

Thimerosal in Vaccines

COMMUNICABLE DISEASE CONTROL

What is thimerosal?

Thimerosal is a very effective preservative that contains mercury and has been used in some vaccines and other products since the 1930s. Efforts have been underway for years to eliminate its use and many product formulations have changed as a result.

Why is thimerosal used in vaccines?

Thimerosal is used as an extra safeguard against bacterial and fungal contamination.

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

The most important thing is that parents not miss an opportunity to get their child immunized. We encourage parents to talk to their doctor or local public health nurse.

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

Making vaccines safer and more effective is a constant goal for the federal government and vaccine manufacturers. No vaccine is 100 per cent safe or effective. Decisions must be based on weighing the 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 put children at risk from disease.

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

The amount of mercury depends on 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. Any mercury levels present are well within the safety margins. It is important that we make sure children do not get too much mercury over time, but parents should not abandon vaccination to do that.

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

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.

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

Yes. In Canada, routine childhood vaccines, including DaPTP/Hib (Pentacel), DaPTP (Quadracel), hepatitis B and MMR do not use thimerosal as a preservative.

Why are chemicals and other substances added to vaccines?

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 bacteria and fungi and to stabilize it, helping to preserve the vaccine and prevent it from losing its strength 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).

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

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.

To read more on thimerosal and vaccine safety, visit the following Web sites:

- Division of Immunization and Respiratory Diseases
www.hc-sc.gc.ca/pphb-dgspsp/dird-dimr/index.html
- Canadian Immunization Awareness Program
www.immunize.cpha.ca
- National Immunization Program – Centres for Disease Control and Prevention – U.S.A.
www.cdc.gov/nip
- Canadian Paediatric Society
www.cps.ca
- World Health Organization – Vaccines, Immunization and Biologicals
who.int/vaccines-diseases/safety/

- Canadian Communicable Disease Report – National Advisory Committee on Immunization (NACI), Volume 29, ACS-1, 1 March 2003.
Statement on Thimerosal
www.hc-sc.gc.ca/pphb-dgspsp/publicat/ccdr-rmtc/03vol29/acs-dcc-1/index.html

How can parents learn more about children's immunizations?

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 in Winnipeg at 788-8200 or toll free 1-888-315-9257 elsewhere in Manitoba.

Information about the shots that you or your children receive may be recorded in the Manitoba Immunization Monitoring System (MIMS). This computerized database allows your doctor, your child's doctor or your public health nurse to find out what shots you or your child have had or need to have. Information collected in MIMS may be used to produce vaccination records, or notify you or your doctor if someone has missed a particular shot. Manitoba Health may use the information to monitor how well different vaccines work in preventing disease.

If you need information on the shots that you or your child has received, contact your local public health unit or nursing station.

Local Public Health Unit Stamp

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