

*The WCB prevention magazine  
on occupational health and safety issues*

**WorkSafe™**

March / April 2000 • Volume 1, Number 2

[www.worksafebc.com](http://www.worksafebc.com)



Police dive unit  
ready for anything

Edit	
Can't Undo	Ctrl + Z
Back Problems	Ctrl + B
Concussion	Ctrl + C
Third Degree Burns	Ctrl + T
Electrical Shock	Ctrl + E
Severed Limbs	Ctrl + L
Paralysis	Ctrl + P
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## Some Things Can't Be Undone.

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This ad was created by Rosemarie Ong,  
1998 Grand Prize winner in the  
WCB Student WorkSafe contest.



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Annual event encourages safety committees to take the lead in occupational health and safety—both in the workplace and in the community.



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British Columbia's construction industry is an integral part of the province's economy; it's also one of the most dangerous industries for workers. Industry, labour, and the WCB are working together to change that.

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Roofing Contractors Association of B.C. gives graduates essential skills in a changing, sometimes hazardous trade.



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Greater Victoria is a watery place—dotted with lakes, streams, creeks, and surrounded by coastal waters. So when something goes wrong, it's good to know the Saanich Police Department's dive unit is ready to respond.

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# From the editor

Communication is a two-way street, and it is gratifying when we hear from you. Some of our readers have told us they like the new look and name, others are giving us story ideas and comments on issues. That's great, because this magazine is for and about our readers.



So tell us what you think, suggest stories that we might report on, and let us know how you'd like to receive *WorkSafe Magazine*—as a publication or online. If you prefer to receive the magazine by e-mail, just send your name, title, work location, and e-mail address to [worksafe@wcb.bc.ca](mailto:worksafe@wcb.bc.ca), and we'll be happy to send future issues to you electronically.

To reach more than 165,000 employers and 1.8 million workers is no easy feat. But by creating a dialogue and using a mix of communications, we might get there yet.

*Diane Bentley*

## Letters

### *Reservations about hotel safety program*

I'd like to point out that one of the main reasons for a reduction in lost-time accidents at the Empress Hotel was because of the hotel's business levels and drop in overtime hours. (In reference to the article "Attitude is Everything" in *Prevention At Work*, November/December 1999.)

I agree with Mr. Cameron's perception that the return-to-work program contributes to reduction in lost time. What he doesn't mention is employees and their doctors are pressured into this return before many are capable of doing so.

As president and local chairperson of CAW local 4276, covering the Empress Hotel, and an employee, I have yet to see weekly meetings, never mind ones to discuss safety issues. I will, however, acknowledge that the housekeeping department is an accident hot spot and management may be starting here but I haven't been informed of this to date.

I agree with "safety first," but let's remember that staffing levels and adequate rest periods are a large factor in the process.

— Lora Lonesberry, Victoria

### **On the cover:**

As a member of the Saanich Police dive unit, Constable Todd Lamb is trained to respond to any rescue or recovery mission in the waters of Greater Victoria. Read the story on page 6.

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# NAOSHWeek 2000

## Take the lead for a healthy future

**E**very year, the NAOSHWeek Steering Committee-B.C. challenges employers, employees, the general public, and all partners in occupational safety and health to focus on preventing injury and illness in the workplace.

NAOSH (North American Occupational Safety and Health) Week—May 15 to 21—promotes the importance of protecting your future health through safe practices today and every day. It also encourages safety committees to take the lead in bringing health and safety to the forefront, in both their organizations and their communities.

This year's planning guide explains how you can participate in NAOSHWeek, how to register your organization's NAOSHWeek participation, how to involve the community and families, and what resources are available to your organization. NAOSHWeek 2000 will include judging categories for a wide range of industries, and for large and small organizations.

Take up the NAOSHWeek challenge by setting occupational health and safety goals, creating awareness of those goals both within and outside your organization, and making a start toward accomplishing those goals.

You can participate by holding special activities focused on occupational safety and health, by promoting an existing safety program, or by developing a new program which is launched during NAOSHWeek.

Community involvement can take the form of joint safety activities with local companies or a family safety fair and picnic. Invite students to visit your company for a health and safety show-and-tell, or organize a poster contest that focuses on occupational health and safety.

NAOSHWeek, an annual event in Canada, the United States, and Mexico, is sponsored in B.C. by the Canadian Society of Safety Engineering in association with the WCB, Human Resources Development Canada, and the provincial Ministry of Labour.

To find out more about participating in NAOSHWeek, visit WorkSafe Online at [www.worksafebc.com](http://www.worksafebc.com), or call the Prevention Information Line at 276-3100 in the Lower Mainland or 1 888 621-SAFE (7233) in the rest of B.C.

### How to participate

1. Order the *NAOSHWeek 2000 Planning Guide and Entry Form for Awards* and the NAOSHWeek poster (see order form)
2. Designate May 15 to 21 as NAOSHWeek in your organization
3. Organize special activities to reinforce the importance of occupational health and safety
4. Display the NAOSHWeek poster (included in this issue of *WorkSafe Magazine*) in your workplace
5. Order resource material (listed in the planning guide) to increase the visibility of health and safety messages in the workplace
6. Register your participation by sending in the entry form by June 30, 2000

For more information or to download a copy of the *NAOSHWeek 2000 Planning Guide and Entry Form for Awards*, visit WorkSafe Online at [www.worksafebc.com](http://www.worksafebc.com). To order copies of the guide or poster, return the form below to WCB Publications and Videos.

### Ordering form

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# Police dive unit ready for anything

By Susan Main

**G**reater Victoria is a watery place—dotted with lakes, streams, creeks, and surrounded by coastal waters. So when something goes wrong, it's good to know the Saanich Police Department's dive unit is ready to respond.

Since the dive unit was established in 1979, members have made many unusual rescues. They once rescued a team of rowers who capsized into the turbulent January waters of Elk Lake. They've searched for the bodies of homicide victims and drowned recreational divers. They've located and preserved criminal evidence, including guns, knives, stolen vehicles, and other property.

"We're not limited to anything," says Sergeant Barry McLachlan, the dive unit supervisor. "The good thing about having a police dive unit is that we can gather evidence, we can seize evidence, and we can present whatever we find in court, rather than having to contract someone else to do it."

Inspector Sherry Dwyer, now in charge of staff development, research, and planning, was one of the original members of the unit and served 11 years before retiring her fins in 1990. She recalls diving after a vehicle that had plunged into the murky waters of downtown Victoria's inner harbour: "The water was filthy, there was zero visibility, and it was just miserable. There were tons of people around, there were lots of dangerous obstructions in the water—and of course we're in hurry-up mode because we're thinking people could be trapped in an air bubble in the car." Fortunately it turned out that no one was in the stolen vehicle.

"We don't dive in ideal conditions when we're doing a rescue or recovery. It's a lot different than recreational divers going down and looking at the pretty colours off the breakwater," says Dwyer. "You've got to be thinking of all the potential hazards that may be in your way."



**"Lots of times you're recovering a human body, so you need someone who's got both the mental and emotional stamina to deal with that aspect."**

Even though none of the Saanich Police divers has ever been injured on the job, the dive unit has recently been revamped to comply with changes introduced in the 1998 Occupational Health and Safety Regulation. The Regulation requires all professional divers to be trained and certified to CSA standards or an equivalent, such as navy fleet or coast guard training. The WCB initiated this change in order to stem the number of fatalities among commercial divers—many of whom were trained to dive only at a recreational level. On average, two professional divers died at work each year in B.C. from 1977 to 1997, and more than half of those deaths occurred in aquaculture and seafood harvesting.

This regulatory change put the Saanich Police in a unique position because it is the only municipal police force in B.C. with its own dive unit. The rest of the province's police divers work for the RCMP, which is outside the jurisdiction of the WCB. Members of the Saanich dive unit are the only police divers in B.C. required to meet WCB standards.

The Saanich Police responded to the Regulation by halting its operations and reviewing the certification of its divers. Three of the divers were certified through the navy, one challenged and passed the CSA diving exam, and a few others resigned from the team and were replaced by divers who already had WCB-approved qualifications. One new member is currently enrolled in the four-week CSA diving certification program at Intratek, a diving school in Nanaimo. There are now six members of the dive unit.

A prospective police diver must have completed 100 hours of diving before applying to join the dive unit. "You want a capable and competent diver who doesn't take unnecessary risks," says Dwyer, who selects divers for the Saanich unit. "Lots of times you're recovering a human body, so you need someone who's got both the mental and emotional stamina to deal with that aspect. We want people who are safety-oriented, thorough, competent, stable, and physically fit."

Constable Shelley Smith joined the dive unit in November 1999, with seven years' diving experience with the navy reserve. She's been with the Saanich Police Department since August 1998. "You have to be fit and you have to use your head because, ultimately, you're in charge of your own safety," she says. "You have to know what you're doing because it can be life and death."



# Building a safer construction industry

By Anne-Rachelle McHugh

**B**ritish Columbia's construction industry is an integral part of the province's economy, and it has an impact on every aspect of our lives—from the homes we live in to the buildings where we earn our livings.

Construction is also one of the most dangerous industries for workers. In 1998, the overall construction injury was 10, which is more than double the provincial injury rate of 4.1 and equivalent to about one in 10 construction workers being hurt on the job.

"Construction sites are by nature full of potential hazards, but that doesn't mean accidents are a foregone conclusion," says Don Nelson, WCB Industry Services manager. "Construction work can be safer than it is today. The secret is to work collaboratively with labour and industry to develop programs that work."

## *Educating the workforce*

"Education is the answer, plain and simple," says David Thompson, assistant business manager for the International Brotherhood of Electrical Engineers local 213. "There are too many untrained construction workers out there who have no idea of what's going on, and that's a problem. Workers must take responsibility for their own health and safety, and that's not right. Contractors have to take part as well."



**The WCB recently renewed funding to train firefighters to perform high-angle rope rescues for the construction industry when needed.**

The WCB encourages industry involvement in a number of ways including the funding of projects that have the potential to reduce injury rates and save lives.

"The funding process is designed to encourage and assist motivated labour and employer groups to play an active role in the implementation of health and safety programs," says Nelson. "By funding projects



that have merit, we're basically giving part of the WCB premiums back and saying work with us to make construction safer for everyone."

Recently, funding was renewed for high-angle rope rescue training. Funding totalling \$1.4 million over five years will provide training for firefighters, who are occasionally called upon to rescue construction workers from heights such as cranes.

The program began in 1994, when the practicality of requiring employers to maintain high-rope rescue capabilities was questioned. "It simply wasn't practical or feasible to train construction workers in this type of rescue, especially because of the high turnover in the industry," says Grant McMillan, vice-president of Occupational Safety and Health for the Council of Construction Associations. "This solution is a lower-risk and cost-effective solution."

### Industry a part of the solution

The WCB is also working with labour and employers to determine how construction companies can best comply with the safety committee requirements of the *Workers Compensation Amendment Act*. Construction sites often have a variety of trades working varying lengths of time, and industry representatives have expressed concern about the effectiveness of having safety committees at every site with 20 or more employees.

The WCB will continue to work with industry to find a viable solution, like that developed in response to concerns about ground fault circuit interrupters (GFCIs). The Occupational Health and Safety Regulation made GFCIs mandatory at all construction sites, but the circuit devices were a frustration to some employers who found that nuisance tripping caused unnecessary work stoppages. In response, the WCB worked with industry to introduce the Assured Grounding Program, which allows for the rigorous testing and inspection of tools as an alternative to GFCIs.

### Safe start for youth

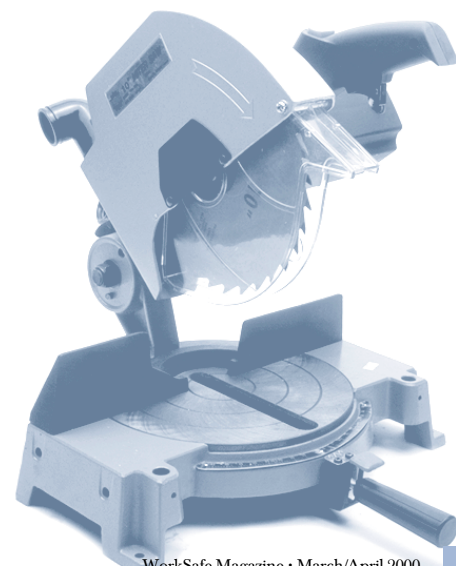
Programs aimed at reducing injuries among young workers are also underway in construction. One such program—the Safety Survival Skills Program—is being developed specifically for secondary school students.

But orientation and training benefit all new workers, regardless of age. Statistics indicate that 60 percent of B.C. construction workers are injured in their first year on the job, with 53 percent of all construction-related deaths occurring in the first two weeks. And veteran construction workers are not immune to injury—especially when they are performing a new task.

"Construction is a unique industry that places many demands on workers, supervisors, and employers," says Nelson. "Still, amid the endless variety of worksites and rapid turnover of employees, health and safety is *the* most important issue to contend with."

### Vital statistics

- About one in every 27 people in Canada works in construction
- More than 12 percent of all B.C. firms are construction-related
- In 1998, there were 21 accepted fatal claims in the construction industry, 7,195 time-loss claims accepted, and \$112 million spent on claims
- Carpenters and construction labourers are the most at risk, making up 46 percent of all construction claims
- Claims are highest in building construction, with 47 percent of all claims, followed by road construction with 22 percent of all accepted claims
- The most common injury in construction is strain resulting from overexertion
- Fifty-three percent of all construction deaths occur in the worker's first two weeks on a job
- In 1998 the injury rate for young workers in construction was 13.4—second only to forestry which had a rate of 19.5





## Custom guardrail system that travels

**T**o comply with the WCB's standards for fall protection, Russ Nelson Roofing needed a new fall protection system. With a little research and ingenuity, they created a solution.

By Dawn Knoll

"We needed a fall protection system that was safe, easy to assemble, and could fit into the back of a truck or trailer for easy transportation to and from worksites," says vice-president Lyle Nelson.

Nelson and his father Russ, now retired, met with employees to determine their specific needs. It turned out that the systems available on the market didn't meet those needs, so the two men decided to design and build their own guardrail system.

What they designed was an innovative U-shaped guardrail system that can be customized to fit any size roof. A prototype was approved by the WCB before the new system was produced and implemented.

The system consists of two 1.8-metre pieces of steel with counterweights and wheels on the end, which fit into a 6-metre piece of welded aluminum railing to form a U-shape.

"The beauty of this design is that you can add as many of the 6-metre pieces as you need to fit the size of the roof you're working on," says Nelson. "We also knew in the designing stages that we wanted a guardrail system that wasn't like permanent anchor systems, so we incorporated the use of wheels to allow workers to roll it out of the way or to move it along the perimeter of the roof with them.

"Feedback from our employees and outside companies has been extremely positive," says Nelson, "but we measure its success on the fact that our guys are using it on *every* job and complying with the Regulation."

If you have a safety solution, e-mail us at [worksafe@wcb.bc.ca](mailto:worksafe@wcb.bc.ca) or write *WorkSafe Magazine*, WCB Communications Services, PO Box 5350 Stn Terminal, Vancouver BC V6B 5L5.

## Day of Mourning, April 28



April 28 is the annual Day of Mourning, when the WCB joins families, workers, employers, unions, and government in remembering those who have been killed or seriously injured on the job.

To order the WCB's 2000 Day of Mourning poster to display at your worksite, contact WCB Publications and Videos (see page 4 for ordering information).

### Personal stories hit home

Last year, 147 people didn't come home from work, ever again.

In *Three Stories*, three survivors relate their own experiences of workplace tragedy—in their own words. These heartfelt testimonials help put the reality of workplace accidents in focus.

This video, which can be shown a segment at a time or all at once, makes an excellent addition to safety meetings and staff training sessions.

See page 4 for ordering information.





# Lock out machinery

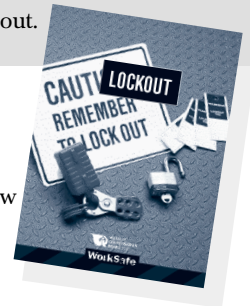
**E**very year, workers in British Columbia are killed or seriously injured because machinery or equipment was not properly locked out. Accidents where workers are caught in machinery can result in severed fingers, crushed limbs, or death. But those accidents can be prevented if machinery is locked out properly before obstructions are cleared or other maintenance work is done. Electrical shock, burns, and electrocution can also result if electrical equipment is not properly locked out.

## Five steps to locking out

1. Identify the machinery or equipment that needs to be locked out.
2. Shut off the machinery or equipment. Make sure that all moving parts have come to a complete stop. Also ensure that the act of shutting off equipment does not cause a hazard to other workers.
3. Identify and de-activate the main energy-isolating device for each energy source.
4. Apply a personal lock to the energy-isolating device for each energy source, and ensure that all parts and attachments are secured against inadvertent movement.
5. Test the lockout to make sure it's effective and to verify that each energy source has been effectively locked out. First ensure that all workers are in the clear and that no hazard will be created if the lockout is not effective. Lockout can be tested after each energy source has been locked out or after a group of nearby devices is locked out.

## Get the manual

This information is taken from the WCB publication *Lockout*, which reviews what lockout is, why it's important, when and how to implement lockout, and employer and worker responsibilities.



See page 4 for information on ordering this publication and other materials from WCB Publications and Videos.

## Courses

See WorkSafe Online ([www.worksafebc.com](http://www.worksafebc.com)) for an expanded listing of health and safety courses around B.C.

## WorkSafe™ courses

Six one-day WorkSafe education courses are offered at more than 50 post-secondary and school district campuses, including all community colleges, around B.C.:

- Joint Health and Safety Committee Training
- Supervisor Safety Management
- Hazard Recognition and Control
- Occupational Health and Safety in Small Business
- Preventing Workplace Violence
- Investigating and Controlling Sprains and Strains

For the phone number of your local provider, call 276-3100 in the Lower Mainland or 1 888 621-7233 in the rest of B.C.

Call your local provider for information about schedules and fees, or to register for a course.

## National Conference on Safety May 8–9, 2000

The Year 2000 National Conference on Safety has what you need, with motivational keynote speakers, more than 28 seminars, an opportunity to network with your peers, maintenance points for your CRSP designation, and a safety trade show.

For more information and to register, call the BC Safety Council at 214-7433, ext. 103 in the Lower Mainland or 1 800 420-7730, ext. 103 in the rest of B.C. Or visit the BCSC web site at [www.safetycouncil.bc.ca](http://www.safetycouncil.bc.ca).



# Training keeps roofers on top

**W**hen your job involves spreading hot asphalt on a surface five or six storeys above ground, or fitting slippery cedar shakes on a steeply pitched roof in the rain, you'd better know what you're doing.

That's the value of the Roofing Contractors Association of B.C. (RCABC) training school. Established in 1993, the Langley facility offers both the compulsory Roof, Damp and Waterproofing Application apprenticeship, which gives graduates an interprovincial certificate, as well as a voluntary Residential Steep Roofing apprenticeship. Both take three years to complete, and are open to non-union as well as union roofers.

Approximately 45 men and women graduate each year from the training facility, says Brian Hoffer, manager of Education and Training for the RCABC. Most apprentices enter the program in their late 20s, and the number of women in the trade is steadily increasing.

In addition, the school offers professional upgrading for experienced roofers on subjects such as new products and applications, and skill-building courses on inspection and supervision, business management, and computers.

A few decades ago, roofing work may have required more brawn than brain, Hoffer says. But the trade has become more sophisticated and today requires both dexterity and attention to detail.

Sandi Parker, a technical service representative for Tremco Ltd., a roofing materials supply and consulting company, completed her apprenticeship in 1996. Parker says the most important safety lesson she learned is to be attentive and clear-headed, which includes being aware of other crew members' whereabouts on the job site.

She also learned skills and procedures that promote job safety. "If you're pouring hot asphalt and you don't know how to handle it properly, you're going to get burned," Parker says.

For more information on RCABC's training program, call 604 882-9734, or visit their web site at [www.rcabc.org](http://www.rcabc.org).

By Elizabeth Godley

John Scott is a trainer at RCABC

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