



CHILDREN'S OUTCOMES

Thimerosal and Autism Fact Sheet

Endorsed by:

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Pediatricians, family physicians, and other child health providers understand the difficulties that parents with autistic children face, and are working hard - with the Centers for Disease Control and Prevention and autism groups - to identify the causes of autism, as well as viable treatment options. We care deeply about children with autism and want to assist them however we can. The theory that autism might be related to thimerosal-containing vaccines has been studied extensively with the following evidence-based conclusions:

- The vast majority of studies, including the most recent and those of most rigorous design, which have involved hundreds of thousands of children in a number of countries including the US, have found no association between exposure to thimerosal in vaccines, and autism.
- Thimerosal has been used for more than 70 years as a preservative in many medicines, and has never been proven to have a link to any adverse effects. No alternative preservative has a similar track record.
- With the exception of some flu vaccines, none of the vaccines currently used in the U.S. to protect children against 12 highly infectious and life-threatening diseases contain preservative levels of thimerosal. Though some flu vaccines contain thimerosal as a preservative, there are preservative-free and trace-thimerosal flu vaccines available.
- Trace amounts of thimerosal can still be found in some vaccines because it is used early in the manufacturing process for some vaccines, and the extraction processes are not 100% efficient. The vaccines with trace amounts of thimerosal licensed to date contain less than 0.5 micrograms of mercury per dose; that is, a given dose of vaccine contains less than 1 part per million.
- The development of vaccines was one of the greatest advances in the history of medicine in the last century. Vaccines have prevented hundreds of thousands of children in Colorado from catching infectious diseases, and even dying, and will continue to do so as long as children are vaccinated.
- Although outbreaks of many vaccine-preventable diseases are at low numbers in Colorado, the organisms that cause these diseases are still present and can re-emerge when vaccination levels fall. Unvaccinated children, even in small numbers, continue to be at risk for outbreaks of serious, even deadly diseases (e.g. polio in Minnesota, pertussis in Colorado). We are only a plane ride away from parts of the world where many of these diseases are still rampant and where immunization is not available (e.g. bird flu). We cannot afford to let down our guard.
- A number of reasons account for what many view as a dramatic increase in cases of autism and autistic spectrum disorders. These include: An increase in diagnosis as a result of improved detection through pediatricians and other physicians, as well as service agencies and schools; changes in case definitions; and changes in reimbursement for medical services and other care. Regardless of the reason, determining the cause of autism is critical to permit appropriate diagnostic, treatment, and preventive measures to be implemented. Importantly, autism rates remain high even in locales that have used vaccines without thimerosal for years.

Conclusion: The vast majority of studies and a rigorous analysis of the currently existing data does not support a causal relationship between thimerosal in vaccines and autism. An unproven suggestion that such a relationship exists should not serve as the basis for legislative action. Undue attention to such an unproven relationship may dissuade parents from vaccinating their children and discourage medical investigations of other potential causes of autism, while increasing the risk of vaccine-preventable diseases.

Useful Web-based resources to help physicians and others communicate with parents about vaccine safety issues.

* Information about mercury and vaccines can be obtained at <http://www.cdc.gov/nip/vacsafe/concerns/thimerosal/default.htm#facts>.

* Information about autism can be obtained at <http://www.cdc.gov/ncbddd/dd/aic/about/default.htm>

* Synopses of articles from the scientific, peer-reviewed literature related to vaccines and immunization can be found at http://www.immunizationinfo.org/immunization_science.cfm?cat=1

* A transcript from the July 19 2005 HHS Media Briefing on Vaccines and Child Health at <http://www.cdc.gov/od/oc/media/transcripts/t050719.htm>

The National Network for Immunization Information (NNii) has various evidence-based materials on its Website that may be of help to families:

* Thimerosal/Mercury in Vaccines
http://www.immunizationinfo.org/thimerosal_mercury_issues.cfm

* Vaccine Misinformation
http://www.immunizationinfo.org/immunization_issues_detail.cfv?id=52

* Cause or Coincidence
http://www.immunizationinfo.org/vaccine_safety_detail.cfv?id=67

* IOM Reports
http://www.immunizationinfo.org/iom_reports.cfm

* Immunization Information for Parents
<http://www.immunizationinfo.org/parents/index.cfm>

