

The WCB prevention magazine on occupational health and safety issues

WorkSafe

www.worksafebc.com

June 2003

Stories of lost youth





From the editor

Every year about this time the Workers' Compensation Board launches a campaign to raise awareness about young worker safety. This year the WCB, in partnership with Human Resources Development Canada, created a video called *Lost Youth* in which four young adults shared their stories about how they came to be seriously injured in the workplace. In *Stories of Lost Youth* on page 10, we profile how their experiences changed their lives forever and explore what all young workers, employers, and parents can do to prevent other youth from being injured or killed in the workplace.

On page 12, we look at the dangers of entering confined spaces. Confined space accidents are rare but deadly both to workers and their rescuers — approximately 60 percent of fatalities in confined space accidents are would-be rescuers. This happened earlier this year when four workers lost their lives in a confined spaces incident on a barge in New Westminster and last summer in a winery accident that left two people dead.

This issue of *WorkSafe Magazine* also includes a great story on returning to work following an injury. The article profiles several workers who, with assistance from the WCB's Vocational Rehabilitation Department, were able to get back to work quickly and successfully. The story includes information on the Hire a Worker and Job Finder Programs.

Also look for stories on the City of Vancouver, a WCB focus firm that is in year three of a six-year plan to create a safer workplace; and how a Maple Ridge manufacturer of construction hangers found innovative ways to train new press operators.

I hope you enjoy this issue of *WorkSafe Magazine*. As usual, I encourage you to contact me with feedback on previous issues or story ideas for the future.

The WCB prevention magazine on occupational health and safety issues

WorkSafe

WCB Communications Services
PO Box 5350 Stn Terminal
Vancouver BC V6B 5L5

Phone 604 231-8690
1 888 621-7233, local 8690
Fax 604 279-7696
E-mail worksafe@wcb.bc.ca

www.worksafebc.com

Editor-in-chief
Donna Freeman

Managing editor
Carolyn Stewart

Associate editor
Terence Little

Graphic design
Graham Coulthard

Photography
Khalid Hawe
Jonathan Peyton

Editorial assistant
Dawn Knoll

Contributing writers
Jamie Bonham, Helena Bryan,
Susan Main, Anne-Rachelle McHugh,
Heather Prime, Corey Van't Haaff

Printing
Benwell Atkins Moore

Advertising representatives
Advertising in Print
Phone 604 681-1811
Fax 604 681-0456
info@advertisinginprint.com

WorkSafe Magazine is published six times a year by the Workers' Compensation Board of B.C. to inform workers and employers of occupational health and safety issues that may affect or interest them.

Subscriptions

To start or stop a free subscription to *WorkSafe Magazine*, or to update mailing information, visit www.worksafebc.com/publications/newsletters/worksafe_magazine/pub_20_10_30.asp, call 604 231-8690 or toll-free in B.C. 1 888 621-7233, local 8690, or e-mail worksafe@wcb.bc.ca.

Copyright

No part of this publication may be reproduced for profit or other commercial enterprise, nor may any part be incorporated into any other publication without permission from WCB Communications Services.

WorkSafe™ is a registered trademark of the Workers' Compensation Board of B.C.

Disclaimer

WorkSafe Magazine strives for accuracy; however, the information contained within *WorkSafe Magazine* does not take the place of professional occupational health and safety advice.

WorkSafe Magazine does not warrant the accuracy of any of the information contained in this publication. *WorkSafe Magazine* and the WCB disclaim responsibility for any reader's use of the published information and materials contained in this publication. The WCB does not warrant or make any representations concerning the accuracy, likely results, or reliability of the contents of the advertisements, claims made therein, or the products advertised in *WorkSafe Magazine*.

The WCB does not warrant that any products advertised meet any required certification under any law or regulation nor that any advertiser meets the certification requirements of any bodies governing the advertised activity.

Health and safety information

If you have specific questions about health and safety in your workplace, please speak to your firm's WCB safety officer or hygiene officer, or call the WCB Prevention Information Line at 604 276-3100, toll-free in B.C. at 1 888 621-SAFE (7233).



www.worksafebc.com

WorkSafe Features

June 2003



p.8

Cover Story: Stories of lost youth 10

Four young people tell of lives forever changed by a workplace accident.



p.10

What's Working: City rebuilds safety through compliance..... 6

City of Vancouver's Engineering Department is reducing injuries with a six-year compliance program



p.14

Previously injured workers add value to workplace..... 8

Return-to-work success stories from employers and workers

Working with the Regulation: Entering confined spaces ... 12

Hyperbaric medicine saves B.C. divers. 16

Regulars

Hands On: Sun safety for outdoor workers 4

In Practice: Growth puts new demands on training 5

Safety Solutions: Baffles lower the din at Cranbrook pool 14

Departments

From the editor 2

Policy decisions 17

Infractions 18

WorkSafe courses 19

WORKWELL TRAINING VIDEOS

QUALITY VIDEOS!



AFFORDABLY PRICED!

FREE 10 DAY PREVIEW!

WORKWELL TRAINING VIDEOS

is a Canadian producer and distributor of training videos across Canada. We provide quality video programs that are current & up-to-date, are Canadian or include Canadian content and are affordably priced. We offer a "Free preview" of our video library; this gives our customers an opportunity to evaluate the video programs to see if they meet their training requirements.

- VIOLENCE: KEEPING IT OUT OF THE WORKPLACE "CANADIAN" (AVAILABLE EN FRANÇAIS)
- CONFLICT COMMUNICATION SKILLS
- SUBSTANCE ABUSE: REASONABLE SUSPICION
- TEAMWORK: ACHIEVING SUCCESS
- STRESS MANAGEMENT: A PRACTICAL APPROACH
- HARASSMENT: KEEPING IT OUT OF THE WORKPLACE "CANADIAN" (AVAILABLE EN FRANÇAIS)
- BACK INJURY PREVENTION "WITH OR WITHOUT BACK BELTS" (AVAILABLE EN FRANÇAIS)
- OFFICE HEALTH & SAFETY
- THE IMPORTANCE OF FOOD SAFETY "CANADIAN"
- FOOD IS YOUR BUSINESS: GOOD MANUFACTURING PRACTICES "CANADIAN"
- FIRE SAFETY "CANADIAN" (AVAILABLE EN FRANÇAIS)
- BLOODBORNE PATHOGENS "CANADIAN"
- CPR THEATRE
- TOO CLOSE FOR COMFORT: NEAR MISS REPORTING & INVESTIGATION "CANADIAN"

TO ARRANGE YOUR "FREE PREVIEW" PLEASE CONTACT

9 THE QUEENSWAY NORTH
KESWICK, ONTARIO L4P 1E2

PHONE: (905) 476-1170 FAX: (905) 476-1172

Email: workwelltraining@rogers.com
Or Visit: www.workwelltrainingvideos.com



1-800-300-9323

ALL PROGRAMS ARE ACCOMPANIED BY A LEADER'S GUIDE

MANY NEW SAFETY PROGRAMS COMING IN 2003



Sun safety for outdoor workers

Summer is just around the corner and so is the need for workers to take extra precautions to protect themselves from the sun when working outdoors.

According to the Canadian Centre for Occupational Health and Safety (CCOHS), outdoor workers such as farmers, maintenance workers, postal carriers, lifeguards, ranchers, police, and loggers face an increased chance of getting skin cancer. The Canadian Dermatology Association says since 1988 there has been a 41 percent increase in the death rate for skin cancer among men — the highest increase of all cancers.

Sun-induced damage to the skin is cumulative, and the higher the “dose” of ultraviolet (UV) rays, the higher the risk is of developing skin cancer. The risk however, may be reduced through awareness of the problem, and by taking measures to prevent exposure to sunlight.

Risk factors

There are four main factors that influence the risk of skin cancer:

- Skin pigment and susceptibility to burn — individuals who sunburn easily are at the highest risk to develop skin cancer
- Heredity — people from Ireland, Scotland, or Northern Europe are at greater risk than others to develop skin cancer
- Amount of exposure to sunlight — the damaging effects of ultraviolet radiation accumulate over the years

Preventing overexposure

Here are some tips from CCOHS for employers and workers to follow to help

reduce overexposure to the sun’s harmful rays:

- Spend less time in the sun:
 - Workers should avoid unnecessary exposure to the sun, especially between 11 a.m. and 4 p.m. during the summer
 - Move work inside or to a shady location whenever possible, or use an umbrella
 - Schedule outdoor work for early morning or late afternoon and/or stagger work times to ensure that the same employees are not always working at the hottest time of the day
- Use sunscreen with a sun protection factor (SPF) of 15 or higher
 - Apply protective sunscreen 30 minutes before working in the sun and reapply throughout the day.
- Avoid using sunscreen around the eyes
- Wear glasses or sunglasses that absorb UV rays where appropriate
- Cover your limbs with clothing made of close-woven fabric in cool sunny weather and lightweight sun-blocking clothing in hot sunny weather
- Wear a wide-brimmed hat

Signs of skin cancer

Watch for a lump, patch, mole, or wart-like growth that is changing in size, colour, shape, or surface, or for any sores that don’t heal within a month. See your doctor immediately if you suspect you have any of these signs.

For more information, talk to your WCB officer or call the Prevention Information Line at 604 276-3100, toll-free at 1 888 621-SAFE (7233).



29th Annual Conference Undersea and Hyperbaric Medical Society, Pacific Chapter

**Sept. 19-20, 2003
Richmond, British Columbia, Canada**

The Pacific Chapter’s annual conference will provide a forum for professional growth and development. Presentations will include ideas and information on currently accepted uses of hyperbaric oxygen and diving medicine.

For more information, including conference sessions, speakers, and registration, visit the Pacific Chapter’s web site at www.pacificuhms.org.

Supervisor Trung Le (left) verifies that production worker Ryan Mager is ready to move to the next level of training.

Growth puts new demands on training

By Jamie Bonham

When business boomed, a Maple Ridge manufacturer of construction hangers had to find a better way to train new press operators.

Success has its problems too. That's what Armen Jeknavorian and his partners at MGA Connectors found out when their construction hanger business took off four years ago. MGA has experienced a growth in business of 20 to 30 percent every year since that time.

Such dramatic growth was welcome, but it meant new staff had to be hired to run the power presses their business depended on. Jeknavorian and MGA's problem was that there isn't a lot of similar industry in B.C., so hiring experienced press operators isn't always a possibility. Staff training therefore became essential to ensuring the quality of the work and worker safety.

Prior to their boom in business, new MGA staff received one-on-one training from supervisors. As the workforce grew, supervisors found themselves stretched thin trying to properly train new workers while still carrying out their day-to-day duties.

Unfortunately, employee safety began to suffer as a consequence. Several MGA press operators suffered finger crush

injuries over a short period of time. It was clear to the company that something had to be done to adequately address press safeguarding and worker training.

MGA set about installing interlock barrier guards and light curtains as safeguards on their presses and stamping machines. The safeguarding would physically protect workers from contact with moving parts, but MGA still had to solve its training dilemma.

While attending a trade show in Ontario, Jeknavorian started talking to the U.S.-based Precision Metal Forming Association (PMFA) about their proprietary safety program. The 26 lessons in the program, presented in video form with accompanying worksheets, offered

graduated training in the running of hand-fed and automated press machines.

MGA didn't just purchase the program and hope that it would make things better on its own. They instituted an incentive system whereby they split the training into four progressive levels and offered pay raises for each level achieved. Management had no qualms paying extra for more highly skilled, safety-conscious workers.

MGA Connectors is the first Canadian manufacturer to integrate the PMFA safety program into its daily business. The results so far speak for themselves, says Jeknavorian: "Our injury rate for crush-type injuries has, in the last year and a half, gone down to zero."

Byrne & Associates

Occupational Health & Safety

Workers Compensation Consultants



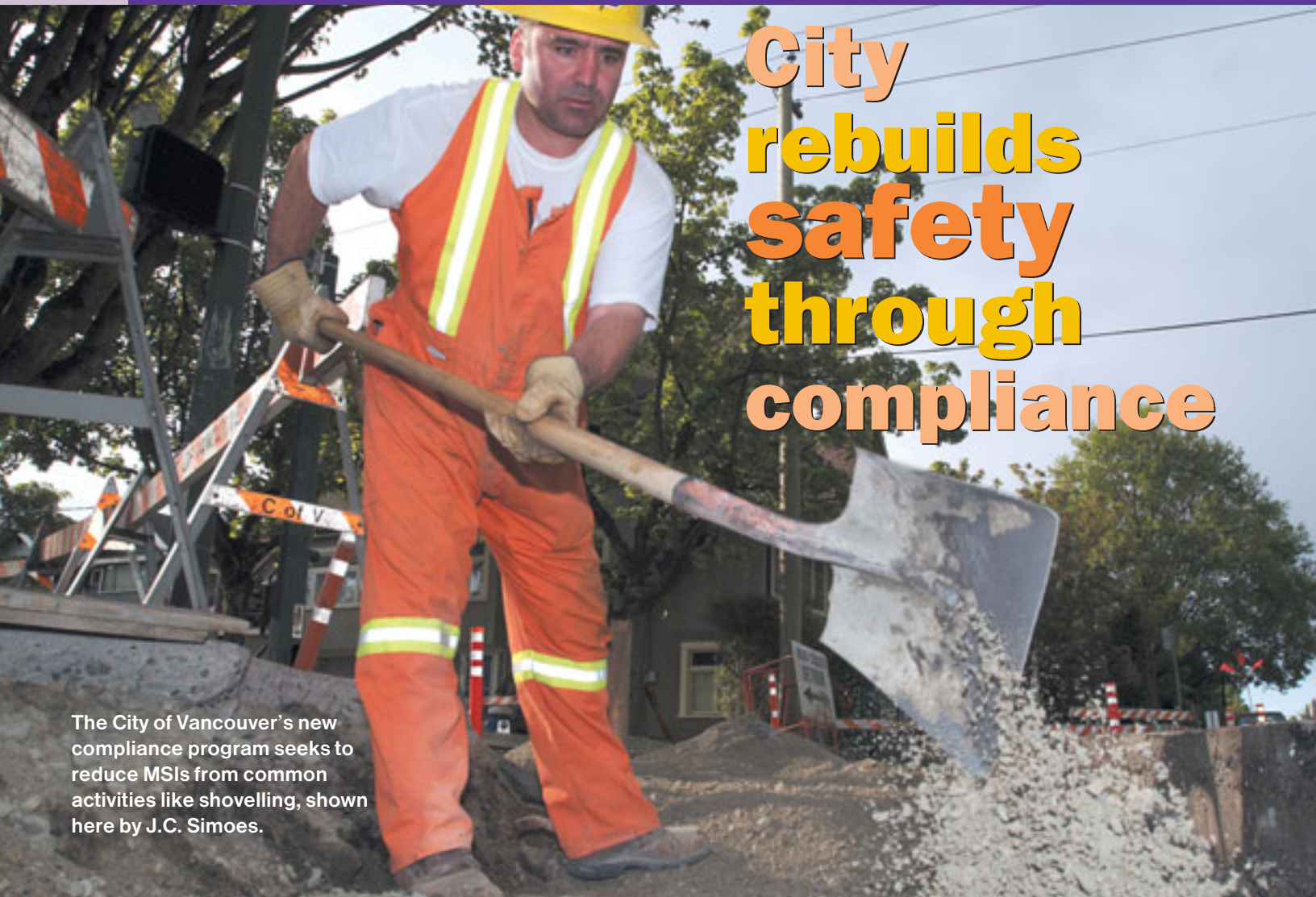
Certified Professionals

www.byrne-and-associates.com

604-418-5809



City rebuilds safety through compliance



The City of Vancouver's new compliance program seeks to reduce MSIs from common activities like shovelling, shown here by J.C. Simoes.

By Susan Main

Since April 1999, the City of Vancouver has been a WCB focus firm, working closely with the WCB to meet compliance and reduce injuries. The WCB's Focus Firm Strategy targets employers with significant injury rates above the average of their rate class — and the City was an ideal candidate.

Specifically, the City's Engineering Department is taking part wholeheartedly and is currently in year three of a six-year plan to create a safer workplace and achieve full WCB compliance — and they're already seeing some promising results.

In 2002, Engineering's short-term disability claims had dropped by 23 percent — down to 212 from 277 in 2001

— and 50 percent since 1998 which saw 425 claims. Today the department continues planning, implementing, and testing new solutions to old problems.

Engineering Operations employs 1,600 workers in various labour-intensive operations, including garbage and recycling collection, street construction and repair, water and sewage line installation and repairs, and parking enforcement. Each year, 80 percent of claims are a result of musculoskeletal injuries (MSIs) to backs, shoulders, arms, knees, and necks.

Six-year compliance plan spurs change

In May 2000, the City and the WCB developed a compliance plan aimed at

reducing the number of injuries. Shortly after, Catherine Deslauriers was made corporate manager of health and safety for the City of Vancouver. Deslauriers restructured an OHS management team that included a hygiene coordinator, an ergonomist, a claims specialist, a compliance specialist, and one safety designate for each City department.

The first step in the City's six-year compliance plan was to rewrite the City's safety program. Jeremy Herd, the safety manager for Engineering, was involved in rewriting the program.

"At first it's extremely overwhelming, but if you stick to the plan that's been made, it's not quite as daunting," Herd says.

Manual provides new tools

As part of the new safety program, the City implemented the *City of Vancouver Occupational Health and Safety Manual*. It offers tools, resources, and audit templates for all City departments. Herd met with the safety coordinators from each of Engineering's component branches to help them use the new audit templates to identify and document where compliance was a problem within their operations. They examined how, where, and why their injuries were happening and searched for solutions to control those risks and reduce injuries.

The Streets Branch learned an important lesson about questioning initial assumptions. Bill Arndt, the branch safety coordinator, examined injury statistics from 1996 to 2001, looking for the most frequent cause of their number one injury: MSI to the back. Everyone thought the culprit would be jackhammers — heavy, vibrating machines that break up thick asphalt. However, the most common cause of MSIs was shovelling, followed by loading and unloading rubble; getting in, out, on, and off vehicles; misstepping; loading and unloading equipment; and, finally, jackhammering.

"When I put this together and showed it to management, they were kind of shocked," Arndt says. "But then we started thinking about it. We realized we shovel every day. Topsoil, gravel, concrete, asphalt — day in, day out."

Training sends right message

Improved training is also credited for the improvements to injury statistics. In 2000, the City created four new courses for safety committees, including an introduction to health and safety; accident investigation, workplace inspections, and safety committee responsibilities. In 2002, Engineering delivered a safety course to 100 superintendents, supervisors, and managers, outlining their supervisory

responsibilities under the Occupational Health and Safety Regulation and *Workers Compensation Act*. In 2002, the Sewers and Waterworks branches each held a three-day training course for 210 field staff. The training covered confined space entry, shoring and trench rescue, small equipment, gas and electrical awareness, back safety, violence prevention, traffic control, and bloodborne pathogens.

Delivering the safety message

Finding different ways to communicate safety messages to workers has been a major focus of the Engineering Department since the inception of the WCB Compliance Plan in 2002.

A new system of safety alerts, which are modelled on WCB Hazard Alerts, and crew talks began last year. In addition, WCB officers accompany the branch safety designates on crew visits to discuss current safety issues and concerns, and to encourage maintaining due diligence in working safely and reducing injuries.

"It's good for them to know that their manager and their supervisor care about them coming to work and not going home injured," Herd says. "It shows a very good sense of commitment from the manager group and the union, who have put their backing behind it. We have complete buy-in into this plan."

Labourer Paul Leblanc, a first aid attendant and safety committee member in Waterworks, agrees that the safety culture has changed.

"I think people just generally care more," Leblanc says. "When you work around heavy equipment or in confined spaces, things can happen. If you can prevent those things from happening, you're more likely to live a long, healthy life."



Saving backs, one lift at a time

Protecting health care workers in British Columbia is critical.

Our people-handling solutions:

- ◆ Eliminate workplace injuries caused by lifting, transferring and repositioning people
- ◆ Improve patient and resident care
- ◆ Reduce repetitive strain to workers
- ◆ Promote a healthier workplace

Angel Accessibility Solutions has the expertise to design and implement your system.

We provide:

- ◆ Pre-installation assessments
- ◆ All engineering and system installation
- ◆ After-installation training and support
- ◆ More than 11 years experience
- ◆ Fully WCB compliant

Angel Accessibility is proud to offer Canadian made Waverley Glen Lift Systems Products.

Angel Accessibility Solutions Limited is 100% BC-owned and operated.



250 383-0405 • www.angelsolutions.com
PATIENT HANDLING SOLUTIONS

2508 Bridge Street
Victoria, BC
Fax 250 383-7099
Toll Free 1 800 977-0723





Previously injured workers add value to workplace

Fred Bateman (outside truck) re-entered the workforce as a Saferway driving instructor after a back injury ended his career as a long-haul truck driver.

By Helena Bryan

When employees at the Snootli Creek Hatchery in Bella Coola complain about working in the rain, fishery technician Wayne Levesque can only smile. Not long ago, Levesque had his right arm reattached after a portable splitter mill cut it off midway between the wrist and elbow. It could have been the end of his hopes, his dreams, his career. Instead, it was a beginning. At least that's the way Levesque chose to see it. And today, fuelled by unwavering determination, his life is back on track. Not only is he cranking out tunes on his bass and acoustic guitars again, he is a valued member of the Department of Fisheries and Oceans' Snootli Creek team.

Levesque is just one of 4,000 injured workers referred to the WCB's Vocational Rehabilitation (Voc Rehab)

Department each year. On their often painful road to recovery, they face an uncertain future in which their jobs or careers — and the sense of self associated with them — are on the line.

Early return is key

Getting back to work quickly was key to Levesque's recovery. "The longer you sit around, the less likely you are to want to go back. For me, the challenge of having to be somewhere every day, of having to work around the injury, and of meeting new people, it all helped."

That's where Voc Rehab comes in. Its mandate is to help injured workers get back to suitable jobs sooner than later. A recently implemented hiring assistance program, connecting employers and Voc Rehab clients, is making that mandate a little easier to meet.

"Our clients," says Taryn Winsor, one of close to 100 vocational rehabilitation consultants (VRCs) around the province, "are workers who either can't return, or who will have trouble returning, to their regular jobs."

The return-to-work process starts with a rehabilitation plan. VRCs assess the client's work and education history to determine transferable skills. Depending on the client's injury, they will then contact their employer to find out whether opportunities exist for alternate work, modified worksite or duties, or gradual return, or whether on-the-job or formal re-training is necessary. An on-site analysis might be required to evaluate the physical requirements of the job.

“We always start with the aim of getting the client back with the original employer,” says Winsor, “because that’s usually the most beneficial situation for both the worker and the employer.”

To determine functional ability, consultants work with a team that includes the WCB case manager, treatment providers, the employer, employee, union representative, and spouse.

Challenges can be overcome

It can be a challenging time and VRCs provide vocational counselling if necessary. Often, clients have been off work for several months while their injuries stabilize. Older workers who can’t go back to their regular jobs may no longer have an attachment to the employer. And for people who have always done physical work, it can be hard to imagine doing anything else. Occasionally, expectations around re-training and earnings have to be tempered, says Winsor.

Despite the hurdles, there’s no shortage of success stories. Doug Falconer is one. While logging on a slope in Clearwater five years ago, his left leg was crushed by a rolling Fir, one metre in diameter. The leg eventually had to be amputated 13 centimetres below the knee. After working 20 years in the woods, and at 41, with one crushed leg and a Grade 8 education, Falconer was looking at finding a new career. And find one he did.

While Falconer was still in physical rehabilitation, the WCB paid for him to complete an introductory computer course. Voc Rehab then arranged further training and provided a computer to help him in his studies. When he found out there was a computer company in his community of Hope, he introduced himself to the CEO of Healthspace Integrated Solutions, a small, busy software company, and offered to work

voluntarily while he finished his training. His offer was accepted and for two and a half months Falconer worked from six to nine a.m., before a full day of classes in Abbotsford where he eventually earned his programming diploma. As an incentive, the WCB paid half his salary for six months. Falconer started as a paid employee of Healthspace in October 2002 and hasn’t looked back. Neither has the company that hired him.

Attitudes outweigh aptitudes

Susan Marie Price, operations and development director at Healthspace, says Falconer was so good at his volunteer work that they didn’t hesitate to employ him.

“He is very good with people,” say Price, “and because of his re-training he had a lot of computer skills we could build on. He’s also very willing to learn and works well as part of a team.

“In the end, the physical disability doesn’t matter. It’s character that’s important.”

Russ Hilland would agree. He hired Levesque to work at the Snootli Creek Hatchery and says Levesque’s personality traits more than make up for some minor functional disability. “He has knowledge and leadership skills. And he’s a good guy to have on a crew because he’s easygoing and keeps everybody loose and happy.”

Hilland urges potential employers not to overlook previously injured workers. “If you give the person a chance, they’ll pay you back many times over.”

Steve Ingham, human resources manager at Coast Paper Limited, knows just how big the returns can be. When a degenerative back problem forced an employee out of his job as a truck driver, the company re-trained him in a number of different departments until he found a good fit. In the end, the former truck driver settled on a data entry position in

customer service, maintaining both his salary and benefits. It was a blessing for the employee, and for the company, says Ingham: “He now provides expert support on pricing analysis and costing matters. Not only has he elevated our efficiency in that area, we’ve got somebody we can parachute into any department in the company if necessary.

“Basically, we assured him he wasn’t disposable,” says Ingham. Employees like Levesque, Falconer, and others, prove the truth of such assurances every day.

Hiring assistance programs

To help suitable employers and previously injured workers connect, the Hire a Worker and Job Finder programs are now available on the WCB web site.

The Hire a Worker program allows employers to promote job opportunities online and to access skilled workers without the costs associated with advertising, recruitment, and training. It also offers a range of cost-sharing options to offset the expense of training for up to six months. To find out more about incentives or to post jobs, employers can visit the Employer and Small Business Centre on the WCB web site at www.worksafefbc.com and select Hire a Worker, or phone 1 866 266-9404.

The Job Finder program allows previously injured workers with personal ID numbers up-to-the-minute access to employment opportunities. By selecting Job Finder from the Worker Centre on the WCB web site, Vocational Rehabilitation clients can access job titles, locations, and salary or payment. Then if they want to pursue an opportunity, they can simply contact their vocational rehabilitation consultant.

Both Hire a Worker and Job Finder are part of the WCB’s broader Employment Development and Placement strategy for Vocational Rehabilitation clients.

Lives forever changed by a workplace accident: (left to right) Nick Perry, Michael Lovett, Jennifer Fouchalk, and John Higgins.



Stories of lost youth

By Anne-Rachelle McHugh

For thirty minutes after his leg was severed by a conveyer's blades, Michael Lovett lay helpless and trapped, screaming for help.

"Finally the rescue team welded me out," he remembers. "They were picking apart the machine to find what parts were my leg and what were bark. I thought I'd have to watch myself die going through the conveyer and was most scared that I was going to be alive when the blades went through my head."

Lovett was lucky, relatively speaking. He lived. Other young workers, aged 15 to 24, have not been as fortunate. The truth is five young workers were killed in work-related accidents last year. Another

34 are hurt on the job every working day in B.C.; that's the equivalent of one every 42 minutes. Five young workers are permanently disabled each week.

Tragic lack of training

Young workers — hesitant to ask for proper safety training or to question the safety of work procedures — are injured at a rate 30 percent higher than the provincial average.

"I was told to clean the conveyer while it was moving so it would take less time," says Lovett, 18 at the time of his accident. "I was young and didn't think about the possibility of injuries that could happen to me. I just wanted to get my job done."

Lovett is one of four injured young workers whose gruesome accidents are reenacted in a compelling new WCB video aimed at young workers. In this video, *Lost Youth: Four Stories*, the youth talk emotionally about learning to live with the aftermath of their workplace accidents.

Jennifer Fouchalk lost three fingers in a pizzeria dough machine when she was 19 years old. Even today, more than three years later, she hides her hands as she speaks.

"I should have been trained better," she says emphatically. "If you don't know a machine and they expect you to use it just

“I should have been trained better,...if you don’t know a machine and they expect you to use it just say no.”

say no; I will not touch that machine until you train me properly on how to clean it, how to use it, all the different parts that are on it.”

Nick Perry talks with brutal honesty about the way his workplace accident has shattered his life. Perry was just 19 when a 1,200 kilogram load of lumber showered down on him, breaking his back and rendering him a paraplegic.

“I have no bowel function,” he says. “I have a tube up my penis to pee. It makes me feel like I’m two years old. I’m a young guy and I feel like all this responsibility has been placed on me. I can’t go and have fun like my buddies. I’d love to be able to dance now, but I can’t. If I go to the bar and see people dancing it pisses me off that I can’t do that.”

John Higgins, also featured in the video, was just 16 when his back was broken in a workplace accident at a recycling plant. Inadequate safety training is to blame, he says.

Higgins warns others to insist on proper training. “Make sure you know what kind of training you need. Know your rights, know what is required of you and what is required of your employer.”

Parents suffer too

The young people’s parents also speak poignantly about their children’s shattered bodies and shattered dreams. All say the absence of on-the-job safety training was a factor in their child’s accident.

“We’ve been looking after them all their lives,” says Lovett’s mother, “and then they

go out to a job and we think employers, because they are adults — and professionals — will look after them.”

A call to action

Although the number of young workers injured or killed on the job has declined 19 percent since 1998, the number of workers suffering a permanent disability such as an amputation, broken back, or third degree burn is not decreasing.

“Too many young people like Michael, Jennifer, Nick, and John are suffering life-altering injuries,” says Roberta Ellis, WCB vice-president of Prevention. “This awareness campaign is a call to action for all of us — employers, workers, parents, and educators. We have to work together to make sure that when we send our kids out to work we are not sending them out unprepared.”

Lost Youth was produced by the WCB in partnership with Human Resources Development Canada. It will be distributed free of charge to secondary schools and Parent Advisory Committees. It can also be purchased from the WCB by calling

1 866 271-4879 between 7 a.m. and 4 p.m., faxing 1 866 362-3130, or e-mailing moore-wcb.customer_service@ca.moore.com.

The WCB has a comprehensive web site dedicated exclusively to young worker safety. For more information, visit <http://youngworker.healthandsafetycentre.org>.





Employers' Advisers

Providing advice, assistance, representation and training on claim, assessment and occupational health and safety issues.

Check our website for upcoming seminar dates
www.labour.gov.bc.ca/eao

Contact us Toll Free: 1-800-925-2233

All services provided without cost to employers

HELPING EMPLOYERS MANAGE WORKERS' COMPENSATION





Entering confined spaces

By Heather Prime

Confined space accidents are rare, but they can have deadly consequences — fast. Workers entering an oxygen-deficient confined space can lose consciousness within a couple of breaths. Without an adequate oxygen supply, a worker can die in less than four minutes. At this rate of speed, well-meaning co-workers often fall victim too — more than 60 percent of fatalities are would-be rescuers.

Where the danger lies

A confined space is an enclosed or partially enclosed space that is not intended for human occupancy and has a restricted entrance or exit. Confined spaces can be found in almost any workplace and come in all shapes and sizes, from aircraft wings to silos, tanks, and utility vaults. Even a trench can be a confined space under certain conditions.

All hazards found in a regular workplace can be found in a confined space, but in a confined space — where the restricted entrance or exit makes rescue difficult — an added element of danger exists. Three of the more common hazards of working in a confined space are:

- **Poor air quality** — Confined spaces may contain hazardous air contaminants, including colourless, odourless gases that can be detected only with testing. Sometimes gases such as nitrogen displace oxygen and make the space oxygen-deficient. Very low oxygen levels can impair brain function, cause heart failure, and death may result in a matter of minutes.
- **Chemical exposure** — Through skin contact, ingestion, or inhalation of

“bad” air, workers may be exposed to hazardous chemicals.

- **Fire hazard** — The presence of flammable gases or vapours exposes workers to the risk of explosion or fire.

Program minimizes risks

The margin for error is small when working in confined spaces, but experience shows that fatalities are preventable when employers and workers implement a Confined Space Entry



Program conforming with Part 9 of the Occupational Health and Safety Regulation. This program should include:

- Assigning responsibility for administration of the program to a person or persons adequately trained to do so. All workers entering a confined space also require training in the relevant hazards and necessary precautions.
- Identifying and assessing the hazards of each confined space or group of similar spaces.
- Written safe work procedures for entry into and work in confined spaces that address where applicable:
 - Entry permits for high-hazard confined spaces
 - Locking out energy sources and isolating adjacent piping
 - Verifying precautions and testing the atmosphere prior to entry
 - Cleaning, purging, venting, or inerting the atmosphere, as appropriate
 - Ventilating the atmosphere
 - Standby persons to check on the well-being of workers
 - Rescue procedures
 - Lifting
 - Personal protective equipment
 - Coordinating work activities

Entry permits at high-hazard sites

All confined spaces are not created equal; some are even more dangerous than others. The Regulation requires the responsible supervisor to complete and sign an entry permit before workers enter a confined space with one of the following characteristics:

- A high-hazard atmosphere, such as one depleted of oxygen
- Requires lockout of energy sources or isolation of adjacent piping that contains or has contained a harmful substance
- Presents a hazard of entrapment or engulfment in loose materials such as grain, sand, or gravel

Each entry permit must identify at least the following:

- Confined space and the work activities to which it applies
- Workers inside the space
- Required safe work procedures
- Length of time the permit is valid for

Completed and signed entry permits should be posted at each designated entry point to the confined space, or at a minimum of one entry point when the identification at other entry points includes up-to-date information on whether it is safe to enter and all workers authorized to enter are informed of the posted permit's location.

To ensure the continuing safety of workers, entry permits must be reviewed and updated as necessary, and all affected workers must be informed of changes to work activity or required precautions. The responsible supervisor is required to re-authorize and sign a permit when there is:

- A change in the work crew
- A shift change
- A change of the responsible supervisor

The employer must keep a copy of all signed entry permits for at least one year.

For more information

There are a number of resources available to help you work safely in confined spaces:

WCB resources

- Occupational Health and Safety Regulation, Part 9, Confined Spaces, online at <http://regulation.healthandsafetycentre.org/s/Part9.asp>
- Guidelines to the Regulation, Part 9, online at <http://regulation.healthandsafetycentre.org/s/GuidelinePart9.asp>
- Your occupational safety or hygiene officer, or the Prevention Information Line (604 276-3100 in the Lower Mainland, toll-free 1 888 621-7233)

Other resources

- Canadian Centre for Occupational Health and Safety web site at www.ccohs.ca/oshanswers/hsprograms/confinedspace_intro.html
- U.S. National Institute for Occupational Safety and Health web site at www.cdc.gov/niosh/injury/traumaconf.html
- U.S. Occupational Safety and Health Administration web site at www.osha-slc.gov/SLTC/confinedspaces/index.html

Nu-Tech Systems Ltd.
Clean Air For Your Work Place

Vehicle Exhaust Systems

Roll-Out Welding Exhaust Systems

12200 - 1st Avenue, Richmond, B.C. V7E 3M2
Tel. # (604) 271-9222 Fax: (604) 271-2154
E-Mail: info@nu-techsystems.com
Web: www.nu-techsystems.com

5 YEAR WARRANTY ON ALL FILTER CHANGES!

Portable and Fixed

Baffles lower the din at Cranbrook pool



Lifeguard Iris Delamont is one of the many who benefit from reduced noise at the Cranbrook Pool.

By Corey Van't Haaff

You can't hear a pin drop at the Cranbrook Pool, but the addition of more than 600 noise-absorbing baffles means that lifeguards no longer have to yell to be heard.

"The walls, the ceiling, and the water itself are very reflective of sound," says WCB engineer Stuart Eaton. "When anyone shouts or splashes, the noise echoes around and the sound level quickly builds up."

It was a problem for everyone. Pool patrons couldn't hear themselves over the hubbub. The music was barely audible and the lyrics were indistinguishable.

Lifeguards were forced to either yell to each other or use portable radios to communicate.

Noise poses health risks

According to Eaton, Cranbrook Pool was noisy enough that lifeguards went home with headaches or sore throats.

"When people use elevated voice levels to communicate, vocal strain can build up over the years and eventually cause voice problems," says Eaton. "This used to happen with fitness instructors before they used microphones. They would develop nodules on their vocal folds."

The noise was a concern for building

management as well, says Rick Fudge, lead facility technician with Keen Rose Technology Group, which is responsible for the three pools housed in the Cranbrook Recreation Complex. "It was a safe working environment in terms of decibel levels," he says, "but it wasn't conducive to a happy work environment."

Fudge retained an acoustical engineer whose tests confirmed that noise levels were below the WCB's noise exposure limit, but the reverberation time (RT) needed to be decreased. The RT is the time it takes for a noise to decay by 60 decibels.

Since there was no practical way of

changing the composition of the walls or ceiling and no way to alter the reflective surface of the water, the report recommended adding 640 sound-absorbing baffles.

Solution quick to implement

The two-by-four-foot fibreglass baffles were placed into attractive, colour-coordinated plastic bags, then hung from the ceiling trusses at Cranbrook Pool. The entire project was completed in a single weekend, with the pool remaining open during the day and installers working at night.

The resulting noise reduction was significant. On average, tested at five different frequency levels, the RT was reduced by about half.

"It's like night and day," says Fudge. You can hear the music clearly. Lifeguards can speak across the pool deck and

understand what's going on. There've been some positive comments from the swim club. Even the City got feedback."

At \$65,000 it was an expensive proposition, says Fudge, but most definitely worth it. "It was good to rectify the situation so everyone is happy," he says, adding that these types of noise-reducing baffles should be installed when a facility is being designed or re-developed. "This should be a construction cost, not an operating cost," he says.

Other facilities can benefit

Pools aren't the only facilities to experience challenges with elevated noise levels. Gymnasiums and auditoriums are likely to benefit from noise reduction. So are warehouse-type buildings or those made from concrete tilt-up construction, such as machine shops, packaging manufacturers, clothing manufacturers,

bottling plants, and pharmaceutical companies.

"Pharmaceutical manufacturers with clean spaces don't want fuzzy surfaces like carpets and curtains which would absorb sound," says Eaton. "Baffles aren't the answer to every problem, they are really just for buildings with lots of echo-producing surfaces, and they benefit the people who are the furthest away from the source of the noise."

For more information about noise levels, call the WCB's Hearing Conservation Section at 604 276-3090, toll-free at 1 888 621-7233, local 3090.

For noise control solutions, call WCB Prevention Engineering at 604 276-3114, toll-free at 1 888 621-7233, local 3114.

First aid, safety, and training delivered to your door.



From Victoria to Fort Nelson, and everywhere in between, ZEE's highly trained professionals are familiar with BC-specific regulations and are ready to help you tackle the most challenging first aid, safety, and training issues you face in your particular industry. When you also consider ZEE's wide range of products, free delivery, 100% satisfaction guarantee, and lack of contracts to sign, you quickly see why we're the #1 full service first aid/safety supplier throughout Canada.

Call today for a free, no-obligation safety assessment of your workplace.



888.CALL.ZEE (888-225-5933)
www.zeemedical.com



Hyperbaric medicine saves B.C. divers



By Dawn Knoll

Deep, wet, cold, extremely dangerous, and mentally and physically challenging. That describes the environment commercial divers face when they work underwater in aquaculture and seafood harvesting, construction, welding, inspection, search, salvage, and repair.

One of the worst common hazards for occupational divers is decompression sickness, or the “bends,” which can occur if a diver ascends too quickly from deep water, causing nitrogen gas bubbles to form in the lungs, tissues, and bloodstream. Untreated decompression sickness can lead to paralysis, even death. The only effective treatment is hyperbaric oxygen therapy.

Hyperbaric oxygen therapy involves patients breathing pure oxygen from inside a hyperbaric chamber. It has proven to be a successful treatment not only for decompression sickness but also for air or gas embolisms, also common to divers; carbon monoxide poisoning, a hazard for firefighters; nitrogen narcosis,

and crush injuries. The treatment is so effective because the chamber's pressure-induced environment increases the amount of oxygen dissolved in the blood and consequently in the affected tissues. This reduces the size of gas bubbles within the body.

Vancouver General Hospital (VGH) is home to the only hospital-based multiplace hyperbaric chamber in B.C., serving patients from throughout the province. Dr. Michael Lepawsky, director of Hyperbaric Medicine at VGH, estimates that more than 100 commercial divers have been treated at the facility since it first opened in 1966.

Lepawsky will retire from VGH at the end of June and return to his private practice, but he's excited about the new hyperbaric oxygen chamber VGH will receive by the end of the year.

“The new unit has double the capacity of the one it replaces so, given appropriate staffing and resources, we'll be able to increase the number of people we help, which is very satisfying at the end of the

day,” says Lepawsky.

In addition to his role at VGH, Lepawsky is executive director of the Undersea and Hyperbaric Medical Society, Pacific Chapter. He is also a member of various Canadian Standards Association subcommittees for commercial diving.

Section 24.13 of Occupational Health and Safety Regulation now requires employers and diving supervisors to ensure all divers meet *CSA Standard Z275 4-97 Competency Standard for Diving Operations*. And that, Lepawsky believes, will help keep commercial divers out of the hyperbaric chamber in the first place. Commercial divers must also be medically fit in accordance with the WCB requirements and be trained in cardiopulmonary resuscitation and oxygen therapy.

The Undersea and Hyperbaric Medical Society, Pacific Chapter, will hold its 29th Annual Conference on September 19 and 20 in Richmond. For more information, visit their web site at www.pacificuhms.org.

Policy decisions

The following is a summary of policy decisions finalized by the WCB Board of Directors.

Decision summaries are posted on the WCB web site at www.worksafebc.com/law_and_policy/policy_decision/.

Reinsertion of direction in policy item #45.61 into the Rehabilitation Services & Claims Manual

The Board of Directors has approved reinsertion into the *Rehabilitation Services & Claims Manual* direction that, whenever a lump-sum payment or commutation is calculated following the review or appeal process, the calculation will be based on the date on which it is processed. This direction will appear in policy item #45.61 (Calculation of Lump-sum Payment or Commutation).

This reinsertion is being done on an interim basis, pending a review of the applicability of the direction over the longer term.

For more information, contact James Watson at 604 231-8650, toll-free at 1 888 967-5377, local 8650.

Policies of the Board of Directors

The Board of Directors has approved a bylaw regarding policies of the Board of Directors that contains an updated list of the policy manuals and other documents for the workers' compensation system.

For more information, contact Sheri Wynne at 604 214-5472.

Consequential policy amendments in regard to governance changes

The Board of Directors has approved consequential policy amendments to the *Rehabilitation Services & Claims Manual*, Volumes I and II, and the *Prevention Manual* to reflect governance

changes at the Workers' Compensation Board. (These changes were already reflected in the new *Assessment Manual* that came into effect on January 1, 2003.)

The policy amendments remove references to the former Governors and Panel of Administrators and insert new references to the Board of Directors. The amendments also incorporate an updated list of the Board of Directors' policy documents.

For more information, contact Heather Greene at 604 276-5160.

Further consequential policy amendment in regard to the Workers Compensation Amendment Act (No. 2), 2002

The Board of Directors has approved a further consequential amendment to the *Prevention Manual* to implement the *Workers Compensation Amendment Act (No. 2), 2002*, or Bill 63. Policy item #D12-196-7 now provides that an employer who has been ordered to pay an administrative penalty under section 196 must pay the amount of the penalty to the WCB for deposit into the accident fund.

For more information, contact Nick Attewell at 604 273-2266, local 2618, toll-free at 1 888 621-7233, local 2618.

Refinement to policies in regard to the Workers Compensation Amendment Act (No. 2), 2002

At its December meeting, the former Panel of Administrators approved substantive policies to implement the *Workers Compensation Amendment Act (No. 2), 2002*. It was subsequently noted that further refinements were required to policy item #C14-102.01 (Changing Previous Board Decisions — Reopenings) to make the language in the policy more consistent with the language in the legislation.

The Board of Directors has now approved two sets of refinements to the reopening policy. The first incorporates the language in section 96(3) of the *Workers Compensation Act*, which authorizes the WCB to vary a previous decision upon reopening. (The former policy language might have suggested that a decision may only be reopened to pay further benefits.) The second incorporates the language in sections 96.2(2)(g) and 240(2). As a result of these provisions, a WCB decision to reopen or not to reopen a matter *on application* is appealable directly to the Workers' Compensation Appeal Tribunal and is not reviewable by the WCB Review Division.

For more information, contact Joe Pinto at 604 276-3118, toll-free at 1 888 967-5377, local 3118.

Casual workers

The Board of Directors has approved an amendment to the WCB policy on casual workers, as provided in policy item #67.10 of the *Rehabilitation Services & Claims Manual*, Volume II.

With respect to compensation matters, the WCB's previous policy was that longshore workers were treated as casual workers for the determination of average earnings.

Upon reconsideration, the Board of Directors has determined that the reference to longshore workers should be removed from the policy so longshore workers are categorized according to their employment circumstances for purposes of determining average earnings. Therefore, effective March 18, 2003, the categorization of longshore workers for the determination of average earnings will be dependent upon their employment circumstances.

For more information, contact Joe Pinto at 604 276-3118, toll-free at 1 888 967-5377, local 3118.



Infractions

The purpose of "Infractions," a regular item in *WorkSafe Magazine*, is to highlight the importance of making workplaces safe. The WCB Compliance Section and the editors of *WorkSafe Magazine* believe British Columbians should know who has been penalized and why. We hope this information will help make B.C. workplaces safer. The delay between the date of infractions and publication of the infractions in this magazine is partially a result of allowing time for employers and other interested parties to respond to the initial penalty and for the appeal process.

Note: Dates shown indicate when infractions were imposed. Addresses shown are locations where infractions occurred, and not necessarily the addresses of the penalized businesses.

430641 SR200200645 Dec. 02, 2002
\$1,000

Ahn & Sons Holdings Ltd.
DBA Empress Hotel
Empress Pub
235 East Hastings Street, Vancouver
Continuing non-compliance with environmental tobacco smoke regulation.

632995 SR200200577 Dec. 10, 2002
\$2,500

Johal Roofing Ltd.
1542 Enderby Avenue, Tsawwassen
Exposing worker to a risk of serious injury by not ensuring that fall protection was used when working at a height of approximately 4.8 m from the ground.

465925 SR200200737 Dec. 13, 2002
\$3,000

Junglas Holdings Ltd.
DBA Yahk Hotel
Horny Owl Saloon,
9008 Railway Avenue, Yhak
Willful non-compliance with regulation restricting exposure to environmental tobacco smoke.

634302 SR200200493 Dec. 17, 2002
\$1,448

S.M. Roofing B.C. Ltd.
1925 7 Avenue, New Westminster
Non-compliance of regulations related to fall protection.

640820 SR200200699 Dec. 17, 2002
\$1,057

G.S.A. Enterprises Ltd.
Flamingo Hotel
10768 King George Highway, Surrey
Repeat orders relating to Occupational Health & Safety Regulation 4.81 for failing to control worker exposure to environmental tobacco smoke.

474916 SR200100523 Dec. 20, 2002
\$6,882

T F Specialty Sawmill Inc.
4040 Comox Logging Road, Courtenay
Repeat non-compliance with requirement to have an effective health and safety program.

60898 SR200200014 Dec. 20, 2002
\$7,726

McDonald Ranch & Lumber Ltd.
Highway 93, Grasmere
Repeat failure to properly cover electrical switches causing workers to be exposed to a high risk of hazard for injury or death.

575955 SR200100816 Dec. 31, 2002
\$4,247

527748 BC Ltd.
DBA Jesse Cedar
4762 Enquist Frontage Road
East of Sicamous
Repeated non-compliance regarding emergency transportation vehicle not available; informal safety program not maintained.

656539 SR200200443 Jan. 07, 2003
\$1,100

Akash Roofing Ltd.
Residential Construction Site
6977 Argyle Street, Vancouver
Repeated violation for fall protection.

275007 SR200200596 Jan. 07, 2003
\$700

Square Deal Roofing Ltd.
2716 Thompson Avenue, Victoria
Worker exposed to fall of 3.9 m to grade without fall protection.

135932 SR200200695 Jan. 09, 2003
\$3,575

Warren Investments Ltd.
DBA Empress Hotel
Stage Pub
9260 Young Street, Chilliwack
Employer has repeatedly failed to take action to protect workers from second-hand tobacco smoke.

666414 SR200200760 Jan. 09, 2003
\$1,000

Jason Sommers
Condo Reroofing Project
1180 Braidwood, Courtenay
Repeat failure of employer to ensure workers utilize a fall protection system when required.

489971 SR200100429 Jan. 15, 2003
\$1,000

Ian James Woodason
DBA Traditional Roofing
2625 Muir Road
Unit 11 and 12, Courtenay
Workers without fall protection at heights greater than 3 m.

626487 SR200100503 Jan. 20, 2003
\$2,000

Johnson Bros Roofing & Painting Ltd.
4124B Glandford Avenue, Victoria
Repeat non-compliance with the requirements to use fall protection.

Correction

To clarify the Infractions report in the February 2003 issue of *WorkSafe Magazine*, North Pacific Roadbuilders Ltd. incurred a penalty on September 9, 2002 at the worksite of Peter Kiewit Sons Co. Ltd. Peter Kiewit Sons Co. Ltd. was not itself the recipient of a penalty.

WorkSafe™ COURSES

Six one-day WorkSafe education courses are offered by the WCB WorkSafe Education Network — training providers from all sectors that meet WCB criteria. These courses are currently offered:

- Hazard Recognition and Control
- Joint Health and Safety Committee Training
- Occupational Health and Safety in Small Business
- Preventing and Investigating Musculoskeletal Injury (MSI)
- Preventing Workplace Violence
- Supervisor Safety Management

Contact a WorkSafe Education Partner for information about schedules or fees, or to register for a course.

For the phone number of your local provider, download the WorkSafe Education Partners listing from the WorkSafe courses web page at www.worksafebc.com/news/worksafe_courses/default.asp, or call the Prevention Information Line at 604 276-3100, toll-free in B.C. at 1 888 621-SAFE (7233).

www.worksafebc.com/news/worksafe_courses/default.asp



COMFORT ON CONCRETE. DURABLE. GUARANTEEABLE.



SEE STORE FOR
DETAILS

**SUPERSOLE™ 2.0. THE MIDSOLE'S
FOR COMFORT. THE OUTSOLE'S
FOR DURABILITY. AND THE
GUARANTEE IS FOR A YEAR.**

**SIZE MATTERS: 5 TO 16
WIDTHS: B.D.E.EE.EEE.EEEE**

#26-2755 Lougheed
Port Coquitlam, B.C. V3B 5Y0
604.942.6114

13745-72nd Ave.
Surrey, B.C. V3W 2P2
604.543.7730

4707 Kingsway
Burnaby, B.C. V5H 2C3
604.439.1212

The Best Friend's Your Feet Ever Had!

Go ahead... make it easy on yourself

Looking for a more convenient way to do business with the WCB?

Discover Online Reporting and Remitting.

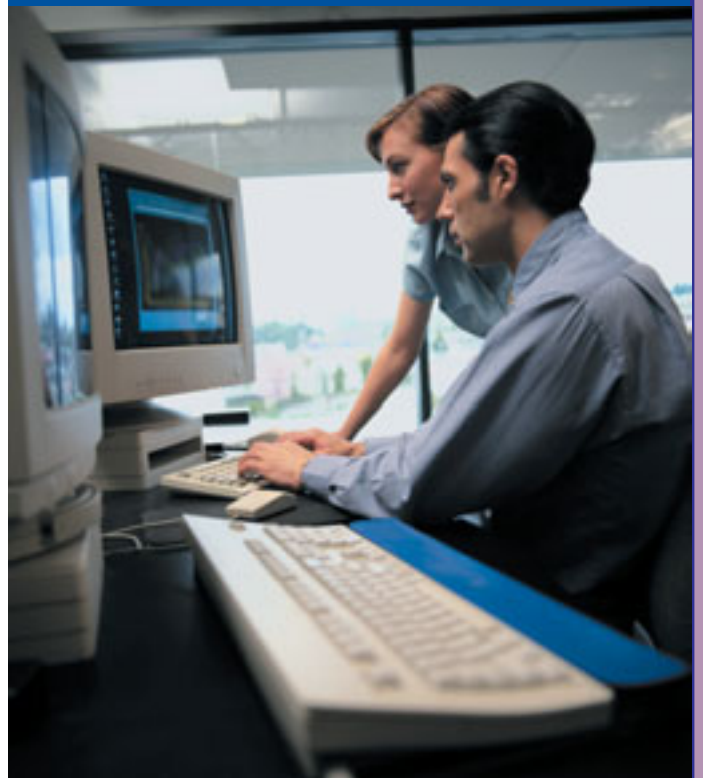
Report your payroll, pay your premiums, and manage your account over the Internet.

Design your own payment plan. No forms to fill out, no pen needed, no postage required.

To sign up and to find out about other online applications visit www.worksafebc.com.

“I just finished using your online services to make my quarterly payment. I loved it. Way to go. One less reason to stick a stamp on a letter or go running to the bank.”

— Carol McClelland
CRS Commercial Carpet Maintenance, Vancouver



WorkSafe™



www.worksafebc.com