



National Report on Human Exposure to Environmental Chemicals

Spotlight on Bisphenol A

BPA is an industrial chemical used to make one type of polycarbonate plastic and certain types of epoxy resins. Polycarbonate plastic is used in many products such as refillable beverage containers, compact disks, some plastic eating utensils, and impact-resistant safety and sports equipment. Polycarbonate plastic is not found in softer, more flexible products such as single-serving water bottles. Epoxy resins containing BPA are used in dental composites and sealants, as coatings inside some food and beverage cans, and as corrosion-resistant metal coatings.

How People Can Be Exposed to BPA

General population exposure to BPA is through the diet. Bisphenol A has been shown to leach from the protective epoxy linings of canned foods and polycarbonate water and baby bottles. For small children, direct oral contact with materials containing bisphenol A may also be possible. People can also be exposed following treatment with BPA-containing dental sealants. Workers who synthesize BPA or formulate its resins can also be exposed.

How BPA May Affect People's Health

When laboratory test animals are dosed during pregnancy, BPA has been shown to have hormone-like effects on the developing reproductive system and neurobehavioral changes in the offspring. Scientists continue to debate whether effects could possibly occur in people who are exposed to low environmental levels of these chemicals. More research is needed to assess the human health effects of exposure to these chemicals.

Levels of BPA in the U.S. Population

In 2007, the Centers for Disease Control and Prevention (CDC) published results of its analyses of urine samples obtained from 2,517 people aged 6 years and older who took part in CDC's National Health and Nutrition Examination Survey (NHANES) from 2003 through 2004.

- CDC scientists detected BPA in the urine of nearly 93% of the people tested (aged 6 years and older), a finding that indicates widespread exposure to BPA in the U.S. population.
- Females had significantly higher levels of BPA in their urine than males. Children had the highest levels, followed by teens and adults.
- Non-Hispanic blacks and non-Hispanic whites had higher levels of BPA than Mexican-Americans.
- People with the lowest household incomes had higher levels of BPA than people in the highest income bracket.

May 2008

The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.