PCBs NOT DEADLY CHEMICALS

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If we were playing a word association game, and I were to say PCBs, you might respond "deadly chemical." Your answer would be understandable. PCBs, or polychlorinated biphenyl chemicals, are often described by the news media as "deadly toxins" or "cancer agents." But while understandable, your answer also would be wrong. PCBs -- oily liquids used mainly to insulate electrical equipment -- are not totally harmless but neither are they deadly nor have they been found to cause serious, long-term health problems among people.

Why the misunderstanding? First, PCBs were propelled to notoriety in the late 1960s when more than 1,000 Japanese in Yusho became seriously ill after eating a food oil contaminated with PCBs. In fact, this oil contained several toxic chemicals, and follow-up studies of Yusho victims have indicated that PCBs were not the likely cause of their misfortune.

Another reason for PCBs' bad reputation may be the fact that they were the only chemicals singled out for a ban in the 1976 Toxic Substances Control Act. This distinction may have resulted in part from Yusho publicity. It also may have reflected concern with PCBs' persistence in the environment.

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PCBs routinely are called cancer-causing. But the weight of scientific evidence indicates otherwise. Thus, while one federal study reported in 1975 that rats fed PCBs developed liver tumors, other studies on both rats and dogs demonstrated no cancer-causing effect from the chemicals. Among these studies was 1978 research by the National Cancer Institute which concluded that PCBs were "not carcinogenic to rats under the test conditions."

More importantly, PCBs have not been found to cause serious health difficulties among workers exposed to large amounts of them for decades. About two dozen such studies have become available during the past two years. They show that prolonged exposure to PCBs may cause the skin disorder "chloracne" and may alter certain liver enzymes -- neither a life-threatening malady. The studies also show that PCBs do not increase mortality (death) from cancer or cardiovascular or nervous disorders.

For example, a 1981 investigation by the National Institute of Occupational Safety and Health on 2,567 workers exposed to PCBs while manufacturing electrical equipment concluded that "all-cause mortality was lower than expected as well as all cancer mortality."

Monsanto Company, formerly the major U.S. producer of PCBs, is concerned that public misunderstanding of their effects on health both alarms people unnecessarily and complicates the job of safely disposing of PCBs. Let's manage our PCB problems on the basis of real versus imagined risks.

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