

Thimerosal in Vaccines



COMMUNICABLE DISEASE CONTROL

Q 1. What is thimerosal?

- A. Thimerosal is a very effective preservative that contains mercury and has been used in some vaccines and other products since the 1940s. Efforts have been underway for years to eliminate its use and many product formulations have changed as a result.

Q 2. Why is thimerosal used in vaccines?

- A. Thimerosal is a preservative used as an extra safeguard against contamination.

Q3. If patients have a choice of vaccines, one with mercury or one without, which should they choose?

- A. The most important thing is that parents not miss an opportunity to get their child immunized. We encourage parents to talk to their doctors.

Q4. Why isn't the federal government just recommending not using vaccines with thimerosal in them if there is concern?

- A. Making vaccines safer and more effective is a constant goal for the federal government and the vaccine manufacturers. No vaccine is 100 percent safe or effective. Decisions must be based on weighing risks and benefits of each vaccine. The current discussion is about a minimal risk, if any, from minute levels of mercury in vaccines containing thimerosal. Any missed vaccinations puts children at risk from disease.

Q5. How much mercury did my 6-month-old get in the last six months from vaccines? How dangerous is that?

- A. The amount of mercury depends upon the type of vaccine product administered. Each dose of vaccine given to your child met Health Canada requirements. Your choice to vaccinate your baby was a sound one. The mercury levels being discussed are well within the safety margins. It is important that we limit the cumulative amount of mercury children are exposed to, but parents should not abandon vaccination as a means to do that.

Q6. I've heard that children may be getting toxic levels of mercury from vaccines. Is that true?

- A. Everyone is exposed to mercury, even in some foods and household products. Some children, who receive vaccines may be exposed to minute levels of mercury.

Q7. Are there vaccines available to prevent childhood diseases without exposing them to mercury?

- A. Yes. In Canada, routine childhood vaccines, including DaPTP/Hib (Pentacel), DaPTP (Quadracel) and MMR do not contain thimerosal. This is different than in the US where some of these vaccines do contain thimerosal and cumulative exposure levels can be higher. Canadian hepatitis B vaccines do contain thimerosal; however, even after receiving three doses of hepatitis B vaccine, methyl mercury exposure levels are still below US EPA guidelines. At least one manufacturer of hepatitis B vaccine used in Canada, is planning to phase out thimerosal in its manufacturing process.

Q 8. Why are chemicals and other substances added to vaccines?

- A. Many things, including foods and medicines, have chemicals added to them to prevent the growth of germs and reduce spoilage. Chemicals are added to vaccines for similar reasons, to inactivate micro-organisms and to stabilize it, helping to preserve the vaccine and prevent it from losing its potency over time.
- Some additives are used in the production of vaccines. Vaccines may include other substances such as suspending fluid (e.g., sterile water, saline, or fluids containing protein); preservatives and stabilizers (e.g., albumin, and glycine); and adjuvants or enhancers that help the vaccine improve its immunogenicity (ability to protect against disease).

Q9. How can I find out what chemical additives are in specific vaccines?

- A. Ask your health care provider or pharmacist for a copy of the vaccine package insert. The package insert lists ingredients in the vaccine and discusses any known adverse reactions.

Q10. How can parents learn more about children's immunizations?

- A. To learn more about children's immunizations (vaccinations or baby shots) contact your provincial/territorial/local health care providers.

If you have any questions, contact your doctor, local public health nurse or Health Links, Winnipeg at 788-8200 or toll free at 1-888-315-9257.

Adapted from information from the Laboratory Centre for Disease Control and Therapeutic Products Programme.