

## Columbia Environmental Research Center

## In Press Publication Brief

## In Vivo Health Effects of Bisphenol A

Concern is mounting regarding the human health and environmental effects of bisphenol A (BPA), a high-production-volume chemical used in synthesis of plastics. We have reviewed the growing literature on effects of low doses of BPA, below 50 mg/(kg day), in laboratory exposures with mammalian model organisms.

Chemical structure of bisphenol A.

Many, but not all, effects of BPA are similar to effects seen in response to the model estrogens diethylstilbestrol and ethinylestradiol. For most effects, the potency of BPA is approximately 10–1000-fold less than that of diethylstilbestrol or ethinylestradiol.

Based on our review of the literature, a consensus was reached regarding our level of confidence that particular outcomes occur in response to low dose BPA exposure.

We are confident that adult exposure to BPA affects the male reproductive tract, and that long lasting, organizational effects in response to developmental exposure to BPA occur in the brain, the male reproductive system, and metabolic processes.

We consider it likely, but requiring further confirmation, that adult exposure to BPA affects the brain, the female reproductive system, and the immune system, and that developmental effects occur in the female reproductive system.

Richter CA, Birnbaum LS, Farabollini F, Newbold RR, Rubin BS, Talsness CE, Vandenbergh JG, Walser-Kuntz DR, vom Saal FS, *In Vivo* Effects of Bisphenol A in Laboratory Rodent Studies, Reproductive Toxicology (2007), doi10.1016/j.reprotox.2007.06.004

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