Aluminum

BY ANNA BROWNING FOR TERYNGREGSON.COM

History, Medical Opinions & Studies

History:

- Injected aluminum has never been properly tested. Why do the FDA and CDC allow aluminum in vaccines?
  - Since 1926, aluminum has been categorized as GRAS (generally regarded as safe) by the FDA before any research was hardly done. It was grandfathered in. It is not because it was extensively tested by the FDA and was then determined safe. The CDC points to the FDA and says that vaccines are licensed by the FDA, and the vaccines meet FDA standards. The CDC has not tested the aluminum adjuvant, yet they recommend it.
- Since the 1920s, aluminum salts have been used primarily as the adjuvant in most childhood vaccines to optimize the body's immune response to the injected disease. Aluminum is now known to be neurotoxic and the root cause of many serious illnesses including MS and Alzheimer's.
  - "The aluminum adjuvant was only tested for 28 days, on two rabbits, and their remains have mysteriously disappeared. What the pharmaceutical companies don't make public is how the aluminum adjuvant was never rigorously tested before going on the market."
    - Documentary: Injecting Aluminum.
- Researchers Show Where Aluminum Travels In the Body and Stays After Vaccination
- Aluminum and autoimmunity:
- Mechanisms of Aluminum Adjuvant Toxicity and Autoimmunity in Pediatric Populations
- Aluminum is a neurotoxin. Injecting aluminum is harmful to your immune system. Some vaccines contain aluminum compounds. For example:
  - Aluminum Hydroxide (Al(OH)3) has 172.95 mcg aluminum per 500 mcg dose.
  - Aluminum Hydroxyphosphate (HAlO5P) has 43.68 mcg aluminum per 250 mcg dose
  - Aluminum Hydroxyphosphate Sulfate (AlHO9PS-3) has 25.83 mcg "aluminum" per 225 mcg dose

Medical Opinions:

- **Christopher Exley, PhD, the world's foremost aluminum researcher:**
  - "In fact, for almost everything else you can think of, you have to do that, you have to demonstrate that something is safe first. That has never been necessary for aluminum, it has never been demonstrated that aluminum is safe. No, there's never been any legislation in order to do that, and this is a historical thing. In fact, the adjuvant does not require clinical approval at all. It is the vaccine preparation which requires clinical approval, so you may put any adjuvant into a vaccine, it will then go through a clinical approval process and if it gets approved with that adjuvant, regardless of what it is, whether it's an aluminum adjuvant or another, then it's the vaccine that will be clinically approved, not the adjuvant."
  - "I only just learned about this. I learned about it through conversations with the European Medicines agency, with the FDA in the U.S., and indeed with manufacturers of aluminum adjuvants. There are no clinically-approved aluminum adjuvants. For a long time, I thought there were. I thought there were two. But actually, adjuvants, (and aluminum adjuvants being part of that) they are only approved as part of a vaccination. This is really important. It is important because we are still in our vaccine trails using aluminum adjuvants, or indeed sometimes, other aluminum-adjuvanted vaccines as placebos or controls in clinical trials... and clearly that's wrong, because in that way, we are not testing the safety of the adjuvants."
  - "The Earth's crust is made of three elements: aluminum, silicon and oxygen. Aluminum, when it is combined with silicon and oxygen, is completely inert. That's what I showed in my original work on fish. It's only when you take it out away from the silicon and the oxygen that you start to produce the problems that we see today. Reform the hydroxyaluminosilicate from which the Earth's crust is made and the aluminum becomes non-toxic."
- **Dr. Paul Thomas, MD (Pediatrician):**
  - "I think honestly James, I think we've reached the time now where we really should be having a moratorium on the use of aluminum in vaccines. It just needs to be stopped. We need to say, "Enough's enough."
- **Rebecca L. Hart, PhD:**
  - "An adjuvant (from the the Latin words Ad (toward) and Juvare (to help)) is typically added to vaccines for the following reasons: 1) to enhance immunogenicity of highly purified or recombinant antigens, 2) to reduce the amount of antigen or number of immunizations needed for protective immunity, or 3) to improve the efficacy of vaccines in newborns, the elderly, or the immunocompromised. Ideally they should be low in toxicity, high in stability, bioavailable, and relatively inexpensive.

- This is a HUGE field in itself, I found out, with books written on the subject! And there are many types of adjuvants (gel-based, surfactive agents, bacterial products, oil emulsions, fusion proteins or lipopeptides). But, so far, Al is the most used because it (seemingly) fits all the ideal criteria. It was discovered by Alexander Glenny in 1926, he injected this into his guniea pigs and noticed a higher production of antibodies being produced. It was then used beginning in 1932 for humans, and for many years, it has been apparently ideal aside from some abscesses that could be difficult to heal at the injection site. They had to change the original formula, however, due to difficulty of consistent preparation and today there are three Al forms commonly used: aluminum hydroxide (AH), aluminum phosphate (AP), and amorphous aluminum hydroxyphosphate sulfate (AAHS).
- Each has its own unique properties (solubility, aggregate formation, electric charge at neutral pH) for adsorbing onto the chosen antigen. How do they work? What are the mechanisms? Well, 85 years later, they are still answering this question."
  - MORE INFO

- **Dr. Bob Sears**
  - "No one has actually studied vaccine amounts of aluminum in healthy human infants to make sure it is safe. Should we now stop and research this matter? Or should we just go on and continue to hope that it is safe?"
- **James Lyons-Weiler, PhD wrote:**
  - ***"FACT:*** Prior to the development of an extraction technique in the late 1800's, nearly all of aluminum in the earth's crust was not available to biological organisms because it was trapped in bauxite, due to its proclivity to bind to silica. No known biological pathway uses aluminum as a substrate, nutrient, co-factor, etc. Zinc, which is highly abundant and readily accessible, is a nutrient.
  - Elsewhere, Offit has claimed (with no scientific basis whatsoever, and against all scientific understanding) that aluminum must be a nutrient because it is found in higher concentrations in premature infants, meaning (somehow) that this potent neurotoxin must be critical to early fetal development. It did not occur to him that high aluminum in premature infants might reflect aluminum toxicity.
  - Offit also has also claimed that aluminum exposure is far higher in food and water and "anything made of water on this planet" than one would ever get from vaccines.
  - ***FACT:*** Only 0.2-03% of aluminum from oral exposure makes it past the gastrointestinal tract; most passes harmlessly through the digestive tract unabsorbed. For all practical purposes, over 99% of aluminum from diet

and water never enters the body. By comparison, 100% of aluminum from any parenteral (i.e, non-dietary) source, including IV and many vaccines, must be dealt with via internal biological processes: it must be removed, or stored, and on the way through these processes, it passes through a large number of tissues and organs. This is true whether the injection is subdermal, or intramuscular. The body forms a granule of immune response, and the aluminum is released over time. So repeated intramuscular injections lead to an accumulation of aluminum and chronic exposure. Clearance studies that focus on serum and do not measure tissue fates miss the mark: like mercury, as much as 10% of metabolically available aluminum makes it into the brain and stays there for years.
    - ***FACT:*** With the exception of extraneous proteins, no component safety testing is required for vaccines or vaccine schedules. The doses of constituent contents of vaccines are not required to be tested for safety in the same manner as drugs. (See FDA 76 FR 20513).
    - ***FACT:*** Vaccine pre-licensure placebo studies do not typically use the proper placebo (saline). HPV trials used aluminum hydroxide as a "placebo", effectively only testing the antigen. Some use other vaccines as a control group. These are not sufficient to reveal the actual risks associated with the decision to accept a vaccine. Further, many pre-licensure trials exclude patient populations at most risk of serious adverse events. Those exclusions are not brought forward into the clinical application of vaccines. The medical community does not screen for these populations at most risk.
    - ***FACT:*** By far, most of our knowledge on long-term vaccine safety relies on retrospective, correlational studies (aka Post-Market Surveillance, aka "Pharmacovigilence"). Retrospective correlation studies are universally recognized as a much weaker form of science than the gold-standard prospective Randomized Clinical Trials, and they are highly susceptible to manipulation and to a common practice of re-analysis of the data until the desired result is achieved (e.g., no association between vaccines and autism). This is called "analysis-to-result", and it practice exerts serious bias into such studies – so much so that I no longer consider them Science.
        - jameslyonsweiler.com
- **Dr. Thomas Jefferson with the Cochrane Collaboration**
    - "Assessment of the safety of aluminum in vaccines is important because replacement of aluminum compounds in currently licensed vaccines would necessitate the introduction of a completely new compound that would have to be investigated before licensing. No obvious candidates to

replace aluminum are available, so withdrawal for safety reasons would severely affect the immunogenicity and protective effects of some currently licensed vaccines and threaten immunization programs worldwide."

- **Research these other leading experts for more information:**
  - Dr. Yehuda Shoenfeld
  - Dr. Romain Gherardi
  - Dr. Suzanne Humphries
  - Christopher A. Shaw, PhD
  - Lucija Tomljenovic, PhD
  - Boyd Haley, PhD
  - Stephanie Seneff, PhD
  - Dr. Theresa Deisher
  - Dr. Judy Mikovits
  - Janine Roberts (Book: Fear of the Invisible)
  - Dr. Stefano Montanari
  - Dr. Antonietta Gatti

Studies:

- Adjuvants and Autoimmunity
- Aluminum Vaccine Adjuvants
- Aluminum in the Central Nervous System (CNS): Toxicity in Humans and Animals, Vaccine Adjuvants, and Autoimmunity
- Do aluminum vaccine adjuvants contribute to the rising prevalence of autism? - PubMed - NCBI
- Mechanisms of aluminum adjuvant toxicity and autoimmunity in pediatric populations.
- Aluminium Overload after 5 years in Skin Biopsy Following Post-Vaccination with Subcutaneous Pseudolymphoma
- Aluminum Hydroxide Injections Lead to Motor deficits and Motor Neuron Degeneration
- Aluminum Toxicity in Infants and Children
- Administration of aluminium to neonatal mice in vaccine-relevant amounts is associated with adverse long term neurological outcomes.
- Aluminum adjuvant linked to Gulf War illness induces motor neuron death in mice.
- Slow CCL2-dependent translocation of biopersistent particles from muscle to brain

- New Study Links Aluminum Adjuvants in Vaccines with Neurological Disorders
- Elevated brain aluminum and early onset Alzheimer's disease in an individual occupationally exposed to aluminium: a case report
- Aluminium speciation in relation to aluminium bioavailability, metabolism and toxicity
- HUMAN HEALTH RISK ASSESSMENT FOR ALUMINIUM, ALUMINIUM OXIDE, AND ALUMINIUM HYDROXIDE
- Aluminum-induced neurotoxicity and oxidative damage in rabbits: protective effect of melatonin.
- Aluminium content of selected foods and food products
- Curcumin counteracts the aluminium-induced ageing-related alterations in oxidative stress, Na+, K+ ATPase and protein kinase C in adult and old rat brain regions.
- Mechanisms of aluminum adjuvant toxicity and autoimmunity in pediatric populations.