

# VIDEO VIEWS

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The VDT Coalition

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## Repetitive Strain Injury: A New High Tech Epidemic

by Rachel Blau

A "High-Tech Epidemic" is spreading throughout Australia, with the dramatic increase in the number of workers using Video Display Terminals.

The disease is called Repetitive Strain Injury (RSI) a term encompassing many work-related injuries of the hands, wrist and arms. Symptoms may range from weakness, numbness and burning in the hand, wrist or forearm, to severe pain and permanent crippling damage. Some of the injuries in the RSI group are tennis elbow, tenosynovitis, epicondylitis, ganglion, tendonitis, and Carpal Tunnel Syndrome. (Please refer to the article on Carpal Tunnel Syndrome in the Feb./March 1985 issue of *Video Views*.)

Repetitive Strain Injury is difficult to "prove" because there are no diagnostic tests, x-

rays or visible symptoms like swelling or bruising to prove that it exists. Therefore only the patient's description is used to diagnose the problem.

Although RSI is an international problem, it has become a much larger and more visible issue in Australia--over 4,000 cases of RSI have been reported in Government departments and Telecom (the Australian telecommunication employer). A recent Public Service Board Report found that over 80% of those with injuries are word processors and keyboard operators, and 90% of them women.

Workers in "blue collar" jobs have suffered from wrist, hand and arm disorders for many years. Telegraphists were diagnosed with RSI as early as 1912. Laundry workers developed "washerwoman's thumb," and workers in cotton fields

fered from "cotton twister's cramp." Wartime Morse code operators developed "glass arm," cardpunch operators were diagnosed with RSI in the 1950s, and more recently, assemblyline workers in several industries have reported disorders such as tendosynovitis (inflammation of the tendon sheath) and Carpal Tunnel Syndrome. However, with the introduction of the VDT and electronic keyboards to the workplace, there is an unparalleled incidence of RSI among white collar workers such as bank and insurance employees, typists, journalists, data processors, typesetters, computer programmers and word processors.

Why do VDT operators have this problem and not typists old fashioned" keyboards? With the typewriter,

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## California Legislature holds VDT hearing

by Larkie Guildersleeve

On December 17 the California legislature held an interim hearing on VDT health and safety. A parade of union representatives testified before the Assembly Labor and Employment Committee in a packed hearing room.

Testimony focused on eye strain in VDT users. Larkie Guildersleeve of the Newspaper Guild, testified that employers utilizing this new technology are at the same time imposing archaic working conditions on their employees, requiring them

to work long periods without adequate rest breaks and not taking common sense precautions to protect workers from undue physical strain caused by improper lighting, furniture and inadequate shielding against low level radiation.

Laura Stock, of the Labor Occupational Health Program at UC Berkeley, emphasized the overwhelming agreement among industrial health researchers concerning recommendations for relieving the most common side effects of VDT use. She also

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## No Cataract Problem Found in VDT Study

"No significant problem of cataracts" was detected among users of video display terminals in eye examinations of 457 news-industry employees, it was reported in a study released today.

Reporting on the second phase of a study initiated by The Newspaper Guild and the Mount Sinai School of Medicine, Dr. Arthur L. Frank said the examinations disclosed no significant difference in the incidence of cataracts between VDT users and nonusers.

"...Relatively few years have elapsed since the introduction of VDTs into the workplace, and there is still no grounds for completely dismissing concerns about cataracts. Continued vigilance, concern and scientific investigation are still called for."

Dr. Frank, who is head of the Department of Preventive Medicine and Environmental Health at the University of Kentucky, was associated with the Mount Sinai School of Medicine when the study was initiated in 1981.

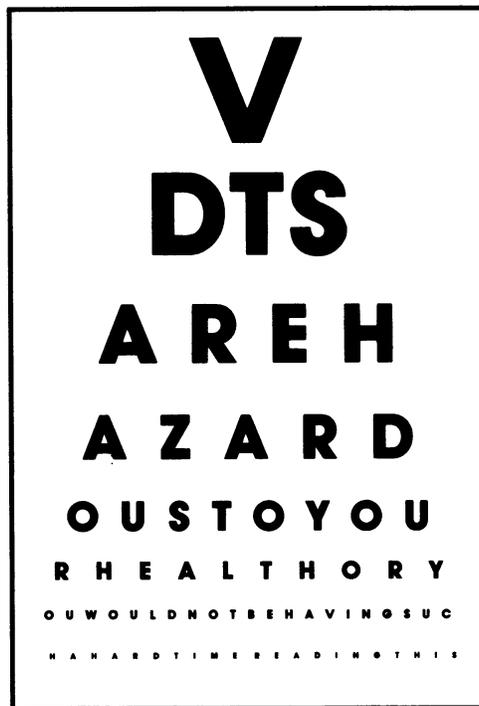
The first phase of the study, involving questionnaires, found that VDT operators reported significantly higher incidences of headaches, eye strain, deteriorated vision, low-back pain, and neck and shoulder pain than nonoperators, and that they also lost more time from work.

The second phase of the study, which included both eye examinations and reported symptoms, disclosed one significant difference between VDT users and nonusers, Dr. Frank reported. That was in the occurrence of esophoria, the turning inward of one eye toward the other.

But he said that while one of the symptoms of esophoria is eye fatigue following close work, frequently reported by

VDT operators, that finding "must be treated with some caution" because "such phorias are common...and usually cause no problem unless the number of diopters is significant." (Diopters are units measuring the power of an optical lens.)

Dr. Frank said no significant differences were found in any other eye problem between the two groups. But he cautioned that "there should be no conclusion drawn that VDT use presents no problem to the eyes."



He said such a conclusions would be "unrealistic" based on the result of a single study.

Noting the absence of any eye study to date that follows employees from a period prior to VDT use, Dr. Frank announced his plan to conduct such a study at the University of Kentucky. VDT users and a control group of nonusers will be followed through eye examinations and questionnaires, both before and after the users go on VDTs.

## UN Committee Proposes VDT Guidelines

The International Labor Organization's (ILO) Advisory Committee on Salaried Employees and Professional Workers, a subcommittee of the United Nations, has recommended setting national health and safety standards for office work. The UN panel issued the following guidelines for VDT work:

- workstations should be adjustable;
- glare should be eliminated and temperature and noise should be controlled;
- workers doing repetitive VDT tasks should be allowed hourly breaks;
- alternative work for pregnant VDT users should be made available.

The ILO Committee also suggested that management responsibility for health and safety be "enshrined in legislation."

The Committee recommendations were accepted unanimously by the 75 members representing industry, labor and government. One of the three officers of the group was Vico Henriques, president of the U.S. Computer Equipment and Business Manufacturers Association (CBEMA), an organization that has lobbied extensively against VDT legislation in the U.S.

## Congressional Report Calls For Radiation Research

More radiation research is needed according to a year-long study by the health and safety sub-committee of the House of Representatives' Committee on Education and Labor. Such research "could eliminate, and definitely reduce, any lingering doubts" about VDT radiation hazards. The report recommends against VDT legislation regulating lighting, furniture and other environmental factors.

## *Bargaining for Safety*

# Technological Change Agreements

*Ed. Note: Elaine Bernard led a mini seminar on "New Technology: Union Initiatives" at a Summer Institute for Union Women in July 1985. Her premise--that technological change is often instituted with little input from unions or workers--is particularly relevant for VDT workers. The Technological Change Agreement is one way for unions in particular to have input into change; Ms. Bernard's comments on the Technological Change Agreement are excerpted here.*

The traditional method of introducing new technology and changes in the organization of work is generally viewed unfavourably by organized labour, as unions and workers are relegated to token participation at the implementation stage, after the new system has been completely designed and constructed. Technological Change Agreements between unions and employers, however, can improve the role of workers, and should be written as an integral part of an overall agreement. Below are only a few points that such an agreement might consider.

**NOTICE:** The union should be involved at the earliest stages of design and planning. To assure the earliest notice possible, the Agreement should stipulate that the union is to be notified when technological change is being considered, and before any contracts are signed with consultants or vendors.

**DEFINITION:** In defining "technological change," refer to working methods, procedures, quantity of work, machinery, etc., and include a clause about changes affecting one or more workers. Beware of a management attempt to use words like

"significant number of employees," as employees may be eliminated piecemeal.

**ONGOING CONSULTATION:** A management/union committee may be formed to work on an ongoing basis on the issue of technological change, in the mode of management/labor health and safety committees.

**GUARANTEED CLASSIFICATION:** An employee shall retain his/her classification and corresponding wage scale, regardless of any reassignment to other duties or any reclassification of duties performed by the employee at a lower level.

**RETRAINING:** Any employee either reassigned or reclassified as a result of changes shall be provided with whatever amount of retraining he/she requires during working hours with full pay from the employer and at no additional cost to the employee. Any employee unable to follow a retraining course shall maintain her/his classification, or its equivalent in the bargaining unit. Such training programs will be reviewed regularly to ensure their relevance to any development which may occur in the use of a particular piece of equipment/system.

**WORK ENVIRONMENT:** Include an ergonomics clause, to allow union to make recommendations for change in work environment. Employer must maintain practical, safe conditions to avoid injury to employees to damage to their attire.

**TRIAL PERIOD:** Any changes proposed should first be implemented on a trial basis in a small area, for a set period of time, at the end of which the equipment or system would cease to be used until final agreement is reached.

**PRODUCTIVITY CONTROL:** All management attempts to introduce programmed productivity measurement [monitoring], workplace controls and disciplinary systems, etc., are unacceptable. Simplistic productivity measures, such as key depressions, lines and pages typed per hour, are to be rejected.

For the most part, technological change clauses are not cost items for the company. They are acquired most easily before technological change is contemplated, and companies will frequently fight very hard to have them removed once they are gained. Even if you don't feel you can get a clause into the collective agreement, in many cases raising the issue at the bargaining table can be helpful.

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*Newsletter committee: Rachel Blau, Doreen Gentry, Jennifer Lawrence, Greg Lum, Bob Matthews, Lynette Neidhardt, Laura Stock. Thanks to Cathy Davis.*

## Repetitive Strain Injury

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workers are forced to type more slowly. All the tasks that gave typists a break from repetitive motion (ribbon to change, paper to roll in, mistakes to correct) have been eliminated, and the process has been sped up and routinized. In addition, there are often ergonomic problems with the VDT (no screen height adjustment, improper overhead lighting, poorly designed chairs, etc.)

The general area of RSI is not very well defined, and only fairly recently has any descriptive, standardized research been done. Many doctors say that the problem may have been escalated by the rapid introduction of the VDT. For example, at the Australian newspaper AGE, some reporters went directly from manual typewriters to state-of-the-art VDTs. According to rheumatologist Milton Cohen,\* "Changing from one machine to the other is like going from a Sunday stroll to a marathon run. If you don't pace yourself, that change can cause serious shock to the system."

Dr. Colin Mills, an occupational health consultant and joint author of a major 1984 study of Repetitive Strain Injury among telephonists, says that one reason Australia has had so many problems with the VDT is that new technology has been adopted in a relatively short period of time, before setting safety standards that are backed by law. Australia is more likely to be offered technology that was not saleable in other countries, according to Mills.

Another, more positive, reason for the high visibility of RSI in Australia is the strong union activism surrounding the issue. The Bank Employees union is pushing for contract language that emphasizes job

rotation for VDT operators. The Australian Journalists Association has pushed for mandatory rest breaks every 45 minutes for VDT operators, and job protection for those already disabled by RSI.

In 1982 the Federated Clerks Union and Australian Public Service Association forced the establishment of a joint union-management team that reviewed the clerical work environment and occupational health and safety problems related to new office technology, and produced specific recommendations for improving working conditions and reducing the occurrence of RSI.

It seems that only dramatic changes in the workplace will reduce and eliminate the occurrence of Repetitive Strain Injury among VDT workers. Manufacturers will have to be held more accountable for their products, and employers may have to sacrifice short term profit in redesigning their workplaces to prevent worker injury. Until workers have more input and control over their work environment they will

continue to be injured. The medical and research community need to be involved with all of those groups in preventing, not just treating the problem of RSI.

\*Columbia Journalism Review, July/August 1985.

## VDT hearing

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iterated the relative easy precautions that can be taken to protect workers from the (as yet unproven) effects of low level radiation.

Only three legislators attended the hearing. They seemed to feel that unless labor is more successful this year in voicing its needs to Sacramento, and in gaining support there, a bill may not be passed this year.

Unions throughout California are pushing for new legislation in 1986. Senator Bill Greene has introduced a bill which would direct Cal-OSHA to develop workplace standards for VDT use.

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