

Labor Occupational Health Program MONITOR

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GENETIC SCREENING

59 FIRMS PLAN GENETIC SCREENING

A questionnaire distributed by the Congressional Office of Technology Assessment has determined that more than 10% of "Fortune 500" companies in the U.S. have plans to conduct genetic screening on workers during the next five years. Several of the companies have already used, or are currently using, genetic screening techniques, the survey found.

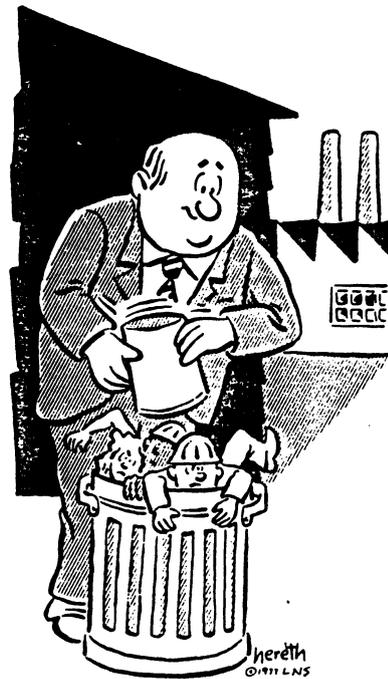
Survey results were disclosed on June 22 at a hearing of the subcommittee on investigations and oversight of the House Committee on Science and Technology. Subcommittee chairman Rep. Albert Gore (D.-Tennessee) called the survey findings "surprising" and suggested that they indicate a need for more examination of the practice of genetic screening.

Companies, especially in the chemical and petrochemical fields, have quietly tested thousands of American workers to determine if any of the genes they were born with are what industry doctors call "defective," making the employees especially vulnerable to certain chemicals in the workplace. Employers claim that the purpose of the tests is to keep so-called "hypersusceptible" workers away from industrial poisons. Many workers have been transferred to other jobs as a result of the tests, and critics suggest that the next step could easily be denial of employment altogether to "hypersusceptible" workers. Many involved companies take the position that it is not economically feasible to make the workplace totally safe for all workers, so that allocating jobs according to genetic tests which predict health risks could better protect workers, reduce absenteeism, and cut down on the cost of workers' compensation and liability litigation.

Critics of genetic screening, on the other hand, argue that such screening used as a pre-employment test could be used to discriminate against particular categories of applicants, and could be used to avoid lowering toxic chemical exposure levels overall in a plant.

DuPont and Dow Chemical are two leading proponents of genetic screening, and claim to have tested thousands of workers over the past decade.

Some employers have maintained that they interpret certain federal OSHA standards to require genetic screening, since some standards related to carcinogens require that medical examinations which include family history and "genetic factors" be performed before an employee works in a carcinogen area. In response to these claims, federal OSHA issued a press release in late 1980 which emphasized that the cited provisions of the carcinogen standards "do not require the exclusion of



—Liberation News Service

otherwise qualified employees from jobs on the basis of genetic testing."

The tests themselves involve drawing a small amount of blood from a worker, which is then put through tests that can reveal genetic makeup. One kind of screening, called cytogenetics, detects chromosome breakage which many scientists believe is an early warning of cancer. Even critics of genetic screening used as an exclusionary device concede that cytogenetic testing could have value for workers if it were used to compare the status of genes before and after exposure to various substances. Some scientists have pointed out that this advantage is negated if companies do not provide workers access to the results of the tests.

The Equal Employment Opportunity Commission says it currently has about 100 cases involving workers

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Screening

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claiming to have been barred from jobs because of "hypersusceptibility." Although most involve women who contend they were barred from certain jobs because of reproductive capacity, others involve such minority groups as blacks. The New York Times has reported that blacks at DuPont routinely are given preemployment genetic tests for "sickle cell trait," a genetic disorder which in a small percentage of cases may lead to the serious disease sickle cell anemia. Some Du Pont medical officials believe that workplace chemicals which are "hemolytic" (causing the destruction of red blood cells) might increase the risk to sickle cell carriers. The U.S. Air Force has also disqualified black candidates for flight training when they

were found to carry sickle cell trait. In both cases-- hemolytic chemicals and high-altitude flight-- the working conditions were thought to be dangerous because of the hazard of oxygen deprivation, which some scientists think increases the likelihood of a "sickling incident" in an individual with sickle cell trait.

Many critics of the use of genetic screening see it as a "blame the victim" approach. One scientist has termed its application to blacks "scientific racism." One of the most prominent critics, Dr. Nicholas Ashford of the Massachusetts Institute of Technology, has stated that "the opportunities for possible abuse by management present a socially unacceptable risk." "We may be focusing on the wrong pathology in addressing genetic factors," Ashford said. "The most serious pathology is misguided industrial practice."

-- Compiled from The New York Times and other sources

AROUND LOHP

LOHP HOLDS HEALTH AND SAFETY COMMITTEE CONFERENCE

"Joint Labor- Management Health and Safety Committees: Reviewing the Alternatives" was the subject of LOHP's most recent conference, June 2, 1982, on the U.C. Berkeley campus.

About 65 union and management representatives met to assess the value and operation of various forms of workplace health and safety structures, including union health and safety committees and steward systems as well as joint labor-management committees. Another topic of discussion was a new federal OSHA proposal encouraging the development of joint committees.

Included was a panel discussion on union approaches to joint committees and other structures. Members of the panel included LOHP Coordinator Robin Baker; Robert Miller of the Association of Western Pulp and Paperworkers; Ken Bishop of CWA Local 9495; Nancy Garcia of Teamsters Local 2707; and Mike Schneider, Deputy Chief for Safety of Cal/ OSHA.

An employer perspective on joint labor-management programs was presented by Joseph Barton, Jr., Field Safety Manager of Bechtel Corporation.

In the afternoon, participants divided into workshops to consider devising health and safety structures for selected workplaces through case studies and exercises.

Participants rated the value of the conference highly, but most commented that the topic deserved more time.

Clearinghouse



The Labor Occupational Health Program continues to offer for sale a variety of books, pamphlets, fact sheets, slide shows, motion pictures, and other educational materials on health and safety. A complete list of our materials, prices, and ordering information is available by writing to LOHP at 2521 Channing Way, Berkeley, CA 94720.

Another feature of our Clearinghouse column from time to time will be brief announcements of particularly valuable new materials in the field of health and safety, produced by others. Noteworthy this month are the following:

Office Hazards is a new 240-page book by journalist Joel Makower, showing the changes in technology and work organization which have come to the office recently, and the new hazards they create. Video display terminals (VDT's), for example, not only cause physical hazards for office workers but also increase the pace of work and production pressures and decrease social contact among workers and job variety. New office designs have resulted in overcrowding, increased noise, and lack of privacy. Ventilation is often being reduced in offices to cut employers' energy costs. Copying equipment and cheaper building materials now in use produce other hazards. The book includes checklists of hazards as well as a resource directory for obtaining help and more information. Copies are \$6.95 from Tilden Press, 1737 DeSales St. N.W., Washington, D.C. 20036.

Community Right-to-Know: A Handbook on Toxic Substances Disclosure is a free 80-page booklet available from the Governor's Office, State of California, Sacramento, CA 95814. It includes the text of the workers' "right-to-know" law passed in California in September, 1980 (SB 1874; see Monitor, Sept.-Oct., 1980, p.8) as well as the text of several local "right-to-know" laws. The booklet advocates passage of such laws on a community level from both the worker's and citizen's point of view.

We Dig Coal is a new film on women in coal mining which will be shown on most Public Broadcasting Service stations during July, 1982. It chronicles the legal battle of three Pennsylvania women to break the sex barrier and win jobs as underground coal miners; after the battle is successful, one of the women is killed in a mine accident. Marilyn McCusker became the first woman miner to die in an underground accident in the U.S. on October 2, 1979. Contact local PBS stations for availability information. By State of the Art Productions in Washington, D.C.

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Update: OSHA CAL-OSHA



NEW STATE WARNING ON GLYCOL ETHERS

The Cal/OSHA Hazard Evaluation System and Information Service (HESIS) issued a Hazard Alert in early June warning California workers and employers about new evidence that two glycol ethers may be hazardous.

The substances are known chemically as ethoxyethanol and methoxyethanol. They are in widespread use as industrial solvents. Until now they have been considered so harmless that nearly 25 million pounds are used annually in California as cleaning and thinning agents, and as ingredients in paints, varnishes, wood stains, inks, and epoxies.

The most common trade names for these chemicals are Cellosolve and Methyl Cellosolve. Others include Dowanol EE, Dowanol EM, Polysolve EE, and Polysolve EM. The chemical names themselves may also be used. In addition, one of these chemicals may be in a product but not listed on the label. (Information on a product's ingredients may often be obtained from the employer or the manufacturer by requesting a Material Safety Data Sheet.)

Ten laboratory studies in the United States, Japan, and West Germany have shown that the two glycol ethers caused birth defects and damage to the sperm and testes in several species of animals, including rats and rabbits.)

HESIS has also recommended lowering the levels of the two glycol ethers to which workers may be legally exposed. Cal/OSHA has formed an advisory committee to help develop a new standard. The current Cal/OSHA permissible exposure limit (PEL) is 100 parts per million for ethoxyethanol and 25 ppm for methoxyethanol.

"We're most concerned about workers who are exposed to glycol ethers daily on their jobs," said Dr. Kim Hooper, a genetic toxicologist and Chief of HESIS. "It's much less likely that these chemicals will harm someone who's painting a room in their home or refinishing their furniture."

OSHA MAY STAY CANCER POLICY LISTING REQUIREMENT

The BNA Occupational Safety and Health Reporter has reported that federal OSHA is making final preparations to stay provisions of its cancer policy which require OSHA to issue an annual list of substances which are "candidates" for regulation as carcinogens and a semiannual list of substances it considers top priority for regulation.

The stay was originally proposed by OSHA in January, 1982, and a required comment period was held.

OSHA said it was proposing the stay because it needed time to evaluate the impact of a "candidates list" published by the previous administration in 1980, to study the "underlying criteria" for including substances on these lists, and to assess the impact of publishing a priority list.

The 1980 list named 107 chemicals for intensive study and possible regulation. The American Industrial Health Council formally complained to OSHA that publication of such lists could lead to "unwarranted concerns" about exposure to the chemicals listed.

OSHA MAY PROPOSE RESTRICTIONS ON STATE STANDARDS

At a meeting between federal OSHA officials and representatives of states authorized to run their own OSHA programs, held in Williamsburg, Virginia, in May, OSHA head Thorne Auchter distributed a memo which indicates that OSHA may propose new restrictions on the states' right to adopt health and safety standards more stringent than those of federal OSHA.

Auchter called the memo "only a starting point for discussion and exchange of views" and indicated that he had not yet made up his mind on the subject.

In the meeting, states such as California, Washington, and Michigan pressed for retention of as much flexibility as possible, with the option to make their standards stronger than federal regulations if necessary. California, for example, adopted an ethylene dibromide standard more stringent than the federal regulation in the recent Mediterranean fruit fly infestation.

Some participants in the Williamsburg meeting said that OSHA may propose to revise its regulations to require states to adopt standards identical to federal standards within one month of federal promulgation, and to exclude funding for states which deviate.

Several unions, including the Teamsters, have criticized the proposal. Such a policy, said a Teamsters' statement, sends a message to the states that OSHA wants no state standards that differ from the federal ones, despite the fact that stronger standards are allowed by statute.

-- Compiled from Occupational Health and Safety Letter and other sources.

OSHA SUCCESS WITH INORGANIC ARSENIC STANDARD

Federal OSHA has announced that a new, preliminary risk assessment shows its inorganic arsenic standard to reduce the risk of lung cancer to exposed workers by about 98%.

The agency said it undertook the assessment to determine whether the arsenic standard met the "significant risk" test for OSHA standards set by the U.S. Supreme Court. In its 1980 decision on OSHA's benzene standard, the Court found that prior to issuing a standard, OSHA must show that the health hazard it plans to regulate poses a significant risk and that the standard would substantially reduce that risk. After the benzene decision, the inorganic arsenic standard, also subject to litigation, was remanded to OSHA by a federal court for a risk assessment. The standard has remained in effect during the litigation and risk assessment by permission of the federal court, at OSHA's request.

Three independent risk assessments were conducted for OSHA by various public and private researchers. They showed general agreement that the standard reduces excess deaths from 375-465 per 1000 workers exposed at 500 ug/m³ to 7.7- 10 excess deaths per 1000 exposed at 10 ug/m³ over an average 45-year working lifetime.

NewsWire



Right to Refuse

IBEW WINS ARBITRATION ON PCB'S

Local 1245 of the International Brotherhood of Electrical Workers in the Bay Area recently won an arbitration decision reversing the suspensions of six Pacific Gas and Electric employees for refusing to participate in the cleanup of a spill of polychlorinated biphenyls (PCB's).

Arbitrator Armon Barsamian's decision of April 30, 1982 was hailed by the union as one of the few arbitral decisions in the U.S. dealing with the right of workers to refuse unsafe work involving toxic chemicals. The decision finds that the suspensions were in violation of the IBEW contract, and orders PG&E to pay the six employees for their lost pay and benefits and remove all references to the discipline from their files.

On June 20, 1980, a PG&E capacitor in Sunnyvale, California ruptured, spilling PCB's on the surrounding area. The six grievants, none of whom had been trained in PCB cleanup procedures, refused to obey orders to participate because of their lack of training, PG&E's failure to provide protective equipment and clothing, and its failure to follow established procedures for PCB cleanup. The grievants were suspended for their refusal.

Barsamian's decision noted that PCB's are classified as a suspected human carcinogen by every applicable governmental agency. "In sum," he wrote, "the lack of training and experience of Grievants... the lack of protective clothing and equipment, and the Company's failure to follow [its PCB cleanup rules] ... together created a real and apparent hazard to the health of Grievants, and they ... acted reasonably and in good faith in refusing to work the PCB spill."

IBEW officials noted that PG&E has now improved its PCB training procedures through a slide show program, and now provides protective clothing in PCB spill situations.

-- IBEW Utility Reporter

CALIFORNIA STATE BUILDING HAZARDOUS, SUIT SAYS

A new State of California office building in Sacramento which has been criticized by unions and employees as hazardous is the target of a \$500,000 lawsuit filed by a state department head.

The year-old Gregory Bateson state government building, innovatively designed to make maximum use of solar energy systems, has seen an unusual number of worker complaints, especially about respiratory problems, since its opening. One survey found that 80% of the employees on one floor reported one or more physical symptoms which they believed to be related to the building's environment. The California State Employees' Association, which represents many of the workers in the building, requested a Cal/OSHA investigation, which is now underway. One preliminary Cal/OSHA finding was that incorrectly installed and improperly run ventilation systems were causing inadequate air circulation.

A suit was filed in Sacramento County Superior Court on behalf of Lilia Molina, director of the Office of Rural and Migrant Affairs, and her husband, who both work in the building. It is a class action suit, seeking over \$500,000 in general and punitive damages for the two named plaintiffs and 1200 other workers in the building.

Molina had to leave her job, and has been under a physician's care, since she collapsed in the building on April 16. The suit names the building's contractors as well as building materials manufacturers as defendants. It contends that the defendants negligently exposed employees to toxic fumes and failed to provide an adequate ventilation system. According to the suit, pollutants in the building include formaldehyde, aldehydes, phenols, and other toxic chemicals.

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