There is no doubt that a substantial proportion of the workforce is afflicted by what is, at best, a painful condition and, at worst, one severe enough to cost the patient his or her job.

That warning, by the *British Journal of Industrial Medicine* in 1987, is confirmed by an epidemic of Repetition Strain Injury (RSI) afflicting workers using electronic keyboards and bar code readers. The government has not only failed to legislate, it has actually blocked an EEC directive giving protection to VDU workers. In this issue we show how workers are paying the price of employers' speedup and government inaction.

Case I: Not so safe with the Pru

It's not so safe with the Pru. This painful realisation has dawned on 50 data-entry operators working for the Prudential Assurance in Reading. These women have every moment of their working

Desk job is no insurance against industrial disease

RSI epidemic in the workplace



ROCC advert encourages rates of over 20,000 keystrokes per hour

lives measured and have to average at least 10,000 keystrokes per hour, otherwise they can get moved off the job. What is more, they are expected to average over 85 per cent actual keyboarding time – 51 minutes in every hour of a 35 hour working week. Keystroke rates of 15,000–

20,000 per hour are common and some of the women are hitting up to 27,000. They are locked into a vicious payment-by-results system which awards a magnificent 8p per hour for each extra 500 keystrokes over 10,000.

Current theory suggests that keystroke rates exceeding 10,000

per hour can cause RSI. Even at those rates, breaks should be taken before muscles start to feel tired, with a 15 minute rest every hour.

Not surprisingly many of the women experience stress, postural/musculoskeletal problems, eyestrain and headaches. With 50 VDUs going all the time, there is a build-up of static electricity so that the workers frequently suffer shocks when they touch metal surfaces. Throw in many of the symptoms of sick building syndrome and you have the picture of the working environment created by one of Britain's richest companies.

With the introduction six months ago of the infamous ROCC data entry system the workers were told that their keystroke rates had dropped and their wages were being cut. The new system allowed the managers to monitor keystroke rates and to use the results either to cut wages or jack up productivity by some 20-25 per cent for the same pay. With the ever present threat of the work being put out to agencies, the women have been forced to increase their output, with a corresponding increase in health problems.

Their union, MSF, which has negotiated the payment-byresults system in the Prudential nationally, has a lot to do to prove that it can properly represent women at the sharp end of new technology.

Turn to page 2

Commons stall on wood treatment

Cracks have begun to appear in the wall of official complacency surrounding the hazards of timber treatment chemicals.

In the House of Commons 117 MPs of all parties signed a motion calling for a ban on the two most hazardous wood preservatives, lindane and pentachlorophenol (PCP). In an adjournment debate on 28 February the case was powerfully put by Martyn Jones (Labour) and Henry Bellingham (Conservative). Both described severe illnesses suffered by constituents whose homes were treated with these chemicals.

In rejecting their demands for a ban, Patrick Nicholls, Undersecretary for Employment, spoke from a well-worn script: "Many of the allegations about wood preservatives in current use are anecdotal and on examination prove to be groundless." The government's excuse for inaction is that lindane and tributyltin oxide (TBTO) are being reviewed by the HSE and the Ministry of Agriculture (MAFF), while the EEC is discussing the future of PCP.

Splits

Splits are increasingly evident between MAFF and HSE. In a recent disagreement over labelling of containers, HSE opposed and MAFF supported the proposals of the wood-preserving industry.

Meanwhile HSE wants to collect evidence of occupational or domestic illness blamed on wood preservatives. The London Hazards Centre has sent them Toxic Treatments * and we are referring new cases to their data appraisal unit.

HSE's guidance note GS46 on remedial timber treatment, said to have been "at the printers" since October, has finally emerged from HMSO. Revisions since the first draft make a few concessions to HSE's own unpublished research on reentry times: "For most treatments re-entry before a minimum of 48 hours, in some cases longer, should not be recommended."

The guidance note omits to mention 10-year old research showing that levels of insecticide in the air start to rise after two days and may not peak for four or five weeks.

* Toxic Treatments, £5.95, from the Hazards Centre.

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We are funded by all the London boroughs

Workers speed up - government does nothing

Case 2: The typist

Maggie Anderson had little difficulty getting her constant, severe diagnosed wrist pain tenosynovitis. She developed the disease after two typists left her office and she was given their workload. Getting the disease diagnosed as occupational, however, proved much more difficult. Despite the evidence proved that the greatly increased volume of work was the root cause of her illness, a consultant decided the problem stemmed from Maggie peeling potatoes. Maggie lives alone and has never had much liking for spuds. After a year of argument and with advice from the Hazards Centre, Maggie finally convinced the medics that the disease was caused by her job and she received backdated Reduced Earnings Allowance for occupational tenosynovitis. She is now sueing her employer for compen-

Case 3: In the newsroom and supermarket

June, who works as a sub-editor on a large evening paper developed RSI after only four weeks on the keyboard. She now wears wrist splints and is worried that she may have to give up her job. Another casual worker also wears splints and June thinks that at least five other journalists suffer from various stages of RSI. Her boss suggested that the problem might be caused by her being "tense" when working on the keyboard.

June has been offered surgery which will cost £1,000. When she was waiting for an appointment with the GP at her local health centre another patient noticed her splints and said, "All of us are strapped up like you where we









RSI strikes in offices, shops and factories

work." She was a checkout operator using tills with bar code readers at the local Sainsbury's store.

● APEX and the GMB have jointly launched a campaign against tenosynovitis. The unions have distributed 100,000 leaflets calling for improved ergonomic design and restrictions on keyboard speed. While they seek compensation for members with RSI, they stress the priority of the prevention of injuries. Members with RSI are urged to report it to their local rep.

APEX General Secretary Roy Grantham said, "The machine should be subordinate to the person. Standards should be reviewed so that machines are redesigned for people."

LORDS SNUB WORKERS

Hopes that European law makers would offer some legislative protection to the millions of British VDU workers appear to have foundered. A draft directive, Minimum Health and Safety Standards for Work with VDUs, has been rejected by the government.

What they said:

The Hazards Centre investigated just what is being said about the VDU directive and, particularly, RSI.

The House of Lords European Communities Committee:

"The Committee thought that to propose a directive on VDUs was

a curious choice," explained a source close to the Committee. "The scientific evidence on hazards of VDUs is inconclusive and the directive would be difficult to implement. The Committee proposed that the directive should not be adopted."

On RSI:

"The feeling was that there was certainly evidence of that sort of hazard . . . the Committee accepts that musculoskeletal disorders and stress can be associated with VDU use. I think the feeling was that if employers are responsible – and that's a big 'if', between you and me, that the committee didn't go into – there's no reason it's more harmful than other sorts of work."

RSI is the term used for a range of injuries to tendons, muscles, nerves and joints that result from repetitive movements or over-use. The London Hazards Centre has published a comprehensive booklet on RSI: Repetition Strain Injuries – Hidden harm from overuse (£6.00), which shows that these crippling occupational diseases are entirely preventable.

Health and Safety Executive:

"We certainly do think that overprolonged or intense use of VDUs, particularly if the ergonomics are wrong, causes these diseases," said Mike Lowell of the HSE's Head Office. "There's no doubt at all. We don't want to play it down as a serious problem . . . but legislation is not the answer.

"We prefer guidance – right now we're working on comprehensive guidance on this very subject. Predicting a timescale for an agreement is very difficult . . . we should have something in around a year."

The government:

In April 1988 an explanatory memorandum from John Cope, Minister of State for Employment, expressed "doubts about the usefulness of the proposal" and concern at the "significant cost implications . . . If the proposal goes ahead the Government will seek to ensure that it avoids requirements likely to constrain the creation or development of small medium-sized undertakings, in accordance with Article 118A of the Treaty [of Rome]."

Cuprinol PR backfires

Now try to read this one with a straight face. Cuprinol, the profits preservative company, got worried that they might have poisoned their workers with lindane, TBTO and PCP. So they "commissioned" some experts to look into it: Professor J.A. Kennerley, C. Eng., M.I. Mech. E., jet pilot and man about committees; Dr Robert Murray, as handy with a writ as he is with a stethoscope when it comes to his medical prowess; Mr Stanley Silk, former HSE functionary

who recently succeeded in privatising himself. The worthies deliberated and opined – no problem. Somebody died of leukaemia? Can't see any connection here. The whole thing was packaged by a public relations firm and released to the world as the report of an "Independent Committee of Inquiry".

Whatever else this exercise was meant to be, it certainly wasn't science. The experts couldn't actually get round to publishing the detailed results of

their tests – confidential to the individual worker concerned, it appeared. Bit tricky if all medical researchers took this line.

Quite a hitch with the public relations, too. There was a strong suggestion that the TGWU in the Cuprinol factory had endorsed the experts' endeavours. Not so, says the TGWU. In fact, they are not happy at all at having their name associated with this sort of exercise and have made this clear in no uncertain terms.

In Part 1 of the factsheet we showed that asbestos cement is a serious health hazard to those who make and use it. The fibres are easily released from the cement by normal handling, especially when the material is old and weathered. This makes it almost impossible to demolish and dis-

pose of structures without hazard to workers and the community. Hundreds of redundant factories, warehouses and sheds, many in an advanced state of decay, stand in the way of the property developers. Cowboy contractors collapse the whole lot in a tangled mess of asbestos and angle iron.

Clouds of dust go with the wind.

When this happened at White City stadium several years ago we helped local residents by writing a work method for safer demolition of asbestos cement. Greenwich Council has also prepared useful guides on demolition and disposal (see "Safer démolition",

below). The horrifying case histories on this page show such guidance being totally ignored.

Law is broken

The laws which are supposed to protect workers, community and environment can be broken with impunity.

Demolition disaster No.I

In May 1988 environmental health officers from Haringey council watched in horror as the grandstand at the local dog track was collapsed in 10 minutes. Powerless to intervene, they photographed the whole thing and sent the file to the authority responsible, the Health and Safety Executive.

"We photographed a man walking on the roof," said one of the EHOs. "We saw them smashing holes in the asbestos cement and burning through the iron frame with oxy-acetylene. They used a digger to bring it all down. We timed it – start 4.35, finish 4.45. Asbestos was everywhere, with tractors running all over the site. We took samples of the debris for analysis and found that it contained blue asbestos."

The HSE put a prohibition notice on the job until the mess had been cleaned up, and told the contractor to provide respirators and decontamination facilities. The HSE inspector gave the contractor a work method for demolishing the rest of the structure which was 200m long and 50m high. The "method" con-



sisted of just eight lines and contained no structural calculations. HSE did not prosecute. The Haringey EHOs believed they had collected clear evidence of breaches of the Health and Safety at Work Act, the Construction Regulations and the Control of Asbestos at Work Regulations.

The London Waste Regulation Authority (LWRA) required all the contaminated soil to be taken in sealed skips to a licensed tip in Kent instead of to its scheduled destination as landfill on the Enfield North-South road.

Haringey EHOs worked hard, within the limits of their powers, to minimise the hazards of asbestos cement demolition. They were not impressed by the HSE's approach to law enforcement. As one of them commented afterwards, "If they won't prosecute on a large job like that, what chance is there of getting the little bloke on a small site to do it right?" The answer came a few months later in the form of . . .

Demolition disaster No.2

At the end of October, Maggie Thomas of South Ilford Residents' Association alerted Redbridge Environmental Health Services to the demolition of asbestos sheds at a local timber yard. She watched contractors collapse the structure by hitting it with the boom of a digger and photographed clouds of asbestos dust rising into the air. An EHO asked the contractor to wet the debris and advised Maggie to "address her inquiry" to the HSE.

No risk

Safer

As for her concern about elderly people in nearby houses, he wrote: "The risk to the occupier of a house near a demolition site where asbestos cement sheeting is broken is non-existent or so small that it cannot be estimated."

Health and Safety at Work Act 1974

The act covers all work activities and consequent hazards to the public. It gives HSE inspectors powers to stop jobs immediately in those workplaces where they are the lawenforcement agency, typically factories and construction sites. EHOs have these powers too - but only in workplaces where they are the enforcing agency, typically shops and offices. EHOs have no powers to protect workers on construction or demolition sites but they can use the Public Health Acts and the Control of Pollution Act (see below) to protect the public and the environment.

Control of Pollution Act 1974 and Control of Pollution (Special Wastes) Regulations 1980

These regulate the production, transport and disposal of any waste containing asbestos. The London Waste Regulation Authority (LWRA) is responsible for regulation of all wastes arising in Greater London. Several trade union and community groups have reported good results from calling in the LWRA to investigate sites contaminated by toxic waste (See Action group digs out grave truth, Daily Hazard No. 17).

THE LAW

Control of Asbestos at Work Regulations 1987

These regulations came into force in March 1988. They apply to every employer and every operation involving asbestos of any kind, anywhere. In theory the contractors involved in both our "Demolition disasters" were bound by this law.

The regulations require the employer to prevent exposure to asbestos or reduce it to as low a level as reasonably practicable. Any work must begin with an assessment showing how this is to be achieved. The employer must either analyse the asbestos or proceed on the assumption that it contains the more strictly-regulated blue or brown fibres. If the work is likely to produce levels of dust in the air exceeding the action level (estimated dose over 12 weeks - see Daily Hazard No. 17), the HSE must be given 28 days written notice before work starts. The dust levels quoted in Part 1 of this factsheet suggest that a typical asbestos cement demolition worker could reach the action level dose in eight days. The employer must therefore provide control measures. and if these don't reduce the levels of dust to the control limit, must provide respiratory protection, and mark off and restrict entry to high risk respiratory areas.

Workers must be given training, protective clothing (and arrangements for its cleaning or disposal); washing and changing facilities. Their exposure to asbestos must be monitored by air sampling and they must be given medical examinations by doctors approved by HSE.

Community pollution: Regulation 12 requires the employer to prevent or reduce to the lowest practicable level the spread of asbestos beyond the site. Regulation 18 says that any asbestos waste must be stored and transported in sealed containers clearly marked with warning labels.

Public Health Acts

These give local authority EHOs and local residents powers to have public health hazards abated and to force offenders to clean up "accumulations" of any kind. But there are no instant remedies – you have to go through the courts.

Control limits for asbestos in air (fibres per ml over 4 hours)

Type of fibre Control limit
Blue or brown 0.02

0.05

White or other types

demolition

The LHC method concentrates on planning, safe access and removal of sheets *intact*. Preventing breakages means labour-intensive removal of all fixings. Sheets are to be wrapped on a work platform before being lowered to the ground. There are detailed instructions on air sampling and on supervision of the

The Greenwich method - Advice to Building Contractors: Safety precautions during removal or repair of asbestos cement roofing - is less strict on access and wrapping. Both documents specify methods for dealing with the asbestos-rich silt found in gutters and both recommend wetting of the sheets before work begins. (Studies on other forms of asbestos show wetting does not suppress fine dust, so do not rely on it to protect health.) Greenwich also has an advice sheet for householders, which gives no instructions on respirators and protective clothing.

We advise against DIY demolition. If you must do it, follow the instructions for contractors in the LHC and Greenwich documents.

● For a set of documents on safer demolition and disposal methods send a large stamped addressed envelope to: London Hazards Centre, 308 Gray's Inn Road, London WC1X 8DS.

Test tubes threaten babies

Health Service workers have found yet another way that cuts can screw up their lives. MSF medical laboratory technicians at St. George's Medical School in Tooting became suspicious that some of the chemicals used for routine biological testing in the lab could be doing them harm.

They approached the Hazards Centre with a list of compounds they wanted checked. We were able to confirm that they were right to be alarmed. One of the standard medical laboratory chemicals, Trypan Blue, can cause serious damage to the developing foetus in pregnant women.

The MSF branch at St. George's is now to approach management to eliminate this daily hazard. MSF nationally.



which organises laboratory workers in hospitals, universities and the private sector, has been alerted to the dangers revealed by the Centre's research.

Where do the cuts come in? In the not so far distant past, NHS workers were largely on full-time, permanent contracts and could be moved off the bench to other work when they became pregnant. Now more and more part-time and temporary staff are coming in who are given no option except to go on working in often ill-designed, badly ventilated laboratories when they are pregnant. This is a direct consequence of pay- and job-cutting exercises. Truly, cuts can damage your life in a million different ways.

O Technicians at St. Mary's Hospital have questioned the reproductive effects of formaldehyde, used from time immemorial as a preserving fluid in laboratories. Our literature search suggests it is in the clear as far as being embryotoxic. But it does seem to be a cancer-causing agent!

EVENTS

● Part of the TUC's Inspect and Protect campaign aims to get trade union safety representatives to carry out regular workplace inspections during three National Inspection Weeks, 10–14 April, 10–14 July and 9–13 October.

Safety representatives are entitled to paid time off to attend TUC training courses.

Details from Steve Grinter, Regional Education Officer, Congress House, Great Russell Street, London WC1B 3LS.

Five Bhopal survivors will visit Britain this summer in preparation for Union Carbide's trial by the Permanent People's Tribunal of International Justice.

The Bhopal Action Group is organising a series of events during their stay, including meetings with survivors of British disasters and a conference on multinationals and hazards.

For details: BAG, 01-281 4534.

Socialist Conference is organising a National Trades Union Conference to be held in Sheffield on 11–12 November. The conference will discuss many trade union issues, including health and safety. Further details: Sheila Cohen, 25b Elmore Street, London N1.

■ The Socialist Environment and Resources Association (SERA) has produced a London Environment Charter for local authorities in advance of the 1990 council elections.

SERA, 26–28 Underwood Street, London N1 7JQ; tel. 01-490 0240.

● We welcome affiliations from individuals and groups committed to the fight against hazards at work and in the community. Affiliation shows support for the centre, brings a year's supply of this newsletter and news of other publications and activities. Rates range from £1.00 to £30.00.

London homeworkers link up

One hundred and fifty women emerged from the London-wide Homeworkers' Conference on 17 March with a strong programme for attacking the hazards of homeworking.

Resources. The conference agreed to produce information and advice for homeworkers, in appropriate languages, on chemicals, dust, noise and overuse injuries. Contact lists and posters will be produced for use by local authorities and advice centres.

Organising. Trade unions will be pressed to make greater efforts to recruit homeworkers and to forge links locally between organised workers and outworkers.

Action on the law. The conference agreed to put pressure on the Health and Safety Commission to designate homeworkers as workers under the Health and Safety at Work Act (HSWA). It is hoped that with backing from the Low Pay Unit, Commission for Racial Equality, trade unions and other agencies, homeworkers will be able to repeat the successful campaign which won employee status under HSWA for trainees on YTS and other training schemes.

The campaign will also press the HSC to ensure that employers of homeworkers are made to comply with S.6 of HSWA, which covers safety of products and equipment used for work, and with the Control of Substances Hazardous to Health



"The work I do makes me sick."
Part of an exhibition by the London Wide Homeworkers Group, in seven languages. Contact Sophie at the Homeworkers Project, 17
Bowater Road, SE18; tel 01-854

(COSHH) Regulations, which come into force in October.

The health and safety workshop also demanded a new role for factory inspectors and local authority environmental health departments. Factory inspectors should be made to enforce S.133 of the Factories Act, which requires employers to keep a register of all homeworkers. The workshop was told that in the London Borough of Islington only 200 outworkers are registered. The real total is known to be far higher.

The workshop wanted a more sympathetic role for environmental health officers. EHOs were more likely to use the law against homeworkers, for example by enforcing the Control of Pollution Act after a complaint of noise from sewing machines, than to inform and assist them.

Women denounce dioxins

The Women's Environmental Network have just published *The Sanitary Protection Scandal*,* on the hazards of chlorine-bleached paper in tampons, nappies and other sanitary products. The book focuses attention on dioxins, possibly the most toxic chemicals ever discovered.

Dioxins are unintended products of many common manufacturing processes such as the chlorine-based bleaching of wood pulp in paper production. But once formed, they are

difficult to eliminate and accumulate in industrial waste.

There are signs of official concern – the Ministry of Agriculture recently announced some research projects into the effects of dioxins. Yet this is a far cry from what is needed, the ending of all manufacturing processes leading to dioxins and the identification and safe disposal of all wastes.

● Published by WEN, 287 City Road, London ECIV ILA at £5.95 plus 45p p&p.



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