

Homes of the poor and the affluent both have high levels of endocrine disruptors

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Homes in low-income and affluent communities in California both had similarly high levels of endocrine disruptors, and the levels were higher in indoor air than outdoor air, according to a new study believed to be the first that paired indoor and outdoor air samples for such wide range (104) of these substances. The study appears in ACS' *Environmental Science & Technology*.

Ruthann Rudel and colleagues note concern about the reproductive and other health effects of endocrine disrupting compounds (EDCs), which are found in many products used in the home. Examples include phthalates, which are found in vinyl and other plastics, and polychlorinated biphenyls (PCBs), which are found in older paints, electrical equipment, and building materials. EDCs also are among the ingredients in some pesticides, fragrances, and other materials.

The scientists analyzed indoor and outdoor air samples as well as house dust in homes from two different communities in the San Francisco Bay area for the presence of 104 compounds, including 70 suspected EDCs. The sampling, which took place in 2006, included 40 homes in Richmond, Calif., an urban, industrial, low-income area, and 10 homes in Bolinas, Calif., an affluent, coastal community.

Levels were generally higher indoors than outdoors — 32 of the compounds occurred in higher concentrations indoors and only 2 were higher outdoors. The scientists expressed surprise at finding higher concentrations of some phthalates outdoors near urban homes

contributing to higher indoor levels as well, but concluded that EDCs "are ubiquitously common across socioeconomic groups."

More information: "Semivolatile Endocrine-Disrupting Compounds in Paired Indoor and Outdoor Air in Two Northern California Communities", *Environmental Science & Technology*.

Provided by American Chemical Society

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