

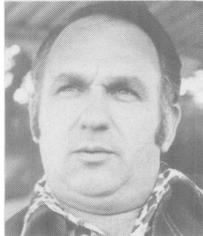
# MONITOR

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## MACHINIST INVENTS ASBESTOS DUST DEVICE

*Editor's Note: Nelson O'Connor, a member of IAM Local 1101, has worked nearly 20 years as an auto mechanic for Cadillac, doing his share of brake jobs and sustaining his share of asbestos brake dust exposure. Three years ago, he invented a two-chambered device to eliminate the bothersome dust and prevent workers' direct contact with asbestos. The device's larger bag clamps tightly to the backing plate. Air pressure pushed through a nozzle at one end dislodges the dust and forces it into a smaller pouch. Inside, the dust is collected in a disposable paper bag similar to a vacuum cleaner bag.*



**Q. How did you become interested in the problem of brake dust?**

For years the problem was mainly brake dust in the air and all over everything it came in contact with, including customers' cars. Everybody blows out the dust with air hoses, and the dust gets all over the shop, on the cars, on everything; it gags you. Not only have we been putting up with a big mess in the shops for years, but with the health hazard, I decided it was time we tried to stop this problem. It was during the last few years that we got any information about diseases people are coming down with as a result of exposure. We got information where mechanics have died from say, lung cancer. Maybe they smoked. But could have been it was from the asbestos dust. Myself, I probably have brake dust in my lungs; I've been doing it for quite awhile.

**Q. What methods did you use to resolve the dust problem?**

We used to try to dust the brakes off with a brush. We tried to vacuum it out. We even poured water on it. That's a mess. If you blow that out with air, it's all over your coveralls and all over the side of the car. The only way to dislodge this brake dust is air pressure. And now they have laws to protect workers from noise and from getting

air under their skin, so that you can only use 30-pound nozzles.

I came up with a single-bag device that just fits over the backing plate and used a commercial vacuum cleaner—there are many brands—to suck up dust while you blow it (with an air nozzle). Trouble is, the dust plugs the vacuum cleaner and you reduce the vacuum cleaner's efficiency by 50 or 60 percent after doing only one wheel. That's not too practical.

I gave that up and decided to go to a self-contained two-bag device that uses disposable paper bags similar to vacuum cleaner bags to collect the dust.

**Q. What do you call your device and how does it work?**

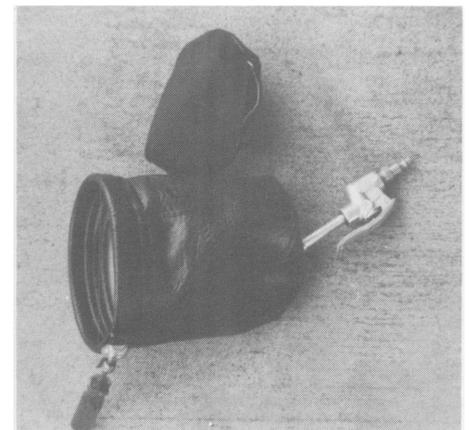
The Kleen Air Brake Dust Collector. An air hose attached to a nozzle inside the large naugahyde bag clamped tightly to the backing plate dislodges the dust and forces it through a one-and-one-half inch hole in the bottom side of the bag into a second, smaller bag.



*Two-bag device uses disposable paper bags.*

Inside this second bag, the dust is collected in a disposable paper bag. The principle is similar to holding a full cup of coffee under a water faucet and letting the water run until the liquid inside the cup clears. With this bag device it may take a minute to dislodge the brake dust where it might take say fifteen seconds in the open. But, that minute saves your life really. And, you can probably do six or eight wheels using one paper bag.

It has to be airtight. When you take the drum off a car all you have left on there is the axle, the backing plate, the shoes, and the brake dust. So the bag is the diameter of the drum and you put it over the drum, clamping it tightly. It has to be airtight because it builds up pressure, and you have an air hose on the end of the bag with a nozzle inside that you can manipulate.



*Scaled down replica of Kleen Air Brake Dust Collector.*

**Q. What are some of the problems you've encountered while inventing the dust collector?**

Getting the naugahyde bags made right and, then, getting the paper bags. And it's difficult for me to get it on the market. I finally got seamstresses to do the naugahyde bags; they're perfectionists.

*Continued on next page*

Then we had a hang-up about the paper bags. At first I used vacuum cleaner bags from Payless and a wholesaler in Palo Alto. I never could come up with one that really fit! The air pressure inside the bags caused the paper bags to tear. And if you didn't change the bag often enough, it tore and then you had a mess. The bag has to be porous enough to let the air through, but not the dust. We contacted a company in Chicago that makes bags and sent their engineers dust samples. The bags they sent didn't fit. Then they sent some more which allowed the dust to go right through. It was depressing for me.

*Q. What are the major limitations of your device?*

The device is only used for maintaining drum brakes on older cars. New cars are mostly coming out with disc brakes. Disc brakes are in the open so the dust comes off while you're driving.

There's certain cars you can't use it on. Some backing plates are made so you cannot clamp the bag on them. Another big problem is that manufacturers don't give out or publish specifications on backing plate diameters. Backing plates are not even machined to be exact. What I've done is go to wrecking yards and measure backing plates to determine what diameter clamps we need to manufacture. A lot of them are interchangeable. I made rubber adaptor



*Adaptor ring and backing plate with brake shoes.*

rings with a little lip on them to slide over the backing plate. You clamp the bag around that. That way you don't have to have a bag for every size backing plate.

*Q. How long does the Dust Collector last?*

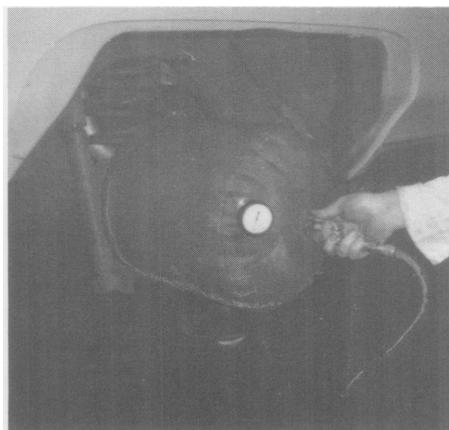
The one I've been using is three years old, and it still works good. It's starting to get torn around the edges, but it all depends on its use, I would say. And

it's naugahyde. You can't make it out of metal because metal-to-metal won't make a seal. It's got to be a soft material to seal around the backing plate with a clamp.

*Q. Who uses the device and how easy is it to use?*

Myself and a few other guys in my shop used this for about three years. The guy about two stalls from me does a lot of brake work, and it's a relief to see him use the device, not only because it's something I've done, but it keeps the shop cleaner and just might save a life.

I tried to make the device as simple as possible to encourage its use. The more complicated a device is, the less it will be used. The device is self-contained and portable—you can have it hanging on the wall, put it on, use it, and put it back. It takes a few minutes.



*Using device on left rear wheel.*

*Q. Would others use it?*

Sure. I would say 90% of auto mechanics do this kind of brake cleaning without any sort of protection. Everybody in my shop does it, except me and another guy who wants to use this device. There's a tremendous amount of interest. Last June I took a week's vacation. I went around to every major automobile dealer in the San Jose area. They wanted it, the service managers were very interested. So we have plenty of interest in it because it is a problem. Everybody complains about it. Some places don't even let them blow the brake dust. And that's a real mess.

*Q. What efforts have you made to get this Dust Collector produced and marketed?*

There's been a tremendous amount of interest. About two years ago, I talked to the Union about promoting the device. They're very interested. Last year, I talked to some brake people at a con-

vention in Anaheim. They make brake lathes and all the drum-turning devices. The Vice-President was there and very interested. I was willing to sell my patent rights because I felt a manufacturer could handle this better. I wrote them a letter but I never heard from them. As I mentioned before, the local San Jose dealers are eager for the device; if we can solve the paper bag problem we will get into production.

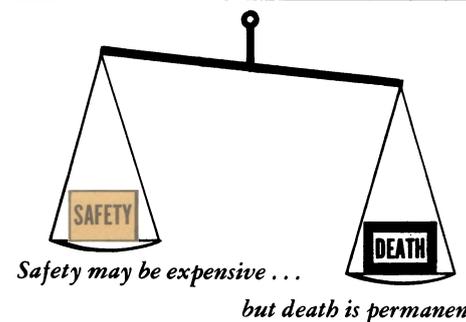
I contacted the San Jose OSHA office. They wanted me, when we go into production, to send brochures to all the district offices in California. Not that they're pushing the device, but if an inspector goes to a shop on a complaint, he can at least indicate that this protective device is available and where to get it. We also talked about the possibility of OSHA certifying the Dust Collector even though the air nozzle is greater than 30 pounds. Because the pressured air is enclosed by the bag, the noise hazards would be diminished and the possibility of the air getting under workers' skin eliminated.

If we can solve the problem of the paper bags, we are ready to go into production. Everything else is set—the naugahyde bags and the adaptor rings. I talked with some business people about marketing and advertising. We figured about \$125.00 for the complete set which would include the two naugahyde bags and some adaptor rings.

*Q. Is the device effective?*

I'd say we get over 90% of the dust. It isn't like if you take an air hose and blow that dust off. But heck, if we get 90%, you're eliminating quite a bit. But I don't want to say it does something it doesn't. I don't like that. Once we get these bags right, we're going to run it through a testing laboratory to determine what the pressures are inside, how much leakage you do get, and get it certified. Then we'll publish a brochure that says what it does.

*For further information, write:  
Nelson O'Connor, 285 Richfield Drive,  
San Jose, Calif. 95129  
(408) 247-7651*



## LEAD POISONING IN PRESTOLITE BATTERY PLANT

by SCOTT McALLISTER\* and SIDNEY WEINSTEIN

At least 80 Prestolite workers have been diagnosed with lead contamination since the company opened its Visalia battery plant six years ago. Lead poisoning has long been known to cause irritability, tiredness, stomach cramps, and severe nerve, brain, blood (anemia), and kidney damage. By appealing citations and requesting variances, Prestolite has delayed complying with Cal/OSHA lead standards for more than 2 years. It was finally given an ultimatum in January, 1976 to comply by August 1, 1976 or be shut down. In April, 1976 the company still hadn't made significant structural changes.

\*—Scott McAllister is an independent health activist in the San Francisco Bay Area.

Prestolite's latest appeal (to lower the \$40,000 in fines assessed in January, 1976) may again stall enforcement. Until the appeal concludes, Cal/OSHA cannot shut down the plant or take other action. Meanwhile the physician retained by the company is giving workers potentially toxic drugs to keep their blood lead levels down.

### Our grandfathers died fighting for better conditions . . .

In April, 1974 a Division of Industrial Safety (DIS) inspection of Prestolite's Visalia plant found airborne lead levels far exceeded legal limits, and workers' blood levels were *dangerously* high. Serious citations were issued and the company fined \$15,000. A second DIS inspection in December, 1974

found airborne lead levels still high—13 times the allowable limit in some work areas. A third inspection in No-

*Continued on back page*

In June, 1969 Tommy D. Miller started work at Prestolite's now-closed Oakland battery plant. On September 12, 1971 he died—of acute and chronic lead poisoning. When he began at Prestolite, Tommy's blood levels were normal. Soon, he experienced symptoms of lead poisoning—headaches, vomiting, severe stomach cramps, weight loss. His blood lead levels rose rapidly. Even after he quit the plant, Tommy's blood stayed abnormal (some physicians believe long exposure to lead leaves the blood lead count permanently high). Tommy received \$3,496.08 in Workers' Compensation when he quit work. When he died, his young daughter received an additional \$2,700, less legal and medical fees.

DATE	EVENT	RESULT/CONDITIONS
April 1974	Self-initiated OHS inspection (triggered by large numbers of Workers' Compensation doctors' reports received by the Division of Labor Statistics and Research).	<b>Found:</b> (1) Airborne lead levels excessive (2) workers' blood levels dangerously high Prestolite issued civil penalties, with fines assessed at \$15,000.
June 1974	Temporary variance granted to Prestolite.	Required that Prestolite: (1) pay for strict medical surveillance program (2) plan permanent engineering controls as solution—in meantime issue acceptable respirators (3) install immediate ventilation controls including temporary ducts (4) set up temporary air-monitoring program
December 1974	2nd OHS inspection.	<b>Found:</b> lead levels still excessive—up to 13 times standard Plant termed "out of control"
February 1975	DIS filed for Temporary Restraining Order with Tulare County Superior Court, to shut down 11 operations, and began injunction proceedings.	Compromise granted by Judge Bradley shut down 5 of the most offensive machines.
June 1975	Prestolite persuaded Tulare County Superior Court that problem with machines had been corrected.	Compromise restraining order lifted. Agreement stipulated Prestolite must: (1) retain services of a consultant industrial hygienist (2) hire licensed mechanical engineer to improve ventilation system (3) continue medical monitoring program
	Prestolite appealed civil penalties and \$15,000 in fines (assessed in June 1974).	Company operated unimpeded while awaiting a court decision (State law prohibits Cal/OSHA from taking action so long as an appeal is active).
September 1975	Tulare County Superior Court <b>denied</b> Prestolite's appeal.	\$8,600 in penalties affirmed (of the \$15,000).
November 1975	3rd OSH inspection.	<b>Found:</b> airborne lead levels still 6 times greater than the standard. Prestolite cited for failure to abate the lead problem, with \$40,000 in fines assessed.
January 1976	Prestolite's request for variance on latest citation <b>denied</b> .	Temporary variance issued on the condition that plant be cleaned up by August 1, 1976.
April 1976	Surprise inspection by DIS official Mike Schneider.	<b>Found:</b> no substantive changes had yet been made in the required ventilation system.
June 1976	Hearing on 27 allegations that Prestolite is not satisfying the terms of the variance.	Plant is operating unimpeded.
May-June 1976	Prestolite appealing \$40,000 in fines (assessed in January 1976)	

# Hazards of Logging and Sawmill Operations

By MORRIS DAVIS

*Editor's Note: Shortly after passage of the Occupational Safety and Health Act of 1970, the Department of Labor (OSHA) launched the Target Industry Program. Its purpose was to reduce hazards in five industries with especially high incidences of job-related injuries—roofing and sheet metal, meat and meat products, mobile homes and transportation equipment, longshoring, and lumber and wood products.*

During 1974, the illness and injury frequency rate for every 100 workers in lumber and wood products was 22.2 percent. This industry, the largest of the five "targeted," far exceeded the national average of 14.6 percent for all manufacturing industries.

The lumber and wood products industry includes logging camps and sawmills, veneer plywood, prefabricated wood buildings and container manufacturers, and wood treating and shaping. Most of the industries' injuries occur in logging and sawmill operations. See chart for 1973 and 1974 State of California statistics.

## Logging Hazards

The general logging industry includes all logging camps and logging contractors engaged in cutting timber and producing logs, bolts, crotches, burls, stumps, pulpwood, poles, posts, hewn ties, mine timbers, frost-cut fuel wood, wood for chemical distillation, shuttles, and similar blocks or blanks.

Once the logs are felled, several methods are employed to move them from the falling area to a landing yard or yard where they can be loaded onto a truck or rail car for transporting to a mill. The actual loading onto trucks or rail cars is often made difficult by the conditions under which the loading must be done, in some instances on a hillside above or below the road. The problems are further intensified by the forest products' physical form—bolts, logs of various lengths, or entire tree lengths. The types of hazards faced by logging workers can be generally classified as obvious, hidden and questionable.

### Obvious Hazards

**FALLING TIMBER.** Almost all severe and fatal logging accidents occur due to sliding, rolling, or falling timber during felling, skidding, and loading operations. Accidents are most likely to occur when a tree is toppled and when hanging trees are pulled down.

## California Injuries and Fatalities—Lumber and Wood Products Industry

	1973		1974	
	Disabling Injuries	Fatalities	Disabling Injuries	Fatalities
Logging Operations . . . . .	1,046	15	1,015	13
Sawmill Operations . . . . .	1,795	1	1,666	4
Other Operations (Lumber and Wood) . . . . .	2,589	3	2,513	4
<b>TOTAL NUMBER</b>	<b>5,430</b>	<b>19</b>	<b>5,194</b>	<b>21</b>

**FALLS.** Falls may account for 20–30 percent of all logging accidents. Working on steep terrain or on slippery surfaces after rain, snow, or frost is particularly dangerous.

**CUTS.** In manual logging, the axe is usually the most dangerous tool and may cause another 20 percent of all logging accidents, especially during branching. Wounds are usually open, primarily affecting the lower limbs. In mechanized logging, the power chain saw is the most dangerous tool—especially when used for branching. The most dangerous saw part is the moving chain; however, a large number of saw-caused accidents are due to the saw's "kicking back" when it encounters obstacles.

### Hidden Hazards

**VIBRATION AND NOISE.** Portable forestry machines such as power chain saws and earth augers, and mobile machines such as skidders may be the source of dangerous levels of noise and vibration. Noise levels emitted by power chain saws exceed 85 dB. Although the federal standard is 90 dB, 85 dB is well-recognized as a much safer limit. At exposures to 90 dB, one in five persons will suffer hearing damage. Evidence of the lumber industry's noise problems is indicated by results of hearing tests conducted at the 1973 International Woodworkers of America convention. Nearly 87 percent of the 75 members tested had at least partial hearing losses. Of these, approximately half had permanent ear damage.

Power chain operators often suffer from "white finger" or "white hand," a condition resulting from vibration-caused spastic constrictions of blood vessels in the hands. This condition may be accompanied by pain or numbness in the wrist, elbow, and shoulder.

In certain countries limits are set on how long workers may operate a power chain saw during each shift. In Czecho-

slovakia, workers can operate chain saws a maximum of two hours per work shift, for only 20 minutes at a time. They must have an interval of at least 10 minutes between each 20 minute operating period. In Japan, workers operate chain saws for no more than a total of 2 hours during a shift.

Mobile machine operators are also exposed to low-frequency vibration through the driving seat. Long-term exposure can seriously affect the spine and digestive system. Vibration-damping seats are one remedy for this problem. Even with such seats, exposure should be limited.



Vibration from power-chain saws can cause "white finger."

### Questionable Hazards

**WOOD DUST.** Wood dust results from a defiberization, pulverization, or any mechanical cutting or abrasion process performed on wood. In the past, wood dust from most North American softwood trees was thought to be only a respiratory irritant, aggravating existing respiratory conditions such as asthma and bronchitis. However, a recent Washington State University study conducted by Samuel Milham, Jr., M.D., which examined the mortality records of carpenters and joiners, found a higher incidence of leukemia (blood cancer) in lumber and sawmill workers, millwrights, millmen, and cabinet workers than expected for the general population.

## Sawmill Hazards

Before finished wood products can be produced, the wood must go through the following processes: preservation and treatment; man-made panel production; machine working; finished goods make-up; surface finishing—painting, varnishing, veneering, etc. All of these processes can be hazardous.

Although industrial trucks and other mechanical handling equipment are used extensively, many sawmill operations are still performed manually. More workers are injured while manually lifting, pushing, or carrying lumber than in other sawmill activities. Statistics show that the majority of sawmill accidents occur in the log storage area and are caused by workers tripping and falling or logs rolling during handling operations. The second most frequent cause of accidents and injuries is contact with wood-working machines, moving machinery parts, and transmission components.

### Injuries Due to Obvious Hazards

The most common sawmill injuries are: bruises; strains and sprains; cuts; amputations; and eye injuries. The workers most often affected by these injuries are those who handle the lumber—lumber pilers, “green chain pullers” (dippers), shipping laborers, and headsaw off-bearers.

**BRUISES** occur frequently in yard operations and at the head saw and edger from lumber dropping on the feet and toes, falling from piles, or being “kicked back.”

**STRAINS AND SPRAINS** are usually caused by workers moving heavy objects without adequate help (strained backs) or by falls (sprained ankles). Strains and sprains occur most frequently in the yard, log ponds, and dry kilns, but are common wherever workers pull, push, or maneuver large pieces of lumber.

**CUTS**, mainly of the fingers, hands, and feet, usually occur around powered equipment in planing mills. Injuries often result from inadequately guarded machine parts and machine-thrown lumber striking workers. Punctures of the fingers and hands can be caused by rubbing against rough or splintered lumber. In addition, workers sustain fractures of the fingers, toes, feet, and ribs, including severe fractures of the chest and skull.

**AMPUTATIONS AND CRUSHED LIMBS**, especially of the fingers, are common to machine operators. Workers have had their fingers and hands



*Roll-Over Protective Structures can prevent serious injury or death.*

crushed while attempting to manually guide lumber through conveyor belts and rolls, and by moving machinery parts during maintenance operations.

**EYE INJURIES** are frequent in sawing and maintenance operations where flying sawdust and metal particles are present. These particles can cause a painful disorder called puncture keratitis (corneal inflammation), resulting in sensitivity to light and blurred vision. Another rare, but serious eye injury is infection caused by sawdust embedded in the eye—this condition often results in eyeball removal (enucleation).

### Hidden Hazards

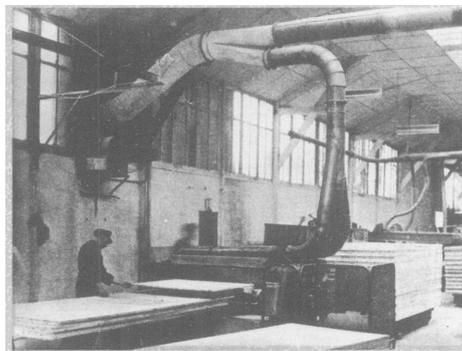
**CHEMICAL** treatments are widely employed in sawmill operations to prevent molds and insects from attacking the wood. The wood is either immersed in pesticide oils, metal salts, or organic compounds, or directly injected with these substances. Many of the chemicals used are highly toxic, possibly producing severe skin burns, dermatitis, mucous membrane sores, intoxication, and allergic reactions. Some have caused cancer in laboratory animals. Although laboratory evidence is not necessarily conclusive for humans, additional reports on substances such as arsenic indicate exposed workers develop more cancers than expected for the general population of the same age group. The hazard is particularly serious for chemicals such as creosote, coal, tar, pentachlorophenol, chromate compounds, and arsenate compounds, when used in large quantities or combinations.

**INORGANIC ARSENIC** (arsenate) compounds have been linked to cancer. In 1974, Dow and Allied Chemical companies both submitted reports to OSHA citing new evidence that exposure to arsenic trioxide dust causes higher than expected incidences of lung and lymph system cancers. Disease of this system can spread to the entire

body via the lymph nodes and ducts. Presumably sawmill workers are at risk since arsenic trioxide is a major ingredient of some wood-preserving pesticides. NIOSH's recommended standard for occupational exposure to inorganic arsenic dust is 0.05 milligrams of arsenic per cubic meter of air ( $\text{mg}/\text{m}^3$ ), determined as a time-weighted average (TWA) for up to 10-hour workdays in a 40-hour workweek. However, NIOSH has recommended that for a cancer-causing substance, “present principles suggest that no exposure limit can be recommended as safe.”

### PRESERVATIVES AND GLUES.

Contact dermatitis is a particular danger of dipping and gluing operations. To guard against fungus staining, green lumber is dipped into compounds usually containing as active ingredients sodium or potassium pentachlorophenate or organic mercury compounds, such as ethyl mercury phosphate. These substances can enter the body through the skin. The dipping compounds often get under the gloves of workers (“green chain pullers”) handling the dipped lumber. Besides causing chronic dermatitis, the pentachlorophenates can also cause convulsions and collapse, and organic mercury can cause severe brain damage, tremors, blindness, even death. Glues containing synthetic resins are particularly troublesome. Some workers become so sensitive to the formaldehyde in phenol and urea formaldehyde glues, for example, that they must avoid *all* contact with the substance.



*An exhaust hood aids in preventing dust build-up.*

**DUST EXPLOSIONS.** Combustible solid materials such as wood dust can cause explosions if sufficient concentrations become suspended in the air near an ignition source. Flames from such explosions spread in all directions consuming the combustible material. Multiple “secondary” explosions can occur when pressure waves from the in-

*Continued on back page*

## RECENT EVENTS

### AFL-CIO Sets Platform Proposals

Washington, D.C.—The AFL-CIO has released their Platform Proposals that will be presented to the Democratic and Republican National Conventions of 1976.

They call for the removal of “the grim and persistent shadow of death over America’s workplaces” citing the 100,000 plus worker deaths annually in addition to the new and deadly toxic substances that threaten the lives and health of millions of workers.

In their Occupational Safety and Health proposals they state “workers must not be condemned to suffering crippling illness, or slow painful deaths from insidious occupational hazards because the Executive Branch lacks the will or the concern to enforce the law.”

The following actions were proposed:

1. A sharp increase in financial support for OSHA calling for 2,500 federal inspectors and industrial hygienists by FY 1977 and increasing to 3,000 by FY 1978 with additional support personnel for standards development, statistics, education and training.

2. Strengthen the OSHA law:

a. providing for full federal preemption of both promulgation and enforcement of occupational safety and health standards in all states. Programs outside these two areas would be carried out by means of plans approved by the OSHA Administration under a federal grant-in-aid program.

b. Extending coverage to all workers, including those employed by federal, state and local governments.

c. Enactment of a comprehensive mine safety law covering all miners presently under the Federal Coal Mine Safety and Metal and Non-Metallic Safety Acts, transferring responsibility from the Department of the Interior to a separate division within the Department of Labor. Miners should be provided the same rights and protections as those covered by the OSHA Act.

d. Transferring regulation of occupational safety and health under the Railway Safety Act administered by the Department of Transportation to the Department of Labor.

e. Transferring the National Institute for Occupational Safety and Health in the Department of Health, Education and Welfare to the Department of Labor.

f. Empowering OSHA compliance officers to issue on-the-spot orders prohibiting the presence of workers in areas where there are imminent danger situations.

g. Permitting employee representatives and other employees to accompany an OSHA inspector during a workplace inspection without loss of time or pay.

h. Allowing employees or their representatives to contest citations on the same grounds as presently permitted employers under the Act.

3. The Occupational Safety and Health Administration should create and expand more effective, practical, understandable programs for employees and employers to achieve broader acceptance of and compliance with the Act.

4. Passage of the Toxic Substances Control Act.

5. Continued oversight scrutiny by the Congress to strengthen implementation of the OSHA Act in accordance with its major policies.

## CLEARINGHOUSE

### Job-related Illness May Be Crisis

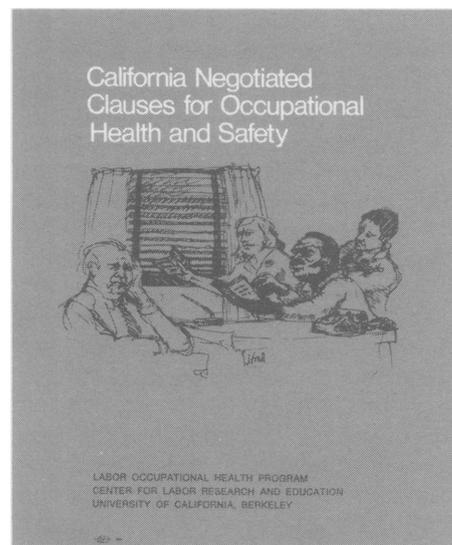
*Crisis in the Workplace: Occupational Disease and Injury*, by Nicholas A. Ashford, offers compelling evidence that job-related illness is far more widespread than commonly realized and may be approaching crisis proportions. Besides discussing the social, legal, economic, and scientific aspects of the problem, this book also: critiques the Occupational Safety and Health Act of 1970 (it has only adopted three health standards during its first five years); other countries' solutions to occupational health problems; and examines the impact of occupational disease on the worker's compensation system. To order, send \$16.95 to MIT Press, Massachusetts Institute of Technology, Cambridge, Massachusetts 02142.

### NIOSH Publications

Two NIOSH publications are available from the Center for Disease Control—*Occupational Health and Safety Symposia*, volume 2 (NIOSH Division of Technical Services, February 1976, #76-136), and *Standards for Occupational Exposures to Hot Environments*, Proceedings of Symposium, February 27–28, 1973 (NIOSH Division of Biomedical and Behavioral Science, January 1976, #76-100). Articles included in *Occupational Health and Safety Symposia* are: Potential Trauma in the Workplace; Agricultural Hazards; Occupational Injury Control; Hazardous Particles and Noise; Identification and Rehabilitation of the Problem Drinker; and Behavioral Aspects of Injuries. Topics covered by *Standards for Occupational Exposures to Hot Environments* include: Strains of Exposure to Heat; Occupational Exposures to Hot Environments: Time-Weighted Average Exposure; Labor Views “Hot Jobs;” Heat Stress Studies; and Data on Industrial Experience Related to a Heat Standard: Chemicals.

To order either publication, write U.S. Department of Health, Education, and Welfare, Public Health Service, Center for Disease Control, National Institute for Occupational Safety and Health, Cincinnati, Ohio 45202.

### Contract Clauses for Health & Safety



*California Negotiated Clauses for Occupational Health and Safety*, compiled by Morris Davis, is now available as a booklet. It contains more than 50 safety and health clauses negotiated by organized labor in the state of California and in effect during the period 1974–75. Topics covered include: Employee Rights, Employer Responsibilities, Special Hazard Restrictions or Provisions, Health and Safety Committee Structure and Procedures, Health and Safety Committee Rights and Responsibilities, Union Access to Information, and Miscellaneous Clauses. To order, send \$2.00 (make checks payable to Regents of U.C.) to the Labor Occupational Health Program, Center for Labor Research and Education, University of California, Berkeley, CA 94720.

### BACOSH Holds Carbon Monoxide Conference

You can't smell it, see it, or feel it but carbon monoxide (CO) in the air you breathe can be hazardous to your health and often is for many workers exposed on the job. Symptoms of carbon monoxide poisoning are headache, nausea, vomiting, and dizziness. CO can also contribute to accidents by interfering with your sight, sense of time, manual dexterity, and reflexes. This problem and what to do about it were the focus of a recent Oakland conference sponsored by the Bay Area Committee on Occupational Safety and Health (BACOSH). It was attended by representatives from the cannery workers, the transportation workers, the International Brotherhood of Electrical Workers (IBEW), and the International Longshoremen's and Warehousemen's Union (ILWU).

## Health Effects of Carbon Monoxide

Rodney Beard, M.D., a physician and Stanford University researcher, discussed the health implications of carbon monoxide poisoning, especially on heart disease. Dr. Beard agreed with NIOSH's current recommendation to lower the Threshold Limit Value (TLV) from 50 ppm (parts of the substance per million parts of air) to 35 ppm. The carbon monoxide standard is much lower in eastern Europe and the Soviet Union; these countries set standards based on the lowest level shown to cause symptoms.

John Burke, a locomotive engineer and member of the United Transportation Union Local 31, suggested relying on collective bargaining to insure effective standards-setting and enforcement. In the tunnels, railroad workers are exposed to high levels of carbon monoxide as well as sulfur and nitric oxides.

## Organizing Health and Safety Committees

A panel discussion led by Ken Fox and Brian McWilliams, both with experience organizing Joint Safety Committees for ILWU Locals 10 and 34, discussed workers organizing to negotiate health and safety issues with their employers. Even if workers and unions are willing to push for better protections, the company may threaten to move the plant elsewhere rather than eliminate health hazards.

Attorneys Peter Brown and Tom Rankin and law student Chuck Hansen discussed legal aspects. As Burke had mentioned, the Occupational Health and Safety Act of 1970 was a legislative victory. It can help workers fight for healthier, safer jobs. However, the standards-setting and enforcement process has been affected by political and industry pressures and slashed budgets. A substantial amount of OSHA budget is now spent to prepare inflationary impact statements assessing employer costs vs. benefits for cleaning up health hazards. Both OSHA and Cal/OSHA are understaffed. Resulting standards are compromises between

## DOCTOR'S CORNER

by Donald Whorton, M.D.

Dear Doc:

Since the 1974 energy crisis, our company has switched back to coal from oil. Some of our workers use front-end loaders to move the coal from one place to another.

This creates a tremendous amount of dust. Is the dust harmful? If so, what can be done?



Long-term exposure to coal dust, whether in a mine or elsewhere, can produce a disabling lung disease commonly called "Black Lung." "Black Lung" reduces the amount of oxygen released into the blood, resulting in tiredness and the increasing inability to work or exercise. It has long been associated with coal miners. Since the energy crisis, increasing numbers of workers outside of coal mines are being exposed to this hazard.

The Federal Mine Safety Act of 1969 acknowledges that "Black Lung" is a disease that can be caused by dust exposure in coal mines. Studies have shown that workers exposed to "excessive" amounts of coal dust in environ-

ments other than mines have developed "Black Lung" type disease. Although some scientists still deny that coal dust can cause disease, we can assume that anyone handling dust-producing coal for most of the workday over a number of years could develop "Black Lung."

The best means to eliminate worker exposures are by engineering controls. The front-end loader cabs (already enclosed) could be air-conditioned with special filters to eliminate dust particles from operators' breathing air, or the coal could be wetted down for handling. Since the accumulated coal dust is hazardous to everyone in the workplace, not just to those handling the coal, cleaning operations should be by wet-sweeping.

I would *not* recommend having workers wear masks or respirators, *except* as back-up or emergency measures. Respirators are difficult to breathe through and uncomfortable. Wearing them often causes irritations and rashes due to sweating around the masks. Because of these problems, workers may decide to risk dust exposure rather than wear a respirator. In such cases, the disease is usually blamed on the worker rather than on the working conditions.

*Requests for information on your work problems should be addressed to: Dr. Donald Whorton, LOHP, 2521 Channing Way, Berkeley, CA 94720.*

what scientists say is safe and what management says it can afford.

Unions can secure more effective standards and enforcement by negotiating job health and safety contract language. Such clauses could guarantee for the union the rights to: information about chemicals and equipment used in the plant; monitor the workplace; and stop work when joint management/union safety committees cannot agree on how to resolve unsafe conditions. Other clauses could guarantee

workers the rights to: walk off the job if conditions are unsafe; health and safety training paid for by the employer; and paid time off to accompany OSHA inspectors on plant tours.

BACOSH is prepared to give short presentations to local union meetings on carbon monoxide, exhaust fumes, and other topics covered at the conference. Contact BACOSH at Box 24774, Oakland, California 94623.

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### STAFF ASSOCIATES

Morris Davis, *Editor*

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Bob Fowler            Sidney Weinstein

Donald Whorton, *Director*

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## LEAD POISONING AT PRESTOLITE (Cont'd)

vember, 1975 found lead levels still 6 times the allowable limit.

In response to Cal/OSHA and union (United Auto Workers—UAW) efforts to enforce compliance, Prestolite has reduced production, resulting in 30 layoffs, and threatened to move the plant to another state if clean-up measures become too costly. Prestolite is a division of the diversified New York-based ELTRA Corporation, which owns 11 Prestolite plants in all. Before the Visalia plant opened, most of the Visalia plant's current employees had been seasonal farm workers.

Also at issue are the medical practices and qualifications of the company physician. Donald Flores, M.D., a specialist in gynecology and obstetrics, has been treating contaminated workers with deleading (chelating) drugs administered orally or intravenously. These drugs do the same kinds of damage to the kidneys and nerves as lead poisoning itself. They should be used only under controlled clinical conditions, and *never* while the worker is being exposed. Treated workers at Prestolite claim they weren't informed about the drugs' side effects and were returned to work as quickly as possible.

### This use of chelating drugs should constitute medical malpractice

Dr. Flores' method of administering chelating drugs *could constitute medical malpractice*. In the opinion of David Parkinson, M.D., head of the Occupational Health Division of the California State Dept. of Health, this use of chelating drugs *should* constitute medical malpractice. George Spencer, M.D.,

President of the American Occupational Health Association and Medical Director of New England Telephone Company, has called such practices "unethical and immoral" when carried out by physicians. In addition, UAW personnel suspect the deleading drugs are being used to keep workers on the job, or bring contaminated workers back to work prematurely. Still Dr. Flores maintains he administers the drugs according to "common medical practice," with confidence, and only when needed.

### The Visalia plant, it's not the worst I've seen . . .

Cleaning up the Visalia plant could set a costly precedent. While the Visalia plant is badly contaminated, UAW industrial hygienist Dan McCloud notes, "it's not the worst I've seen." Of 19 other southern California battery plants inspected, 18 had lead levels exceeding state limits.

Meanwhile, Prestolite workers in Visalia are faced with the dilemma of keeping their jobs or their health. "You'd think things would change," said one man whose kidneys hurt him so much he has trouble bending over. "Our grandfathers died fighting for better conditions, and here it is we're doing the same damn thing."

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### LOGGING AND SAWMILL HAZARDS (Cont'd)

ital explosion whip ground dust into the air in front of the advancing flames. Recently, 7 workers were killed and 10 injured at U.S. Plywood's Anderson, California plant during such an explosion. The holocaust was set off by fric-

tion in the motor of a wood chip drier packed with sawdust. A subsequent Cal/OSHA inspection resulted in citations for ineffective housekeeping, ventilation, and exhaust systems. However, these findings were too late to help the deceased or their families.

### Summary

The International Woodworkers of America (IWA), representing lumber and wood products workers, has consistently attempted to improve the health and safety conditions of its membership. It actively promotes joint management/union safety committees, educational programs, and stronger health and safety contract language. In addition, IWA is involved in occupational health research programs. For example, over 270 members of IWA Local 3-101 in Everett, Washington are participating in a Mt. Sinai Hospital study to determine the ill effects of a lifetime career in a plywood plant.

However, recognition and control of health and safety problems within the industry is the shared responsibility of employers, government, and workers. As OSHA admits, the lumber industry has not been given inspection scheduling priority, in spite of having been singled out for special programs to reduce on-the-job injuries and illnesses. If there's to be any change, employer health and safety programs must be improved, and governmental inspection and enforcement activities intensified.

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Institute of Industrial Relations,  
University of California  
Center for Labor Research and Education

2521 Channing Way  
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