There is now strong scientific evidence that vaccines cause autism by an immune activation mechanism. Aluminum adjuvant is implicated because it travels into the brain where it causes microglial activation and elevated IL-6 production.

Today about 1 in 6 American children suffer from a neurodevelopmental disorder, a large increase compared to decades ago. Vaccines are a primary cause of this new crisis.

**Vaccine advocates are silent about the science of Al adjuvant toxicity and immune activation.**

"These MIA (maternal immune activation) animal models meet all of the criteria required for validity for a disease model: They mimic a known disease-related risk factor (construct validity), they exhibit a wide range of disease-related symptoms (face validity), and they can be used to predict the efficacy of treatments (predictive validity)."

— Dr. Kimberley McAllister, et al. (UC Davis MIND Institute), 2016

"...any factors that alter the number or activation state of microglia either in utero or during the early postnatal period can profoundly affect neural development, thus resulting in neurodevelopmental disorders, including autism."

— Tomoyuki Takano (Shiga University of Medical Science, Japan), 2015

"...the existing evidence on the toxicology and pharmacokinetics of Al adjuvants...strongly implicate these compounds as contributors to the rising prevalence of neurobehavioral disorders in children."

— Dr. C.A Shaw, et al. (University of British Columbia), 2013

"And what does a vaccination do? It activates the immune system. That’s the point of vaccination... I think that universal vaccination of pregnant women could get us into a whole new set of problems."

— Dr. Paul Patterson, et al. (California Institute of Technology), 2006

**REFERENCES**

Citations available at: vaccinepapers.org/autism-brochure

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**NEW SCIENTIFIC EVIDENCE SHOWS THAT VACCINES CAUSE AUTISM AND OTHER BRAIN INJURIES.**

**VACCINES AND AUTISM**

New scientific discoveries show that autism is caused by early-life immune activation and brain inflammation.

This brochure explains the science connecting vaccines, immune activation, aluminum adjuvant and autism.
Immune Activation & Autism

In early life, the brain and immune system develop together. "Cytokines" are chemicals used by the immune system for communication, but they also guide brain development. Immune activation from an infection or vaccine can cause elevated cytokines in the brain, thereby disrupting brain development. Specifically, immune activation can cause life-long brain injury and mental illnesses including autism, seizures/epilepsy, and schizophrenia. Developmental brain injury by cytokines has been studied extensively in humans, mice, and monkeys. Immune activation in infants can cause brain injury. This is because the brain develops for years after birth. For example, synapse formation, which is disrupted by IL-6, is most intense at ages 0-2, when vaccines are given. Early life immune activation causes many abnormalities associated with autism: mitochondrial dysfunction, Purkinje cell loss, microbiome dysbiosis, chronic brain inflammation, and autoimmunity. It is established beyond reasonable doubt that autism is caused by immune/microglial activation and IL-6/IL-17 specifically. Vaccines are designed to cause immune activation. But can vaccines cause immune activation in the brain? Can vaccines induce IL-6 in the brain? The answer to these questions is YES. The aluminum (Al) adjuvant in vaccines can travel to the brain and stay there, causing long-term brain inflammation.

Aluminum Adjuvant & Immune Activation

Aluminum (Al) adjuvant is necessary in many vaccines for stimulating immunity. The Al adjuvant dosages infants receive in the CDC schedule cause neurological injury, brain inflammation, learning and memory impairment, and behavioral abnormalities in animal experiments. It is now clear that vaccines contain brain-damaging amounts of Al adjuvant.

Aluminum (Al) adjuvant is made of microscopic particles. The particles cause immune activation wherever they go, and they travel into the brain. Al adjuvant particles persist in the brain for months or years, causing chronic immune activation. Al adjuvant particles are transported around the body by immune system cells (macrophages), in response to a signal called "MCP-1". Elevated MCP-1 causes Al adjuvant transport into the brain. Infants that become autistic have high MCP-1 at birth. Vaccines (e.g. MMR) can trigger MCP-1, and thereby accelerate transport of Al particles into the brain. Brain accumulation of Al adjuvant can take months or years. Hence, brain injury can develop months or years after vaccination.