

Baby Bottles, Breastfeeding and BPA: Information for Parents and Caregivers

This fact sheet is based on the information currently available on this topic. It is not intended to be a complete overview of BPA or proper bottle or breastfeeding practices.

Bisphenol A (or BPA) has received a lot of attention in the media and it can be confusing for caregivers to know what to do with sometimes conflicting information. BPA is a chemical commonly used in the manufacturing of clear, hard plastics like plastic drinking bottles and baby bottles. It is also used in the sealants that cover the inside walls of food cans. As a parent or caregiver you may be concerned about the possible danger of BPA to your child.

Is BPA dangerous?

Studies have found that small amounts of BPA may transfer from cans or plastic containers into foods and liquids and may then be consumed. This is the most common way in which adults and children are exposed to BPA.

Studies using standard risk assessment methods indicate low levels of BPA exposure are probably not harmful to humans. However, studies using alternative methods have prompted federal agencies to have some concerns about the effects of low doses of BPA on infants and young children. To help resolve these questions the federal government has begun a \$30 million research initiative funded by the Recovery Act (commonly known as the "2009 economic stimulus"). The MDH will follow this work closely and may change its advice on BPA based on the results.

Are infants and children particularly vulnerable to BPA exposure?

In general, infants and children are considered to be more likely to be exposed to chemicals in food and water because they eat and drink more per pound of

body weight than do adults. For this reason, we pay special attention to children's exposure to chemicals and the effect that exposure may have on them.

How could my child be exposed to BPA?

Your child is most likely to be exposed to BPA from eating food and drinking liquids that have been stored for extended periods of time in a container containing BPA, such as a can or a rigid plastic cup or bottle. (Note that bottles used for prepackaged bottled water typically do *not* contain BPA.) Small amounts of BPA have been found in canned infant formula (both powdered and liquid) and canned foods. Studies also show that BPA can transfer from the plastic to the bottle contents when the plastic is heated and/or damaged.

BPA has also been found in breast milk. This is not unexpected because everyone is exposed to BPA, including breastfeeding mothers.

How do I know if the baby bottles I use have BPA?

A 2009 Minnesota law requires that manufacturers and wholesalers may not sell baby bottles or cups containing BPA in Minnesota beginning January 1, 2010. Retail sale is prohibited beginning January 1, 2011, so you may still see these products in stores until current supplies sell out. Many retailers, however, are voluntarily removing bottles and cups containing BPA from their inventories. The surest way to know that a baby bottle does not contain BPA is to read the label or contact the manufacturer.

Elimination of the products covered under the law will reduce, but may not eliminate, a child's exposure to BPA. There are other sources, including canned foods and infant formula.



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Baby Bottles, Breastfeeding and BPA – page 2

Does formula contain BPA?

BPA has been detected at low concentrations in liquid formula, and to a lesser extent in powdered formula. If you feed your infant formula, choose powdered rather than ready-to-feed or liquid concentrate. The inside walls of both liquid and powdered formula cans may contain BPA, but there is likely to be less transfer of BPA into powdered formula than into liquid formula. The new Minnesota law does not apply to these food containers.

What if I am breastfeeding?

It is recommended that you continue to breastfeed your baby. There are many nutritional and health benefits of breastfeeding and breast milk remains the recommended food for infants. While BPA has been detected in breast milk, there is no indication that this level of exposure would harm a nursing infant. If you are nursing and want to reduce your infant's exposure to BPA, you should try to reduce your own exposure.

Do not store your breast milk in containers that may contain BPA. Prolonged contact with the plastic increases the potential for BPA to move into the breast milk. If you are using a plastic bottle for feeding, transfer the liquid to the bottle right at feeding time to minimize the time it spends in the bottle.

What can I do to reduce my child's exposure to BPA?

Here are some things you can do to reduce exposure to BPA:

- **Breastfeed your baby.** This will reduce your need for bottles and will also provide numerous health and nutritional benefits.
- **Use bottles that are BPA-free.** Choose baby bottles, water bottles and children's cups made from glass or from plastics that do not contain BPA. Given Minnesota's new law, it should not be difficult to find products that are labeled as "BPA-free".

If you choose to use polycarbonate plastic bottles, here are some steps you can take to reduce potential exposure to BPA:

- **Treat plastic bottles with care and throw away scratched and cloudy bottles.** Bottles that show significant signs of wear – scratched

and cloudy surfaces – may release more BPA than an undamaged one.

- **Wash plastics by hand** rather than in a dishwasher and do not use brushes that could scratch the surface. Excessive heat and harsh detergents can damage the surface of plastics and may result in greater release of BPA.
- **Sterilize plastic bottles with heat only when necessary.** Generally bottles do not need to be sterilized, however, your child's pediatrician can advise you as to whether your bottles need to be sterilized before each use.
- **Don't microwave plastic baby bottles.** Plastic is strong and durable but over time it may break down from overuse at high temperatures. Instead, heat formula or milk in a pan on the stove or in a glass or ceramic container in the microwave before pouring into a bottle for your infant. Always remember to check the temperature before feeding.
- **Minimize the amount of time** that breast milk, prepared formula or water is stored in plastic containers before you use them.
- **Use powdered infant formula** instead of ready-to-feed or liquid concentrate formula.
- **Use fresh or frozen fruits and vegetables** to reduce exposure to BPA from cans.

For more information

Studies are still underway to determine the long-term effects of BPA on humans of all ages. For more information on the children's exposure to chemicals, go to:

- MDH Environmental Health Division, Children's Environmental Health: <http://www.health.state.mn.us/divs/eh/risk/chemhazards/bisphenola.html>
- U.S. Food and Drug Administration: <http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm064437.htm>
- U.S. Department of Health and Human Services: <http://www.hhs.gov/safety/bpa/>

For other questions, contact the MDH Maternal and Child Health Section at (651) 201-3760 or e-mail health.cfhcommunications@state.mn.us.