

newborn serum of children with ASD (n = 84) compared to children with intellectual disability or developmental delay (n = 49) and general population (n = 159) and found no significant association with the risk of ASD ([Yau, Green, Alaimo, et al, 2014](#)). A similar finding was concluded in a meta-analysis of evidence on impact of prenatal and early infancy exposures to mercury on autism and attention-deficit/hyperactivity disorder (ADHD) with the recommendation of further study to be conducted on effects of environmental perinatal mercury exposures and increase risk of developmental disorders ([Yoshimasu, Kiyohara, Takemura, et al, 2014](#)).

- Two review studies by the same first author reported that new epidemiological evidence of a significant relationship between increasing organic mercury exposure from thimerosal-containing vaccines and subsequent risk of neurodevelopmental disorders. Both case-controlled studies examined automated records updated through the year 2000 in the Vaccine Safety Datalink (VSD) for organic exposure to hepatitis B vaccine administered in the first 6 months of life and increased risk of neurodevelopmental disorder ([Geier, Hooker, Kern, et al, 2014](#)) and organic exposure from *Haemophilus influenzae* type b administered in first 15 months of life and increase of pervasive developmental disorder ([Geier, Kern, King, et al, 2015](#)). Conversely, the Global Advisory Committee on Vaccine Safety reviewed both animal and human toxicity studies in which the blood and brain did not attain toxic levels, making it biologically implausible for any relationship between thimerosal in vaccines and neurologic toxicity ([World Health Organization, 2012](#)). Another evidence-based meta-analysis of case-control studies and cohort studies supported the same conclusion; the findings suggest that vaccinations are not associated with the development of autism or ASD ([Taylor, Swerdfeger, and Eslick, 2014](#)).
- In 2013, the Institute of Medicine completed an update to the review of the evidence reported from January 1990 to May 2013 and concluded that the review did not reveal an evidence base, suggesting that United States childhood immunization schedule