



# AOMA Report

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## OCCUPATIONAL EXPOSURE TO PCBs MAY BE LINKED TO CANCER IN HUMANS

A possible association between occupational exposure to polychlorinated biphenyls (PCBs) and cancer in humans was recently reported to the National Institute for Occupational Safety and Health by Mobil Oil Corporation, according to a letter which John F. Finklea, M.D., NIOSH Director, sent to colleagues on August 20. The Mobil communication reported preliminary results of an epidemiological analysis, based on medical records of employees exposed to PCBs at the Mobil plant in Paulsboro, N.J. The study, which was conducted by Prof. Anita K. Bahn of the University of Pennsylvania School of Medicine, included two cohorts of Mobil employees who were reported to have had varying exposure to Aroclor 1254 (a mixture of PCBs). Quoting Dr. Finklea:

"The cohort of research and development employees was exposed to PCBs between 1949 and 1957 and the cohort of refinery plant employees between 1953 and 1958. The extent of exposure to these workers to other chemicals is not known. The cancer incidence among these workers for the period 1957 through 1975 was determined using Mobil medical records. Because medical records for 37 employees were incomplete, these workers were excluded from this analysis. Among the 92 workers in these two cohorts from whom adequate medical records were available, eight cancers (in seven workers) were observed between 1957 and 1975. Of these eight cancers, three were malignant melanoma and two were cancer of the pancreas. This is significantly more skin cancer (melanoma) and pancreatic cancer than would be expected in a population of this size (based on the Third National Cancer Survey). The remaining cancers were found at three other sites in two employees; sarcoma of the right thigh and multiple myeloma in one employee, and recto-sigmoid cancer in the other.

"NIOSH is unaware of any other published animal or human data which suggests a correlation between exposure to PCBs and skin (melanoma) or pancreatic cancer. However, hepatomas (mice, Aroclor 1254) and hepatocellular carcinomas (mice, Kanechlor 500; rats, Aroclor 1260) have been reported in PCB feeding studies of laboratory animals."

Dr. Finklea also pointed out that since the NIOSH Bulletin on PCBs was first issued in November, 1973, a number of large firms have introduced products (e.g., butylated monochlorodiphenyl oxide and dimethyl siloxane polymer) claimed to be fire resistant dielectrics which can serve as alternatives to PCBs. He stressed that alternatives for PCBs should be thoroughly studied to assess the consequences they may pose to human health.

## OSHA ISSUES VOLUNTARY GUIDELINES ON CRYSTALLINE SILICA, LEAD AND MERCURY

Inaugurating a new practice, the Occupational Safety and Health Administration has issued voluntary guidelines for employers to follow for the protection of workers who may be exposed to crystalline silica, lead and mercury. Adherence to the guidelines is intended to provide stopgap protection