

FILE NAME: Newspaper & Magazine Articles (NMA)

DATE: 1959

DOC#: NMA117

DOCUMENT DESCRIPTION: Wall Street Journal - Technology's Advance
Boosts On-Job Health Problems for Industry

Technology's Advance Boosts On-Job Health Problems for Industry

Perils Include Rocket Fuel,
Radiation; Scientist Links
Some Cancer to Industry

By JERRY E. BISHOP

Staff Reporter of THE WALL STREET JOURNAL

The nation's advancing technology is bringing new on-the-job health problems.

At the same time, industrial health experts are worrying about some hazards, from traditional occupations, that may have gone unnoticed until now. A California public health official yesterday released findings indicating that a small part of the increasing incidence of lung cancer in the nation may stem from occupational environment.

Dr. Lester Breslow of the state's Bureau of Chronic Diseases says a study of some 500 lung cancer patients in California indicates that such workers as welders and other handlers of hot metals; steamfitters working with asbestos, lead, zinc and copper miners, commercial cooks and painters may have a higher-than-normal incidence of the disease. The number of cases that develop in these occupations is extremely small, however, he adds.

Elaborate Safeguards

Newer jobs created by technological progress, are bringing other hazards. Chemical companies are setting up elaborate safeguards to protect workers against accidental whiffs of toxic rocket fuels, and atomic energy firms, already extremely safety conscious because of radiation hazards, have brought under control a disease resulting from the growing use of beryllium, a metal used in atomic weapons.

"The industry of the future, with its emphasis on automation, electronic and chemical operations, and nuclear energy, may introduce numerous physiologic, pathologic and psychologic health problems. Some of these problems may have more far reaching effects than those of the past," says Dr. Henry N. Doyle, assistant chief of the occupational health program of the U.S. Public Health Service.

These problems, doctors quickly explain, are no cause for public alarm. In most cases, industry's expanding medical and research facilities are able to spot and prevent health hazards before a worker is endangered.

Most doctors agree, too, Americans are safer on the job now than ever before. "These new problems are spectacular and attract attention; they are of concern, but in terms of the average individual worker coming to harm they are not too much of moment," says Dr. B. Dixon Holland, secretary of the American Medical Association's Council on Industrial Medicine.

Spreading Hazards

There's no question, however, that the newer hazards are spreading. In the early days of atomic energy, for example, only a handful of plants and laboratories had to worry about radiation dangers. Now an estimated 1,600 companies are authorized to use radioisotopes for industrial purposes and have to undertake the elaborate precautions to guard against accidental exposure of their workers.

Occupational diseases long have been a problem in industry, of course. These ailments, which do not include on-the-job accidents, generally are such illnesses as skin allergies from contacting toxic chemicals, lung diseases from inhaling harmful dusts and polluted air, and poisonings such as from lead and carbon dioxide.

An estimated 50 million work days a year are lost because of illnesses of occupational origin, A. J. Hayes, president of the International Association of Machinists, recently told a gathering of industrial medicine experts at Chicago. "American workers lose a minimum of \$420 million in wages every year because of occupational illnesses," he asserted, "and this does not include the inevitable losses in production and profit."

While a major part of industry's outlays for workmen's compensation awards are for on-the-job accidents, a significant—and increasing—amount are for occupational diseases. "Compensation awards for silicosis alone (a lung disease caused by years of inhaling dust such as quartz dust) are probably more than \$10 million a year now—and that's probably a gross underestimate," says one U.S. Public Health Service official.

The growing amount of health insurance costs being borne by corporations also is sharpening interest in warding off threats to employee health. Health insurance plans last year shelled out a record \$4.8 billion in benefits, an increase of 14% from 1957, E. J. Faulkner, president of the Woodmen Accident & Life Co., stated at the Chicago meeting.

The flood of new chemicals, now estimated

Please Turn to Page 13, Column 1

Advancing Technology Increases Industry's On-Job Health Problems

Continued From First Page

at 4,000 new compounds a year, is proving a major problem for industrial health experts.

For example, inhaling two of the new boron compounds used in rocket fuels will produce a cough, a tightness of the chest, headache and possibly nausea, chills, dizziness and drowsiness. Overexposure could be serious, doctors say. Inhaling beryllium compounds over a prolonged period can produce berylliosis, a lung disease characterized by chills, fever, profuse perspiration and a painful cough.

Only a relatively few cases of poisonings from such compounds have bothered industrial firms, most of these coming before it was realized the compounds were dangerous. Once spotted, however, companies quickly institute safety measures.

Dr. F. J. Weissmiller of the Stromberg-Carlson division of General Dynamics recalls that another instrument company not long ago began using a powerful epoxy resin glue to stick component parts together. The work required the highly skilled employees to handle the glue for a few moments before it dried. The workers suddenly began breaking out in rashes and burns on the hands and around the eyes. As a result, the company had to institute the costly procedure of putting rubber gloves on the workers and then having them stop work for a half hour every two hours.

When Stromberg-Carlson recently began using the glue to assemble electronic parts, Dr. Weissmiller explains, instruments were developed to handle the glue without workers' hands touching it, ventilating hoods were put in overhead and a wash basin was put next to each worker. The company has no trouble at all, he says.

While toxic chemicals long have been a problem—lead poisoning, for instance, has troubled industry for decades—other health problems are from new sources.

Doctors say there is some question about the effects of high-energy radio waves being used for radar and other military purposes. So far, there have been no known deaths or

serious injuries from the waves but it is suspected they may cause such troubles as cataracts of the eye. Both industry and the armed forces have taken precautions against such a possibility. Studies are now under way to find out if the waves have any long-range hereditary effects on humans.

Ironically, the most dangerous of the new health problems, radiation from the mushrooming atomic energy plants, so far has been one of the least damaging, doctors say. Since 1956 there have been only two or three accidental exposures to radiation, including one fatality at Los Alamos that made headlines a few months ago. Considering the number of persons working in the field and the hazard involved, doctors say that record is rather remarkable.

Many firms now call in their medical departments before installing new processes or building new plants. "Our medical department is in close liaison with our engineers and is

as responsible for product reliability as anyone," says Dr. Harry Teabrook, medical director of Sylvania Electric Products Co. The company's physicians are working closely with the development of a synthetic mica to determine if the mica dust will pose a health problem among the workers.

A final indication of the lengths to which industry has gone to protect its workers is reflected in the numbers of health experts it now employs. The American Medical Association estimates that 5,000 doctors now work

full time at plants and that another 10,000 are on call. In addition, companies employ some 1,000 industrial hygienists, experts in controlling health hazards.