

The USWA wants a permanent safety standard for workers exposed to gaseous vinyl chloride set at zero—industry claims it can't be done.

CHLORIDE

A four-day vinyl chloride physical examination program, jointly-sponsored by the Steelworkers Union and the Mt. Sinai Medical Hospital in New York, was held June 2-5 at Midland, Mich., for workers employed by Dow Chemical Co.

The massive testing program examined 450 Local 12075 members for possible health disorders recently discovered to be associated with vinyl chloride exposure. Up to this date, the testing program—held in a nearby community center—was the largest of its kind in the nation.

A team of six medical doctors, and more than a dozen technicians, led by Dr. Irving Selikoff from Mt. Sinai, found themselves overwhelmed by the union's response—and actually scheduled an additional day of examinations in order to accommodate the unexpected number of applicants. Nearly 150 members who applied at the last minute were unable to participate in the testing—which lasted 10-12 hours daily.

Each Dow-Midland worker participating in the examination program was required to complete an extensive work and medical history. Applicants then proceeded from one station to another for a variety of tests, which included blood samples, lung function, urinary analysis and a complete physical. The entire examination generally took about two hours, with a follow-up x-ray scheduled for later at a nearby hospital.

Dr. Selikoff is an internationally-known expert on job-related diseases, who did much of the landmark research linking the inhalation of asbestos fibers with cancer. He says that vinyl chloride gas and related polymer compounds may be an even more wide-spread cancer-causing disease. Numerous circulatory and health disorders, including liver cancer—known as angiosarcoma—have been associated with vinyl chloride exposure.

GASEOUS VINYL CHLORIDE is the foundation of the plastics industry—and when "polymerized" into a powdery white chemical called polyvinyl chloride (PVC)—it is used for making thousands of products such as: textiles, synthetic rubber, paints, wire, construction pipes, phonograph records, and plastic bottles.

Dow Chemical is one of the largest plastic producers in the world, and at its Midland location, vinyl chloride is used as a component for Dow consumer products like a plastic wrap called Saran. Numerous industrial compounds and polymerization operations at the Midland plant over the past 20 years have exposed an estimated 650 workers to various levels of vinyl chloride gas and PVC resins.

USWA Safety & Health Rep. Francis Grimes helped set up the examination program at Midland with Mt. Sinai. He expects to have several other such testing programs done at other plant locations where there is known vinyl chloride exposure to Steelworker members. One of these plants includes some 260 workers at Ethyl Corp.'s Visqueen Division in Terre Haute, Ind., where PVC pipe is manufactured.

Mr. Grimes estimates from a computer survey conducted of Steelworker-organized plants, that a

minimum of 1,500 members are involved in some way with vinyl chloride production. Several thousand more members are involved in what are termed "secondary operations" as extruding, molding and forming of various plastic products. There is some evidence that these secondary operations expose workers to "unreacted" vinyl chloride found in PVC.

THE U.S. LABOR DEPT. has proposed a flat ban on worker exposure to vinyl chloride, but because industry complained so loudly, the Occupational Safety & Health Administration (OSHA) set a temporary emergency standard at 50 ppm (parts per million). This was a sharp reduction from the 500 ppm previous limit.

Hearings are currently being conducted by the Labor Dept. in Washington, D.C., on a proposal to set a permanent standard which requires "no detectable" level of exposure. The Steelworkers and AFL-CIO are strongly in favor of the zero proposed standard. Industry claims that such a standard can't be met.

According to Mr. Grimes, public realization that vinyl chloride exposure causes liver cancer was first discovered earlier this year by the deaths of seven workers at a B. F. Goodrich Co. in Louisville. This meant some 6,500 workers employed in vinyl chloride operations nationally would be possible victims of health disorders and liver cancer associated with the gas.

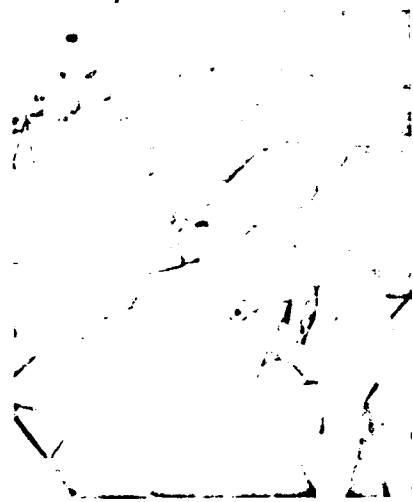
But since that initial discovery, several other cases of angiosarcoma were discovered in secondary operations which turn vinyl chloride into polyvinyl chloride. The plastics industry employs up to an estimated 700,000 workers—who all would be subjected to similar tightening of potential exposure standards.

DR. SELIKOFF, WHO IS director of Mt. Sinai's Environmental Science Laboratory, said he expects results from the testing program at Dow-Midland to be available sometime by late summer or early fall. He said when the results of each union member's examination are determined, a letter will be sent to the participant, describing the condition of his health and recommending if any action should be taken.

Although the testing program at Midland drew praise from medical experts—it received nothing but criticism from Dow Chemical. The union received no cooperation from the company, even though Dow publicizes its constant concern for employee health and safety. Steelworkers District 29 Director Charles Younglove charged Dow refused to release lists it had of workers employed in vinyl chloride operations and their levels of exposure.

"Dow Chemical's refusal to cooperate with the union is just another example of the company's paternalistic attitude toward its employees on matters of health and safety," Mr. Younglove declared.

But the company's attitude toward the Steelworkers is expected to change—the 5,300 members of Local 12075 have been on strike against Dow Chemical since March 18—and safety is among one of the many issues of their strike.



Above: Dr. Irving Selikoff interviews Local 12075 members employed at Dow Chemical, Midland, Mich., in vinyl chloride testing program. Blood test program (bottom picture) involved a substantial portion of the workers at the large Dow plant. Below: District 29 Staff Rep. George Watts, Local 12075 Safety Committee Chairman Bryce Alexander and USWA Safety & Health Rep. Frank Grimes discuss the program which they coordinated at Midland.



USWA-sponsored research aids detection of vinyl chloride

A simple test has been developed by Dr. Irving Selikoff, director of the Environmental Sciences Laboratory at Mt. Sinai Hospital, for detection of circulatory problems related to vinyl chloride exposure. Dr. Selikoff demonstrates the technique in a medical testing program conducted among workers employed at Dow Chemical Co. in Midland, Mich., with Floyd Steele—who worked 13 years in the Saran Department, which uses vinyl chloride to make Saran Wrap. Steele is a member of Local 12075. The technique involves cutting off the blood supply in the fingers of the hand by pressing the blood vessels at the wrist. When the pressure is released, the time it takes for the blood to recirculate will indicate the circulatory condition of the extremities. According to Dr. Selikoff, it has only been recently discovered that there is a deterioration of blood circulation in the hands and feet among workers who are exposed for long periods of time to vinyl chloride.



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