

## Hepatitis B vaccination of males neonates and autism

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**PURPOSE:** Universal newborn immunization with hepatitis B vaccine was recommended in 1991; however, safety findings are mixed. The Vaccine Safety Datalink Workgroup reported no association between hepatitis B vaccination at birth and febrile episodes or neurological adverse events. Other studies found positive associations between hepatitis B vaccination and ear infection, pharyngitis, and chronic arthritis; as well as receipt of early intervention special education services (EIS); in probability samples of U.S. children. Children with autistic spectrum disorder (ASD) comprise a growing caseload for EIS. We evaluated the association between hepatitis B vaccination of male neonates and parental report of ASD.

**METHODS:** This cross-sectional study used U.S. probability samples obtained from National Health Interview Survey 1997-2002 datasets. Logistic regression modeling was used to estimate the effect of neonatal hepatitis B vaccination on ASD risk among boys age 3-17 years with shot records, adjusted for race, maternal education, and two-parent household.

**RESULTS:** Boys who received the hepatitis B vaccine during the first month of life had 2.94 greater odds for ASD (n=231 of 7,486; OR 2.94; p < 0.03; 95% CI 1.10, 7.90) compared to later- or unvaccinated boys. Non-Hispanic white boys were 61% less likely to have ASD (OR 0.39; p < 0.04; 95% CI 0.16, 0.94) relative to non-white boys.

**RESULTATS:** Les garçons qui ont reçu le vaccin anti-hépatite B durant le premier mois de la vie ont 2,94 fois plus de chances de souffrir de syndrome autistique (SA) en comparaison des garçons vaccinés plus tard ou non-vaccinés. Les garçons blancs non-hispaniques ont un risque abaissé de 61 % d'avoir un SA par rapport aux garçons non-blancs.

**CONCLUSION:** Findings suggest that U.S. male neonates vaccinated with hepatitis B vaccine had a 3-fold greater risk of ASD; risk was greatest for non-white boys.

**CONCLUSION :** Ces résultats indiquent que les nourrissons mâles américains vaccinés avec le vaccin anti-hépatite B ont un risque de syndrome autistique multiplié par presque 3, et que ce risque est le plus élevé chez les enfants non-blancs.

### PRECISION DE NAMD

A l'époque de cette étude, les vaccins anti-hépatite B utilisés contenaient du mercure (Thimérosal).

[Biometals](#). 2009 Oct;22(5):697-700. Epub 2009 Feb 11.

## Are toxic biometals destroying your children's future?

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Cadmium, arsenic, lead, and mercury have been linked to autism, attention deficit disorder, mental retardation and death of children. Mercury in thimerosal found in many vaccines and flu shots contributes significantly to these problems. Decomposition of the thimerosal can produce more toxic compounds, either methylethylmercury or diethylmercury, in the body. These compounds have a toxicity level similar to dimethylmercury. Within the human body, a mitochondrial disorder may release the more toxic form of mercury internally. Young children and pregnant women must minimize internal exposure to the vaccines and flu shots containing mercury.

### TRADUCTION. Les métaux toxiques détruisent-ils le futur de nos enfants ?

Cadmium, arsenic, plomb et mercure ont été impliqués dans l'autisme, le déficit d'attention, le retard mental et le décès d'enfants. Le mercure du thimérosal contenu dans de nombreux vaccins notamment anti-grippaux contribue significativement à ces problèmes. La décomposition du thimérosal peut produire des composés plus

toxiques, méthylethylmercure ou diéthylmercure, dans le corps. Ces composés ont une toxicité similaire à celle du diméthylmercure. A l'intérieur du corps humain, un désordre mitochondrial peut libérer la forme la plus toxique du mercure. Les jeunes enfants et les femmes enceintes doivent abaisser leur exposition aux vaccins contenant du mercure.

[Indian J Med Res.](#) 2008 Oct;128(4):383-411.

## A comprehensive review of mercury provoked autism.

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Emerging evidence supports the theory that some autism spectrum disorders (ASDs) may result from a combination of genetic/biochemical susceptibility, specifically a reduced ability to excrete mercury (Hg), and exposure to Hg at critical developmental periods. Elemental/inorganic Hg is released into the air/water where it becomes methylated and accumulates in animal tissues. The US population is primarily exposed to methyl-Hg by fish consumption. In addition, many pharmaceuticals have been, and some continue to be, a ubiquitous source of danger because they contain mercurials. Mercurials may be found in drugs for the eye, ear, nose, throat, and skin; in bleaching creams; as preservatives in cosmetics, tooth pastes, lens solutions, vaccines, allergy test and immunotherapy solutions; in antiseptics, disinfectants, and contraceptives; in fungicides and herbicides; in dental fillings and thermometers; and many other products. Hg has been found to cause immune, sensory, neurological, motor, and behavioural dysfunctions similar to traits defining/associated with ASDs, and that these similarities extend to neuroanatomy, neurotransmitters, and biochemistry. Furthermore, a review of molecular mechanisms indicates that Hg exposure can induce death, disorganization and/or damage to selected neurons in the brain similar to that seen in recent ASD brain pathology studies, and this alteration may likely produce the symptoms by which ASDs are diagnosed. Finally, a review of treatments suggests that ASD patients who undergo protocols to reduce Hg and/or its effects show significant clinical improvements in some cases. **In conclusion, the overwhelming preponderance of the evidence favours acceptance that Hg exposure is capable of causing some ASDs.**

**En conclusion, l'écrasante prépondérance des preuves est en faveur de la reconnaissance qu'une exposition au mercure est capable de causer des cas d'autisme.**

[Neuro Endocrinol Lett.](#) 2005 Oct;26(5):439-46.

## Mercury and autism: accelerating evidence?

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The causes of autism and neurodevelopmental disorders are unknown. Genetic and environmental risk factors seem to be involved. Because of an observed increase in autism in the last decades, which parallels cumulative mercury exposure, it was proposed that autism may be in part caused by mercury. We review the evidence for this proposal. Several epidemiological studies failed to find a correlation between mercury exposure through thimerosal, a preservative used in vaccines, and the risk of autism. Recently, it was found that autistic children had a higher mercury exposure during pregnancy due to maternal dental amalgam and thimerosal-containing immunoglobulin shots. It was hypothesized that children with autism have a decreased detoxification capacity due to genetic polymorphism. In vitro, mercury and thimerosal in levels found several days after vaccination inhibit methionine synthetase (MS) by 50%. Normal function of MS is crucial in biochemical steps necessary for brain development, attention and production of glutathione, an important antioxidative and detoxifying agent. Repetitive doses of thimerosal leads to neurobehavioral deteriorations in autoimmune susceptible mice, increased oxidative stress and decreased intracellular levels of glutathione in vitro. Subsequently, autistic children have significantly decreased level of reduced glutathione. Promising treatments of autism involve detoxification of mercury, and supplementation of deficient metabolites.