

March 23, 1974

A 2

THE LOUISVILLE TIMES, SATURDAY, MARCH 23, 1974

Alarm system summons body to fight cancer, scientists discover

From Chicago Daily News Service and AP Wirephotos

ST. AUGUSTINE, Fla. — A New Orleans scientist today said he and fellow researchers have discovered a sentry in the body whose function is to warn of cancer and mobilize killer cells against it.

He speculated that people with cancer have a deficiency of this "recognition factor" (RF). In animal experiments and in beginning work with patients, RF added to the body has boosted resistance to cancer.

Patients with cancer have much less RF, scientists find. The more advanced the disease is, the less the amount of RF. But the RF level can bounce back if much of the cancer has been removed surgically or otherwise treated effectively.

Isolation of RF — a protein from the blood plasma — was reported to a seminar for science reporters sponsored by the American Cancer Society.

Dr. Nicholas R. D'Amico, professor and chairman of the Department of Physiology at Tulane University Medical School, said that when RF is injected directly into patients' tumors, there is a reduction in the size of the cancer.

In addition to recognizing the first signs of cancer growth, RF has the capacity to mobilize thousands of killer cells, known as macrophages. These surround the cancer and destroy it. Macrophages have long been known to act against many germs that invade the body. Their effectiveness against cancer is now being appreciated.

Dr. E. Cuyler Hammond, society vice president for epidemiology, said five more deaths have been reported in other plants in the United States.

Projections suggest that eventually 5 out of 100 vinyl chloride workers will die of the liver disease compared with a general incidence of 1 in 50,000.

Of further concern, he said, is the effect on consumers of vinyl plastic, a material that is used, for example, to package fresh meat.

Vinyl chloride also is used as a propellant in pressurized cans of consumer products.

Hammond said the liver deaths could have been prevented had vinyl chloride been tested first in animals. He called for a registry of all new chemicals introduced in industry.

An earlier seminar report warned of possible cancerous effects from the expanding sea of chemicals man has spread around the planet in the past 40 years.

"The air we breathe contains gases and particles that never before entered the human lung. Our food has chemicals designed to improve its taste, freshness, appearance — but which are strange to our intestines, livers, kidneys, blood," the report said.

Copies to:

A. Vittone
R. D. Scott
J. L. Nelson
H. Waltemate
B. M. G. Zwicker
G. Pow
W. J. Wilcox
P. J. Weaver
E. B. Osborne
R. P. Kenney/A. L. Hatfield/C. R. Flynn

Date: 3-25-74
From: E. W. Harrington

24217001

LOUISVILLE TIMES - 3/22/76

2 more victims of rare cancer are reported

The Goodyear Tire & Rubber Co. today announced that it has uncovered two more deaths of workers at its Niagara Falls, N. Y., plant from a rare form of cancer of the liver.

The announcement, from company headquarters in Akron, Ohio, raises to 10 the number of known deaths of workers in American vinyl and polyvinyl-chloride plants from angiosarcoma. Previously, Goodyear had reported one death of a

Tougher U.S. standards to protect vinyl-chloride workers will be in effect soon. Page B3.

Niagara Falls workers, the B. F. Goodrich Co. had reported five deaths — all at its Louisville plant on Bell's Lane — and death at a West Virginia plant.

The two deaths announced today were of a 54-year-old man who died in 1968 and a 60-year-old man who died in 1970. The younger man had worked at the Goodyear plant from 1951 until his death; the other had worked there for 24 years.

Goodyear officials say they are spending an estimated \$1 million on equipment to better safeguard the plant's 440 workers and on medical detection and surveillance of the workers. The Goodyear plant, like the Goodrich plant here, is one of the older ones in the country. It opened in 1946.

Virtually all of these victims were exposed to vinyl chloride fumes for long periods. The material is a basic building block in the plastics industry.

Goodyear two weeks ago gave extensive medical examinations to all of the Niagara Falls workers. Earlier, the plant union began its own medical examinations of some workers, seeking to establish a connection between their employment and liver disorders. The studies are continuing.

Stricter standard ahead?

U.S. to toughen safety rules on vinyl chloride

By DENNIS POLITE
Louisville Times Staff Writer

The allowable amount of exposure of workers to vinyl chloride fumes will be reduced from 500 parts to 50 parts per million parts of air by the federal Occupational Safety and Health Administration (OSHA).

The new levels conform to the standard set last month by the Kentucky Occupational Safety and Health Administration.

Federal OSHA officials announced the soon-to-be-implemented change today in a statement from Washington. The federal standards are considered "emergency, temporary" ones, and can remain in effect for up to six months before a permanent standard must be set, officials said.

The new federal standards also call for workplace monitoring, and, "where exposure is greater than the 50-parts-per-million level, personal protective measures and equipment."

(The Kentucky standard calls for protective equipment when the level reaches 75 parts per million. The federal standard will prevail, however.)

A federal OSHA spokesman said the issuance of the emergency standard follows disclosure earlier this year that five B. F. Goodrich Co. employees at the chemical plant here have died of angiosarcoma, a rare liver cancer, in the past 10 years and two workers who are still living have the disease. All had worked near vinyl chloride.

Five other deaths, two today, have been reported from other chemical companies.

'Grave dangers'... exist

"The emergency standard will serve to protect workers from the grave dangers we know exist," the announcement quoted Asst. Secretary of Labor John H. Stender as saying. Stender is head of the federal OSHA.

Stender said the new standard will go into effect after next week's publication in the Federal Register.

He said the evidence presented at an OSHA fact-finding hearing in Washington on Feb. 13 led to the emergency ceiling of 50 parts per million, averaged over an eight-hour period.

An Italian scientist, Cesare Maltoni, has said he observed vinyl chloride to be cancer-causing in animals at exposure levels of 250 parts per million. Stender said, but there were no apparent ill ef-

fects at exposure levels of 50 parts per million.

Today's announcement said that, under the law, the temporary standard serves as a proposed permanent standard.

Implications from OSHA spokesmen, however, are that the permanent standard could be even tougher.

The announcement said OSHA's consideration of a permanent standard would include recommendations from the National Institute of Occupational Safety and Health (NIOSH).

A spokesman for NIOSH, which serves as an advisory body to OSHA, said earlier this month that the institute could not say any level of exposure to vinyl chloride is "safe."

One part per million?

It recommended that protective equipment be worn when monitoring devices found the level of vinyl chloride at one part per million parts of air.

NIOSH also recommended specific work practices and that certain medical screening tests and air-sampling procedures be made a part of the permanent standard.

(When NIOSH consulted with industry before making its recommendation to OSHA, the industry indicated it wanted a 50-parts-per-million standard. B. F. Goodrich and other chemical companies that use vinyl chloride have said they now maintain such a level at their facilities.)

Stender said the permanent standard could be in effect as early as June.

The permanent standard will not be adopted until the public has been given a chance to comment on the measure, and this might entail a public hearing on the issue, an OSHA spokesman said.

More data to be sought

In addition to the fact-finding hearing held by OSHA, the spokesman said, Stender and other high OSHA officials have made visits to plants to determine possible means of limiting workers' exposure to vinyl chloride, a substance used in the manufacture of certain kinds of plastics.

Dr. J. Bradford Block, medical consultant to the Kentucky Department of Labor, said he was "very pleased with the (temporary) standard."

Block said he feels the standard will afford protection to workers and at the same time allow industry to continue to operate.

Labor spokesmen had been critical of OSHA in not setting a temporary standard while it considered a permanent one.

24217003