

Mercury and Vaccines

(Thimerosal)

What You Should Know

- Thimerosal is a preservative, which contains a type of mercury called ethylmercury. Thimerosal has been used in some vaccines and other products since the 1930's to help keep them safe by preventing bacterial contamination.
- The level of mercury exposure from vaccines is low. There is no evidence to suggest that thimerosal in vaccines causes any health problems in children and adults other than minor reactions like swelling at the injection site.
- In July 1999 the Public Health Service (PHS) agencies and the American Academy of Pediatrics (AAP) recommended that thimerosal be taken out of vaccines as a precautionary measure.
- All routinely recommended licensed vaccines that are currently being manufactured for children in the U.S. [except some influenza (flu) vaccine and Td (tetanus-diphtheria) vaccines] contain no thimerosal or only trace amounts.

Additional Facts

- Mercury is a metal that occurs naturally and is found everywhere in the environment. There are different types of mercury. Thimerosal contains approximately 49% ethylmercury.
- Measles, mumps, and rubella (MMR), varicella (chickenpox), and inactivated polio vaccine (IPV) have never contained thimerosal.
- In 2004, a report by The Institutes of Medicine (IOM) concluded that there is no association between autism and vaccines that contain thimerosal as a preservative.
- Evidence is accumulating of lack of harm resulting from exposure to thimerosal in vaccines.
- A recent study conducted by the National Institute of Allergy and Infectious Diseases (NIAID) concluded that mercury levels in the blood of babies that received vaccines with thimerosal remained well below levels considered acceptable by the EPA. Furthermore, ethylmercury (thimerosal) seems to be removed from the body quickly through the gastrointestinal tract (stools).
- CDC recently conducted a study to see whether there are associations between vaccines containing thimerosal as a preservative and a wide range of neurodevelopmental disorders. Results found no consistent significant associations. Studies to examine these issues are ongoing.

For more information

- For in-depth information about mercury, thimerosal and vaccines go to <http://www.cdc.gov/nip/vacsafe/concerns/thimerosal/default.htm#answers>.
- For the complete IOM report on thimerosal and vaccines: <http://www.nap.edu/books/0309076366/html>.
- For immunization information call the National Immunization Hotline:
English and Spanish:
800-CDC-INFO (232-4636) TTY 888-232-6348