

## WORKER SOLUTIONS

## Nursing home workers ease the burden of work sprains and strains

*Labor Occupational Safety and Health Program trainer Diane Factor has been an industrial hygienist since 1982 and has inspected hundreds of Los Angeles workplaces - shipyards, aerospace factories, plastic shops and metal finishing. But she says nothing prepared her for what she found when she began a project to reduce back injury among nursing home workers.*

**N**ursing home workers, nurse aides in particular, have one of the most difficult jobs and the highest rates of on-the-job injury of any occupation. Back injury caused by cumulative trauma represents 43 per cent of all injuries in nursing homes.

The startling high injury rates and the expanding nature of the industry have made nursing homes the target of a major effort by the national Occupational Safety and Health Administration, OSHA.

In 1995, the University of California at Los Angeles, Labor Occupational Safety and Health Program (UCLA-LOSH) received a two-year OSHA grant to educate and train California nursing home workers in an ergonomic approach to preventing back injury.

We collaborated on this project with the Service Employees International Union (SEIU), the largest union in California, representing more healthcare workers than any other union. In Southern California this translates to 43 organized nursing homes out of over 600 in Los Angeles County alone.

As Project Director I wanted to

begin visiting facilities and talking to workers and management to figure out what kind of training program might be effective.

Nursing homes today are not just residence for old folks, but also filled with people in the late stages of AIDS, Alzheimer's disease, multiple sclerosis, victims of bullet and spinal cord wounds, the mentally ill, and many other conditions and terminal illnesses.

The trend in the US healthcare industry is to move patients out to long-term care facilities (nursing homes), offering "sub-acute" care for very sick patients at a much reduced cost. This economic incentive, coupled with the ageing population explosion, has created a demand for nursing homes that has resulted in a high growth, competitive industry. The "mom and pop" facilities are being bought by large chains, which are in a constant state of reorganization, mergers and buy outs.

Working conditions reflect all these tendencies. There are tremendous pressures on nurse aides - from management, their patients, the physical and emotional demands of the work and the poor wages and benefits.

Nurse aides care for from eight to 25 residents, depending on the shift. They lift, push, pull, bend, crank, reach, hold and catch weights that range from 85 to 450 pounds. Their job is more physically gruelling than any job I have observed. It is unrelenting, taxing work to bathe, change diapers, toilet, feed, turn over, ambulate, carry, reposition patients.

Patients can be combative, mentally unstable or severely depressed. Nurse aides are very often present at the moment of death, holding a hand of a person who may have verbally and/or physically abused them, not out of malice, but out of anger, fear, or rage.

What a new parent does out of love and a visceral connection, a nurse aide performs with strangers. In Southern California the

reward for this is between \$5.00 and \$7.00 per hour, without benefits - considered working poor in the United States. Many worked a second shift at another facility.

Not one nurse aide ever volunteered that she hurt. Only when I asked specifically if they felt pain did they always respond with a definite "yes". Most just talked about their patients - the ones that scratch and bite, or the ones they love and wish they could care for in their own homes.

Facilities range in presentability. The odor is what lingers most in your memory, and is an indication of the overall state of the facility. One, with a strong, foul odor was institutional in the worst sense.

I walked past rooms of four, five and six beds with what appeared to be tiny, childlike bodies in each bed. Later I realised, after visiting cleaner and nicer facilities that those small shapes were probably severely contracted residents who hadn't been properly turned and cared for and had shrivelled into a fetal position.

It was no surprise when the executive director proudly reported that they had no back injuries - why would they, the residents were not being turned and massaged or changed. She joked that if we raised demands among the workers as an outcome of our back injury prevention training, she had a revolver in her desk drawer to intimidate us. It did intimidate me. In fact, much of what I saw and heard in non-union facilities was appalling.

The workforce in Los Angeles is primarily female, Latina, Filipina or Afro-American. Everyone needs functional English to do their job, but in reality when I spoke to a group of workers only in English, I did not hear from those who did not use English as their primary language.

Training sessions are mandatory in nursing homes for nurse aides to maintain or achieve their certificate as a qualified nurse aide.

I gave 12 sessions around the clock in Spanish and English at most facilities. This did afford me the opportunity to spend a lot of time in the facilities, to watch and listen and talk to lots of people. The curriculum was adapted from one designed by the Service Employees International Union.

So what is an ergonomic approach to nursing home work? Redesign the job to suit the worker and, in this case, the patient as well. There is a marketplace of ergonomically designed lifting

equipment and assist devices to transfer and handle patients.

Manual lifts can virtually be eliminated. Electric lifts with comfortable slings in various sizes can be used to transfer residents from bed to wheelchair and back, for changing and toileting, ambulating and repositioning. Hydraulic pelvic lifts for in-bed toileting: a horseshoe shaped inflatable pad with a rectangular shaped bedpan that slides in "like a car into the garage" was my personal favourite. To demonstrate the pelvic lift during a training session proved to always produce a good laugh, even among the most exhausted and downbeaten group. In fact the training centered around a hands on session where workers get to lift and be lifted, trying out the equipment and filling out a worksheet where they assess which residents would be good candidates for the equipment.

Then workers break into small groups and count the number of times per shift that they actually perform certain risky tasks, using a list of 20 tasks.

This exercise always produced a stunned response from participants as they realised that they were performing 50, 75, 100, even 200 risky tasks per day. It is also quite liberating to feel that you are not to blame, and that there is a solution that can make a meaningful impact on controlling the physical stress of the job.

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The next step is to purchase the new equipment and change the organization of work to perform transfers in a new way.

My experience with non-union facilities was pitiful. After conducting hours of training and awakening real enthusiasm among the workers and occasionally their

## References

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direct supervisors, the corporate management representatives would balk - equipment costs too much money, too much worker involvement, too much change.

This is one time I would appeal to a cost/benefit argument. Workers' compensation costs are enormous in this industry, and reducing the number of costly back injuries would more than offset the costs of new equipment.

Fortunately, one company did respond. Grancare is a national company with 28 facilities in California. All of their unionised facilities are in Northern California. They are represented by SEIU.

Together we agreed on a partnership to try out this program at a pilot site. Vale Care Center is in the small town of San Pablo just northeast of Berkeley, most known for its large casino. It is a large facility with over 200 beds spread out in a u-shaped structure.

We began the training sessions in August 1996, training 70 nurse aides. We established a Back Injury Prevention committee and met monthly. We wanted nurse aide representatives from each station and each shift. It took several months to achieve consistent and representative participation.

We began by analysing the injuries - 11 patient handling injuries in 1995, 12 in 1996; when did they happen, to whom and why. We also analysed resident incidents - when did they fall or when were they dropped. We mapped the building with this information so that we could see the patterns of why and where injuries happened.

A bit of luck - the company needed to replace an existing poorly designed lift and agreed to purchase one of the newer ergonomically designed lifts. When the equipment arrived, we suggested they pilot the equipment on the stations where there was the greatest possibility to make an impact.

The chairperson of the committee, Levette Houchins, who is also a roving restorative aide and one of the shop stewards, made it her business to train nurse aides as they were becoming familiar with the use of the new lift. She said: "The machine is wonderful. A lot of people don't like new things. But once they got used to the new equipment, they started to use it all the time."

Because of the training experience, workers were ready and anxious to use the new equipment. They wanted to prove that it worked. The response was very

different compared to when management had introduced new equipment, such as the lumbar support, that workers didn't want, and that didn't work. There was real excitement in the facility about the new lift.

I don't know why we were surprised, but we were when the committee realised that injury rates were dropping. In fact, within the first six months the only patient handling injury was due to the worker not having access to the new lift.

"The new equipment already appears to have paid for itself," said Valerie Paynter, Vale's Staff Developer. "If you consider what it saves you in injury costs, it's really not expensive."

We wrote up our findings and prepared a report to the company asking for a full complement of equipment: a total of four lifts, ergonomic walking belts for all staff, a sample "slipp sheet" device and even a pelvic lift. All member of the committee signed the letter requesting the new equipment, and to our amazement the request was granted. In fact, Tim Neal, the executive director, who had been far from keen on the entire project, applauded our work and said, "since we established the Ergonomics Program, conducted training sessions and bought new ergonomically designed electric lifts, we have seen a dramatic reduction in injuries and a real boost to morale as well. The nurse aides really like the new equipment and have bought into the program. Our joint labor/management committee has been very successful."

Grancare (now called Paragon after a corporate merger) is asking to bring the program to all 14 facilities in Northern California.

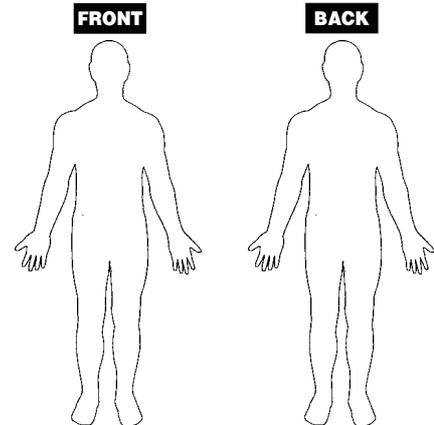
The union and the company are creating a joint program that will train worker-trainers in each facility to conduct the program, and I have somewhere to donate my truckful of equipment.

It's a happy ending for one company and a relatively small number of workers, but there are still thousands who don't have union representation and work under miserable conditions caring for us, when that day comes.

#### Further information

Diane Factor  
UCLA - LOSH  
1001 Gayley Ave., 2nd Floor  
Los Angeles, CA. 90024, USA  
Tel: +1 310 794 0369  
Fax: +1 310 794 8017  
Email: dfactor@ucla.edu

## MAPPING TECHNIQUES



### Body mapping

All workers should apply stickers to the body map (as above, but usually much larger) where they think their own job is making them sick or hurt. A large felt tip can be used if stickers are not available. Different colours could be used to represent different health effects:

- red = pain/soreness
- green = aches
- blue = reproductive problems
- black = stress.

Be careful to think about all the possible ill-effects of all parts of the job - dizziness when using degreasing solvents, itchy skin from detergents, headaches from stress, or breathlessness, menstrual problems, nausea, weakness, fatigue or other problems for which the job could be to blame. Even if you are not certain, the body map might help indicate whether it's a problem for just you or for everyone doing your job.

As the stickers are applied, explain briefly why you are placing each one in each particular place. Notes can be kept around the edge of the body map.

Workers undertaking the body mapping exercise should usually be doing the same or very similar jobs. Different groups from within the workplace can compare completed body maps to see how problems differ between jobs.

\* **Further information:** *Hazards* 61, Body mapping guide. £2.50. *Hazards* body mapping charts. Packs of 10 large (A3) blank body mapping charts are available priced £5.00 (US\$10). From *Hazards* (address as WHIN). Email: whin-hazards@mcr1.poptel.org.uk

### "Ouch!" - my job hurts me here

As an icebreaker Diane Factor and the nursing home workers made "ouch", "ay" (Spanish) and "array" (Tagalog) stickers. Workers placed their ouch stickers on a co-worker where they felt pain on the job. Diane calls this the "ouch" method.

"Language barriers dissolved into the common idiom of pain," she says. "Immediately workers began discussing where they hurt and why and within ten minutes realise they are not alone, it is not a personal problem, but a problem of the design of the job."

Stickers were concentrated in the lower back area. Then the worker/model with all the stickers demonstrated a transfer with another participant acting as the patient. "This miming exercise is valuable for two reasons," says Diane. "As a group we conduct a mini job analysis and we acknowledge that no matter how well the worker performs the lift, using her best body mechanics, she still must put her back at risk."

## MAPPING TECHNIQUES

### Unions mapping out workplace hazards in a Canadian casino

A team of Canadian researchers employing a participatory research approach have completed an occupational health research project in tandem with casino workers. The joint Windsor/Winnipeg gaming workers' health and safety project took place during August and September 1997 (see *WHIN* 51/52).

The Windsor, Ontario team employed a participatory research action program which identified the main worker concerns as stress, second hand smoke, ergonomic and repetitive strain hazards and biological hazards.

The team was made up of eight CAW members from Casino Windsor and five members of staff from Occupational Health Clinics for Ontario Workers Inc. (OHCOW) and Windsor Occupational Health Information Service (WOHIS).

Thirteen focus groups sessions were held with a total of 51 participants, made up of an almost equal number of men and women. The groups used Body Maps, Hazard Maps and "Your World Maps" to track down problems.

Body fluids were identified as a major problem and a cause of stress, along with fear of disease transmission from needle-stick injury. The issue of noise did not emerge as a top priority the workers wanted to see addressed, although it was identified as a serious problem by the majority of the participants.

Different occupation groups emphasised some differing concerns. Porters were overwhelmingly concerned about ergonomic issues (pushing, pulling and carrying equipment), use of certain cleaning agents, overcrowding, noise and biological hazards from body fluids, bacteria and filthy bathrooms.

Workers in the slot machine department reported problems of noise and patron abuse. Participants from the security department reported that prolonged standing and fear of patron violence were of particular concern to them.

The overall environment of the Casino was considered to be a major cause of stress. Its atmosphere is described as "super-charged". The machines are noisy, there are flashing lights, reflective surfaces and mirrored ceilings. Patrons are emotionally stimulated and many are under the influence of alcohol or drugs; many are losing money and desperate, some losing control. The workers refer to Friday and Saturday nights as "fight nights".

A number said they liked their jobs yet they talked, almost without exception, about the exhaustion or stress symptoms they experienced after work. Most said relationships and leisure activities were affected, speaking of moods/stress/irritability and sleep problems. A number discussed the need to be alone after returning home from work, feeling unable to face family and friends.

The worker participants said the casino corporation was reluctant to spend money on health and safety despite a reported \$442 million Canadian gross profit in 1995/96.

The participatory approach was a great success, said WOHIS director Margi Keith: "The sessions were lively with active participation. The evaluations were overwhelmingly positive. The participants enjoyed the mapping, the comfortable environment and the opportunity for discussion. It was clear that this was an affirmative process. It also helped the participants to understand the problems faced by workers in other departments.

"Solutions were volunteered by participants. For example, for stress the suggestion centred around educating management and co-workers and reducing the noise. The solutions suggested by the participants are being considered by the CAW and a number of them are being implemented."

**Further information:** *Gaming workers' health and safety: Summary report.* Free from WOHIS, 547 Victoria Avenue, Windsor, N9A 4N1, Ontario, Canada. Tel: +1 519 254 5157. Fax: +1 519 254 4192. Email: wohis@mnsi.net

### Workers as investigators

The Oil, Chemical and Atomic Workers' International Union (OCAW) medical surveillance program is employing safety reps as worker investigators to promote participation by workers in research which directly affects their health and conditions.

The reps on the medical surveillance program are conducting focus groups and risk mapping sessions. The focus group sessions are aimed at finding out the health concerns and expectations of workers. The risk mapping sessions look at site and building maps and plot the hazards by type and level.

The concept of workers as investigators is not new but OCAW has expanded its boundaries. The worker investigators are working in partnership with the academic researchers. They are providing the descriptive data to back up the

evaluation of the quantitative records of exposure and health studies.

This approach is based on OCAW's conviction that workers who are most affected by hazards are in an ideal position to investigate the hazards - they have first hand experience. The approach is also a response to the "expert" approach to research which often repels workers and discourages active participation from those workers most affected.

Worker investigators draw from the experiences and knowledge of groups of workers by placing them in small groups and getting them to engage in activities such as discussions.

With time a picture begins to form as to what kinds of symptoms and conditions workers are experiencing. The picture helps to determine what sorts of medical tests are required.

*Lifelines, OCAW, USA, Vol 24, Nos 3-4, May-June 1997*

### LETTER FROM BRAZIL Mapping is risky out of workers' hands

The experience of risk mapping in Brazil has been that the tool works very well in the hands of the workers but becomes problematic as soon as it falls into the hands of bosses and "experts".

In the early 1990s, after a long struggle to get health and safety recognised as a legitimate union concern, Brazilian trade unionists began to use risk mapping methodology to carry out risk assessments. In 1992, the Chemical Pharmaceutical and Plastic Industries Workers' Union of Sao Paulo (CPPIWU) began to give courses for members of workplace CIPAs (Accident Prevention Commissions).

These commissions, regulated by law, have half of their members chosen by the company and half are elected by the workers. CPPIWU say these commissions have actually worked in a completely undemocratic way with the company picking all members. The commissions also have no power to negotiate workplace improvements and are seen as toothless by the workers.

Despite these problems the use of risk mapping has been positive in the companies where there is a stronger political and organisational presence and where health and safety has been prioritised as

an issue. In these companies an improvement in working conditions has been observed.

After pressure from the trade union movement the Brazilian government passed a law making risk mapping obligatory. However, the institutionalisation of this instrument of trade union struggle had the effect of distorting its use. The principles of risk mapping and the basic premise of worker involvement and participation in health and safety were sidelined.

Since the law has been passed most risk assessments using the risk mapping methodology are carried out by health experts and engineers who are contracted specifically for that task. It is very rare for the experiences of workers to be taken into consideration.

The conclusion of CPPIWU is that despite all the problems risk mapping is an important instrument for changing working conditions in the great majority of companies in Brazil as long as the basic premise of worker involvement is respected.

**From:** Walter Tsunaki, Rodolfo Vilela, CPPIWU, Rua Tamandare 348, Liberdade, Sao Paulo (SP), CEP 01525 000, Brazil. Tel: +55 11 279 3811 Fax: +55 11 279 0662