

## The Use of Thimerosal Preservative in Vaccines

Thimerosal is a mercury-containing preservative that has been used for decades in the United States to prevent contamination in some vaccines. Preservatives prevent the growth of bacteria and fungi in the event that they get into the vaccine. Contamination by germs in a vaccine could cause serious illness or death.

There are two kinds of mercury compounds: methylmercury and ethylmercury. Methylmercury is the type of mercury found in seafood. Ethylmercury is the type of mercury found in thimerosal. Whereas methylmercury builds up in our bodies over time and is thought to cause health problems, ethylmercury is quickly eliminated and does not cause such problems.

Some people have expressed concern that thimerosal in vaccines leads to autism. There is no conclusive evidence that any vaccine or vaccine additive increases the risk of developing autism or any other behavior disorder. Rather, evidence is accumulating of lack of harm resulting from exposure to vaccines containing thimerosal as a preservative. Numerous studies have found no association between thimerosal exposure and autism. In a comprehensive 2004 report, the Institute of Medicine (IOM) concluded that there is no association between autism and vaccines that contain thimerosal as a preservative.

Except for minor effects like swelling and redness at the injection site due to sensitivity to thimerosal, there is no convincing evidence of harm caused by the small amount of thimerosal in vaccines. However, in July 1999 the Public Health Service (PHS) agencies, the American Academy of Pediatrics (AAP), and vaccine manufacturers agreed that thimerosal should be reduced or eliminated in vaccines as a precautionary measure. Since 1999, newly formulated thimerosal preservative-free childhood vaccines (Hepatitis B, Hib, and DTaP) have been licensed. Today, all routinely recommended licensed pediatric vaccines that are currently being manufactured for the U.S. market, with the exception of influenza vaccine, contain no thimerosal or only trace amounts. Based on guidelines established by the FDA, the Environmental Protection Agency (EPA) and the Agency for Toxic Substances and Disease Registry (ATSDR), no child will receive excessive mercury from childhood vaccines.

*This information is provided by the Marin County Immunization Coalition.*

Reference: <http://www.cdc.gov/flu/about/qa/thimerosal.htm>