Bisphenol A

Bisphenol A (BPA) is a chemical that is used for many purposes. It is used in polycarbonate plastics (hard, clear plastics such as reusable water bottles and children's sippy cups), the resins that line food cans, and in some dental materials, such as sealants or composite fillings. The recycling code ⚠ represents "other" types of plastics including polycarbonates, however not all plastics labeled with this code are polycarbonate.

On April 18, 2008, Environment Canada and Health Canada issued a draft report and proposed risk management approach for bisphenol A as part of their process to categorize and evaluate substances of concern.

What is the concern?

Based on the results of Health Canada's assessment of bisphenol A, some laboratory studies on animals suggest that bisphenol A at low levels of exposure can affect neural development and behaviour when experimental animals are exposed in very early life. However, there is some uncertainty in interpreting how these findings might be relevant to human health.

Some research suggests that bisphenol A may mimic or disrupt hormones, in this case, estrogen. Exposure to endocrine disruptors may lead to certain types of cancer. In addition, recent studies on animals have shown that exposure to endocrine disruptors may cause behavioral abnormalities such as cognitive impairment and autism.

Some reports suggest that bisphenol A may leach out of polycarbonate plastics, and the linings of food cans, possibly exposing humans to levels that are higher than the current suggested safe levels. Some research also suggests that BPA can affect health at levels much lower than the safe levels. This research has been done with animals, therefore scientists do not know whether the results can be applied to humans.

Heath Canada states that the preliminary research tells us the general adult public need not be concerned. In general, most Canadians are exposed to very low levels of bisphenol A and it does not pose a significant health risk.

Health Canada's focus is now on the health of newborns and infants under 18 months of age. Scientific research tells us that exposure levels are below those that could cause health effects, but since they are close to the levels where potential effects could occur, the Government wants to be prudent and further reduce exposures.

Advice to reduce the risk of exposure to bisphenol A

The main source of exposure for newborns and infants is from bisphenol A migrating from the lining of cans into liquid infant formula and migrating from polycarbonate baby bottles into the liquid inside following the addition of boiling water Very hot water causes bisphenol A to migrate out of the bottle at a much higher rate.

Health Canada is working with manufacturers of infant formula to reduce levels of BPA in the lining of infant formula cans.

The following suggestions are recommended to reduce exposure to BPA:

- Health Canada recommends that breast milk is the best food for optimal growth in newborns and infants.
- Do not put boiling water into polycarbonate baby bottles. Water should be boiled and allowed to cool to lukewarm in a non-polycarbonate container before transferring to baby bottles.
- Consider alternative drink containers for children, such as stainless steel or glass, or products made of polypropylene plastic (recycling code 5).
- Choose fresh or frozen foods over canned when possible.
- Avoid children's toys, bottles and dishes made with polycarbonate plastic.
- If you are having dental work, speak with your dentist about the materials being used and the options available.

The Government of Canada has allocated an additional $1.7 million over the next three years to fund research projects on bisphenol A. This research, in addition to major studies currently underway at Health Canada and Environment Canada, will help to address key knowledge gaps in both the Canadian and international scientific community, and inform g

overnment decision-making should further actions be required. In addition the Government of Canada has prohibited the importation, sale and advertising of polycarbonate baby bottles that contain BPA.

For more information, please contact a public health inspector at 705-743-1000.

Links to further information on Bisphenol A:

Canadian Cancer Society

http://www.cancer.ca/Canada-wide/About%20us/Media%20centre/Our%20positions%20on%20cancer-related%20issues/Bisphenol%20A.aspx?sc_lang=en

Health Canada

http://www.chemicalsubstanceschimiques.gc.ca/faq/bisphenol_a_qa-qr_e.html