, monosodium L-glutamate, sodium phosphate dibasic, potassium phosphate monobasic, potassium chloride, neomycin, bovine calf serum
Zoster (Shingles) (Shingrix)	sucrose, sodium chloride, dioleoyl phosphatidylcholine (DOPC), 3-*O*-desacl-4'monophosphoryl lipid A (MPL), QS-21 (a saponin purified from plant extract *Quillaja saponaria* Molina), potassium dihydrogen phosphate, cholesterol, sodium dihydrogen phosphate dihydrate, disodium phosphate anhydrous, dipotassium phosphate, polysorbate 80

A table listing vaccine excipients and media *by excipient* is published by the Institute for Vaccine Safety at Johns Hopkins University, and can be found at http://www.vaccinesafety.edu/components-Excipients.htm.

Updates:

Trumenba: (added Aluminum phosphate)
RotaTeq: PI dated 2/2017
Rotarix: 6/11/18 (PI dated xx/xxxx)
Smallpox: 3/2018
Td (Tenivac): April 2013
Td (Mass Biologics): April 2009 (no change)
Tdap (Adacel): xxx/2017 (no change)
Tdap (Boostrix): 6/12/2018 (PI dated xx/xxxx) (no change)
Typhim Vi: March 2014 (added sodium chloride & buffered saline)
Ty21a: September 2013
Varicella Frozen: 2/2017
Varicella Refrigerator Stable: 2/2017
YF Vax: June 2016
Zostivax Frozen: xx/2018
Zostivax Refrigerator Stable: xx/2018
Shingrix: 10/2017

Aluminum in Childhood Vaccines Is Unsafe

Neil Z. Miller

ABSTRACT

Aluminum is a neurotoxin, yet infants and young children are repeatedly injected with aluminum adjuvants from multiple vaccines during critical periods of brain development. Numerous studies provide credible evidence that aluminum adversely affects important biological functions and may contribute to neurodegenerative and autoimmune disorders. It is impossible to predetermine which vaccinated babies will succumb to aluminum poisoning. Aluminum-free health options are needed.

Introduction

From 1999 through 2002, several vaccines containing mercury were phased out of the childhood immunization schedule. Manufacturing of childhood vaccines with thimerosal ceased in 2001, but those that were not past their expiration date remained on the market for sale until January 2003.[1] They were replaced with low-mercury or "thimerosal-free" vaccines. In the years that followed, autism rates continued to rise, prompting health authorities to assert that autism is not linked to mercury in vaccines and that vaccination policies are safe and appropriate.[2-4] (If mercury in vaccines contributed to autism, then rates should have dropped after mercury was removed.) However, in 2002, during this so-called phase-out period, the Centers for Disease Control and Prevention (CDC) actually added two doses of mercury-containing influenza vaccines to the list of inoculations urged for all babies 6 to 23 months of age.[5] Two years later, the CDC also added *pregnant women in their first trimester* to the list of people officially recommended and actively encouraged to receive influenza vaccines, even though a majority of available doses contained mercury.[6]

In addition to these questionable actions during this highly publicized "phase-out" of mercury, four doses of a new vaccine with high *aluminum* content were added to the childhood immunization schedule in February 2000 (for pneumococcus) and two doses of another aluminum-containing vaccine (for hepatitis A) were added in 2005.[7,8] These changes to the vaccine schedule resulted in a substantial increase of aluminum-containing vaccine doses—from 10 to 16 injections—that babies are still mandated to receive by 18 months of age.

Prior to the mercury phase-out (pre-2000), babies received 3,925 micrograms (mcg) of aluminum in their first year-and-a-half of life. After pneumococcal and hepatitis A vaccines were added to the immunization schedule, babies began receiving 4,925 mcg of aluminum during the same age period—a 25% increase (Figure 1).[9,10] In 2011, CDC recommended that pregnant women receive a pertussis vaccine (Tdap), which also contains aluminum.[11] Studies show that aluminum crosses the placenta and accumulates in fetal tissue.[12] Thus, millions of babies in utero, infants, and young children were injected with, and continue to receive, unnaturally high doses of neurotoxic substances—mercury and aluminum—long after unsuspecting parents were led to believe that vaccines were purified and made safe.

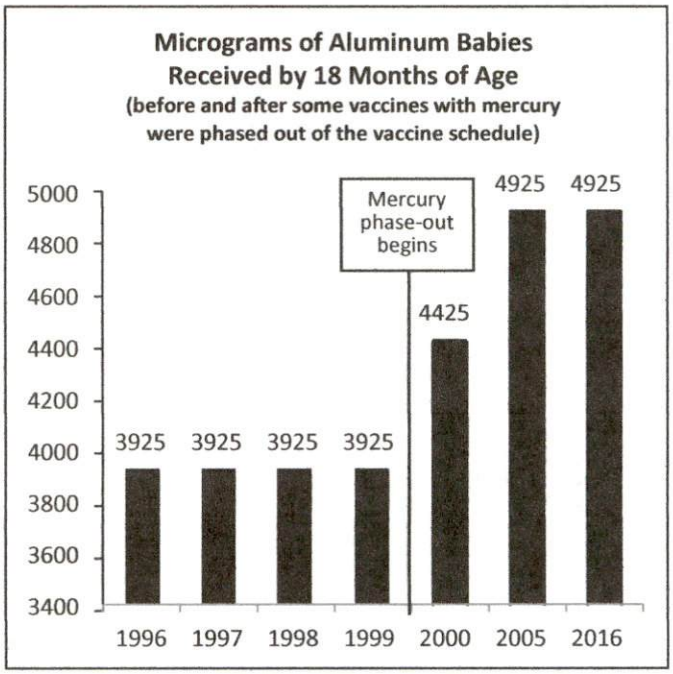

Figure 1. Aluminum Content from Childhood Vaccines

Vaccines containing aluminum were added to the childhood immunization schedule when some vaccines containing mercury were removed. Prior to the mercury phase-out (pre-2000), babies received 3,925 mcg of aluminum by 18 months of age. After pneumococcal and hepatitis A vaccines were added to the schedule, babies began receiving 4,925 mcg of aluminum during the same age period—a 25% increase.

Source: The vaccine manufacturers' product inserts and the CDC's annual childhood vaccination schedules.

Aluminum

Aluminum adjuvants are added to several vaccines to elicit a more robust immune response and increase vaccine efficacy. In the United States, Canada, Europe, Australia, and many other parts of the world, infants and young children receive high quantities of aluminum from multiple inoculations. For example, in the U.S. the hepatitis B, DTaP (for diphtheria, tetanus and pertussis), pneumococcal (PCV), *Haemophilus influenzae* type b (Hib), and hepatitis A vaccines are all administered during early childhood. Each of these

vaccines contains aluminum, and multiple doses (booster shots) are required (Table 1). Babies are injected with 1,225 mcg of aluminum instantaneously at age 2 months, and 4,925 mcg of accumulated aluminum by age 18 months (Figure 2).[9,10]

Table 1. Aluminum Exposures in Early Childhood from Recommended Vaccines

Vaccine	Aluminum Content	Vaccine Schedule
Hep B	250 mcg x 3 doses	Birth, 2, 6 months
DTaP	625 mcg x 4 doses	2, 4, 6, 15 months
PCV	125 mcg x 4 doses	2, 4, 6, 12 months
Hib	225 mcg x 3 doses	2, 4, 12 months
Hep A	250 mcg x 2 doses	12, 18 months

Source: The vaccine manufacturers' product inserts and the CDC's 2016 childhood vaccination schedule.

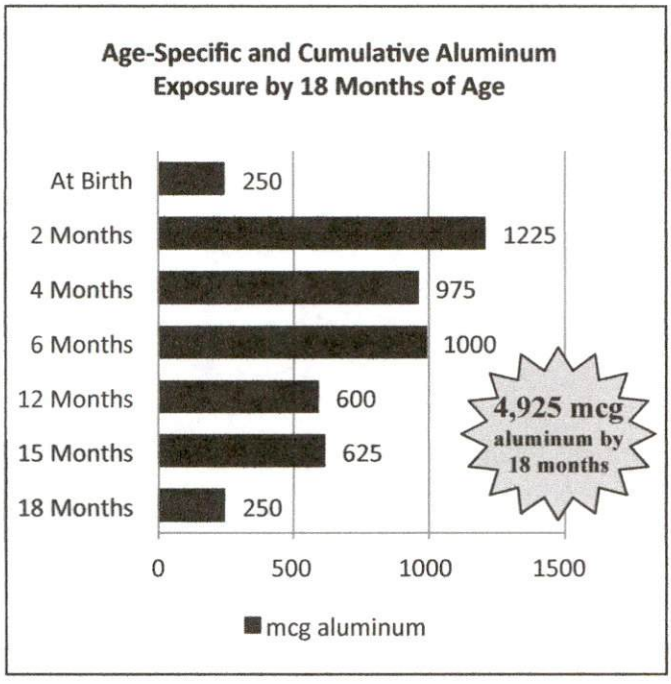

Figure 2. Cumulative Aluminum Exposure from Recommended Childhood Vaccines

Source: The vaccine manufacturers' product inserts and the CDC's 2016 childhood vaccination schedule.

Babies are not the only age group exposed to high quantities of aluminum from vaccines. The HPV vaccine (indicated for the prevention of cervical cancer and genital warts associated with some strains of human papillomavirus) is marketed to pre-teens and adolescents. Each dose in the three-dose series contains 500 mcg of aluminum. The Tdap vaccine (for tetanus, diphtheria, and pertussis) is given to pre-teens as well, and contains 390 mcg of aluminum.[13] Several adult vaccines also contain aluminum.

Aluminum is neurotoxic and has a long history of well-documented hazards.[14] For example, as early as 1921 The *Lancet* described a 46-year-old metal worker in whom "aluminium produced a rather slow intoxication. In this case it caused memory loss, tremor, jerky movements and incontinence of urine."[15] In 1927, Dr. Victor Vaughn, a toxicologist with the University of Michigan, testified before the Federal Trade Commission that "all salts of aluminum are poisonous when injected subcutaneously or intravenously."[16] By 1951, Chusid et al. showed that chronic epilepsy could be induced in monkeys through intra-cerebral administration of aluminum hydroxide cream.[17] In 1968, Driver et al. performed a similar experiment by placing aluminum hydroxide cream unilaterally on the posterior parietal cortex of six monkeys.[18] From 3 to 8 weeks after surgery, electrical abnormalities could be seen on an electroencephalogram and the monkeys exhibited "episodic twitching of the limbs and face." The animals were also impaired at learning new tasks and at re-learning tasks first learned prior to the intervention.

According to the American Academy of Pediatrics (AAP), "Aluminum is now being implicated as interfering with a variety of cellular and metabolic processes in the nervous system and in other tissues."[19] Bishop et al. published data showing that "aluminum accumulates in the body when protective gastrointestinal mechanisms are bypassed, renal function is impaired, and exposure is high."[20] For example, in premature infants, "prolonged intravenous feeding with solutions containing aluminum is associated with impaired neurologic development" by 18 months of age. More recently, Kawahara et al. published research confirming that "aluminum can cause severe health problems in particular populations, including infants."[21] The authors of this paper also declared that "whilst being environmentally abundant, aluminum is not essential for life. On the contrary, aluminum is a widely recognized neurotoxin that inhibits more than 200 biologically important functions and causes various adverse effects in plants, animals, and humans."

Neurologic and Autoimmune Disorders

Numerous studies provide compelling evidence that injected aluminum is detrimental to health. For example, a recent paper by Tomljenovic and Shaw affirmed that aluminum is a neurotoxin and may be a co-factor in several neurodegenerative disorders and diseases, including Alzheimer's, Parkinson's, multiple sclerosis, amyotrophic lateral sclerosis (ALS), autism, and epilepsy.[22] According to the authors, "The continued use of aluminum adjuvants in various vaccines for children as well as the general public may be of significant concern. In particular, aluminum presented in this form carries a risk for autoimmunity, long-term brain inflammation and associated neurological complications and may thus have profound and widespread adverse health consequences."

Recent data by Perricone et al. showed that aluminum adjuvants in vaccines have been linked to multiple sclerosis, systemic lupus erythematosus, chronic fatigue syndrome, Gulf War syndrome, macrophagic myofasciitis, arthritis, and autoimmune/inflammatory syndrome induced by adjuvants (ASIA syndrome), an autoimmune disease with neurological and cognitive manifestations.[23] Clinical symptoms associated with vaccine-induced autoimmunity can take months or years to manifest, much longer than the time intervals utilized in most vaccine safety studies.

Although aluminum is a neurotoxin, pre-school children are repeatedly injected with aluminum adjuvants from multiple vaccines during critical periods of brain development. A recent paper published in the journal *Lupus* found that this may lead to neuro-developmental and autoimmune disorders.[24] During early development, the child's blood-brain barrier is more permeable to toxins, and the kidneys are less able to eliminate them. Thus, children have a greater risk than adults of adverse reactions to aluminum adjuvants in vaccines. The authors of this paper issued the following warning: "Because children may be most at risk of vaccine-induced complications, a rigorous evaluation of the vaccine-related adverse health impacts in the pediatric population is urgently needed."

Macrophagic Myofasciitis (MMF)

Some people develop macrophagic myofasciitis (MMF) after receiving an aluminum-containing vaccine.[25-39] MMF is characterized by an aluminum-filled lesion (wound) at the site of an earlier vaccination. MMF lesions occur when the aluminum adjuvant from a vaccine remains embedded in the muscle tissue and causes a continuous immune reaction. The lesions are persistent, long-term granulomas (or inflammatory tumors) found in the quadriceps in children and deltoid muscles of adults, common vaccination sites. Several vaccines contain aluminum hydroxide, which has been identified as the causal factor of MMF lesions.[25]

Although MMF is associated with a macrophagic lesion at the site of vaccination, it is a systemic ailment. Symptoms include chronic fatigue, chronic diffuse myalgia (muscle weakness), arthralgia (joint pain), and disabling headaches. Aluminum's toxic effects can also manifest as impaired psychomotor control, repetitive behavior, speech disorders, sleep disturbances, seizures, confusion, and anxiety, as well as deficits of concentration, learning, and memory. Nearly 20% of patients with MMF develop an autoimmune disease, including neuromuscular and multiple sclerosis-like demyelinating disorders.[26-28]

Several descriptive studies document MMF in pediatric populations. For example, Spanish scientists presented data on seven children younger than 3 years of age with lesions of macrophages on muscle biopsies at the site of vaccination.[29] In three of four cases tested, elevated levels of aluminum in muscle were detected (indicative of a reaction to aluminum adjuvants in vaccines). All of the children developed hypotonia (a lack of normal muscle tone) and motor or psychomotor delay. Six of the children also had abnormal neuro-imaging, associated with neurological anomalies, including atrophy and abnormal myelination.

In the U.S., Gruis et al. evaluated four cases of MMF in young children with hypotonia, motor delay and failure to thrive, likely due to intramuscular injections of aluminum-containing vaccines.[30] Another team of American physicians evaluated MMF in two fully vaccinated children. Both showed typical aluminum-filled macrophages at muscle biopsies.[31] One child had abnormal pupillary reflexes and urinary retention suggesting dysautonomia while the other child had developmental delay and hypotonia.

Israeli researchers documented MMF in six Arab children.[32] Reactions included hypotonia, seizures, motor delay, and developmental delay. The authors of this paper believe that genetic predisposition is a factor in determining the prevalence of MMF in different populations.

German researchers documented MMF in a 3-month-old East Indian child following his hepatitis B vaccine at birth, "after which he developed generalized hypotonia, and central nervous system and peripheral nervous system manifestations at one month of age."[33] The child also had respiratory failure, decreased spontaneous movements, apnea spells, and generalized seizures. Aluminum was detected in the muscle biopsy macrophages. The authors recommend that "after vaccination, children should be closely followed to detect these complications at early stages."

Italian researchers believe that MMF in children "is probably more common than reported. Diagnosis requires a high index of suspicion and can be missed if biopsy is performed outside the vaccination site."[34] According to Canadian MMF researchers, "aluminum has been demonstrated to impact the central nervous system at every level, including by changing gene expression. These outcomes should raise concerns about the increasing use of aluminum salts as vaccine adjuvants." Moreover, "based on the current and emerging literature, it seems unlikely that in the future aluminum will be considered safe for human use in any of the current medicinal applications."[28]

Animal Studies

A recent paper by Luján et al. found that sheep developed a new type of autoimmune and inflammatory disorder—ovine autoimmune/inflammatory syndrome induced by adjuvants (ASIA)—after receiving vaccines containing aluminum adjuvants.[40] The condition appears in some sheep two to six days after they are vaccinated. Symptoms of the acute phase include poor response to external stimuli and acute meningoencephalitis. The chronic phase causes muscular atrophy, neurodegeneration of the gray matter of the spinal cord, and death.

Khan et al. conducted several mouse experiments to determine the long-term biological distribution of vaccine-related aluminum nanoparticles.[41] They discovered that aluminum travels from the injection site to distant organs such as the spleen and brain, where aluminum deposits could still be detected one year later. Aluminum remains in monocyte-lineage cells long after vaccination and may cause neurologic and autoimmune disorders. According to these scientists, "Alum has high neurotoxic potential, and administration of continuously escalating doses of this poorly biodegradable adjuvant in the population should be carefully evaluated by regulatory agencies since the compound may be insidiously unsafe."

Scientists also looked at whether Gulf War Syndrome, which afflicted many veterans of Western militaries with cognitive and behavioral deficits similar to ALS (a progressive neurodegenerative disease that destroys nerve cells), could be related to the aluminum-containing anthrax vaccines they received. In a series of studies, mice were injected with adjuvants at doses equivalent to those given to vaccinated U.S. Gulf War veterans.[42,43] The aluminum-injected mice exhibited significant deficits in memory and motor functions. Testing showed motor neuron loss and progressive deficiencies in strength. The mice also had pathological abnormalities that are characteristic of neurological diseases such as Alzheimer's and dementia. According to the authors of these studies, "The demonstrated neurotoxicity of aluminum hydroxide and its relative ubiquity as an adjuvant suggest that greater scrutiny by the scientific community is warranted."[43]

Israeli scientists recently evaluated an aluminum adjuvant and the HPV vaccine Gardasil to determine behavioral and inflammatory effects.[44] Female mice were injected with either aluminum or Gardasil in amounts equivalent to human exposure, or they received a true placebo. (Vaccine safety trials for the HPV vaccine did not provide the control group with an inert substance or true placebo; the "control" group was injected with aluminum.) The Gardasil and aluminum-injected mice spent significantly more time exhibiting depressive behavior when compared to the placebo-injected mice. In addition, anti-HPV antibodies from the sera of Gardasil-injected mice showed cross-reactivity with the mouse brain protein extract. Analysis revealed microglial activation in the hippocampi of Gardasil-injected mice. According to the authors, "It appears that Gardasil via its aluminum adjuvant and HPV antigens has the ability to trigger neuroinflammation and autoimmune reactions, further leading to behavioral changes."

Autism

There is evidence that aluminum in vaccines may be linked to autism. For example, the *Journal of Inorganic Biochemistry* published data showing a highly significant positive linear correlation between the amount of aluminum infants receive from their vaccines and the rates of autism in several developed nations (Pearson r = 0.89-0.94).[45] The authors of this ecological study commented on their findings: "Our results...suggest that a causal relationship may exist between the amount of aluminum administered to preschool children at various ages through vaccination and the rising prevalence of autism spectrum disorders."

In another recently published paper, Shaw et al. found that genetic predispositions may sensitize some children to central nervous system damage induced by aluminum-containing pediatric vaccines.[46] Moreover, vaccines with aluminum adjuvants are *injected* into the body, bypassing protective barriers of the gastrointestinal tract and skin. Absorption of aluminum by this mode is more efficient than through ingestion, increasing the likelihood of a toxic outcome. The authors summarized their findings: "Evidence has now emerged showing that autism may in part result from early-life immune insults induced by environmental xenobiotics. One of the most common xenobiotic with immuno-stimulating as well as neurotoxic properties to which infants under two years of age are routinely exposed worldwide is the aluminum vaccine adjuvant."

Recent research published in the *Journal of Toxicology* found that aluminum exposure produces adverse effects in living organisms and is especially damaging to the central nervous system.[47] Aluminum from vaccine adjuvants crosses the blood-brain and blood-cerebrospinal fluid barriers, provoking harmful immuno-inflammatory responses in neural tissues. Yet, clinical studies on vaccine safety often give aluminum-containing injections to a "control" group as a harmless "placebo" despite evidence that aluminum is toxic to humans and animals. The use of aluminum as a placebo cannot be justified. According to the authors of this paper, "Studies on animal models and humans have shown that aluminum adjuvants by themselves cause autoimmune and inflammatory conditions. These findings plausibly implicate aluminum adjuvants in pediatric vaccines as causal factors contributing to increased rates of autism spectrum disorders in countries where multiple doses are almost universally administered."

In another recent animal study, young mice were injected with either high or low levels of aluminum adjuvants (designed to correlate with U.S. or Scandinavian childhood vaccine schedules).[48] Significant changes in the mice were observed, affirming the role of aluminum adjuvants in adversely altering the central nervous system. The authors commented on their findings: "These current data implicate aluminum injected in early postnatal life in some central nervous system alterations that may be relevant for a better understanding of the etiology of autism spectrum disorders."

Vaccine Industry Conferences and Concerns

In May 2000—3 months *after* the CDC added the aluminum-containing pneumococcal vaccine to the recommended immunization schedule for children—the U.S.

Department of Health and Human Services (HHS) sponsored a Workshop on Aluminum in Vaccines.[49,50] The workshop, given in San Juan, Puerto Rico, was attended by members of the vaccine industry, including government officials, immunologists, pathologists, vaccine manufacturers, metal ion specialists, and other interested people. It was organized to increase knowledge about aluminum as an adjuvant in vaccines, investigate potential adverse reactions associated with aluminum in vaccines, and develop a research agenda on the effect of aluminum in the human body. Experts from around the world were invited to give their presentations on vaccines and aluminum.

Dr. Romain Gherardi, a specialist in neuromuscular disease and professor at the Mondor Institute of Biomedical Research, showed that MMF without vaccination does not occur. In fact, it often begins after receiving a hepatitis B vaccine. Myalgia was present in 94% of patients with MMF, and 85% of these people were disabled. Although 30% of patients had their first myalgias within 3 months after their last vaccination, 20% of patients' symptoms took longer than 2 years to manifest. These myalgias begin in the calves and legs, then progress to diffuse myalgia. Fatigue was present in 93% of patients with MMF, and 87% of these people were disabled. In addition, 34% of MMF patients had autoimmune disease, including multiple sclerosis and arthritis.[50, pp 48-74]

In June 2000, the CDC sponsored a conference on thimerosal (mercury) in vaccines, although aluminum was discussed as well.[51] CDC scientists analyzed the agency's Vaccine Safety Datalink (VSD) database containing thousands of medical records of vaccinated children and found statistically significant relationships between mercury in vaccines and developmental delay, tics, and attention deficit disorder.[51, pp 40-41] However, Dr. Tom Verstraeten, CDC epidemiologist, analyzed the data and determined that the injuries could have been caused by aluminum in the vaccines.[51, p 77] It is also possible that the neurological damage was due to the synergistic effects of both aluminum and mercury in the vaccines given to the affected children.

Although millions of children every year are required to receive vaccines containing aluminum and mercury, evidence supporting the safety of this practice is lacking. For example, according to Dr. Richard Johnston, immunologist and professor of pediatrics at the University of Colorado School of Medicine, "Aluminum and mercury are often simultaneously administered to infants, both at the same site and at different sites. However...there is absolutely no data, including animal data, about the potential for synergy, additivity or antagonism, all of which can occur in binary metal mixtures."[51, p 20] Dr. Alison Maule, who attended the Workshop on Aluminum in Vaccines, voiced similar concerns: "We need to bear in mind that we are not only putting aluminum in here, we are putting in mercury.... Often these effects are additive but there is always the possibility of synergy. We know nothing about that."[50, p 106] Dr. Vito Caserta, chief medical officer for the Vaccine Injury Compensation Program, had this to say: "One of the things I learned at the aluminum conference in Puerto Rico...that I never really understood before, is the interactive effect of different metals when they are together in the same organism. It is not the same as when they are alone, and I think it would be foolish for us not to include aluminum as part of our thinking with this."[51, p 234] Dr. William Weil, pediatrician, former member of the National Institutes of Health, and representative for the AAP Committee on Environmental Health, was also present at the CDC conference and made his concerns known: "In relationship to aluminum, being a nephrologist for a long time, the potential for aluminum and central nervous system toxicity was well established by dialysis data. To think there isn't some possible problem here is unreal."[51, pp 24-25]

Some health authorities who oversee federal vaccine initiatives candidly acknowledge their limited understanding of metals—aluminum and mercury—that are added to several vaccines. For example, Dr. Martin Myers, director of the National Vaccine Program Office and host of the HHS-sponsored Workshop on Aluminum in Vaccines, made a frank admission: "Perhaps the most important thing that I took away from the last meeting was that those of us who deal with vaccines have really very little applicable background with metals and toxicological research."[49, pp 1-2] Dr. Neal Halsey, director of the Institute for Vaccine Safety, Johns Hopkins Bloomberg School of Public Health, and former member of the CDC's Advisory Committee on Immunization Practices (ACIP), was also present at the workshop on aluminum. He had concerns regarding missing data: "We do not seem to have information on the age-related toxicity of aluminum, especially when we are dealing with very young infants.... We do not know whether or not there is a difference in susceptibility by age, as there [is] with other metals."[50, pp 83-84]

Some health authorities seemed to admit that even if aluminum is dangerous, it would be burdensome to remove it. For example, according to Dr. John Clements with the World Health Organization's Expanded Programme on Immunization, "There are not easy and obvious substitutes to aluminum adjuvants.... The existing vaccines, if they change the adjuvant for any reason, would need to be resubmitted for clinical trials for safety and efficacy and it would take a great deal of time to do that."[50, p 75] Furthermore, "Aluminum is not perceived, I believe, by the public as a dangerous metal. Therefore, we are in a much more comfortable wicket in terms of defending its presence in vaccines."[49, p 64]

Note: In 2005, 5 years after conference attendees spoke out about a lack of data on the effects of mixing different metals in childhood vaccines, Dr. Boyd Haley, former professor of medicinal chemistry and chairman of the chemistry department at the University of Kentucky, published a study in which he investigated the effect of combining aluminum hydroxide with thimerosal.[52] In this study, cultured neurons showed no significant cell death six hours after they were exposed to just aluminum; more than 90% survived. Thimerosal alone also caused few neurons

to die after six hours of exposure. Again, more than 90% survived. However, when cultured neurons were exposed to aluminum and thimerosal, only about 40% survived after six hours, clearly demonstrating synergistic toxicity (Figure 3).

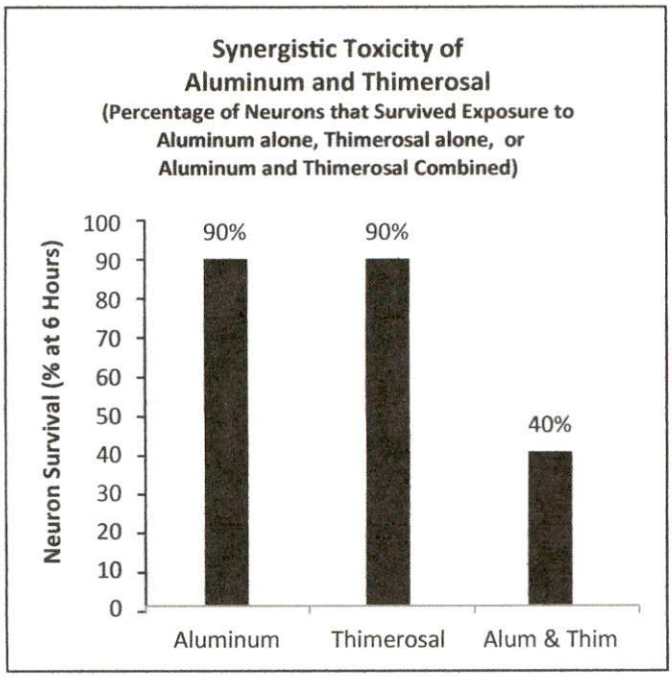

Figure 3. Survival of Neurons Exposed to Aluminum, Thimerosal, or Both

Unconvincing Evidence of Adjuvant Safety

Although several high-level representatives of the CDC, World Health Organization (WHO), American Academy of Pediatrics, Institute for Vaccine Safety, National Vaccine Program Office, and Vaccine Injury Compensation Program who attended the conferences on aluminum and thimerosal had serious concerns about the potential hazards associated with aluminum in vaccines, a conference report and workshop summary published in the journal *Vaccine* 2 years later declared that "the message from this conference for the global public should stress the safety of both these adjuvants and these vaccines," despite acknowledging that "we don't know" how aluminum adjuvants interact with the immune system and how it is processed by infants and children.[53] The conference report minimized risks by claiming that aluminum has been used as a vaccine adjuvant for more than 70 years and "has an established safety record with low incidence of reported adverse events." However, no one is warning vaccine recipients to consider the possibility that their adverse event could be related to aluminum in their vaccines nor encouraging them to report it to health authorities. Furthermore, research indicates that many people who have adverse reactions to aluminum-containing vaccines won't exhibit symptoms for several weeks, months, or years, so it's very difficult for vaccine recipients to recognize that the vaccines they received some time ago may be related to their current disabling autoimmune ailments.

A few years later, the FDA published a study, Mitkus et al., in which the authors concluded that "the benefits of using vaccines containing aluminum adjuvant outweigh any theoretical concerns."[54] This study is often cited as a confirmation that injecting babies with multiple doses of aluminum-containing vaccines is safe. However, there are major flaws in the FDA's analysis:

1. To determine an aluminum intake "minimal risk level" (MRL) for humans, a single animal study was used.[55] This study found that mice could receive up to 26 milligrams of aluminum per kilogram of body weight per day (26 mg/kg/day) with no adverse effects. After considering differences between mice and humans (and other factors), this number was reduced to create a margin of safety, and an MRL of 1 mg/kg/day was established for humans, including infants.[56] But there is a problem: 26 mg/kg/day is not a safe amount of aluminum for animals. Several studies confirm that animals are harmed by much lower quantities of aluminum—3.4 to 6.1 mg/kg/day—and at least three of these studies were published before the FDA paper in 2011, so the FDA study was fallacious at its inception.[57-60] Rats that were given just 6.1 mg/kg/day aluminum (30 mg/kg/day $AlCl_3$) needed significantly more repetitions to learn a maze when compared to a control group.[57] Rats that were given just 5.6 mg/kg/day aluminum (50 mg/kg/day $AlCl_3$-$6H_2O$) had significantly impaired spatial learning and memory abilities when compared to a control group. They also had cellular shrinking, plus behavioral, biochemical, and histological alterations.[58] Rats that were given just 3.4 mg/kg/day aluminum (17 mg/kg/day $AlCl_3$) "showed behavioral, biochemical, and histological changes similar to those associated with Alzheimer's disease."[60]

2. The MRL for humans is derived from dietary aluminum *fed* to mice. But infants are *injected* with aluminum. Injected aluminum bypasses the gastrointestinal tract and has unique toxic properties compared to aluminum that is ingested. To determine the safety of injected aluminum, scientists must conduct experiments with injected—not ingested—aluminum.

3. After vaccines containing aluminum adjuvants are injected into the body, aluminum nanoparticles can be transported by monocyte-lineage cells to draining lymph nodes, blood and spleen—and may also penetrate the brain.[41] Aluminum is unsafe even in trace quantities. For example, just 50 nanomolars of aluminum are sufficient to generate reactive oxygen species (ROS), or oxidative stress, in human primary neuronal-glial cell cultures and induce inflammatory gene expression.[61] In another study, just 10 nanomolars of aluminum increased C-reactive protein (CRP) levels four-fold, causing inflammation in human brain microvessel endothelial cells.[62] But the FDA assumes, without evidence, that these poorly biodegradable aluminum nanoparticles,

which have been detected in body organs up to a year after vaccination, are harmless, and they are not calculated by the FDA as part of the aluminum "body burden" until they dissolve.

4. The "retention function for aluminum," a mathematical equation that the FDA used to help estimate levels of aluminum in infants, was derived from data on only one person, an adult (rather than from numerous infants), and an estimate on the rate of absorption of aluminum hydroxide following injection was based on data from just two rabbits.

The FDA paper also falsely claimed that "occasional irritation (dermal) at the site of injection is the only adverse effect that has been reported in the published literature" following injections of aluminum-containing vaccines. And the clinical symptoms in patients diagnosed with MMF "are considered to be due to separate, coincidental immune or neurological disorders that are unrelated to the presence of aluminum in vaccines."[54] The Global Advisory Committee on Vaccine Safety, established by WHO, welcomed the FDA's analysis endorsing the safety of aluminum in vaccines.[63] The CDC vigorously defends the presence of aluminum in vaccines as well.[64] Clearly, FDA, CDC, and WHO agree on continuing indefinitely with their current policies of injecting babies with multiple doses of aluminum-containing vaccines.

Aluminum Toxicity Acknowledged for Parenteral Nutrition

Although the FDA's recent paper advocates the continued use of aluminum in childhood vaccines, FDA has known for many years that aluminum can be dangerous. For example, some infants require parenteral nourishment (administered by intravenous injection). All parenteral nutritional formulas contain aluminum. According to the FDA, "when medication and nutrition are administered orally, the gastrointestinal tract acts as an efficient barrier to the absorption of aluminum, and relatively little ingested aluminum actually reaches body tissues. However, parenterally administered drug products containing aluminum bypass the protective mechanism of the gastrointestinal tract and aluminum circulates and is deposited in human tissues."[65]

In a 1997 study published in the *New England Journal of Medicine*, scientists assessed 182 infants who received intravenous injections of nutritional formula that contained differing quantities of aluminum.[20] They calculated that infants who received aluminum at greater than 4 to 5 mcg/kg/day would lose 1 point per day on the Bayley Mental Development Index ($p = 0.03$). Babies who score low on this test are at risk for subsequent developmental and educational problems. This study contributed to FDA's decision to set limits on aluminum content in parenteral drug products and require warning labels on the package inserts—safety measures that were never required with aluminum-containing vaccines. In the Code of Federal Regulations, Title 21, published in the Federal Register, aluminum toxicity levels are revealed:

> WARNING: This product contains aluminum that may be toxic.... Research indicates that patients with impaired kidney function, including premature neonates, who receive [injections] of aluminum at greater than 4 to 5 mcg per kilogram of body weight per day, accumulate aluminum at levels associated with central nervous system and bone toxicity. Tissue loading may occur at even lower rates.[66]

This means that for a 6-pound baby with impaired kidney function, 11-14 mcg of injected aluminum would be toxic. The hepatitis B vaccine given at birth contains 250 mcg of aluminum—20 times higher than safety levels indicated for preemies. Babies weigh about 12 pounds at two months of age when they are injected with 1,225 mcg of aluminum from their CDC-recommended vaccines—50 times higher than safety levels for preemies.

Healthy babies may be able to handle quantities of aluminum above FDA toxicity levels indicated for patients with impaired kidney function. However, no one knows how much more aluminum is safe because adequate studies were never conducted. In addition, babies are not screened for renal function prior to vaccination. Therefore, it is impossible to know ahead of time which babies will succumb to aluminum poisoning. Instead, parents are expected to play Russian roulette with their children.

Summary

Aluminum adjuvants are added to several vaccines to elicit a more robust immune response and increase vaccine efficacy. Infants and young children throughout the world receive high quantities of aluminum from multiple inoculations. Incremental changes to the vaccination schedule during the past several years significantly increased the quantity of aluminum in childhood shots. Numerous studies provide compelling evidence that injected aluminum can be detrimental to health. Aluminum is capable of remaining in cells long after vaccination and may cause neurologic and autoimmune disorders. During early development, the child's brain is more susceptible to toxins and the kidneys are less able to eliminate them. Thus, children have a greater risk than adults of adverse reactions to aluminum in vaccines.

Millions of children every year are injected with vaccines containing mercury and aluminum despite well-established experimental evidence of the potential for additive or synergistic toxicity when an organism is exposed to two or more toxic metals. Dr. Haley's study in which cultured neurons died at an accelerated rate following concurrent exposure to aluminum and thimerosal provides evidence of an enhanced detrimental effect. In addition, aluminum toxicity levels published by FDA indicate that two-month-old babies who are vaccinated according to CDC guidelines may

be receiving quantities of aluminum that are significantly higher than safety levels.

Conclusion

Toxic metals such as aluminum do not belong in prophylactic medications administered to children, teenagers, or adults. Vaccines are normally recommended for healthy people, so safety (and efficacy) standards must be impeccable. Parents, especially, should not be compelled to permit their loved ones to receive multiple injections of toxic metals that could increase their risk of neurodevelopmental and autoimmune ailments. Safe alternatives to current disease prevention technologies are urgently needed.

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* Recieved TDAP at 28 weeks and baby stopped Moving and growing within days of me recieving shot.

Client: Nicole Smythe
10549 W. Darmouth Ave.
Lakewood, CO 80227
N.smythe@outlook.com

Account Number:

February 20, 2018

Sample: **Placenta Supplement - Sample A** Son with TDAP injury
Lab Number: **U180123-2001**

Element	Results (µg/g)
Aluminum	4.2
Antimony	<detection limit
Arsenic	<detection limit
Barium	0.30
Beryllium	<detection limit
Bismuth	<detection limit
Cadmium	0.030
Cesium	0.013
Gadolinium	<detection limit
Lead	0.01
Mercury	<detection limit
Nickel	0.13
Palladium	<detection limit
Platinum	<detection limit
Tellurium	<detection limit
Thallium	<detection limit
Thorium	<detection limit
Tin	<detection limit
Tungsten	<detection limit
Uranium	<detection limit

Analysis performed by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)

DOCTOR'S DATA INC

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* To prove pharmaceuticals need to be studied and they don't filter out — I had an MRI with dye 2 years before having my daughter. Doctors assured me the dye filters out, Gadolinium showed at high levels in my daughters placenta 2 years later!
Gadolinium is only found in MRI dye. My son had high AL and no gadolinium.

Client: Nicole Smythe
10549 W. Darmouth Ave.
Lakewood, CO 80227
N.smythe@outlook.com

Account Number:

February 20, 2018

Sample: Placenta Supplement - Sample B
Lab Number: U180123-2002

3yo. Dawghter, never exposed to vaccines.

Element	Results (µg/g)
Aluminum	2.7
Antimony	<detection limit
Arsenic	<detection limit
Barium	0.19
Beryllium	<detection limit
Bismuth	0.023
Cadmium	0.029
Cesium	0.017
* Gadolinium	0.052
Lead	0.01
Mercury	<detection limit
Nickel	0.062
Palladium	<detection limit
Platinum	<detection limit
Tellurium	<detection limit
Thallium	<detection limit
Thorium	<detection limit
Tin	<detection limit
Tungsten	<detection limit
Uranium	<detection limit

Analysis performed by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)

Aluminium Studies

Administration of aluminium to neonatal mice in vaccine-relevant amounts is associated with adverse long term neurological outcomes
https://www.sciencedirect.com/science/article/pii/S0162013413001773

Aluminum-induced chronic myelopathy in rabbits. - PubMed NCBI
https://www.ncbi.nlm.nih.gov/m/pubmed/1901636/?i=3&from=hypertonia%20aluminium

Aluminum and the Neurotoxicity of Vaccines 2015 http://www.globalresearch.ca/aluminum-and-the-neurotoxicity-of-vaccines/5446101

Aluminum in the central nervous system (CNS): toxicity in humans and animals, vaccine adjuvants, and autoimmunity. 2013 https://www.ncbi.nlm.nih.gov/pubmed/23609067

Neurodevelopmental effect of aluminum in mice: Fostering studies
https://www.sciencedirect.com/science/article/pii/089203629290013Z

Neurobehavioral effects in offspring of mice given excess aluminum in diet during gestation and lactation https://www.sciencedirect.com/science/article/pii/0892036289900056

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The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) is a Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education.

FERPA gives parents certain rights with respect to their children's education records. These rights transfer to the student when he or she reaches the age of 18 or attends a school beyond the high school level. Students to whom the rights have transferred are "eligible students."

- Parents or eligible students have the right to inspect and review the student's education records maintained by the school. Schools are not required to provide copies of records unless, for reasons such as great distance, it is impossible for parents or eligible students to review the records. Schools may charge a fee for copies.
- Parents or eligible students have the right to request that a school correct records which they believe to be inaccurate or misleading. If the school decides not to amend the record, the parent or eligible student then has the right to a formal hearing. After the hearing, if the school still decides not to amend the record, the parent or eligible student has the right to place a statement with the record setting forth his or her view about the contested information.
- Generally, schools must have written permission from the parent or eligible student in order to release any information from a student's education record. However, FERPA allows schools to disclose those records, without consent, to the following parties or under the following conditions (34 CFR § 99.31):
  - School officials with legitimate educational interest;
  - Other schools to which a student is transferring;
  - Specified officials for audit or evaluation purposes;
  - Appropriate parties in connection with financial aid to a student;
  - Organizations conducting certain studies for or on behalf of the school;
  - Accrediting organizations;
  - To comply with a judicial order or lawfully issued subpoena;
  - Appropriate officials in cases of health and safety emergencies; and
  - State and local authorities, within a juvenile justice system, pursuant to specific State law.

Schools may disclose, without consent, "directory" information such as a student's name, address, telephone number, date and place of birth, honors and awards, and dates of attendance. However, schools must tell parents and eligible students about directory information and allow parents and eligible students a reasonable amount of time to request that the school not disclose directory information about them. Schools must notify parents and eligible students annually of their rights under FERPA. The actual means of notification (special letter, inclusion in a PTA bulletin, student handbook, or newspaper article) is left to the discretion of each school.

For additional information, you may call 1-800-USA-LEARN (1-800-872-5327) (voice). Individuals who use TDD may use the Federal Relay Service (/about/contacts/gen/index.html#frs).

Or you may contact us at the following address:

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U.S. Department of Education
400 Maryland Avenue, SW
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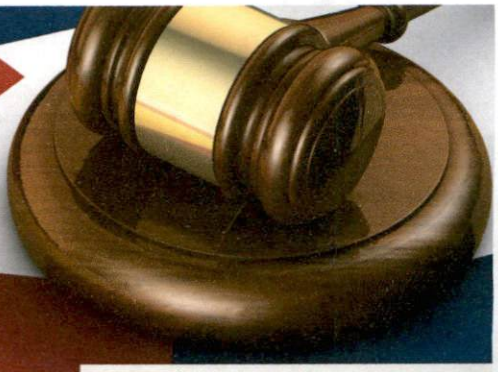
Last Modified: 03/01/2018

WHAT YOU NEED TO KNOW

COLORADO BILL HB19-1312



WHERE THERE'S RISK THERE MUST BE

CHOICE

LIMITS MEDICAL EXEMPTIONS

PROPOSED: COLORADO WOULD ADOPT CDC/ACIP MEDICAL EXEMPTION GUIDELINES

- This would eliminate a doctor's authority to exercise judgement in **preventing** serious adverse events in the case that red flags raise concern **prior** to vaccination.
- Medical exemption would only be available **following** a serious adverse event, and the exemption given, would only be valid for the vaccination that **caused** initial reaction

REMOVES STATE BOARD AUTHORITY

PROPOSED: COLORADO WOULD ADOPT CDC/ACIP VACCINE SCHEDULE

- Colorado would forfeit authority over it's residents and adopt the CDC schedule with no room to contest it's schedule.
- **Upon passage of this bill, more mandatory vaccines would be added; including the HPV and flu vaccine.**
- As the CDC expands the vaccine schedule, Colorado would follow suit.

THREATENS HIPAA & FERPA RIGHTS

PROPOSED: COLORADO WOULD ADOPT STANDARDIZED FORMS, FORCED "EDUCATION" AND A TRACKING SYSTEM

- A form (not yet released) would be required for exemption, possibly implicating parents of endangering a child by refusing a vaccination hypothesized as "safe".
- The mandatory vaccine "education" proposal is biased and does **not** include addressing the possible serious adverse events a child may experience.
- HB19-1312 allows the health department to track exemptions instead of the school, allowing them to circumvent FERPA. This gives access to a child's health record that would otherwise be protected.

ONLY ALLOWED CONTRAINDICATIONS WITH PROPOSAL

DTAP

- SEVERE ANAPHYLAXIS
- ENCEPHALOPATHY
  (ONLY IF OCCURRENCE WITHIN 7 DAYS OF PREVIOUS DTAP DOSE)

MMR

- SEVERE ANAPHYLAXIS
- SEVERE IMMUNODEFICIENCY

HEP B

- SEVERE ANAPHYLAXIS

(SOME OF THE) POSSIBLE INELIGIBLE SERIOUS ADVERSE EVENTS

- PANNICULITIS
- ATYPICAL MEASLES
- MEASLES-LIKE RASH
- FEVER
- SYNCOPE
- DIZZINESS
- VASCULITIS
- PANCREATITIS
- POLYNEURITIS
- POLYNEUROPATHY
- OCULAR PALSIES
- DIARRHEA
- VOMITING
- PAROTITIS
- DIABETES MELLITUS
- ASEPTIC MENINGITIS
- PNEUMONIA
- RETROBULBAR NEURITIS
- OTITIS MEDIA
- ORCHITIS
- PARESTHESIA
- EPIDIDYMITIS
- THROMBOCYTOPENIA
- PURPURA
- LEUKOCYTOSIS
- CHRONIC ARTHRITIS
- ARTHRALGIA
- MYALGIA
- ENCEPHALITIS
- RETINITIS
- NERVE DEAFNESS
- CONJUNCTIVITIS
- ACUTE DISSEMINATED ENCEPHALOMYELITIS (ADEM)
- MEASLES INCLUSION BODY ENCEPHALITIS (MIBE)
- STEVENS-JOHNSON SYNDROME
- TRANSVERSE MYELITIS FEBRILE CONVULSIONS ATAXIA
- SUBACUTE SCLEROSING PANENCEPHALITIS (SSPE)
- GUILLAIN-BARRÉ SYNDROME (GBS)
- REGIONAL LYMPHADENOPATHY
- OPTIC NEURITIS
- PAPILLITIS
- DEATH

HTTPS://WWW.MERCK.COM/PRODUCT/USA/PI_CIRCULARS/M/MMR_II/MMR_II_PI.PDF

THIS MEANS THAT EVEN IF YOUR CHILD EXPERIENCES SERIOUS ADVERSE REACTIONS, UNLESS IT'S "ALLOWED" THEY WILL BE REQUIRED TO CONTINUE RECEIVING THE SAME SHOT.

86R13084 JG-F

By: Hall S.B. No. 2350

A BILL TO BE ENTITLED
AN ACT

relating to the prohibited administration of certain vaccinations.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Subchapter A, Chapter 161, Health and Safety Code, is amended by adding Section 161.0045 to read as follows:

Sec. 161.0045. ADMINISTRATION OF CERTAIN VACCINES PROHIBITED. A health care provider may administer a vaccine only if:

(1) the study relied on by the United States Food and Drug Administration for approval of the vaccine evaluated the safety of the vaccine against a control group that received:

(A) a placebo; or

(B) another vaccine or other substance approved by the United States Food and Drug Administration based on a study that evaluated the safety of that vaccine or substance against a control group that received a placebo for that study;

(2) the study relied on by the United States Food and Drug Administration for approval of the vaccine evaluated the safety of the vaccine for a sufficient time to identify potential autoimmune, neurological, or chronic health conditions that may arise on or after the first anniversary of the date the vaccine is administered;

(3) the vaccine has been evaluated for the vaccine's potential to:

(A) cause cancer;

(B) mutate genes;

(C) affect fertility or cause infertility; and

(D) cause autism spectrum disorder;

(4) the department has posted on the department's Internet website a disclosure of any known injuries or diseases caused by the vaccine and the rate at which the injuries or diseases have occurred; and

(5) the chemical, pharmacological, therapeutic, and adverse effects of the vaccine and the rate of injury of the vaccine when administered with other vaccines have been studied and verified.

SECTION 2. This Act takes effect September 1, 2019.

Vaccine	Brandname/ Tradename	NDC	Packaging	CDC Cost/ Dose	Private Sector Cost/ Dose	Contract End Date	Manufacturer	Co
DTaP [1]	Daptacel®	49281-0286-10	10 pack – 1 dose vial	$18.071	$30.84	03/31/2020	Sanofi Pasteur	75
DTaP [1]	Infanrix®	58160-0810-11	10 pack – 1 dose vial	$18.67	$24.71	03/31/2020	GlaxoSmithKline	75
		58160-0810-52	10 pack – 1 dose syringe	$18.67	$24.71			
DTaP-IPV [2]	Quadracel™	49281-0562-10	10 pack – 1 dose vial	$40.667	$53.13	03/31/2020	Sanofi Pasteur	75
DTaP-IPV [2]	Kinrix®	58160-0812-11	10 pack – 1 dose vial	$41.31	$52.12	03/31/2020	GlaxoSmithKline	75
		58160-0812-52	10 pack – 1 dose syringe	$41.31	$52.12			
DTaP-Hep B-IPV [4]	Pediarix®	58160-0811-52	10 pack – 1 dose syringe	$59.05	$79.15	03/31/2020	GlaxoSmithKline	75
DTaP-IP-HI [4]	Pentacel®	49281-0510-05	5 pack – 1 dose vial	$59.422	$96.14	03/31/2020	Sanofi Pasteur	75
e-IPV [5]	IPOL®	49281-0860-10	10 dose vial	$13.55	$33.53	03/31/2020	Sanofi Pasteur	75
Hepatitis A Pediatric [5]	Vaqta®	00006-4095-02	10 pack – 1 dose syringe	$19.66	$32.66	03/31/2020	Merck	75
Hepatitis A Pediatric [5]	Havrix®	58160-0825-52	10 pack – 1 dose syringe	$20.52	$32.89	03/31/2020	GlaxoSmithKline	75
Hepatitis A-Hepatitis B 18 only [3]	Twinrix®	58160-0815-52	10 pack – 1 dose syringe	$60.34	$104.00	03/31/2020	GlaxoSmithKline	75
Hepatitis B [5] Pediatric/Adolescent	Engerix B®	58160-0820-52	10 pack – 1 dose syringe	$16.02	$23.72	03/31/2020	GlaxoSmithKline	75
Hepatitis B [5] Pediatric/Adolescent	Recombivax HB®	00006-4981-00	10 pack – 1 dose vial	$12.30	$23.95	03/31/2020	Merck	75

Vaccine	Brandname/ Tradename	NDC	Packaging	CDC Cost/ Dose	Private Sector Cost/ Dose	Contract End Date	Manufacturer	Co
		00006-4093-02	10 pack – 1 dose syringe	$12.30	$23.95			
Hib [5]	PedvaxHIB®	00006-4897-00	10 pack – 1 dose vial	$13.21	$26.23	03/31/2020	Merck	75
Hib [5]	ActHIB®	49281-0545-03	5 pack – 1 dose vial	$9.484	$16.51	03/31/2020	Sanofi Pasteur	75
Hib [5]	Hiberix®	58160-0818-11	10 pack – 1 dose vial	$9.46	$10.85	03/31/2020	GlaxoSmithKline	75
HPV – Human Papillomavirus 9-valent [5]	Gardasil®9	00006-4121-02	10 pack – 1 dose syringe	$178.14	$217.11	03/31/2020	Merck	75
MENB – Meningococcal Group B [5]	Trumenba®	00005-0100-10	10 pack – 1 dose syringe	$108.95	$133.62	03/31/2020	Pfizer	75
MENB – Meningococcal Group B [5]	Bexsero®	58160-0976-20	10 pack – 1 dose syringe	$135.48	$170.75	03/31/2020	GlaxoSmithKline	75
Meningococcal Conjugate (Groups A, C, Y and W-135) [5]	Menactra®	49281-0589-05	5 pack – 1 dose vial	$93.45	$122.31	03/31/2020	Sanofi Pasteur	75
Meningococcal Conjugate (Groups A, C, Y and W-135) [5]	Menveo®	58160-0955-09	5 pack – 1 dose vial	$94.84	$130.75	03/31/2020	GlaxoSmithKline	75
Measles, Mumps and Rubella (MMR) [1]	M-M-R®II	00006-4681-00	10 pack – 1 dose vial	$21.22	$75.04	03/31/2020	Merck	75
MMR/Varicella [2]	ProQuad®	00006-4171-00	10 pack – 1 dose vial	$131.40	$214.37	03/31/2020	Merck	75
Pneumococcal 13-valent [5] (Pediatric)	Prevnar 13 TM	00005-1971-02	10 pack – 1 dose syringe	$137.01	$180.05	03/31/2020	Pfizer	75
Pneumococcal Polysaccharide (23 Valent)	Pneumovax®23	00006-4837-03	10 pack – 1 dose syringe	$56.30	$100.19	03/31/2020	Merck	75

Vaccine	Brandname/ Tradename	NDC	Packaging	CDC Cost/ Dose	Private Sector Cost/ Dose	Contract End Date	Manufacturer	Contract Number
Influenza [5] (Age 6 months and older)	Fluzone® Quadrivalent	49281-0631-15	10 dose vial	$13.803	$16.939	2/28/2020	Sanofi Pasteur	75D30119D03769
Influenza [5] (Age 6-35 months)	Fluzone® Quadrivalent Pediatric dose	49281-0519-25	10 pack – 1 dose syringe	$13.757	$18.314	2/28/2020	Sanofi Pasteur	75D30119D03769
Influenza [5] (Age 6 months and older)	Fluzone® Quadrivalent	49281-0419-50	10 pack – 1 dose syringe	$13.757	$18.314	2/28/2020	Sanofi Pasteur	75D30119D03769
		49281-0419-10	10 pack – 1 dose vial	$13.757	$19.629			
Influenza [5] (Age 6 months and older)	Fluarix® Quadrivalent	58160-0896-52	10 pack- 1 dose syringe	$13.50	$16.82	2/28/2020	GlaxoSmithKline	75D30119D03767
Influenza [5] (Age 6 months and older)	FluLaval Quadrivalent	19515-0897-11	10 dose vial	$13.55	$15.77	2/28/2020	GlaxoSmithKline	75D30119D03767
		19515-0906-52	10 pack – 1 dose syringe	$13.50	$16.82			
Influenza [5] (Age 4 years and older)	Flucelvax® Quadrivalent	70461-0319-03	10 pack – 1 dose syringe	$15.55	$24.051	2/28/2020	Seqirus USA, Inc	75D30119D03768
		70461-0419-10	10 dose vial	$15.00	$22.758			
Influenza [5] (Age 6 -35 months)	Afluria® Quadrivalent	33332-0219-20	10 pack – 1 dose syringe	$13.55	$17.22	2/28/2020	Seqirus USA, Inc	75D30119D03768
Influenza [5] (Age 36 months and older)	Afluria® Quadrivalent	33332-0319-01	10 pack – 1 dose syringe	$13.55	$17.22	2/28/2020	Seqirus USA, Inc	75D30119D03768

KINDERGARTEN THROUGH 12TH GRADE IMMUNIZATION CHART
REQUIRED VACCINES FOR SCHOOL ATTENDANCE 2018-19

VACCINE	Number of Doses	Grades K-12 (4-18 Years of Age)
	Vaccines must follow MINIMUM INTERVALS & AGES to be valid. A 4 day grace period applies in most situations.	
Diphtheria/Tetanus/ Pertussis (DTaP) *Only licensed through 6 yrs of age.*	4 to 5	5 DTaP unless dose 4 given is given on or after the 4th b-day. Final dose of DTaP given no sooner than 4 years of age.
Tetanus/Diphtheria/ Pertussis *For students 7 years of age or older who did not have a full series of DTaP.*	3 or 4	3 doses tetanus/diphtheria containing vaccines (DTaP, DT,Td, Tdap) is required, or 4 doses required if 1st dose of DTaP is given before 1 year of age. 1 dose of Tdap given if DTaP series not completed and student is at least 7 yrs of age. **Tdap is required at 6th grade entry through 12th grade.**
Polio (IPV) *With combination of OPV & IPV, need series of 4 doses*	3 to 4	4 IPV unless 3rd dose is given on or after 4th birthday. Students who were compliant with 3 or 4 doses (4 weeks minimum intervals between doses) prior to August 7, 2009 have met the requirement.
Measles/Mumps/Rubella (MMR) *There must be at least a 28 day interval between 2 live vaccines.*	2	The 1st dose is not valid if administered more that 4 days before the 1st birthday. 2 doses are required for students entering Kindergarten & through 12th grade.
Varicella (Chickenpox) *There must be at least a 28 day interval between 2 live vaccines.*	2	The 1st dose is not valid if administered more that 4 days before the 1st birthday. 2 doses are required for students entering Kindergarten & through 12th grade. ***Note:** no vaccine required if there is laboratory documentation of chickenpox disease or a disease screening performed by a health care provider.*
Hepatitis B *Dosing must follow minimum intervals between doses and last dose must be administered at or over 24 wks of age.*	3	The 2nd dose administered at least 4 weeks after the first dose. The 3rd dose must be administered at least 16 weeks after the 1st dose, at least 8 weeks after the 2nd dose, and the final dose must be administered no sooner than 24 weeks of age. *Note: there is a specific 2-dose series is for ages 11-15 years only using adult vaccine.*

RECOMMENDED VACCINES FOR THE BEST PROTECTION AGAINST VACCINE-PREVENTABLE DISEASE

VACCINE	Number of Doses	Grades K-12 (4-18 Years of Age) *Vaccines administered ≤ 4 days before the minimum age are valid*
Influenza (Flu)	1 to 2	2 doses initially if under 9 yrs of age with a minimum interval of 28 days between doses, then 1 dose annually, thereafter. (Recommended for all children 6 months of age and older).
Meningococcal Meningitis		
MenACWY	2 doses	Adolescents 11-18 years of age (11-12, 16-18)
MenB	Series	Adolescents 16-18 years of age
Human Papillomavirus (9vHPV)	2 to 3	Adolescents 11-18 years of age Series initiation age 9-14 - two doses 6-12 mo apart Series initiation 15+ - three doses 0, 1-2 and 6 mo
Hepatitis A (Hep A)	2	All children 1 year of age and older

Immunization requirements are strictly enforced for all students. Students who do not meet the requirements will be denied attendance according to Section 25-4-902, C.R.S. There are three ways to be in compliance with the school immunization law:

1. Student's immunization record shows they are fully immunized with required vaccines. A laboratory report for some vaccines or diseases showing immunity is also acceptable.
2. For the student who is not up to date on required vaccines, the school will notify the parent/guardian that the student has 14 days to receive the required vaccine(s) or to make an appointment to receive the required vaccine(s). Parents are to provide a written plan for the remaining vaccines following the minimum intervals of the Advisory Committee on Immunization Practices (ACIP) schedule. If the plan is not followed, the student shall be excluded from school for non-compliance.
3. Submission of a Medical Exemption form signed by a health care provider or a Non-Medical exemption (religious or personal) submitted by a parent/guardian or emancipated student go to www.colorado.gov/vaccinexemption.

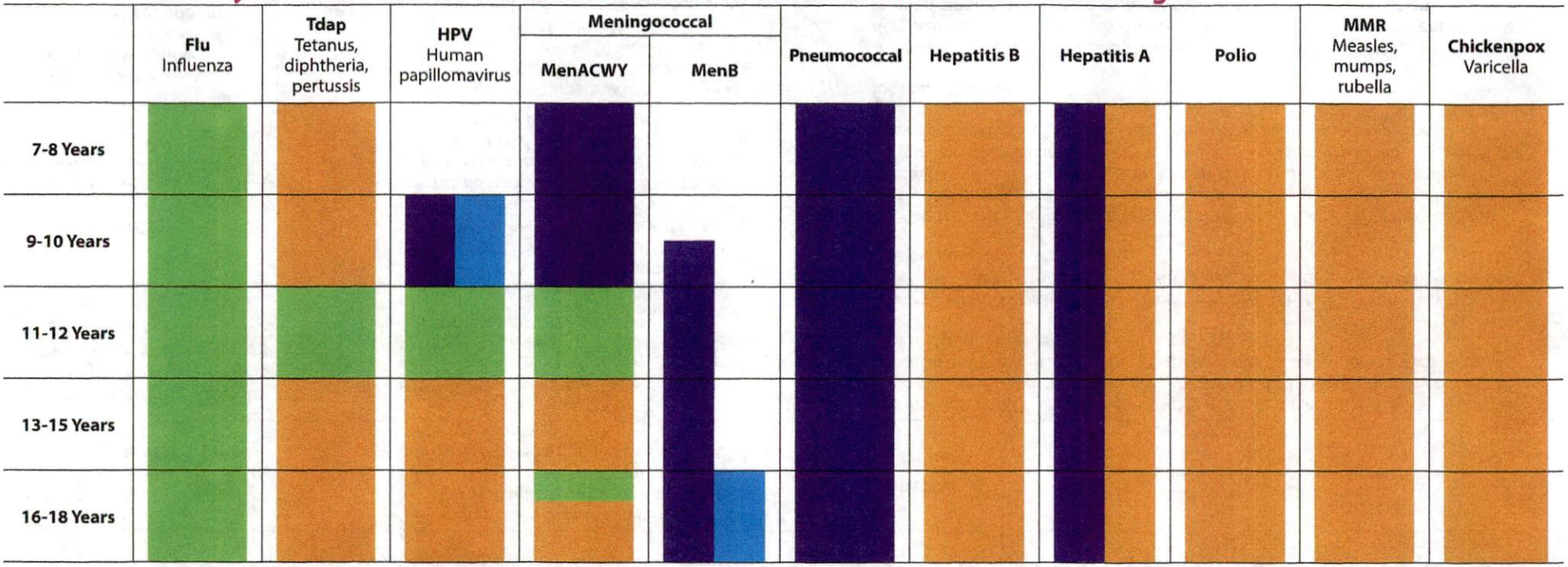
Last Reviewed January 2018

COLORADO
Department of Public Health & Environment

INFORMATION FOR PARENTS

2019 Recommended Immunizations for Children 7–18 Years Old

Talk to your child's doctor or nurse about the vaccines recommended for their age.



More information:	Everyone 6 months and older should get a flu vaccine every year.	All 11- through 12-year olds should get one shot of Tdap.	All 11- through 12-year olds should get a 2-shot series of HPV vaccine. A 3-shot series is needed for those with weakened immune systems and those who start the series at 15 years or older.	All 11- through 12-year olds should get one shot of meningococcal conjugate (MenACWY). A booster shot is recommended at age 16.	Teens 16–18 years old **may** be vaccinated with a serogroup B meningococcal (MenB) vaccine.

These shaded boxes indicate when the vaccine is recommended for all children unless your doctor tells you that your child cannot safely receive the vaccine.

These shaded boxes indicate the vaccine should be given if a child is catching up on missed vaccines.

These shaded boxes indicate the vaccine is recommended for children with certain health or lifestyle conditions that put them at an increased risk for serious diseases. See vaccine-specific recommendations at www.cdc.gov/vaccines/hcp/acip-recs/.

This shaded box indicates children not at increased risk may get the vaccine if they wish after speaking to a provider.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™

AAFP
AMERICAN ACADEMY OF FAMILY PHYSICIANS

Madame Chair Lontine, members of the committee, thank you for the opportunity to present to you today.

My name is Dana Griffin. Today, I would like to address the costs of implementing HB 19-1312, and to respectfully ask you to vote NO on this bill.

On page 9, lines 10-14, the state board of health must adopt the immunization recommendations from the ACIP as now being required in Colorado.

This will add Influenza annually, Meningitis, HPV, and Hep A for an additional 20 shots per student over their K-12 career.

My numbers are dated, but as of 2015, the number of uninsured children and children on Medicaid totaled 458,000 students requiring 20 additional shots each.

Using the CDC price list cost per shot, and an estimated $10 shot administration cost,

The cost per student is $857.

Grand Total (in 2015 children numbers) is approximately $392 million.

Of course, this number will need to be adjusted to accommodate the increase in children on Medicaid since 2015.

Per 2015 Medicaid sharing of Colorado covering 50%, Colorado's share would be approximately $196 million to comply with page 9, lines 10-15 of this bill.

I'd also like to talk to the State Expenditures section of the Fiscal Note. CDPHE estimates that 45,000 students will need to resubmit nonmedical exemptions each year. At an estimated 1 hr per exemption to sign form, process, and forward to schools, this would require 45,000 addition hours or 21.64 FTEs, increasing the department's estimated workload by 4.4% of its estimated annual budget.

Thank you for your time, and please vote NO on this bill. Are there any questions?

This Fiscal Note for HB 19-1312 states minimal impact. I wanted to share with you some numbers my husband and I put together that show substantial impact and that I will be presenting tomorrow at the House Committee meeting.

Referencing HB 19-1312, p. 9, lines 10-15, state board of health will now require all ACIP recommended immunizations, adding Influenza annually, Meningococcal Meningitis, HPV, and Hep A to the schedule immediately.

- 20 Additional shots required by bill by now requiring all ACIP recommended immunizations. (p. 9, lines 10-15)
- (Could only find numbers as recent as 2015) As of 2015, number of children on Medicaid was 406,000. Number of children uninsured was 52,000. So, 458,000 children in 2015 numbers will require 20 additional shots each.
- Sequence of vaccine cost:
    - Influenza (CDC price list cost per shot): $13.30 x 14 shots over course of school = $186.20 per student
    - Meningococcal Meningitis (CDC price list cost per shot): $65 x 2 shots = $130 per student
    - HPV (CDC price list cost per shot): $144 x 2 shots minimum = $288 per student
    - Hep A (CDC price list cost per shot): $26.30 x 2 shots = $52.60 per student
    - Medicaid/uninsured Grand total for requiring all ACIP recommended immunizations:
        - Total per student = $656.80
        - Total for 458,000 students = $300,814,400 in shots alone
        - Assume $10 per shot to administer, 458,000x20 shots X$10 =$91,600,000 shot administration cost (estimated)
        - Grand total (in 2015 children numbers): $392,414,400
        - Per 2015 Medicaid sharing of Colorado covering 50%, Colorado share would be: $196,207,200

- Per HB 19-1312 Fiscal Note Page 2 Background, CDPHE estimates 45,000 students claim nonmedical exemptions in a given year.
    - Cost to process exemptions:
        - Assume per exemption:
            - 10 min appointment time/scheduling/callback
            - 20 min personal interaction/re-education
            - 30 min to process and forward to schools
        - 45,000 exemptions x 1 hr manpower per exemption = 21.64 FTEs
        - Current SB 19-207, the Department of Health Care Policy and Financing currently funds 488.2 FTE for next fiscal year. This bill will increase the department's estimated workload by 4.4%.

This is quite a substantial financial impact. Of course, my 2015 numbers of children are probably 2/3 want numbers are now, and I'm not sure if Colorado's Medicaid share is still 50% or less now.

Madame Chair, members of the committee, thank you for letting me speak to you today.

My name is Elena Griffin, and I am 10 years old. Today, I ask you to vote NO on this bill.

Currently, my doctor can use my medical history and my family's medical history, and my doctor's medical experience and medical knowledge to decide what vaccines I should and should not be receiving. My doctor then writes a letter filing an exemption.

Under House Bill 19-1312, page 8, lines 9-15, my doctor is taken out of the picture. Medical choices will not be decided by sound medical practice but by allowing the ACIP contra-indications only. I actually need to be injected and have anaphylaxis to be exempted. It doesn't matter that my doctor recommends that I don't receive the vaccination and that I have a high likelihood of having a severe reaction. I actually have to have the severe reaction to get an exemption. And that only exempts me from that one shot, not the other 70 shots on the schedule.

By not considering my medical history and not giving my doctor the choice to make medical decisions, this section of House Bill 19-1312 endangers me and thousands of others affected by this bill. How do you intend to protect me?

Thank you for your time, and please vote NO on this bill.

Current Medical Exemption	HB 19-1312 Medical Exemption
Doctor Letter	CDPHE Medical Exemption Form
Based on child's doctor's medical knowledge taking patient's medical history and family medical history and whatever else the doctor deems relevant to make decision	Based on ACIP Contraindications which, unless child is undergoing organ transplant or is on chemo, is only recognized as an anaphylactic reaction to a given vaccine; thus only an exemption after potential harm is done and only for that said vaccine, not the other 70 plus vaccines required before the age of 18
Includes child's doctor in the decision process	Removes child's doctor from the decision process
Source: https://www.colorado.gov/pacific/cdpe/vaccine-exemptions	Sources: House Bill 19-1312, p. 8 lines 9-15 General Best Practice Guidelines for Immunization: Contraindications and Precautions (pp. 49-67 of https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/downloads/general-recs.pdf)

TABLE 4-1. Contraindications and precautions[a] to commonly used vaccines			
Vaccine	**Citation**	**Contraindications**	**Precautions**
DT, Td	(*4*)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component	GBS <6 weeks after previous dose of tetanus-toxoid–containing vaccine History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid–containing or tetanus-toxoid–containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid-containing vaccine Moderate or severe acute illness with or without fever
DTaP	(*38*)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures), not attributable to another identifiable cause, within 7 days of administration of previous dose of DTP or DTaP	Progressive neurologic disorder, including infantile spasms, uncontrolled epilepsy, progressive encephalopathy; defer DTaP until neurologic status clarified and stabilized GBS <6 weeks after previous dose of tetanus-toxoid–containing vaccine History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid–containing or tetanus-toxoid–containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid–containing vaccine Moderate or severe acute illness with or without fever
Hepatitis A	(*39*)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component	Moderate or severe acute illness with or without fever
Hepatitis B	(*40*)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Hypersensitivity to yeast	Moderate or severe acute illness with or without fever

Hib	(*41*)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Age <6 weeks	Moderate or severe acute illness with or without fever
HPV	(*42*)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component	Pregnancy Moderate or severe acute illness with or without fever
IIV	(*43*)	Severe allergic reaction (e.g., anaphylaxis) after previous dose of influenza vaccine or to vaccine component.	GBS <6 weeks after a previous dose of influenza vaccine Moderate or severe acute illness with or without fever Egg allergy other than hives, e.g., angioedema, respiratory distress, lightheadedness, recurrent emesis; or required epinephrine or another emergency medical intervention (IIV may be administered in an inpatient or outpatient medical setting and under the supervision of a health care provider who is able to recognize and manage severe allergic conditions).
IPV	(*44*)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component	Pregnancy Moderate or severe acute illness with or without fever
LAIV[(b)]	(*43*)	Severe allergic reaction (e.g., anaphylaxis) after a vaccine component, including egg protein Concomitant use of aspirin or aspirin-containing medication in children and adolescents LAIV4 should not be administered to persons who have taken influenza antiviral medications within the previous 48 hours.	GBS <6 weeks after a previous dose of influenza vaccine Asthma in persons aged 5 years old or older Medical conditions which might predispose to higher risk of complications attributable to influenza[(c)] Moderate of severe acute illness with or without fever

MenACWY	(*45*)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component	Moderate or severe acute illness with or without fever
MenB	(46,47)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component	Moderate or severe acute illness with or without fever
MMR[d],[e]	(*1*)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Pregnancy Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy[f] or patients with HIV infection who are severely immunocompromised) Family history of altered immunocompetence[g]	Recent (≤11 months) receipt of antibody-containing blood product (specific interval depends on product) History of thrombocytopenia or thrombocytopenic purpura Need for tuberculin skin testing or interferon-gamma release assay (IGRA) testing[h] Moderate or severe acute illness with or without fever
MPSV4	(*48*)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component	Moderate or severe acute illness with or without fever
PCV13	(*49*)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose of PCV13 or any diphtheria-toxoid–containing vaccine or to a component of a vaccine (PCV13 or any	Moderate or severe acute illness with or without fever

		diphtheria-toxoid–containing vaccine)	
PPSV23	(*50*)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component	Moderate or severe acute illness with or without fever
RIV	(*43*)	Severe allergic reaction (e.g., anaphylaxis) to any component of the vaccine	GBS <6 weeks after a previous dose of influenza vaccine Moderate or severe acute illness with or without fever
Rotavirus	(*6*)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component SCID History of intussusception	Altered immunocompetence other than SCID Chronic gastrointestinal disease[i] Spina bifida or bladder exstrophy[i] Moderate or severe acute illness with or without fever

Tdap	(*51*)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures), not attributable to another identifiable cause, within 7 days of administration of previous dose of DTP, DTaP, or Tdap	GBS <6 weeks after a previous dose of tetanus-toxoid–containing vaccine Progressive or unstable neurological disorder, uncontrolled seizures, or progressive encephalopathy until a treatment regimen has been established and the condition has stabilized History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid–containing or tetanus-toxoid–containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid–containing vaccine Moderate or severe acute illness with or without fever
Varicella[d],[e]	(*52*)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy[f] or patients with HIV infection who are severely immunocompromised)[e] Pregnancy Family history of altered immunocompetence[g]	Recent (≤11 months) receipt of antibody-containing blood product (specific interval depends on product) Moderate or severe acute illness with or without fever Receipt of specific antiviral drugs (acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination (avoid use of these antiviral drugs for 14 days after vaccination) Use of aspirin or aspirin-containing products[j]

Zoster	(53)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy[f] or patients with HIV infection who are severely immunocompromised)[e] Pregnancy	Moderate or severe acute illness with or without fever Receipt of specific antiviral drugs (acy 14 days after vaccination)

Testimony
HB 19-1312

Citations For Your Consideration:

CDC's "Who Should Not Get Vaccinated with These Vaccines?" *Note that each vaccine listed carries risks not acknowledged on the ACIP's Contraindication Guidlines:
https://www.cdc.gov/vaccines/vpd/should-not-vacc.html

ACIP's Contraindications Guidelines:
https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html

EXAMPLE: DTaP Infanrix package insert, on page 15, under section 13.1 "INFANRIX has not been evaluated for carcinogenic or mutagenic potential, or for impairment of fertility."
https://www.fda.gov/downloads/BiologicsBloodVaccines/Vaccines/ApprovedProducts/UCM124514.pdf

Current Listing of all Vaccines/Vaccine Package Inserts from the FDA:
https://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm093833.htm

Autoimmune Conditions Resulting from Vaccines:

1. Henoch-Schonlein Purpura:
   A. http://immunityeducationgroup.org/vaccinesideeffectsingredients/
   B. https://pediatrics.aappublications.org/content/pediatrics/112/6/e491.full.pdf
2. Anaphylactic Peanut Allergy:
   A. https://www.researchgate.net/publication/285580954_Evidence_that_Food_Proteins_in_Vaccines_Cause_the_Development_of_Food_Allergies_and_Its_Implications_for_Vaccine_Policy?fbclid=IwAR1IwdRu0OwDTSafVo-_bew2seEpxJyv9hYg7CN9ymYqh-Auifbi7DpWaBQ
   B. https://www.ncbi.nlm.nih.gov/m/pubmed/9949325/
   C. History of the use of Peanut Oil as an Adjuvant in Vaccines:
   https://www.nytimes.com/1964/09/19/archives/peanut-oil-used-in-a-new-vaccine-product-patented-for-merck-said-to.html?smid=fb-share&fbclid=IwAR2MpCXJhT5R_T6Rg3gOa0vhJevkx0RyujyUj5wpecPOwbtsQGccQvZXtUA
3. Vaccine Adverse Reporting System and Underreporting of Vaccine Injuries & Deaths:
   A. Underreporting of Adverse Events
      1. https://www.nap.edu/read/2138/chapter/12
      2. https://www.nap.edu/read/13164/chapter/2
      3. https://healthit.ahrq.gov/ahrq-funded-projects/electronic-support-public-health-vaccine-adverse-event-reporting-system
   B. Grant Final Report from Harvard: "Adverse events from drugs and vaccines are common, but underreported. [...] Likewise, fewer than 1% of vaccine adverse events are reported. Low reporting rates preclude or slow the identification of 'problem' drugs and vaccines that endanger public health. New surveillance methods for drug and vaccine adverse effects are needed."
   https://healthit.ahrq.gov/sites/default/files/docs/publication/r18hs017045-lazarus-final-report-2011.pdf

Brand name (vaccines) Ages given	Monitored for reactions	Studies	placebo/controls	Quotes from the insert
Energix-B (hepatitis B) Birth, 1mo, 6mo	**4 days** *with symptom checklist (a checklist eliminates or precludes recording of any reactions that are not listed)	Study 1 -**efficacy** for neonates (infants) Study 2 – **efficacy** and immunogenicity in special adult populations Study 3 & 4 – **immunogenicity** (various ages) Study 5 – **interchangeability** with other Hep B vaccines Safety studies = 0	Only the study of interchangeability used any comparators at all (Energix following 2 doses of Energix compared to Energix following 2 doses of Recombivax) No control groups in any other studies. Inert controls = 0	Pg6. "Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a vaccine cannot be directly compared with rates in the clinical trials of another vaccine and may not reflect the rates observed in practice." Pg10. "**8.4 Pediatric Use** Safety and effectiveness of ENGERIX-B have been established in all pediatric age-groups. *See Adverse Reactions (6), Clinical Studies (14.1, 14.3, 14.4).*" However, studies 14.1, 14.3, and 14.4 are studies of efficacy and immunogenicity, NOT safety. (Pg 12-13) Pg12. **"13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility** ENGERIX-B has not been evaluated for carcinogenic or mutagenic potential, or for impairment of male fertility in animals. Vaccination of female rats with TWINRIX, which contains the same HbsAg component and quantity as ENGERIX-B, had no effect on fertility. *[See Use in Specific Populations (8.1).]"*

Brand name (vaccines) Ages given	Monitored for reactions	Studies	placebo/controls	Quotes from the insert
Recombivax (hepatitis B) Birth, 1mo, 6mo or (age 11+) 2 doses, 4-6 months apart	**5 days**	Study 1 – **efficacy** in infants exposed to hepatitis B Study 2 – **immunogencity** infants-adolescents Study 3 – **immunogencity** in healthy 11-15yo Study 4 – **immunogenicity** in healthy adults Study 5 – **immunogenicity** in special adult populations Safety studies = 0	Only one study compared **efficacy** of Recombivax alone vs Recombivax plus HBIG (hepatitis B immune globulin) in infants whose mothers had hepatitis B No other comparators or control groups Inert controls = 0	Pg4. "In three clinical studies, 434 doses of RECOMBIVAX HB, 5 mcg, were administered to 147 healthy infants and children (up to 10 years of age) who were monitored for 5 days after each dose." Pg8. "**13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility** RECOMBIVAX HB has not been evaluated for its carcinogenic or mutagenic potential, or its potential to impair fertility *[see Use in Specific Populations (8)]*."
Hiberix (Haemophilus b Conjugate or Hib) 2mo, 4mo, 6mo, 15-18mo	**4 days** booster dose **31 days**	Study 1 – immunogenicity Study 2 – antibody response when administered with Pediarix and PCV13 "7 additional studies" = insufficient data to confirm lack of interference in immune response Safety studies = 0	- another licensed Hib vaccine - a DTAP-IPV and Hib - non-USA formulations of 3 different vaccines Inert controls = 0	Pg5. "In these 7 studies, HIBERIX was administered concomitantly with non-U.S. formulations (containing 2.5 mg 2-phenoxyethanol per dose as preservative) of one of the following U.S.-licensed vaccines: INFANRIX (DTaP) [Diphtheria and Tetanus Toxoids and Acellular Pertussis Vaccine Adsorbed], KINRIX (DTaP-IPV) [Diphtheria and Tetanus Toxoids and Acellular Pertussis Adsorbed and Inactivated Poliovirus Vaccine], or PEDIARIX (DTaP-HBV-IPV). In the studies, DTaP-IPV and DTaP-HBV-IPV were administered in dosing regimens not approved in the U.S. Some subjects received DTaP-HBV (GlaxoSmithKline Biologicals, not licensed in U.S.) concomitantly with HIBERIX." Pg11. "**13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility** HIBERIX has not been evaluated for carcinogenic or mutagenic potential, or for impairment of fertility."

Brand name (vaccines) Ages given	Monitored for reactions	Studies	placebo/controls	Quotes from the insert
Proquad (measles, mumps, rubella, varicella) 12mo and 4-6yr	**42 days** **28 days** *with a symptom checklist (a checklist eliminates or precludes recording of any reactions that are not listed)	"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." Studies are not numbered on the insert, but all studies described focused on immunogenicity and seroconversion. Safety studies = 0	Study 1 - Proquad compared with MMR2 and Varivax given as 2 shots Study 2 – compares first dose with second dose Study 3 had three groups: Proquad+placebo MMR2+placebo MMR2+Varivax While they used the word placebo, there is NO control group which received only an inert placebo. Study 4 3 groups -Proquad + PCV7 -PCV7 -Proquad Study 5 compared Proquad with and without a hepatitis A vaccine Inert controls = 0	Pg3. "**5.1 Fever and Febrile Seizures** Administration of ProQuad (dose 1) to children 12 to 23 months old who have not been previously vaccinated against measles, mumps, rubella, or varicella, nor had a history of the wild-type infections, is associated with higher rates of fever and febrile seizures at 5 to 12 days after vaccination when compared to children vaccinated with dose 1 of both M-M-R II and VARIVAX administered separately *[see Adverse Reactions (6.3)]*" "**5.2 History of Cerebral Injury or Seizures** Exercise caution when administering ProQuad to persons with a history of cerebral injury, individual or family history of convulsions, or any other condition in which stress due to fever should be avoided. Healthcare providers should be alert to the temperature elevations that may occur following vaccination." Pg13. "In the post-marketing observational surveillance study, results from the primary safety analysis revealed an approximate two-fold increase in the risk of febrile seizures in the same 5 to 12 day timeframe after vaccination with ProQuad (dose 1)." Pg16. "**13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility** ProQuad has not been evaluated for its carcinogenic, mutagenic, or teratogenic potential, or its potential to impair fertility."

My name is Cyndy Odenwald; I've lived in Colorado for 25 years. Like most parents, I assumed that the vaccines our doctors recommended for our children were safe. I assumed after examining my child that day, the doctor had determined that each vaccine to be given was safe for our child. I also assumed that the doctor had read studies which showed that it was safe to give the combinations of shots he or she was recommending for our child that day. Apparently, that was not quite the case. Actually, our doctors assumed that the CDC had read or done those studies and determined that vaccines are safe and effective. If they were not, the CDC would not recommend them, right? In fact, it would seem reasonable to assume that every vaccine had been shown to be safe **before** receiving FDA approval. Unfortunately, those assumptions, like many assumptions, were not correct.

When making medical decisions, it is best to avoid assumptions and deal with science. So, I started looking into the science available on vaccines. In addition to searching the peer reviewed journals, I looked for information from the CDC and the FDA. Fortunately, I discovered that the FDA requires pharmaceutical companies to make their research available to physicians and the public through what they call a package insert. I have spent many, many hours reading vaccine inserts and analyzing the information they contain. My research and statistics textbook states that science relies on direct and objective observation. I'm afraid that what I found in vaccine package inserts is far from objective.

You may remember from your school days that it is very important, when using the scientific method, to be sure you identify the one variable you wish to study and keep all other factors the same. You have a treatment group and a control group. You form a hypothesis about how you think the treatment group will differ from the control group because of the treatment. This is a gold standard of science; we are teaching it now as early as 3rd or 4th grade, continuing on through high school and undergraduate programs, of course. But this concept is missing from the studies on vaccines. I have examined the manufacturers' inserts for every vaccine on the CDC childhood schedule, and none of them (not one) holds to this principle of using an inert placebo as a control group to compare to the treatment group (which would be the vaccine being tested.

If you would, please, refer to the charts that I gave you. They show some of my analysis for just 4 of the vaccines on the CDC's childhood schedule. I started with a hepatitis B vaccine since that is the first vaccine recommended by the CDC, given in the first few hours after birth.

COLORADO
Department of Public Health & Environment

Questions and answers about Colorado's 2017-2018 school and child care immunization data

Colorado's 2017-2018 School and Child Care Immunization Data website is a resource for families, schools, local public health agencies, health care providers and other partners. The site requires one of the following browsers:

- Chrome on Windows, Mac, and Android 4.4 or later.
- Apple Safari on Mac and iOS 8.x or later.
- Internet Explorer 11 or newer.
- Mozilla Firefox 3.x or later on Windows and Mac.

How/where did the Colorado Department of Public Health and Environment get the data?

A Colorado Board of Health rule requires most schools and licensed child cares to report aggregate immunization and exemption data to the department annually. Schools and child care/preschool facilities reported the data directly to the department through an online data collection tool or by sending data directly to the department between October 2017 and December 2017.

Who must report: Public, private and parochial schools with grades K - 12, as well as child care centers, preschools and Head Start programs licensed by the Colorado Department of Human Services to provide care for 10 or more children.

Who does not need to report: School-age child care centers, family child care homes, drop-in centers, day treatment centers, foster care homes, day camps, resident camps and online only K - 12 schools - though these facilities are still required to collect immunization or exemption forms for their students.

What do the data show?

For the 2017-2018 school year, the Colorado Department of Public Health and Environment collected de-identified immunization and exemption data from 1,860 K-12 schools (▽ 59) representing more than 880,000 students (▽ 30,000). 92.9 percent of students were in compliance with school immunization rules.

Statewide school fully immunized and exemption rates by vaccine

Vaccine	Fully immunized rate	Exemption rate
DTaP	94.35% (▽ .43)	2.64% (▽ .26)
Hep B	94.68% (▽ .47)	2.88% (▽ .24)
MMR	94.53% (▽ .25)	2.87% (▽ .25)
Polio	94.32% (▽ .31)	2.83% (▽ .25)
Varicella	92.89% (▽ 1.27)	3.53% (▽ .25)
Tdap (6th grade and up)	90.50% (▽ .65)	2.80% (▽ .33)

Statewide school exemption data by exemption type and vaccine

Vaccine	Personal belief exemption	Religious exemption	Medical exemption
DTaP	88.97% (▽ .87)	8.15% (▽. 22)	2.88% (▽ .64)
Hep B	89.61% (▽ .07)	7.07% (▽. 07)	3.32% (▽ .15)
MMR	88.14% (▽ .54)	7.80% (△ .17)	4.06% (△ .32)
Polio	88.91% (▽. 16)	7.77% (▽.08)	3.32% (△ .08)
Varicella	85.42% (▽. 34)	7.88% (△ 1.23)	6.70% (▽ .9)
Tdap (6th grade and up)	89.78% (▽. 89)	6.79% (▽ .47)	3.44% (▽ .41)

For 2017-2018, the department collected aggregate, de-identified immunization and exemption data from 1,728 child care and preschool facilities (▽ 181) representing more than 106,500 children (△6,000). 95.06 percent of children were in compliance with immunization rules.

Statewide child care and preschool fully immunized and exemption rates by vaccine

Vaccine	Fully immunized rate	Exemption rate
DTaP	93.04% (△ 1.72)	2.53% (▽ .23)
Hep B	93.10% (△ 1.21)	3.18% (△ .18)
MMR	93.84% (▽ .78)	2.56% (△ .24)
Polio	93.79% (▽ 1.61)	2.66% (△ .18)
Varicella	93.11% (▽ 1.30)	2.92% (△ .20)
HIB	93.85% (△ 1.58)	2.48% (▽ .22)
PCV13	93.48% (△ 1.48)	2.50% (▽ .21)

Statewide child care and preschool exemption data by exemption type and vaccine

Vaccine	Personal belief exemption	Religious exemption	Medical exemption
DTaP	86.17% (▽ 1.76)	9.49% (▽ 2.16)	4.34% (△ .40)
Hep B	89.56% (▽ 1.20)	6.66% (▽ 1.05)	3.77% (△ .19)
MMR	87.04% (▽ .19)	8.04% (△ .81)	4.92% (▽ 1.04)
Polio	88.06% (▽ .74)	7.73% (△ .93)	4.20% (△ .20)
Varicella	88.09% (▽ .27)	7.23% (△ .43)	4.69% (▽ .76)
HIB	86.08% (▽ 1.64)	9.56% (▽ 2.10)	4.36% (▽ .90)
PCV13	87.47% (▽ 1.27)	7.99% (▽ 1.06)	4.54% (△ .22)

How were the rates calculated?

The department calculated the vaccine-specific fully immunized rates for each school and child care/preschool by summing the total number of children who were fully immunized for a particular vaccine and then dividing by the total number of children who were eligible for that vaccine. Exemption rates were calculated the same way. Here's an example:

Vaccine	Fully immunized children	Eligible children
DTaP	95	100

DTaP fully immunized rate: 95/100 = 95 percent

Rates for school districts, counties, and local public health agency (LPHA) jurisdictions were calculated similarly. The total number of children who were fully immunized for a particular vaccine in each geographical area were divided by the total number of children enrolled in schools or child cares/preschools within that geographical area.

Compliance with immunization rules is the only figure that was reported across all vaccines for each individual child in aggregate. For example:

School	Compliant - Number of children who are fully immunized, exempted from, or in process for all required doses of vaccine.	Not compliant - Number of children who are missing a record for, not exempted from, or not in process for one or more required doses of vaccine.
Sample elementary school	95	5

What if a school or child care/preschool doesn't have any data listed?

If a school or child care/preschool doesn't have any data listed, that facility did not report data to the department for the 2017-2018 school year. You may request immunization data directly from that facility. Colorado immunization law requires them to make it available, upon request.

The data for my facility do not look correct. Why?

This is the second year the department has collected this data. Data are reported by December 1 each year, and the website is updated in the spring of the following year. The data are self-reported by schools and child cares/preschools and could include data entry or other reporting errors. Like all data, use caution when interpreting results. If you have concerns with data for a child care/preschool, school or school district, it is best to contact the child care/preschool, school, the school district, or the department's Immunization Branch at 303-692-2700 or cdphe_informaticsimmunization@state.co.us.

How does Colorado compare to other states?

It is not possible to accurately compare Colorado's immunization and exemption rates with those of other states because school immunization requirements differ and states collect data in different ways. We do know that, like many other states, Colorado has an opportunity to improve immunization coverage rates.

What is the statewide up-to-date rate for all vaccines?

This year, we have fully immunized rates by individual vaccine, as shown in the tables above. In 2016-2017 (the first year we collected data), schools and child cares/preschools were asked to report the number of children who were up-to-date (fully immunized) across all required vaccines. Review of these self-reported measures were inconsistent with the self-reported fully immunized rates for each individual vaccine and were not used. Instead, we reported an average up-to-date rate that took the total number of children who were up-to-date for individual vaccines and then divided by the total number of children who were eligible for the required vaccines.

NOTE: We have decided against continuing this methodology moving forward due to concerns with its validity. We have piloted receiving de-identified, FERPA-compliant, student-level data from school districts, which allows us to calculate all rates from a single source. We intend to expand this pilot in the future as it would allow the generation of a more accurate and credible statewide up-to-date immunization rate.

What is the statewide compliance rate for schools and child cares/preschools?

In 2017-2018, we asked for compliance across all required vaccines because compliance is a straightforward and easy way to report across all required vaccines for each student. In the 2017-2018 reporting year, facilities reported compliance at the facility level across all vaccines for each student. This figure is 92.9 percent for schools and 95.06 percent for child cares/preschools and is presented in the Partners State Overview visualization.

What does compliance mean? What is the difference between a student being in compliance and up-to-date?

To be in compliance, a student must have on file:

- a record of being up-to-date on all vaccines required by age/grade; OR
- a valid medical or non-medical exemption; OR
- a written plan to become up-to-date.

To be up-to-date, a student must have received all required vaccines at the time of reporting.

Why are these data important?

Immunization information can help parents and guardians choose where to send their children for school or child care/preschool. It is especially important for parents of children with weakened immune systems, or parents of children who are too young to be immunized, to understand how well-vaccinated their children's peers are. Children with weakened immune systems can be more susceptible to infection, and the likelihood of vaccine-preventable disease outbreak is greater when immunization rates are lower.

Why did the department create this data website?

The department shares these data to give parents and guardians the opportunity to consider immunization rates as they choose a school or child care/preschool for their child.

Can you see which students or families do not have vaccines or have claimed exemptions?

No. The department only receives de-identified data. In addition, to protect privacy, facilities with fewer than 10 children are not required to report data to the department.

How often will the data be updated?

Schools and child cares/preschools are required to report by December 1 each year. CDPHE publishes the data annually.