



March 14, 2022

OEHHA Carcinogen Identification Committee,

CleanEarth4Kids.org asks you to take action to protect us from Bisphenol A (BPA), not only adding it to Prop 65 as a carcinogen, but banning its use as well.

BPA is known to leach from plastic food and water containers, where even very small amounts can interfere with a person's endocrine system. There is a great deal of studies showing this endocrine disruption by BPA increases the risk of cancer.

Below are just a few of the studies.

[Bisphenol A and Hormone-Associated Cancers: Current Progress and Perspectives \(nih.gov\)](#).

“Overall, several conclusions can be made: 1) BPA is a typical xenoestrogen and its estrogenic activity and estrogen-independent activity are likely responsible for its roles in promoting carcinogenesis of multiple cancers; 2) BPA interacts with other steroid receptor such as AR to promote proliferation of prostate cancer cells; and 3) fetal exposure to BPA could lead to “long-lasting” effects on the carcinogenesis of certain organs. Recently, one study showed increased expression of histone trimethylated H3 at lysine 27 of EZH2 after BPA treatment in human breast cancer cells, indicating epigenetic regulation by BPA of cells in carcinogenesis and progression of breast cancer.” “A recent report demonstrated that prostate stem-progenitor cells are direct BPA targets and that exposure to BPA at low doses during development increases the hormone-dependent cancer risk in the human prostate epithelium...”:

[Bisphenol-A and diethylstilbestrol exposure induces the expression of breast cancer associated long noncoding RNA HOTAIR in vitro and in vivo - PubMed \(nih.gov\)](#). “Long non-coding RNA HOTAIR is a key player in breast cancer...HOTAIR is induced by endocrine disruptors BPA and DES in vitro and in vivo.”

[Exposure to bisphenol A correlates with early-onset prostate cancer and promotes centrosome amplification and anchorage-independent growth in vitro - PubMed \(nih.gov\)](#). “...urinary BPA level is an independent prognostic marker in Prostate cancer.”

[Bisphenol A promotes human prostate stem-progenitor cell self-renewal and increases in vivo carcinogenesis in human prostate epithelium - PubMed \(nih.gov\)](#). "...early-life exposure to bisphenol A (BPA) reprograms the prostate and enhances its susceptibility to hormonal carcinogenesis with aging."

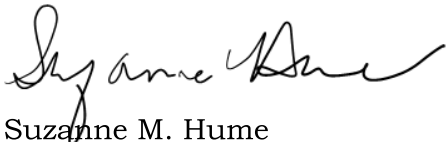
[Bisphenol A and its analogues disrupt centrosome cycle and microtubule dynamics in prostate cancer - PubMed \(nih.gov\)](#). "We thus conclude that selected BPA analogues, similar to BPA, disrupt centrosome function and microtubule organization, with DMBPA displaying the broadest spectrum of cancer-promoting effects."

[Understanding the Mechanistic Link between Bisphenol A and Cancer Stem Cells: A Cancer Prevention Perspective \(nih.gov\)](#). "It has been well established that BPA exerts estrogenic activity in animal models and in vitro systems." "Of particular concern, BPA-induced cancers show increased resistance against widely used chemotherapeutic agents, such as doxorubicin and cisplatin."

[Association Between Bisphenol A Exposure and Risk of All-Cause and Cause-Specific Mortality in US Adults \(nih.gov\)](#). "In this nationally representative cohort of US adults, higher BPA exposure was significantly associated with an increased risk of all-cause mortality."

[BPA Alters Estrogen Receptor Expression in the Heart After Viral Infection Activating Cardiac Mast Cells and T Cells Leading to Perimyocarditis and Fibrosis - PubMed \(nih.gov\)](#). "Exposure to BPA significantly increased CD4+ T cells, IFN $\gamma$ , IL-17A, TLR4, caspase-1, and IL-1 $\beta$  in the heart. BPA exposure also increased cardiac fibrosis compared to controls. Mast cells, which are associated with cardiac remodeling, were found to increase in number and degranulation, particularly along the pericardium."

Sincerely,



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