

CHARLESTON GAZETTE

12/19/86

NIOSH STUDIES DEATH RATE OF CARBIDERS

By: Norman Oder, Staff Writer

A draft report by the National Institute of Occupational Safety and Health shows that workers at Union Carbide's three facilities in the valley have experienced a lower death and cancer rate than would be expected from the general population.

However, the report, based on a study of death certificates of 29,139 employees, indicates that there may be cancer hot spots among groups of workers. The study showed that there were excess deaths from liver cancer and lymph cancer, among 80 causes of death studied.

The study traced all white males who worked at least one day between Jan. 1, 1940, and Dec. 31, 1978, at the South Charleston plant, the Institute plant and the Tech Center.

Of the employees studies, 5,785 died, while 6,148 deaths would be expected. There were 1,083 cancer deaths, while 1,159 deaths would be expected. The report does note a "healthy worker" effect, which means that people who work are in better health than the entire population.

"I think the results are very encouraging," said Carbide spokesman Thad Epps. "It would indicate that, based on this epidemiological study, that the employees were not at risk, in terms of their occupation."

NIOSH researchers cautioned that the study is not conclusive. "On the one hand, it is reassuring that we didn't find excesses in more than two of the cause-of-death categories," said Bob Rinsky, an epidemiologist in NIOSH's Cincinnati office.

"On the other hand...this is not one plant with homogeneous exposure of all workers," he said. Workers in certain process units may have great exposure to certain chemicals, while office workers may have little exposure. Also, the chance of earlier death may increase the longer an employee is exposed.

Rinsky said the agency will further explore the work histories of employees who died of liver and lymph cancer, to see if the cancers are related to occupational exposure.

"Phase II is where the real payoffs will come," Rinsky said. "What we're trying to see is if we can make associations that will be helpful on an industrywide basis for people exposed to certain compounds."

NIOSH, in cooperation with Carbide, also will review the death data for men who worked in butadiene and ethylene oxide production areas, as well as in the coal hydrogenation unit. "One can't tell from the overall group what the results will be for those composite populations," Rinsky said.

Rinsky said NIOSH and the company hypothesize that the 39 liver cancer deaths - 10 more than expected - came from workers exposed to vinyl chloride. The liver cancer deaths came after Union Carbide began using vinyl chloride in its processes, and were increased the longer employees worked and the more they were exposed to the chemical.

When the link between vinyl chloride and liver cancer was recognized in the mid-1970s, the company took steps to control such exposure, Carbide officials said in a letter sent to employees and retirees Thursday.

- MORE -

UCC 097453

The letter states that researchers do not yet know the cause of the increase in the two cancers that arise in the lymph nodes: lymphosarcoma and reticulosarcoma. There were 48 such deaths, 14 more than expected.

Plant, union and NIOSH officials met to discuss the study Thursday morning. While the statistical work must go through further scientific review, Rinsky said. It should be issued officially in a few months.

The project began in the late 1970s, when NIOSH hoped to trace exposure to ethylene oxide, a suspected carcinogen. NIOSH, an arm of the federal Centers for Disease Control, conducts research into workplace hazards.

Because so many workers were exposed to the chemical, NIOSH decided it would be almost as easy to study the entire group of workers, Rinsky said.

More than 96 percent of the employees were successfully traced through 1978 and researchers found the cause of death for 95 percent of those employees who had died.

Rinsky said researchers divided up the data using several different variables, which included age of workers, number of years worked, and the time period of the years worked. He said the data did not indicate that employees who worked at Carbide the longest had a greater chance of dying.

The study does not address injuries or sickness. Death rates, especially for cancer, often correlate with disease rates, Rinsky said.

However, hundreds of workers at the South Charleston and Institute plants have filed workmen's compensation claims for asbestosis, a scarring lung disease caused by exposure to asbestos, which was once widely used as an insulation material.

- END -

(1081W)

UCC 097454