

NIOSH Dioxin Study Results Available

The National Institute for Occupational Safety and Health (NIOSH) recently made available the results of a health study of workers who had the potential for occupational exposures to 2,3,7,8 tetrachlorodibenzo-*p*-dioxin (TCDD). They report that, statistically, mortality in the total group was not significantly increased for cancers previously suspected of being associated with dioxin: Stomach cancer, Hodgkin's Disease, non-Hodgkin's lymphoma, soft-tissue sarcomas (STS), and cancer of the liver, biliary passages and gallbladder. They also presented data on a variety of other conditions.

The study evaluated the mortality experience through 1987 of 5,172 U.S.-based workers from 12 plants of 11 different companies with chlorophenol and related manufacturing operations. Nearly 40 percent of the group was from Dow's Michigan Division. NIOSH investigators presented information for the total group and for those employed at each plant. They also examined a subgroup of 1,520 with more than one year of potential exposure 20 or more years ago.

In the total group, mortality from all causes combined was not elevated, based on comparison with national statistics. There was an increase in overall cancer mortality (i.e., all cancer sites combined) especially among those workers with more than one year of potential exposure 20 years ago. In addition, they noted an elevation in mortality attributed to STS in the subgroup, but reported the validity of many of the diagnoses was questionable. Respiratory cancer was also

significantly elevated in the sub-group. The excess was most pronounced among workers from two of the manufacturing sites, neither of which was Dow's Midland facility.

The information for our Midland facility was consistent with the results of several studies reported to employees by Dow health scientists over the past decade. Total cancer mortality among the Dow workers was not unusual and mortality for respiratory cancer was approximately 20 percent less than expected.

* The NIOSH investigators concluded that their study "does not confirm the high relative risks for several rare cancers reported in previous studies." While it is their interpretation that some of their results are "consistent with TCDD being a carcinogen," they acknowledge that other factors such as cigarette smoking may be important and have decided to continue surveillance of this group.

Dow cooperated with NIOSH throughout the 12 years it has taken to complete this study. Expertise, copies of relevant personnel and production records, industrial hygiene and analytical and monitoring data, and selected portions of employee medical records were shared with NIOSH. All of this was done, however, in a manner which protected the privacy of Dow employees.

Anyone needing additional information should contact Dr. Thomas Lipps, Michigan Division Medical Director, at (517)636-6681.