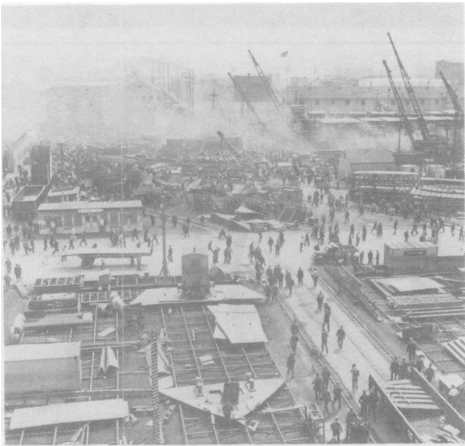


# Labor Occupational Health Program MONITOR



## *In This Issue:*

- GENETIC TESTING IN THE WORKPLACE
- ASBESTOS STANDARD



### On the Cover:

*A U.S. shipyard in 1943. Shipyard workers during World War II were one of the first large occupational groups to be exposed to asbestos. The problems continue, and this year federal OSHA proposed a strict new asbestos regulation. See page 3. (Photo: Job Safety and Health.)*

# Labor Occupational Health Program MONITOR

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## 1984 "Workers' Compensation" Conference in March

**Workers' Compensation: A Conference for Workers and Trade Unionists**, a popular two-day event originally held in early 1983, will be offered again on Friday and Saturday, March 2 and 3, 1984, on the University of California, Berkeley campus.

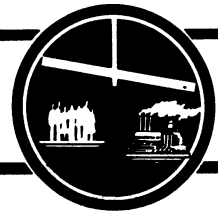
Designed both for those who could not attend the 1983 conference and for those who attended but would like more followup discussion, the 1984 conference is co-sponsored by the Labor Occupational Health Program and the Center for Labor Research and Education, Institute of Industrial Relations.

As at the 1983 conference, there will be both guest speakers and presentations by LOHP and Labor Center staff. The focus will be the present California compensation structure, recent changes in it, strategies for reform, and union involvement with workers' compensation. Once again, there will be both workshops and a union panel discussion.

For more details on exact location, registration fees, etc., please contact Brenda Presley at (415) 642-5507 or Bruce Poyer at (415) 642-0323.



Labor



## Appeals Court Blocks

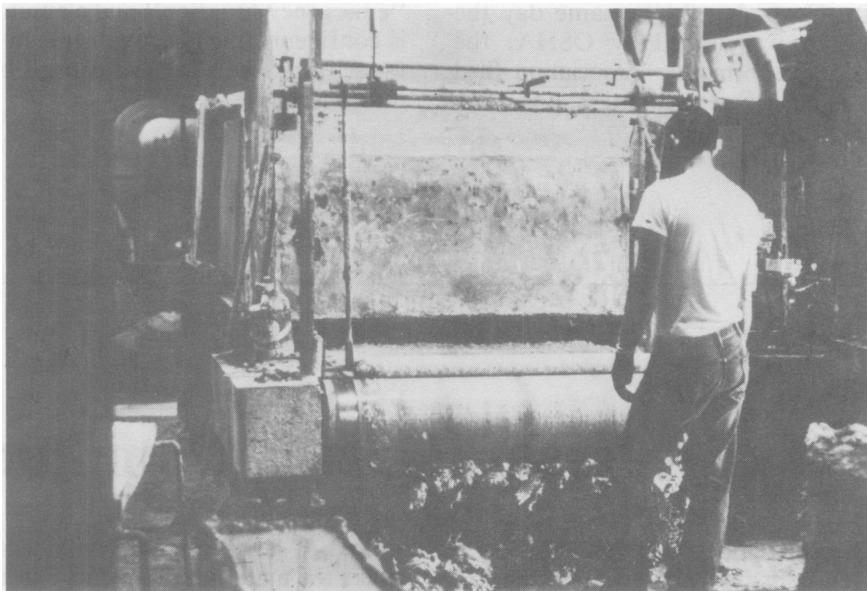
# OSHA Issues New Emergency Asbestos Standard

In early November, 1983, the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) issued an emergency temporary standard to reduce the permissible level of worker exposure to asbestos. But by the end of the month, a U.S. Circuit Court of Appeals had granted a stay of OSHA's order sought by the industry-sponsored Asbestos Information Association.

OSHA released the emergency temporary standard, reducing the legal exposure limit to asbestos from 2 fibers per cubic centimeter to 0.5 fiber per cubic centimeter, on November 2. The new standard also requires employee training. It was the first temporary emergency standard issued by OSHA under the Reagan administration.

In announcing the new standard, Labor Secretary Raymond Donovan said that at many as 375,000 workers in the construction, manufacturing, and shipbuilding industries may be "exposed to a grave danger" if the old permissible exposure level continues. Donovan said that a new OSHA risk assessment predicts "three excess cancer deaths per 1000 workers exposed for one year at the current permissible exposure level." Even short-term asbestos exposure was found extremely hazardous. Donovan said that the new standard would "save many lives."

Another OSHA official, Douglas Clark, estimated that 450 lives would be saved directly because an emergency temporary standard would allow exposure levels to be cut one year faster than the normal standards-setting process. OSHA Director Thorne Auchter had said earlier this year that he planned to issue a new asbestos standard in June, 1984. Issuance of the emergency standard was prompted in part by OSHA's increasing concern about asbestos exposure at work sites where buildings are being demolished or renovated. Recent inspections at these sites have found high asbestos



*Studies show that asbestos workers have a 50% chance of developing lung disease after twenty years on the job. (Photo: LOHP Photo File.)*

levels, and OSHA announced in October a stepped-up inspection program for such sites.

Under the emergency temporary standard procedure, the emergency standard takes effect immediately, and is used as a proposal during the public comment phase of the process leading to a permanent standard. A permanent standard must be issued within six months. The ETS procedure is available only when OSHA finds that a substance presents a "grave danger" to employees.

OSHA justified the issuance of the emergency standard on the basis of a risk assessment, which Clark called "an emerging discipline" that mathematically projects the statistical chances of health problems at different exposure levels. The technique has been criticized by industry as scientifically questionable.

## LABOR REACTION

In the early summer of 1983, the International Association of Machinists

and several other AFL-CIO unions petitioned OSHA for an emergency temporary standard on asbestos. The petition sought a reduction of the permissible exposure limit (p.e.l.) from 2 fibers per cubic centimeter to 0.1 fiber per cubic centimeter. The old standard had not been changed since 1976.

Union reaction to the issuance of the ETS in November centered on two concerns. First, some labor spokespersons doubted that the 0.5 fiber level is sufficient. Also, the ETS was criticized because it is "performance-oriented." It permits wide flexibility in how employers achieve the lower exposure levels. Respirators, protective clothing, and work practice changes are allowable means of compliance. Unions have contended that strict engineering controls are the best solution to the problem, but Donovan expressed doubt that the new standard could survive court tests unless it called for corrective measures which are "clearly feasible" for industry.

*continued on p.4*

## ASBESTOS

*continued from p. 3*

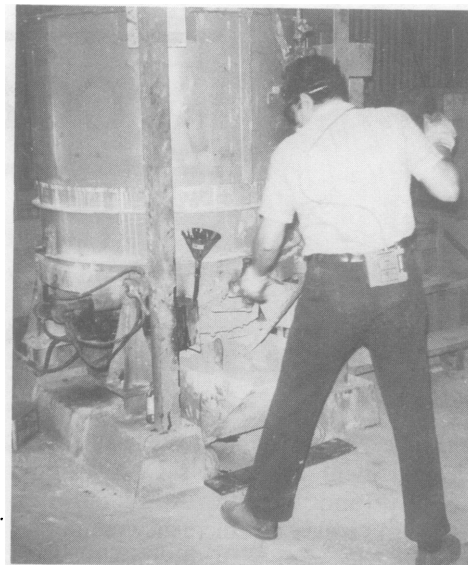
Another labor concern was whether the new standard would be adequately enforced. "The real test is whether they have put in place an enforcement mechanism," said Sheldon Samuels of the AFL-CIO's health and safety unit.

### RESTRAINING ORDER

On November 2, the same day the standard was issued by OSHA, the Asbestos Information Association filed suit against the standard in the U.S.

Court of Appeals for the Fifth Circuit in New Orleans. Bob J. Pigg, Executive Director of this employer group, said that the ETS was "unneeded and unwarranted" and that it represented a "precipitous" action based on "the unfounded conclusion that a health emergency exists" under the old standard.

In late November, the Fifth Circuit Court granted the stay against the standard sought by the employer group, and called for oral arguments in January, 1984. OSHA has sought to accelerate the court's timetable, calling this an "emergency situation" and claiming it is confident "the court will rule in our favor" and the standard can go back into effect.



*Furnace operator wears sampling apparatus for asbestos. (Photo: LOHP Photo File.)*

### AFL-CIO Sues

## OSHA Issues 'Hazard Communication' Standard

On November 22, 1983, federal OSHA issued its long-awaited "hazard communication" (or "right to know") standard. The same day, two lawsuits were filed, one by the AFL-CIO, to force OSHA to improve it.

In issuing the new standard, originally proposed three years ago in another form by the last administration, Assistant Secretary of Labor Thorne Auchter said: "We estimate there may be as many as 575,000 chemical products in American workplaces, with new chemicals being introduced every day. Workers need to know which chemicals are hazardous and how to protect themselves."

Auchter said that the new standard has three components: labels or other signs, material safety data sheets, and worker training. Chemical manufacturers and importers will be required by Nov. 25, 1985 to assess the hazards of chemicals they sell and to provide hazard information by placing warning labels on product containers. They must also provide material safety data sheets by this date to purchasers who are employers in the manufacturing sector (Standard Industrial Classification Code SIC 20-39.) By May 27, 1986, manufacturing employers will be re-

quired to label in-plant containers, to make the material safety data sheets or similar information available to employees, to inform employees of workplace hazards and to train them in protective measures. Employers will be required to develop written hazard communication programs which meet these objectives. The standard names 600 substances which will automatically be considered hazardous, and establishes criteria by which manufacturers should assess the hazards of other substances. One provision of the standard is a "trade secret" protection for manufacturers.

Although the new standard was praised by Auchter as the "most significant regulatory action ever taken by OSHA," a suit was immediately filed in the Third U.S. Court of Appeals in Philadelphia by the AFL-CIO, United Auto Workers, United Steelworkers, and International Chemical Workers. Union criticisms of the standard include the fact that it is limited to the manufacturing sector. Margaret Seminario of the AFL-CIO occupational health unit called this limitation "arbitrary," and pointed out that OSHA is excluding from coverage more than 60 million

workers in construction, retail, communications, transportation, and health care who also may be exposed to toxic workplace chemicals.

Seminario also said that OSHA has "bent over backwards to protect the trade secret claims of manufacturers" without providing a mechanism for workers to contest "specious trade secret claims."

Finally, Seminario said that the new federal standard could pre-empt various state and local right-to-know laws which are more protective. (Both states which operate their own OSHA plans and states which do not have passed right-to-know legislation. In both cases, OSHA has said it would review the state laws to assess their consistency with the new federal regulation. Some municipalities also have right-to-know laws of their own, and the federal regulation may prevail over them.)

Another lawsuit was filed in the Third U.S. Court of Appeals on November 22 by a Ralph Nader group, joined by ten "Cosh" groups (Coalition on Occupational Safety and Health) from throughout the U.S.

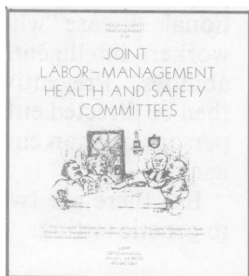


# AROUND LOHP

## Three New LOHP Resource Packets

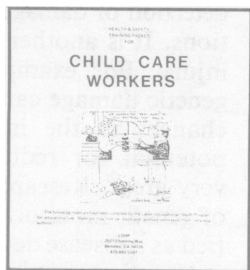
The Labor Occupational Health Program has recently issued three new resource packets: **Joint Labor-Management Health and Safety Committees**, **Child Care Workers**, and **Indoor Air Pollution**.

Like LOHP's other popular resource packets on various health and safety topics, each of the new packets is a compilation of short materials from numerous sources, divided into several subtopics and indexed for easy use.



The 100-page packet on **Joint Labor-Management Health and Safety Committees** was designed to provide assistance in analyzing the controversial issue of joint committees and especially their use in voluntary compliance. Materials are included in four subject areas: federal OSHA initiatives; California initiatives; experiences with joint committees in other states; and guidelines for the establishment of effective committees. The materials represent a variety of views and should offer an understanding of the range of experiences and issues related to the joint committee controversy.

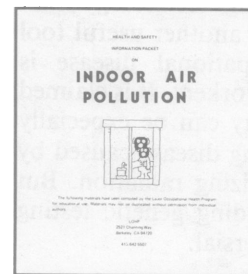
Recently, the federal government has begun to play a substantial role in promoting health and safety committees, especially the joint labor-management committee. The new government emphasis is based on the "voluntary compliance" model, designed to decrease the role of OSHA in enforcing regulations and increase cooperative labor-management efforts to control workplace hazards. Also, two state laws—in Washington and Oregon—now require joint committees in most workplaces. Yet, with all this new interest, key questions remain unanswered, such as whether these committees are effective, whether labor can ensure that it has an equal voice on them, and what minimal standards should be set for committees to function well. The materials in this packet represent various attempts to answer such questions.



Another new packet, **Child Care Workers**, grew out of training and technical assistance programs which LOHP developed jointly with the Child Care Employee Project in

the San Francisco Bay Area. Directed at workers in child care centers, these 63 pages of materials are divided into three subject areas: occupational hazards; stress and working conditions; and rights and resources.

Because child care workers do not deal primarily with chemicals or machinery, many people consider child care a safe and physically easy job. While there is nothing about child care work that is immediately life threatening, hazards do exist. In a 1979 study of San Francisco child care workers, 67% stated that their health was adversely affected by their jobs. Some of the hazards reported were: exposure to diseases ranging from colds to measles to hepatitis; exposure to toxic substances such as art materials, cleaning agents, and pesticides; inadequate lighting; noise; stress; and lifting. All these considerations, and more, are covered in the packet.



The third new packet, **Indoor Air Pollution**, is a 70-page collection of materials designed to provide background information on the issue of indoor pollution and to suggest what others are doing to solve the problem. Section I includes articles which discuss the nature of the problem; Section II deals with ventilation; and Section III covers the regulatory approaches currently underway in California. There is also a bibliography.

LOHP has found that indoor pollution is one of the major concerns of white collar worker groups which it assists. The problem has also received national attention. Workers have reported health symptoms ranging from upper respiratory illnesses to central nervous system problems, headaches, nausea, and cramps. Although many of the complaints come from workers in newer, energy-efficient buildings (the "tight building syndrome"), the problem may be found in renovated and older buildings as well. Often, no specific biological or chemical agent is found in levels exceeding the standards, but workers nevertheless get sick.

In California, several regulatory and legislative bodies are grappling with the issue and a coalition of unions in the Bay Area is pressing for more and faster action. Cal/OSHA has recently appointed a committee to develop a new ventilation standard.

Each of the new packets is available for \$5.00, postage included. Make checks payable to: The Regents of U.C. Order from: LOHP, 2521 Channing Way, Berkeley, CA 94720.

# Genetic Testing in the Workplace

by Lula Simmons

LOHP Labor Intern

According to the U.S. Bureau of Labor Statistics, over 850,000 workdays were lost in 1981 due to occupational illness. The illnesses included everything from minor skin rashes to cancer. Occupational illness causes impaired health and shortened lifespans. The problem is immense.

Various steps have been taken by unions, industry, and the government to combat occupational disease, including environmental monitoring, engineering controls, and the use of personal protective equipment.

A new, emerging technology that many hope will be another useful tool in reducing occupational disease is genetic testing of workers. It is claimed that this technology can be especially valuable in reducing disease caused by chemicals and ionizing radiation. But the issues surrounding genetic testing are highly controversial.

## TECHNIQUES

There are two types of techniques in genetic testing: one is genetic screening and the other is genetic monitoring.

**Genetic screening** examines individuals for certain inherited traits using body fluids, usually blood. It is a one-time testing procedure to determine whether a person has a particular trait. Some scientists feel that certain genetic traits may predispose one to adverse health effects in the presence of particular chemicals. Some data do exist on a few traits, implicating them in susceptibility differences to certain chemicals. However, with the current state of knowledge, it is not possible accurately to define who is a "susceptible" person.

For example, some people have a deficiency in an enzyme called glucose-6-phosphate dehydrogenase (G-6-PD). The deficiency itself is harmless. However, if people who have this deficiency take certain drugs for malaria, they may suffer from acute anemia due to the destruction of their red blood cells. Some scientists have even theorized that people with G-6-PD deficiency may also be at increased risk of disease in workplaces where they are exposed to chem-

icals that are similar to antimalarial drugs.

The second technique, **genetic monitoring**, examines individuals periodically for environmentally induced changes in the genetic material of certain cells in their bodies. In genetic monitoring, the damage may indicate exposure to a hazardous agent such as a carcinogenic chemical. It may also indicate the possibility that the exposed group will be at an increased risk of developing disease, most likely cancer. Genetic monitoring focuses on risks for the exposed group as a whole. There is no evidence to suggest that it could be used to identify which *individuals* in the group are at increased risk.

The underlying assumption in both techniques is that genetic traits or genetic changes may predispose the individual to occupational disease.

## COMPANIES INTERESTED

In 1981, Congressman Albert Gore, Jr. (D.-Tennessee), Chairman of the House Committee on Science and Technology's Subcommittee on Investigations and Oversight, commissioned the Office of Technology Assessment (OTA) to survey the Fortune 500 companies and 42 major utilities to find out how many of the companies were doing genetic testing on their employees. The preliminary results of this survey were reported in June, 1982: 65.2% of the organizations responded to the survey; 1.6% reported that they were currently using genetic tests; 4.6% reported that they had used the tests sometime in the past 12 years; and 16.1% reported that they would or may use genetic tests in the future.

DuPont and Dow Chemical have been two leading proponents of genetic screening. They claim to have tested thousands of workers over the past decade. The *New York Times* reported in 1981 that DuPont regularly tested Blacks in pre-employment genetic tests for sickle cell anemia because some medical officials in the company believe that workplace chemicals that cause the destruction of red blood cells might cause those with sickle cell traits to be at increased risk of disease.

## PROS AND CONS

Genetic testing is a science in its embryonic stages. However, several com-

panies, according to the OTA report, have admitted their interest in using it in the future. Thus, it is inevitable that there will be complex legal, social, and ethical considerations to deal with. It will be on the agenda to assess the potential benefits, risks, and impacts of this technology.

Genetic testing—both screening and monitoring—may have the potential to play a role in the prevention of occupational disease when companies and workers intelligently use its predictive abilities. Preventive measures could then be directed either at "susceptible" persons or at an environmental stressor itself.

But there are two major drawbacks to genetic testing:

(1) According to the OTA report, the ability of these techniques to identify people who are predisposed to occupational illness has not been fully demonstrated. No two people are alike; there is no typical individual. We all differ by age, sex, environment, lifestyle, nutrition, work, and personal habits. No two people, no matter what their genetic makeup may be, will have an identical reaction to the same level of exposure.

(2) Secondly, there is much concern, primarily from labor, that the use of genetic testing could result in workers being unfairly excluded from jobs and also that it may cause attention to be directed away from efforts to reduce workplace hazards and foster a "blame the victim" attitude.

At the present state of the technology, the more beneficial of the two genetic techniques would seem to be genetic monitoring. It does promise to give early warning of toxicity and early detection of damaged, high risk populations. It is another means of detecting injury. For example, in cases where genetic damage can be associated with changes in the immune system, the potential for reduction of disease is very great. Research and development of genetic monitoring seems to be justified as a disease detection tool.

Genetic screening, however, may be a different matter. At hearings of his Subcommittee last July, Congressman Gore said of genetic testing:

**"It does not require a great deal of imagination to envision the impacts of such a practice. If we learn to predict which individuals are more likely to be harmed by exposure to certain substances, it has potential to serve as a marvelous tool to protect the health of workers, or as a terrible vehicle for invidious discrimination. It is precisely because of this potential, and the obvious impacts it could have on our existing statutes which are meant to protect a worker's health, as well as to eliminate job discrimination, that the Congress should be informed early on in this controversy, rather than waiting until a crisis is reached."**

Title VII of the Civil Rights Act of 1964 guarantees every American an equal right to employment opportunities. The Occupational Safety and Health Act of 1970 guarantees every American a safe and healthful workplace. Genetic testing is not a correct response to these statutes because, with it, the workplace would still be neither safe nor equally accessible to one segment of the population, those individuals with unusual genetic characteristics.

Advocates of genetic testing believe that it would allow:

- Additional preventive measures to be taken by the company or the workers themselves; and
- A reduction in costs associated with occupational disease for employers, employees, and society (medical costs, insurance, legal expenses, time lost from work, disability and unemployment benefits.)

On the other hand, those who are skeptical about genetic testing have several questions that they feel should be answered as the technology develops:

- Are the tests accurate enough to predict reliably an association between genetic makeup and disease?
- Since most of the traits sought in screening are found disproportionately among some racial and ethnic groups, could the use of the tests result in discrimination on the basis of race, sex, or national origin?

- What effect will the tests have on the employer's responsibility to maintain a safe workplace?
- What effect will they have on reducing the level of hazardous substances in the workplace?
- If the tests are effective, to what degree should society protect those from high-risk groups? At what costs? And who should bear the costs?

## AFL-CIO REACTS

Sheldon Samuels, Director of Health, Safety, and the Environment for the national AFL-CIO, issued a report on genetic testing to the AFL-CIO's Executive Council in June, 1983. Samuels' report makes another important point:

**"Acceptable patient-physician relations—essential to the proper control of genetic testing—cannot usually be developed and maintained in a setting in which confidentiality and trust between the doctor and the worker is secondary to the interests of the corporation."**

But the report does offer some solutions:

**"The labor movement is seeking passage of broad high-risk population legislation that would create the requisite conditions under which genetic testing could take place. Special provisions to meet the special problems of such genetic testing should have the following goals:**

- to protect confidential counseling;
- to ensure no reduction in programs of prevention focused on controlling conditions in the workplace;
- to develop intervention programs that enhance the ability of the worker and his or her family to manage lifetime surveillance, intervention, and treatment;
- to support community-based programs focused on the special problems of past and present exposed workers and their families; and

- to promote professional education and research programs that upgrade the accuracy and meaning of genetic tests and their interpretation."

The AFL-CIO report insists that "this program must be *legislated*." According to the report's perspective, "neither the scientist nor the agent of management can be depended upon to work with labor outside the framework of law."

## CONCLUSION

Although everyone may agree that seeking a completely safe workplace is desirable, screening out those who are hypersusceptible to occupational disease is a discriminatory practice that is unacceptable. Rather than engage in genetic screening, employers should concentrate on the more socially and environmentally desirable alternative—reducing exposure to toxic chemicals in the workplace. Toxic exposure should be reduced to tolerable levels for all by designing and utilizing protective equipment, instituting safe handling procedures and/or employee rotation systems. If employers are permitted to screen out hypersusceptible workers, they will be less inclined to make the workplace safe for everyone, the goal mandated by the Occupational Safety and Health Act and Title VII of the Civil Rights Act.

*See the next page for a related story on LOHP's recent Genetic Testing Conference.*



*"It doesn't look to me like it could do any chromosomal damage." (UAW Occupational Health and Safety Newsletter.)*

# LOHP Genetic Testing Conference Airs the Issues

A diverse audience of health professionals, Northern California union leaders and members, students, media representatives, and others attended a two-day conference on **Pre-Employment Testing, Genetic Screening, and Medical Monitoring in the Workplace**, November 8 and 9, 1983, at the Hyatt Regency Hotel in Oakland.

Co-sponsored by LOHP and Extended Programs in Medical Education, University of California at San Francisco, the conference emphasized the legal and ethical questions surrounding the new technology of genetic testing. (See accompanying article.)

One guest speaker, Sheldon Samuels, Director of Health, Safety, and the Environment for the national AFL-CIO, spoke about the controls which labor hopes to place on genetic testing through legislation. Samuels said that genetic screening will work only if "confidentiality, access to records for research and treatment, compensation and physician independence are guaranteed." Such screening, he said, should be "done voluntarily in a neutral place with followup tests and counseling."

Marc Lappe, Adjunct Associate Professor in the U.C. Berkeley School of Public Health, made similar recommendations. Lappe pointed out that, at

present, employers release medical information from the tests to workers at the company's discretion because "the tests are paid for by the company and considered proprietary." Companies should disclose the information and explain to workers how it will be used, Lappe said.

Other speakers discussed the potential for genetic screening to lead to employment discrimination. One example cited was the blood test given by DuPont Co. to all Black job applicants to determine whether they carry a genetic trait for sickle cell anemia. Although the trait is usually considered harmless, its presence could be used to discriminate on the basis of race, some suggested. One theme emphasized by several speakers is that genetic testing invites potential employment discrimination because it deals with statistical probabilities rather than individuals.

*Materials distributed at the November conference on Genetic Testing are available from LOHP for \$20.00, first-class postage included. Make checks payable to: The Regents of U.C. Mail orders to: 2521 Channing Way, Berkeley, CA 94720.*

## "Hard Hat Mack"

### Anti-OSHA Video Game Protested

A video game that casts OSHA as an enemy of American workers has been removed from the shelves of one California store after a protest by a State Senator.

The Santa Clara Emporium-Capwell store told Senator Dan McCorquodale (D.-San Jose) that it would no longer sell the game "Hard Hat Mack." The game, by Electron Arts of San Mateo, California, portrays OSHA and its inspectors as "the primary impediment to Mack's livelihood," according to Russell B. Swanson, Regional Administrator of the U.S. Department of Labor, who publicly supported McCorquodale.

Mack, the hero of the game, must continually battle OSHA inspectors.

McCorquodale's complaint to the store said that "Games that foster misleading sentiments harmful to workers wrapped up in a 'working class hero' package have no place in our children's video library."

—California AFL-CIO News

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