

Thimerosal Information Sheet

What is thimerosal?

Thimerosal is used as a preservative in some vaccines. It breaks down to ethylmercury, which quickly leaves the body through the stool. It is not the same as methylmercury which enters the body by eating contaminated fish (e.g., sword fish, tuna, king mackerel, and shark) or phenylmercury, which is a chemical used to kill fungus. These types of mercury build up in the body. They are not removed from the body like ethylmercury.

Why is thimerosal used in vaccines?

Thimerosal has been used as a preservative in vaccine vials containing more than a single dose since the 1930s. It stops bacteria and fungi from growing inside the vial of vaccine. If the vaccine becomes contaminated, it could cause serious infections in people who get it.

Thimerosal is also used to inactivate the virus or bacteria in some vaccines. Only small amounts of thimerosal are present in vaccines.

Is thimerosal in vaccines used in Alberta?

In Alberta, only a few vaccines contain thimerosal. Multi-dose vials of influenza vaccine contain small amounts of thimerosal. Other routine childhood vaccines have not contained thimerosal since 1994. Live vaccines, such as MMR and varicella, have never contained thimerosal.

Is there a concern with thimerosal (mercury) in vaccines?

No. In 2004 the Institute of Medicine (IOM) Immunization Safety Review Committee concluded there is no relationship between thimerosal and autism. Since that time, more studies have shown no association between thimerosal and neurodevelopmental disorders. The National Advisory Committee on Immunization (NACI) states that there is no safety reason to avoid using products with thimerosal for children or older people, including pregnant women.

Where can I get more information about thimerosal?

If you have more questions about thimerosal, speak to a public health nurse or other healthcare provider.