

BPA CONTAMINANTS FOUND IN MOST CANADIANS

MORE THAN 90% OF CANADIANS HAVE DETECTABLE LEVELS OF BISPHENOL A (BPA) ~ A CHEMICAL USED TO MAKE SOME HARD PLASTIC CONTAINERS, BOTTLES AND TOYS, A NEW REPORT SUGGESTS



Statistics Canada released the finding Monday as part of the results of its survey measuring the levels of various contaminants in the urine and blood of Canadians aged six to 79.

Bisphenol A is an industrial chemical used to make polycarbonate plastic for water bottles and food containers as well as the protective lining in metal cans. It does not occur naturally in the environment.

"With 91 per cent of Canadians with detectable concentrations, we can certainly say that people are exposed probably on a regular basis," said report author Tracey Bushnik of Statistics Canada's health analysis division in Ottawa.

Some studies on animals suggest that low levels of exposure to BPA very early in life can affect brain development and behavior, but scientists are unsure how these findings might be relevant to human health, Statistics Canada said.

Compared with children aged six to 11, those aged 12 to 19 had a slightly higher concentration, while those aged 40 to 79 had lower concentrations, Statistics Canada said.

It is the first time the BPA levels of Canadians have been measured in a nationally representative sample of the population.

WIDESPREAD EXPOSURE

The findings are consistent with results from international studies, the agency said. The Statistics Canada data "suggest continual widespread exposure in the Canadian population," the report concluded.

CANADIANS' AVERAGE BPA LEVEL IN THEIR URINE WAS 1.16 MICROGRAMS PER LITRE

"Canada was the first country in the world to take action on bisphenol A by proposing a series of actions to reduce BPA exposure to newborns and infants, including a prohibition on the importation, sale and advertising of polycarbonate baby bottles containing BPA," Health Canada said in an email.

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THE DEPARTMENT'S SCIENTISTS ARE DEVELOPING GUIDELINES ON BPA LEVELS

While there is still uncertainty about the health risk of BPA, it is excreted quickly and the fact that it was not found in some participants is good news, Prof. Linda Campbell, an environmental expert on mercury and metals at Queen's University in Kingston, Ont., said in an email.

CONTAMINANT SOURCES

"The BPA concentrations are of concern at the higher concentrations, but since it is not persistent in humans, we should be able to see an immediate reduction if we can limit this compound," added Campbell, Canada Research Chair in aquatic ecosystem health.

Most research has focused on food sources of BPA. But the chemical is also widely used in consumer electronics such as computers, cellphones and video game consoles, said Prof. Miriam Diamond, who runs the Diamond Environmental Research Group at the University of Toronto.

"It is coming off your hands," said Diamond. "The next question is how much is actually getting into you as a result of handling all these devices."

THE CHEMICAL INDUSTRY ASSOCIATION OF CANADA URGED CAUTION IN INTERPRETING THE RESULTS

"Thanks to advances in analytical chemistry, researchers are able to measure extraordinarily low levels of natural and man-made substances in human fluids and tissues ~ often as little as one part per billion (a single drop in an Olympic-sized swimming pool)," the group said in a statement.

"Of course, health researchers know that the simple presence of an environmental chemical in a person's body does not mean that it will cause health effects or disease."

While the potential cause-and-effect relationship between BPA and health effects remains unclear, regulators could consider taking steps to limit exposure during pregnancy as a precaution, said Scott Venners, a professor in the faculty of health sciences at Simon Fraser University.

Samples for the study were collected from March 2007 to February 2009 from a representative sample of about 5,600 Canadians aged six to 79 years at 15 sites across the country.

With files from The Canadian Press

External Links

Lead, BPA concentrations in the Canadian population, Statistics Canada

Bisphenol A, U.S. National Institute of Environmental Health Sciences

Order amending Schedule I to the Hazardous Products Act (Bisphenol A), Canada Gazette