

What is mercury and what is thimerosal?¹

Mercury is a naturally occurring element found in the earth's crust, air, soil and water. Mercury has been released into the environment through volcanic eruptions, weathering of rocks and burning of coal. Once released, certain types of bacteria in the environment can change mercury to methylmercury. Methylmercury makes its way through the food chain in fish, animals, and humans. At high levels, it can be toxic to people.

Thimerosal — a preservative still used in some vaccines — is a mercury-containing organic compound which has a different form of mercury called ethylmercury. Studies comparing ethylmercury and methylmercury suggest that they are processed differently in the human body. Ethylmercury is broken down and excreted much more rapidly than methylmercury. It appears that ethylmercury (the type of mercury in the influenza vaccine) is removed from the body more quickly than methylmercury (the type of mercury in the environment).

What are Washington's legal limits on mercury in vaccines?

As of July 1, 2007, Washington State law requires that pregnant women and children under 3 years of age be given vaccines that have no more than 0.5 micrograms of mercury per 0.5 milliliter dose. The law makes an exception for mercury content of influenza vaccine and allows pregnant women and children under age three to get influenza vaccine if it has 1.0 microgram of mercury per 0.5 milliliter dose, or less. Your doctor or nurse can help explain the size of these amounts.

The law also states that in the case of an outbreak or vaccine shortage, the Secretary of the Department of Health may suspend the law's mercury limits for the duration of that outbreak or shortage.

Which vaccines have more mercury in them than Washington law allows for pregnant women and children under three?

Currently, only the following three vaccines have too much mercury in them:

- o multi-dose vials of influenza vaccines (although there are influenza vaccines that are mercury-free);
- o a vaccine that protects against Japanese Encephalitis.

¹ Information about mercury, methylmercury thimerosal and ethylmercury stated in the answer to this question was taken from the following two sources: Children's Hospital of Philadelphia at <http://www.chop.edu/consumer/index.jsp> and the Food and Drug Administration at www.fda.gov/cber/vaccine/thimerosal.htm

How do these limits affect me and my family?

Few vaccines are now manufactured with more mercury than the law allows. However, the law may affect you or your family in the following ways:

1. If you are pregnant, you must get a flu shot with 1.0 microgram of mercury per 0.5 milliliter dose, or less.
2. If you have a child under three years of age, he or she must get a flu shot with 1.0 microgram of mercury per 0.5 milliliter dose, or less.
3. You (or your child) may not get vaccinated against Japanese Encephalitis in Washington State if you are:
 - o traveling to certain countries in Asia where Japanese Encephalitis occurs, AND
 - o you will be staying in these countries longer than one month, AND
 - o you are pregnant, OR
 - o your child is under age three.

Where can I get more information?

For more information about vaccines, go to: www.doh.wa.gov/cfh/immunize

To find an immunization clinic, call The Family Health Hotline at 1-800-322-2588.