

BISPHENOLA (BPA)

Introduction: BPA was first created in 1891. Early evidence of its hormonal action came from animal experiments on rats carried out in the 1930s, but it was not until 1997 that the adverse effects of low-dose exposure on laboratory animals were first reported.

What it is used for: BPA is a building block of a lightweight, clear, heat-resistant and almost unbreakable plastic called polycarbonate. It's also used in epoxy resins a chemical used as a protective coating in metal food and beverage cans. The coating prevents corrosion of the can and thus contamination of the contents with trace metals.



The Government of Canada banned BPA in polycarbonate baby bottles in October 2008 and declared BPA a toxic substance in October 2010

Where it's found: Water bottles, baby bottles (now banned), reusable food containers, plastic tableware, infant feeding cups, linings of infant formula cans and some canned foods, jar lids, CDs, electronics, electrical equipment, dental sealants, toys and other products.

Health Effects Summary: Exposure to BPA is universal because of its widespread use in all countries. About 3 million tons of BPA are produced worldwide each year. Research on rodents has shown that BPA can affect the immune system in ways that may be a factor in autoimmune diseases. There is also some preliminary evidence that BPA at low-levels of exposure might be associated with the development of Type 1 diabetes. Research has shown other health effects such as reduced fertility can be passed on through generations. The Government of Canada's recent risk assessment of BPA confirmed that BPA exposure can effect human and animal reproduction and the development of the foetus in the womb. It also confirmed that exposure levels for most Canadians were below what would cause adverse health effects. However, because of uncertainties about low-level exposure, the Government of Canada has acted in a

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precautionary way and prohibited polycarbonate baby bottles containing BPA, a regulation that became law in March, 2010.

How we are exposed: Exposure is mostly through eating food or drinking liquids stored in containers containing BPA. Infants and small children have the highest risk of exposure because of BPA contaminants in canned infant formula and from older polycarbonate baby bottles. BPA leaches out of polycarbonate bottles when exposed to high temperatures such as boiling water or by heating the contents by microwave.

What you can do to reduce exposure: Use glass or stainless steel bottles and use glass food storage containers. If you buy plastic, check for the recycle number on the bottom. Polycarbonate containers that contain BPA usually have a number 7 inscribed in a triangle. If there is a number 7, assume the container contains BPA unless it explicitly states otherwise. Another option is to purchase fresh or frozen vegetables instead of canned. Other precautions you can take include not microwaving plastics, avoid putting hot liquids into plastic containers and use glass baby bottles, feeding cups and utensils.

