CONCURRENCE IN SENATE AMENDMENTS
AB 1319 (Butler)
As Amended August 22, 2011
Majority vote

ASSEMBLY: 42-29 (May 23, 2011) SENATE: 21-12 (August 30, 2011)

Original Committee Reference: E.S. & T. M.

SUMMARY: Prohibits the sale, manufacture or distribution of a bottle or cup or a liquid, food or beverage in a can, jar or plastic bottle that contains bisphenol A (BPA) if the item is primarily intended for children three years of age or younger. Specifically, this bill:

1) Enacts the Toxin-Free Infants and Toddlers Act.

2) Prohibits the sale, manufacture or distribution of any bottle or cup that contains bisphenol A, at a level above 0.1 parts per billion (ppb), if the bottles or cups are designed for, or intended to be filled with a liquid, food, or beverage intended primarily for consumption by, children three years of age or younger. This prohibition is effective July 1, 2013.

3) Exempts from the above prohibitions food and beverage containers designed or intended primarily to contain liquid, food, or beverages for consumption by the general population.

4) Requires manufacturers to use the least toxic alternative when replacing bisphenol A in containers.

5) Prohibits manufacturers from replacing bisphenol A with carcinogens or reproductive toxicants as identified by the United States Environmental Protection Agency (U.S. EPA) or as listed in the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

6) Provides that in the event that the Department of Toxic Substance Control (DTSC) takes action on specific items under the provisions of the state's Green Chemistry Program, then the standards established by this bill would no longer be in effect for those items.

The Senate amendments removed legislative findings and the provisions of the bill that prohibited the use of bisphenol A in baby foods and formula. The bill maintains the prohibitions on bisphenol A only in cups and bottles used by children under the age of three.

AS PASSED BY THE ASSEMBLY, this bill provided for the banning of bisphenol A in baby bottles, sippy cups, baby foods and formula effective July 1, 2013.

FISCAL EFFECT: None

COMMENTS: According to the author, "AB 1319 is a child safety measure that seeks to protect infants and toddlers from a harmful toxin that leaches into babies' milk and food. While most consumers believe that everyday products are tested for dangerous chemicals and determined to be safe by government authorities, the reality is many children's products contain toxic chemicals, such as bisphenol A, that have been shown to cause harm to children's health and the environment. BPA has been linked to a number of long-term health impacts such as birth defects, reproductive harm, impaired learning, hyperactivity and breast and prostate cancer. Because children's bodies are growing and

developing, they are especially vulnerable to the effects of bisphenol A. Regulation of BPA in children's products is woefully inadequate and has not kept pace with the explosion of government funded peer reviewed studies in the last few years indicating a problem with BPA in food and beverage products."

Bisphenol A is an organic compound that has been used for several polymers and polymer additives, such as polycarbonate plastics and epoxy resins. Polycarbonate plastics are used as linings in most food and beverage cans and also in dental sealants. Such plastics are also used in the manufacture of children's products such as toys, pacifiers, baby bottles and tethers. Hard, clear plastics, such as some reusable water bottles, are created using bisphenol A. Bisphenol A is also used as an antioxidant in plasticizers and as a polymerization inhibitor in polyvinyl chloride. Nearly three billion pounds of bisphenol A are produced annually in the United States alone.

Effects of bisphenol A: The leaching of bisphenol A from consumer products has led to widespread human exposure. Bisphenol A has been shown to leach from the plastic lining of canned foods and polycarbonate plastics that are cleaned with harsh detergents, or from containers that are used to store acidic or high-temperature liquids. The chemical bonds linking bisphenol A molecules in polycarbonate plastics break down when exposed to the high heat, or acidic or basic conditions. Bio-monitoring studies conducted by the Centers for Disease Control and Prevention found that bisphenol A concentrations in Americans range from 0.4 ppb (10th percentile) to 8 ppb (95th percentile), with the chemical being detected in 93% of the sampled population in urine. Children had the highest concentrations of bisphenol A, followed by teens and adults.

According to the State Department of Toxics Substance Control, bisphenol A acts as a synthetic estrogen. In laboratory experiments, it has been shown to bind to the estrogen receptor and cause proliferation of human breast cancer and prostate cells. Experiments with laboratory animals have shown that bisphenol A can lead to reproductive, developmental and behavioral abnormalities. There is controversy as to whether the levels of bisphenol A that humans are exposed to through consumer products are harmful to their health.

One group of experts concludes that the findings related to reproductive, developmental and behavioral abnormalities are not relevant to humans because: 1) the adverse effects (observed in laboratory experiments) occurred only at high doses and are, therefore, not applicable to human populations who are exposed to much lower levels in the everyday environment; 2) the routes of exposure were not always the same between the laboratory animals (e.g., injection) experiencing the above-mentioned effects and general human populations (oral); and, 3) to date, no reproductive, developmental or neurological adverse effects have been observed in humans exposed to bisphenol A.

Another group of experts counters that exposure of rodent offspring to low doses of bisphenol A in the womb (lower than the 50 ug/kg/day level considered to be safe by the U.S. Environmental Protection Agency (U.S. EPA)) leads to abnormal weight gain, insulin resistance, and prostate and breast cancer. The U.S. EPA derived a safe value of 50 ug/kg/day in 1993, and many researchers are calling for an update in this value after consideration of more recent research data. A National Institutes of Health-sponsored panel in the United States determined that there was "some concern" about bisphenol A's effect on fetal and infant brains and behavior, and that further studies in this area are needed.

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