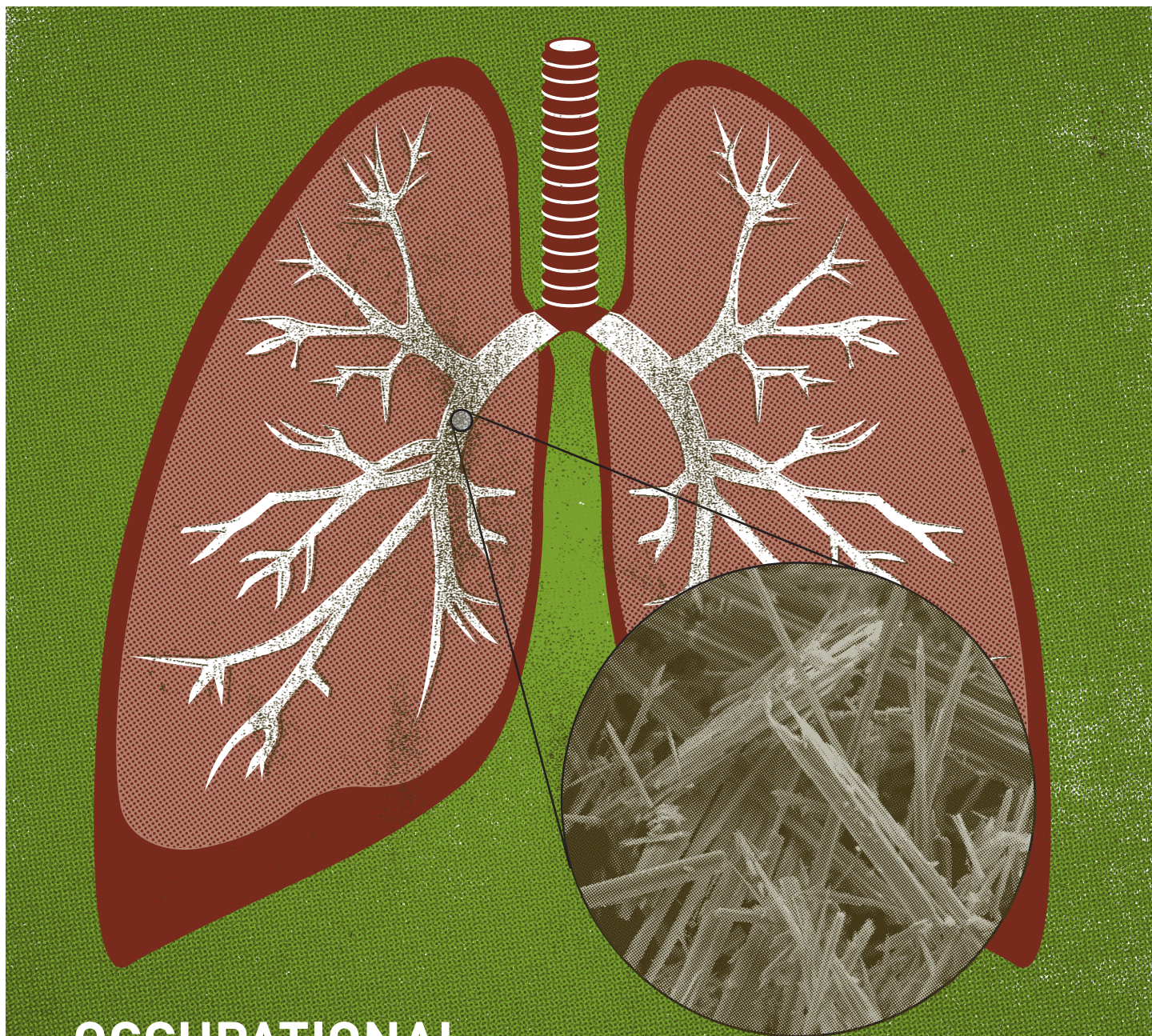


OCCUPATIONAL

JANUARY 2009

HEALTH & SAFETY



**OCCUPATIONAL
DISEASES ON THE RISE**

EMPLOYMENT.ALBERTA.CA/WHS-OHSMAG



ASBESTOS: AN INSIDIOUS KILLER

by Ryan Campbell

The cancer-causing properties of asbestos are widely known. According to the World Health Organization, at least 90,000 people die every year of asbestos-related diseases such as lung cancer and mesothelioma. According to Workers' Compensation Board statistics for Alberta, in 2007, 46 workers died from asbestos-related disease as a result of workplace exposure to asbestos. Most workers killed by asbestos exposure are from trades not normally associated with asbestos work. Because of a latency period between asbestos exposure and asbestos disease, these statistics do not accurately reflect current work site conditions or exposures. For example, asbestos mortality is expected to reach a peak in 2015 because of worker exposure in the 1970s.

Workers unknowingly exposed

The company I work for practises occupational hygiene, and we continually hear about workers accidentally and unknowingly exposing themselves to asbestos. The health and safety community is concerned that sub-standard health and safety systems and inadequate hazard assessments continue to result in needless worker exposure to asbestos. The concern is also that these exposures will result in continuing asbestos-related occupational disease and possibly even deaths.

Asbestos has many characteristics that led to it being used in building materials until the early 1980s. Asbestos resists burning, insulates against electrical conduction, dampens noise and is extremely flexible. As such, asbestos was used in a large number of building materials: vinyl asbestos floor tile, drywall joint compound, loose-fill insulation, pipe elbow mudding, T-bar ceiling tiles, cement products and many others.

Pre-job hazard assessments

The disturbance of asbestos-containing materials (ACM) by workers not following correct work procedures can result in the release of asbestos fibres into the air. These fibres may be inhaled and travel deep into the lungs where they create the potential for disease. Renovation, demolition or regular building maintenance activities can disturb ACM. If the work site was constructed prior to the early 1980s, ACM may be present in some form.

A pre-job hazard assessment, as required by part 2 of the Alberta Occupational Health and Safety Code, is one of the most effective ways to recognize potentially

unsafe conditions, asbestos or not. A hazard assessment at a site built prior to the early 1980s should include questions such as whether testing has occurred to determine the presence or absence of ACM. For example, a contractor completing renovations in a building may ask the building owner if a hazardous building materials survey has been completed, and ask to see the results before starting work. Similarly, a building owner should complete a hazardous building materials assessment in order to ensure their maintenance personnel are not unknowingly being exposed to asbestos through their daily work activities.

Asbestos removal procedures

If ACM are present, they may require removal or protection from impact prior to completing construction or demolition activities. Asbestos removal has the overall goal of eliminating or effectively minimizing the exposure potential for asbestos fibres. The procedural, training and competency requirements for asbestos removal can be found in the Alberta Employment and Immigration Asbestos Abatement Manual.

The single most effective way to ensure workers are not unknowingly exposed to asbestos is to perform an accurate pre-job hazard assessment. Admittedly statistics are a lagging indicator and not an indication of current work practices. However, current observations indicate that worker exposure to asbestos continues to occur through inadequate training and a general lack of asbestos awareness. Employers, employees and health and safety professionals all have an obligation to ensure that the number of workers dying of asbestos-related occupational disease begins to decline.

Ryan Campbell is a junior occupational hygienist at Golder Associates Ltd., in Red Deer, Alberta.

If you're interested in sharing opinions or comments about workplace health and safety issues, please contact the magazine's editor through the WHS Contact Centre, 1-866-415-8690 (or 780-415-8690, if you are in the Edmonton area), or e-mail whs@gov.ab.ca.

Please see feature story on occupational diseases on page 14.

OCCUPATIONAL HEALTH & SAFETY

January 2009, Volume 32, Number 1

Joe Childs
Lee Craig

Managing Editor
Editor

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Membership on the Occupational Health & Safety magazine advisory board is open to any resident of Alberta with knowledge and experience in health and safety, and an interest in communicating health and safety information to the public. Anyone who is interested in joining the board should submit a letter of application to the managing editor of the magazine. The board meets three times a year in Edmonton. Board members do not receive remuneration or reimbursement for expenses related to meetings. See "Contacting the editor," below.

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The magazine is also available as a PDF file at employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/126.html.

Contacting the editor. We welcome responses to articles or information published in this magazine, as well as suggestions for future articles. You can reach the editor through the Workplace Health & Safety Contact Centre. Phone 1-866-415-8690 or e-mail whs@gov.ab.ca.

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AWARD FOR STUDENTS IN OH&S COURSES

The Canadian Centre for Occupational Health and Safety (CCOHS) is accepting entries for the 2008–2009 Dick Martin Scholarship Award. This annual national award is available to students who are enrolled in an occupational health and safety course or program in an accredited college or university in Canada. The course or program must lead to an occupational health and safety certificate, diploma or degree.

The award was established in 2002 by the CCOHS Council of Governors in recognition of Dick Martin's contribution as a governor.

Three scholarships of \$3000 will be awarded. Post-secondary students are invited to submit 1000- to 1200-word essays on a topic related to their area of study in occupational health and safety.

The deadline for this award is January 31, 2009.

For more information on Dick Martin and the award, please see www.ccohs.ca/scholarship/entries.

Submissions can be made electronically. Contact CCOHS at 1-800-263-8466 or e-mail scholarship@ccohs.ca.

NEW eLEARNING

Workplace Health and Safety has posted three new eLearning programs. They are available online at www.worksafely.org or directly at employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/268.html.

The topics are basic health and safety; noise and hearing protection; and working at heights.



Basic Health and Safety

This program provides basic information about making a workplace safe and healthy. It includes some practical tools that can help you follow the health and safety laws in Alberta.

Noise and Hearing Protection

Noise is a common workplace hazard. Learn about how noise can affect you and what you can do to manage noise at the workplace.

Working at Heights

This awareness program discusses the laws that apply to fall protection in Alberta, the identification and control of fall hazards, and the components of fall protection systems.

CALGARY STAMPEDE WORKPLACE SAFETY FLOAT

Once again, the safety community of Alberta entered a Work Safe for Life float in the Calgary Stampede parade, which was on July 4, 2008. The focus of this project—completely funded through corporate and industry donations and created with volunteer labour—was to promote and increase public awareness of safe work practices within all industries and all jobs in Alberta.

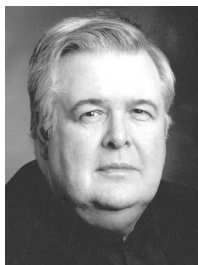
The Work Safe for Life float, for the second year in a row, was awarded third place in the Not for Profit category. The float was also featured at Marlborough Mall during its Stampede Breakfast.

Everyone must do their part to work together every day, so that they can return home safely to their families at the end of every work shift.



Volunteers and sponsors:

Alberta Association for Safety Partnerships
 Alberta Body & Heavy Truck, Calgary
 Alberta Construction Safety Association
 Alberta Food Processors Association
 Alberta Forest Products Association
 Alberta Government, Work Safe Alberta
 Alberta Motor Transport Association
 Alberta Traffic Supply
 AMA
 Armour Equipment Sales and Rentals Limited
 Avenues Access Systems
 Black and MacDonald
 Calgary Exhibition and Stampede, Health,
 Safety & Environmental
 Calgary Police Service
 Canadian Society of Safety Engineering
 (Calgary and National)
 Centennial Royal Canadian Legion
 City of Calgary
 Fountain Tire, Meridian Road, Calgary
 Gibson Energy
 Home Depot
 Job Safety Skills Society
 Manufacturers' Health and Safety Association
 Marlborough Mall
 Olds Emergency Medical Services
 NAPA Airways Calgary
 Rockyview Fire Service Station 56, Irricana
 RONA—Ogden Road
 Qualico Group
 Safety Tech
 Stewart and Stevenson Canada
 Telus
 Turner Valley Fire Department
 Westcan Bulk
 Weston Solutions at Nortel
 WCB-Alberta



**I THINK,
 THEREFORE
 I AM**

by Bob Christie

Many university undergraduates have tried to follow the serpentine logic of René Descartes, the famous 17th century French philosopher. He is remembered for the line, “I think, therefore I am.” The question we are facing in this issue is even simpler: if a workforce thinks it is safe, is it really safe?

When Dennis Ryan from Compass Health and Safety tried to persuade me to write about his book and the premise of safety perception surveys, I balked. However, I made a couple of calls to Workplace Health and Safety and discovered that perception surveys can have a significant role in advanced safety systems.

I don't pretend to understand the intricacies—a perception survey tries to measure the beliefs, values and opinions of the workforce about risk and safety within an organization. What a workforce thinks is no substitute for a detailed and objective measure of actual risks, hazards and systems. But it is clear that a workforce that has inconsistent views on safety will be likely to follow unwise courses of action.

Dennis has a published book and a software package on the subject. You can read more at www.compasshealthandsafety.com.

Do not get involved in a safety perception survey until you have a system in place that is improving health and safety. You need to make sure your organization has a good audit system in place that can track improvements over time; has a health and safety system that you believe is making your site as safe as it can be; and has not received notices from your friendly occupational health and safety officer about concrete actions you need to be taking. The Certificate of Recognition allows for perception surveys only in maintenance years and after a solid safety system is in place.

If you have a health and safety innovation you would like to see highlighted in this column, please write to me at bchristie@shaw.ca.

Bob Christie, a partner at Christie Communications Ltd., supplies most of the web link resources for the articles in this magazine.

YOUNG WORKER CAMPAIGN AIMED TO TAKE LUCK OUT OF THE SAFETY EQUATION

by Cory Schachtel

“Young people tend to feel invincible,” says Mark, an employee at an Edmonton gas station.

As a young person, he would know. A 19-year-old college student, Mark has worked at the gas station since high school. Though slightly more self-aware than some peers, he admits he hasn’t always been safety-conscious. Unfortunately, neither has his employer.

“When I first started, I didn’t know any better, but it was obvious the new staff wasn’t being trained properly. About a year later, they introduced a safety training program, but it was boring and few employees retained much,” he says.

“We want to instill a culture of workplace safety that will stay with them throughout their careers, and to share that culture with the generations behind them.”

—Barrie Harrison

Despite accounting for only 17 per cent of Albertan employees, 15–24-year-olds were over 23 per cent of disabling injury claims in 2007, and 41 have died in the last five years. Alberta Employment and Immigration’s young worker safety campaign aimed to lessen those losses in a way our province has never seen.

The campaign, which ran October 29 to November 30, sought its target demographic (15–20-year-olds) without the use of TV, radio or print media. The campaign was in buses and bus shelters, school hallways and cafeterias, and also where young people spend most of their time: online.

Bloodylucky.ca, the campaign cornerstone, provided five safety questions all new employees should ask, and reminded them of their right to refuse unsafe work. The website garnered most of its attention, however, from six not-so-subtle videos depicting relatively graphic incidents of workplace mishaps. Barrie Harrison, Employment and Immigration’s public affairs officer, says they expected a wide range of reactions, and not all were good.

“We knew the potential for controversy because our focus groups told us that’s what we needed to reach our



Bloodylucky.ca campaign launch October 29, 2008

audience. We were okay with people taking issue with the videos, even if they said the content was too alarming,” says Harrison. “They weren’t meant to be enjoyed, they were meant to be talked about. Our goal was to initiate conversation on young worker safety.”

While focus group reactions were mixed, research showed young Albertans don’t mind alarming images, so long as they’re forewarned. They also respond to a true story.

“The website opens with a content disclaimer, and the focus groups appreciated that. They were also surprised to learn that all the videos were based on actual, documented workplace accidents. The viewed mock-ups were considered ‘neat’...until they were told it all actually happened,” says Harrison.

The videos were posted on the government website and YouTube. Viewers posted comments, which gave the campaign feedback. Within the first week of the campaign launch, bloodylucky.ca was visited more than 100,000 times.

“They don’t think government is cool. Early on, we fought the issue of how to be exciting when our audience already considers us bland. One advantage is that they trust us, so we made engaging videos available, and pulled our audience in, instead of pushing it on them, like a traditional campaign. Word of mouth is more effective and fixes the ‘cool’ issue,” says Harrison.

It's a modern approach to spreading a crucial message, one the campaign hopes will spread past its targeted demographic.

"We want to instill a culture of workplace safety that will stay with them throughout their careers, and to share that culture with the generations behind them. We want all workers in Alberta to go home to their families at the end of their work day," says Harrison.

Cory Schachtel is an Edmonton writer and a recent graduate of Grant MacEwan's Bachelor of Communications in Professional Writing.

RESOURCES

WEB LINKS

Occupational Injuries and Diseases in Alberta (Young Workers)
employment.alberta.ca/documents/WHS/WHS-PUB_oid_young_workers.pdf

Alberta Employment New and Young Workers
employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/352.html

X-treme Safety, a Survival Guide for New and Young Workers
www.alis.gov.ab.ca/pdf/cshop/xtremesafety.pdf

2008 Heads Up Workplace Safety Campaign posters
www.wcb.ab.ca/workingsafely/heads_up.asp

Alberta Employment and Immigration and Alberta Education joint project
employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/3133.html

VIDEO

Young and New Workers: They Are Worth Your Attention (DVD 031)
Young and new workers need special attention because they are more at risk of injury than their older and more experienced counterparts. This program profiles young and new worker programs at 13 B.C. companies.

Lost Youth: Four Stories of Injured Young Workers (VC 0365)
Michael, Jennifer, John and Nick all speak of losing their youth after suffering serious workplace incidents. Through recreations of these incidents and one-on-one discussions with the young people and their parents, this program tells four stories of lives forever altered.

Dying to Work (VC 0345)
W-Five reporter Wei Chen examines the perils of teen labour and discovers an astounding statistic—on average one young worker in Canada dies on the job each week and 60,000 young workers are injured each year.

Supervisor (The)
This program is a docudrama that examines a supervisor's responsibility for workplace health and safety. It depicts the emotional, legal and financial consequences of a fictionalized workplace accident that results in the death of a young worker. **Warning:** This video contains graphic scenes and profanity. Viewer discretion is advised.

WORKPLACE HEALTH & SAFETY

Contact us any time

For occupational health and safety information and assistance, or to order Workplace Health and Safety publications, phone the Contact Centre at 1-866-415-8690
780-415-8690 in Edmonton and area
e-mail whs@gov.ab.ca



Sign up for Workplace Health and Safety news

To be notified by e-mail of all new Workplace Health and Safety website postings, sign up for a FREE subscription service through employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/2984.html.

Alberta Government Library – Labour Building Site

To review the large selection of occupational health and safety information materials available through the Alberta government, go to employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/415.html.

To borrow materials, either contact your local library and make your requests through the inter-library loan system or visit the Alberta Government Library:

3rd floor, 10808 - 99 Avenue
Edmonton, AB T5K 0G5

Library phone

780-427-8533

Audio-Visual Services phone

780-427-4671

To reach either of the above numbers toll-free in Alberta, dial 310-0000 followed by the area code and phone number.

Library fax 780-422-0084

Workplace Health and Safety is an Alberta Employment and Immigration program that falls under the jurisdiction of Minister Hector Goudreau.

PARTNERSHIPS NEWS

New partner in health and safety

Partnerships would like to welcome its newest partner in health and safety, ALBI Homes Ltd. of Calgary.

Partners are recognized as health and safety leaders in their industry. Through a memorandum of understanding, partners commit to taking a proactive role in promoting workplace health and safety throughout Alberta. They promote the Partnerships program, and assist others with their health and safety systems and needs.

What Certifying Partners work in which industry?

Workplace Partnerships works with 14 Certifying Partners to deliver the Partnerships program across Alberta. Seven of the safety associations are funded (F) through a levy added to employers' WCB premiums in select industries. The other seven operate on a fee-for-service funding model. The table to the right identifies the industry sectors associated with each Certifying Partner, and includes a contact number for each association, if you need more information.

Is that COR valid?

All copies of Certificates of Recognition have an expiry date printed in the lower right corner of the certificate. As more project owners and employers require contractors to hold a valid COR to either bid for or perform work, the incidence of altered, modified and expired CORs being submitted in bid packages has increased.

Information on a COR can be verified quickly and easily online by visiting our website at employment.alberta.ca/documents/WHS/WHS-PS_COR.pdf.



Partnerships in Health and Safety is a non-regulatory, province-wide injury prevention program sponsored co-operatively by government, labour and industry. The program offers the following:

- tools to implement a health and safety management system
- guidance in applying for a Certificate of Recognition (COR)
- potential for premium rebates from the Workers' Compensation Board-Alberta

For more information, call the Partnerships Hotline at 1-866-415-8690 or visit employment.alberta.ca/whs-partnerships.

Client/Industry	Industry Sector Certifying Partner
All industries	Alberta Association for Safety Partnerships 403-223-9008
All construction industries	Alberta Construction Safety Association (F) 780-453-3311
Bakeries, meat packers and processors, breweries, miscellaneous processors, retail and food service	Alberta Food Producers Association 403-201-3657 ext. 28
Member forest product manufacturers and their contractors, logging, trucking of logs and timber management	Alberta Forest Products Association 780-452-2841
Hotels, motels and convention centres	Alberta Hotel Safety Association (F) 780-423-9233
Private and public long-term care facilities, seniors' housing, health authorities* and other healthcare providers* (*industries not covered by WCB levy)	Continuing Care Safety Association (F) 780-433-5330
All general trucking, specialized trucking and garbage hauling	Alberta Motor Transport Association (F) 403-214-3440
Cities, towns, villages, counties and municipal districts	Alberta Municipal Health and Safety Association (F) 780-417-3900
Provincial government services, including regulatory agencies	Alberta Corporate Human Resources 780-408-8483
All industries	Alberta Safety Council 780-462-7300
All forms of manufacturing, machine, hydraulic and metal fabricating shops	Manufacturers' Health and Safety Association (F) 403-279-5555
All forms of petroleum industries	Enform (F) 403-250-9606
Dry cleaning, commercial washing, garment textile industry, linen manufacturing and rental	Textile Rental Industry Association 780-475-9097
Wood truss fabrication and home improvement centres	Western Wood Truss Association of Alberta 403-279-3385

CREATIVE SENTENCING

SEEKING JUSTICE AFTER WORKPLACE TRAGEDIES

by Nordahl Flakstad

It is impossible to eliminate the dark shadow of workplace injuries and fatalities. However, creative sentencing under Alberta's Occupational Health and Safety Act brings some measure of restorative justice in the aftermath of trauma and tragedy.

OH&S offences can lead to court-imposed fines of up to \$500,000. Formerly, such fines simply became part of general provincial revenue. However, section 41.1 of the OH&S Act lets a court direct that these fines be put into specific programs or be provided to specific beneficiaries. Since section 41.1 became law, Alberta judges, Crown prosecutors and defence lawyers increasingly have crafted creative sentences that more meaningfully fit punishment to the offence.

Highest fines ever in 2008

As of October 2008, more than 30 Alberta OH&S offenders (mainly firms) were assessed more than \$4.6 million (versus \$1.7 million in 2007), most of which was directed into safety-related causes and programs.

Edmonton-based Crown Prosecutor Marshall Hopkins says that court sentencing has several goals. It may deter others from similar infractions or specifically deter an offender from re-offending. The court may seek to denounce unlawful conduct.

Creative OH&S sentencing orders can aim at restorative justice for the community and victims, including injured workers and affected families and co-workers.

"You cannot restore a life that is lost, but courts may be able to direct the penalties so they operate to protect other lives and to restore, in some way, the community that is affected," says Hopkins.

A creative sentencing order under section 41.1 may be based upon a joint proposal to the court by the Crown and defendant. This situation happened after a worker drowned in 2005 when his snowmobile went through the frozen Peace River. ATCO Electric was fined \$300,375—\$297,000 of which is being used to develop an Alberta standard for best practices when working on ice.

Wide-ranging list of groups

Most of the approximately 20 major OH&S convictions in Alberta in 2008 involved creative sentences. The wide-ranging list of recipients includes the University of Alberta's Engineering Safety and Risk Management Program, the Glenrose Rehabilitation Centre, the Alberta Construction Safety Association and the Worker Health Centre. Hopkins emphasized that the Crown and courts remain open to other creative alternatives.

In September 2008, SSI Special Services Inc. received one of the highest creative sentencing fines in connection with the death of one worker and injury of two others. The oil-servicing firm was fined a total of \$425,000. Of this amount, \$419,250 benefited the Northern Alberta Institute of Technology's OH&S safety diploma programs, Red Deer College (for a rig-technician program honouring the deceased worker), STARS air ambulance and Threads of Life.

Shirley Hickman co-founded Threads of Life after her 21-year-old son Tim died because of a workplace explosion in 1996. She and other families found there was no Canadian organization offering timely support, advice and comfort.

The organization is a national not-for-profit charity that offers one-on-one peer support and education to families and victims of occupational fatalities, injuries and diseases. It will use its \$40,000 share for an Alberta workshop for people coping with workplace tragedies. In 2007, a \$95,000 award helped Threads of Life hold a similar workshop and produce two Alberta-specific resource booklets for families living in the aftermath of a fatality or life-altering injuries.

Value immeasurable

Hickman, the executive director, stresses that creative sentencing's value goes beyond money.

"For Threads of Life to be recognized by the judicial system in Alberta, the family, the employer and everyone else involved, means the human side of tragedy is being recognized."

STARS air ambulance, through more than 16,000 medical emergency flights over 23 years from helicopter bases in Calgary, Edmonton and Grande Prairie, already has a high-flying presence. Funds from recent and earlier orders helped STARS develop the Industry Site Registration Program—an inventory that includes locations, numbers of workers and special hazards of more than 3000 Alberta worksites. Money from creative sentencing also helped STARS' Emergency Link Centre become a 24-hour communications centre that links emergency-transportation providers and treatment centres.

"Creative sentencing is an innovative way to get funds, to address safety incidents at industrial sites, and to help workers and their families," says Paul Jackson, STARS safety and risk manager.

Nordahl Flakstad is an Edmonton writer and editor. He is the owner of Flakstad Communications.

MOTORING AWAY FROM DANGER

REDUCING THE RISKS OF DRIVING WHILE AT WORK

by Anita Jenkins

As Alberta's economy continues to thrive, traffic jams and difficult commutes have become an everyday reality. More and more vehicles are on the road, not just in large urban centres like Calgary and Edmonton but also, for example, on the roads between Fort McMurray and the oilsands worksites. Many Albertans drive as part of their jobs, especially in forestry, oil and gas, and other resource-based industries.

Driving for work is increasingly dangerous as the higher traffic volumes are combined with the pressures of working in boom times. Labour shortages and high demand for products and services can lead to unsafe driving practices, such as speeding, using cell phones and other such devices while driving, and driving while fatigued or impaired by alcohol or drugs.

Don MacKenzie, Partnerships consultant at Alberta Employment and Immigration, notes that driving-related incidents are the most common cause of workplace deaths in Alberta. "These incidents normally make up about a quarter of the cases investigated," he says, "but in 2007 they represented almost a third of the total number."

The statistics are alarming, and the costs of making a mistake are high. Still, several health and safety leaders in the province say there is light at the end of the tunnel. A number of safe driving awareness campaigns

are striving to change drivers' attitudes and habits, and safe driving courses for employees are becoming more common. There is even a move afoot in many sectors to ban the use of cell phones while driving.

"These incidents normally make up about a quarter of the cases investigated, but in 2007 they represented almost a third of the total number."

—Don MacKenzie, Partnerships

Awareness

Enform's 2007–08 Safe Driving Campaign, www.enform.ca/1012, reminds workers that driving is the leading cause of death in the Canadian oil and gas industry. And people who don't die in a motor vehicle incident can be seriously injured or disabled. The campaign also points out that another less visible but perhaps just as painful outcome of careless or inattentive driving is having to spend the rest of your days knowing you were the cause of someone else's death or disability.



The forestry industry is similarly active in stressing the importance of road safety among its workers. Industry truck drivers make thousands of trips annually, transporting logs from the harvest site to the mills. The industry estimates that more than 2200 logging trucks travel over 90 million km each year in Alberta. Most of these trips are made during the winter months.

“If I don’t take a call immediately, the world will keep turning.”

—Wally Baer, president and CEO of Enform

Forestry companies hire independent contractors to conduct inspections with a view to keeping forestry vehicles roadworthy and compliant with the legislation. Proper maintenance, along with training and evaluation, help to provide a safer transportation system, says Carola von Sass, director of health and safety, Alberta Forest Products Association.

During loghaul season, forest companies place radio and newspaper ads and use other methods to let the driving public know that hauling is going on in the area.

“Logging trucks are big, heavy and not as maneuverable as passenger vehicles,” says Parker Hogan, director, public relations, Alberta Forest Products Association, “so other drivers need to be cautious and careful when sharing the road with them.”

The Alberta government is on board, too. MacKenzie says Partnerships in Health and Safety is revising the Certificate of Recognition audit to increase awareness of the importance of safe driving.

“To help keep road safety in the forefront,” says MacKenzie, “we are doing things like adding references to driving in the auditor guidelines.” As well, MacKenzie says, it is now a Partnerships standard to include road safety in COR health and safety program building courses.

The roads in the Fort McMurray area and between Fort McMurray and Edmonton are among the most congested and heavily travelled in the province. Part of the problem is that the infrastructure has not kept up with the dramatic increase in activity. While construction and improvements proceed, Syncrude Canada encourages employees to be more patient while driving and to maintain their focus, says Peter Dunfield, senior advisor external interfaces, with Syncrude’s Safety, Health and Environment office.

One of Syncrude’s programs is a hotline call-in number. Fellow employees and other citizens are encouraged to

call if they observe dangerous driving, and Syncrude management then follows up with the contractors and/or employees involved, or with the RCMP in the case of a private vehicle.

Training

Enform, which offers training, certification and health and safety services to the upstream petroleum industry in Canada, is currently offering one-day driver improvement courses for light duty vehicles and larger vehicles.

The Alberta Forest Products Association promotes the Forest Industry Professional Driver Improvement course offered by the Woodland Operations Learning Foundation (WOLF), based in Slave Lake. The course, which is currently being field-tested and piloted, provides professional driving tips and addresses key issues such as hours of operation, inspections and cargo securement. Course modules can be taught independently, with opportunities for practical, hands-on learning.

Cell phone policies

The use of cell phones and other hand-held devices while driving has become commonplace, and is cause for concern, say the safety experts. However, there is currently a trend in many sectors to prohibit employees from using cell phones while driving. Enform requires its workers to pull over to the side of the road and park

CHOOSE TO DRIVE SAFE

Driving is the single leading cause of death in the upstream petroleum industry.

ENFORM
THE PETROLEUM INDUSTRY'S COMMITMENT TO TRAINING AND SAFETY

For more information on this campaign, please visit: www.enform.ca/driving

before making or taking a call. Workplace Partnerships and Syncrude Canada have similar policies.

“If I don’t take a call immediately, the world will keep turning,” says Wally Baer, president and CEO of Enform. “We are quite proud of our cell phone policy and hope other companies will follow suit.”

Anita Jenkins was the editor of Occupational Health & Safety magazine from January 2003 to January 2008.



SAFE DRIVING TIPS

Dr. Louis Francescutti, professor of public health sciences at the University of Alberta, says that nations such as Australia, the United Kingdom, Sweden and Malta have made “great strides” towards improving driver safety while Alberta and Canada are lagging behind. “We all think we’re great drivers,” he says, “and we’ve become desensitized to the hazards.”

Francescutti advocates tougher enforcement. “Drivers in Alberta know they can probably get away with impaired driving, speeding and failing to use seatbelts,” he says.

“The rules of the road are very simple,” Francescutti says:

- Don’t speed.
- Stop at stop signs.
- Adapt to the weather conditions.
- Don’t drink and drive.

Don Mackenzie, Partnerships in Health and Safety, adds these tips to the above list:

- Keep your vehicle well maintained.
- Take a rest break if you are tired.
- Avoid distractions.

RESOURCES

WEB LINKS

transportation.alberta.ca/3112.htm

Alberta Ministry of Transportation Alberta Traffic Safety Plan

www.saferoads.com/index.html

Saferoads—Traffic Safety in Alberta

www.ama.ab.ca/cps/rde/xchg/ama/web/advocacy_safety_traffic_work.htm

AMA Mission Possible @ Work Program

Driving for RNs: findarticles.com/p/articles/mi_qa3929/is_ai_n9158122

VIDEO

Driven to Distraction (DVD 022)

Driving distractions cause crashes. This program will point out exactly how dangerous distractions in the car can be. After watching this, you and your employees will understand why you must remain focused behind the wheel.

Defensive Driving for Government Employees (VC 0384)

Although the title refers to government employees, this DVD is applicable to anyone who drives as part of their job. For government employees, motor vehicle accidents are by far the leading cause of death on the job. This program looks at techniques to help prevent accidents from happening, and in the case of unavoidable accidents, helps lessen the severity.

Blindfold Effect (The) (VC 0407)

This award-winning video focuses on three driving situations that involve more than half of all collisions: following too closely, intersections and backing up. Through collision reenactments and demonstrations of safe driving procedures, the video teaches tactical driving techniques that will improve every driver’s skill and awareness.

In a Heartbeat (VC 0418)

Based on the true story of a tragic accident in October 1998 that took the life of an 18-year-old girl, this video stresses the importance of diligence and attention when driving and shows just how quickly an accident can occur.

Are you a gambler?

A recent study suggests taking a call on your cell phone while driving may quadruple your risk of collision. If you must make or take a call, pull over in a safe place.

Asleep at the Wheel

According to the Canadian Trucking Association, 30–40 per cent of collisions in the heavy truck industry in North America are related to fatigue.

ADDRESSING THE GROWING INCIDENCE OF OCCUPATIONAL DISEASE

OCCUPATIONAL DISEASE UNIT TO BE ESTABLISHED IN ALBERTA

by Mary Anne Gorman

Occupational disease is a rapidly growing cause of work-related death. The Workers' Compensation Board-Alberta reports an increased number of occupational disease fatality claims in Alberta over the past 10 years. In 1999, 29.2 per cent of occupational fatality claims were attributed to occupational disease, but by 2007 this figure had risen to 42.3 per cent. This rate will increase even more as the workforce ages, and as occupational disease becomes better recognized and identified.

A wide spectrum of diseases

In his clinic at the University of Alberta, Dr. Jeremy Beach, associate professor and residency program director, community and occupational medicine, sees a spectrum of work-related diseases. Cases are complex and range from cancer and lung diseases, such as asbestosis and silicosis, to musculoskeletal diseases and injuries like low back pain, carpal tunnel syndrome and tendonitis.

Dr. Beach points out several challenges in dealing with occupational disease. First, there is low recognition of the workplace as a source of disease. "Work-related injuries and disease are fairly common, but society doesn't often consider them a priority. This presents a major stumbling block in prevention and treatment." Second, even when occupational disease is recognized in a patient, health care providers have an additional responsibility. "We

must not only treat the condition but also extend our concern to the workplace or other places where the rest of the population may have been exposed." A further challenge is to meet the unique treatment needs of the workforce with only 50 to 60 specialist occupational physicians in Canada.

"Work-related injuries and disease are fairly common, but society doesn't often consider them a priority."

—Dr. Jeremy Beach

Prevention is best

Of course, the best treatment of all lies in prevention. Current prevention programs are largely based on meeting the regulations set out in legislation, such as those pertaining to health screenings for asbestos exposure or for hearing. Many provinces have acknowledged in legislation a strong connection between specific diseases and certain occupations—principally that of urban firefighters. But the causal relationship between a wider range of occupations and diseases remains unexplored territory.

To better understand the relationship between work and disease, Alberta Employment and Immigration is establishing an occupational disease unit, to be operational in early 2009. The unit aims to amass data that will create better awareness and understanding of occupational disease in Alberta.

As Bernice Doyle, manager of the workplace health and safety policy unit, observes, “The focus has been on occupational injuries not diseases, but we need to do more trending and take a more in-depth look at occupational disease. Our ultimate end is to develop policies and strategies that will prevent occupational disease in Alberta workers.”

Greater awareness key to new unit

Leading the initiative is Dan Clarke, who directs the ministry’s Workplace Innovation and Continuous Improvement branch. “With greater awareness, employers and workers will understand the relationship between work and toxic chemicals and disease,” he says.

A number of strategies to promote awareness are proposed. A best practice guide, involving labour and industry, is to be developed. An \$850,000 campaign currently focusing on safety in general will be refocused to include occupational disease. Learning materials will be provided to Alberta schools to educate students about the hazards of chemicals. Individual cases will be followed and investigated over a 25–30-year period. And, along with traumatic fatalities, deaths due to occupational disease will be published on the ministry web site.

“This initiative is important because we don’t understand the full extent of the link between exposure to hazardous chemicals and cancer in Alberta.”

—Steve Gaspar

In addition, Alberta Employment and Immigration and the Alberta Cancer Board are in the early stages of developing a joint initiative to decrease the incidence of occupational cancer. The initiative is expected to benefit Albertans by creating an Alberta that is a safer place to live, work and raise families because of a decreased risk of occupational cancer.

“This initiative is important because we don’t understand the full extent of the link between exposure to hazardous chemicals and cancer in Alberta. The purpose of the partnership is to increase that knowledge base,” explains Steve Gaspar, program coordinator of the Alberta Cancer Board’s environment unit in Calgary.

It will take time to collect and unravel the data surrounding cancer and the workplace. Gaspar explains why: “First, occupational cancer takes a long time to



develop, and may not appear until 20–25 years after the exposure. Second, it’s necessary to separate occupational and life style factors when assessing who does and doesn’t get cancer. For example, workers who are exposed to asbestos have a certain cancer risk. Smokers also risk getting cancer. But if a worker smokes, and is exposed to asbestos, then the risk increases exponentially. Third, data must include the amount as well as the type of exposure, because exposure does not automatically lead to disease.”

Still, it will be worth the effort. Accurate data will provide a better picture of the risk of disease development in Alberta—not only of cancer, but of other diseases as well.

Asbestos exposure related to type of cancer

It's well-known that exposure to asbestos could lead to the development of mesothelioma. It can be difficult to identify occupational cases, however, because exposure to asbestos can also happen outside of the workplace. Few cases of mesothelioma in Alberta are reported to WCB each year.

Doyle looks forward to an increased focus on occupational diseases. "Workplaces need to be aware that occupational disease is complicated, develops over time and requires everyone's attention. Exposures at work can cause long-term problems, but there are steps people can take to prevent disease. We all have a part to play."

Mary Anne Gorman is an Edmonton writer and communications consultant.

DEFINITIONS

Occupational disease is any chronic ailment that occurs as a result of work or occupational activity.

A **carcinogen** is any substance or agent that can cause cancer. A carcinogen may be a chemical substance, physical agent such as asbestos or dust, or biological agent such as viruses and bacteria.

RESOURCES

Alberta Workplace Health and Safety: 1-866-415-8690

Occupational Environment Medicine Clinic at the University of Alberta: 780-486-9009

WEB LINKS

Occupational Fatalities in Alberta 1997-2006 (WCB Report) – includes statistics on occupational disease: employment.alberta.ca/documents/WHS/WHS-PUB_10yr_fatal.pdf

Alberta Occupational Disease Fatalities Summaries: employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/2573.html

COMMONLY OCCURRING CARCINOGENS IN ALBERTA WORKPLACES:

Substance/Agent	Common Use/Exposure	Cancer/Disease
Arsenic	Mining, Smelting, Wood Preservatives	Lung Cancer
Asbestos	Insulation, Refractory Materials	Lung Cancer, Mesothelioma, Asbestosis
Benzene	Petroleum, Gasoline	Leukemia
Beryllium	Dental Alloys	Lung Cancer, Acute and Chronic Beryllium Disease
Chromium	Welding, Chromium Plating	Lung, Nasal Cancer
Coal Tar Pitch Volatiles	Coke Production for Steel	Lung and Other Cancers
Environmental Tobacco Smoke	Bars and Restaurants	Lung and Other Cancers
Formaldehyde	Preservation of Biological Samples, Manufacture of Plywood and Other Glued Wood Products	Upper Respiratory Cancer, Allergen
Lead Chromate	Industrial Paint Pigment	Lung Cancer
Nickel Compounds	Welding	Lung, Nasal Cancer
Silica (crystalline)	Road Construction, Mining, Sand Blasting	Lung Cancer, Silicosis
Sunlight	Outdoors	Nonmelanomatous Skin Cancers
Radiation (ionizing)	Health Care, Non-destructive Testing of Metals	Various Cancers, Radiation Sickness, Genetic Effects.
Refractory Ceramic Fibers	Insulation, Refractory Materials	Lung Cancer
Vinyl Chloride	Polyvinylchloride Production	Liver Cancer
Wood Dusts (oak, beech, birch, mahogany and walnut)	Cabinet Making, Finishing Carpentry, Floor Installation	Nasal Cancer

THE LAST RESORT

REPORTING ON RECENT CONVICTIONS UNDER THE OCCUPATIONAL HEALTH AND SAFETY ACT

Between July and October 2008, six employers were convicted under the Occupational Health and Safety Act.

B. Little Construction. On January 31, 2005, a framer working on the roof of a residential construction site in Drayton Valley fell 4.2 metres from the roof and was fatally injured. B. Little Construction Ltd. pleaded guilty on June 2, 2008, to one charge under Section 2(5) of the Occupational Health and Safety Act, being a contractor, failing to ensure that an employer complied with the Act, Regulation and Code. The employer received a total penalty of \$300,000, including \$295,000 to STARS.

Independent Automatic Sprinkler Ltd. On May 15, 2005, workers were installing a sprinkler system in a stairwell at a construction site in Grande Prairie. The workers used a wooden pallet on a material hoist as a work platform to access a ceiling, and then placed a stepladder on top of the pallet. The material hoist tipped over and the workers fell 4.9 metres. One worker was fatally injured and another worker received injuries that resulted in permanent disability. On August 22, 2008, Independent Automatic Sprinkler Ltd. pleaded guilty to one charge under Section 2(1)(a)(i) of the Occupational Health and Safety Act, failing to ensure the health and safety of workers. The employer received a total penalty of \$100,000.

Atco Electric Ltd. On January 7, 2005, a snowcat that was constructing an ice bridge on the Peace River broke through the ice and sank in the river. The operator of the snowcat was never found and was presumed drowned. On September 15, 2008, Atco Electric Ltd. pleaded guilty to one charge under Section 7(1) of the Occupational Health and Safety Code, failing to conduct a hazard assessment. The employer received a total penalty of \$300,375, including a fine of \$2500, a victim surcharge of \$375 and \$297,500 to be paid to produce a Best Practice for working on ice in Alberta.

Pagnotta Industries Ltd. On March 10, 2005, in Jasper, a construction worker was repositioning a concrete slab with a lever bar when he stepped over the edge of the slab and fell 4 metres. The worker was seriously injured. On October 6, 2008, Pagnotta Industries Ltd. pleaded guilty to one charge under Section 2(5) of the Occupational Health and Safety Act, being a contractor, failing to ensure that an employer complied with the Act, Regulation and Code.

The employer received a total penalty of \$85,750: a fine of \$5000, a victim surcharge of \$750 and \$80,000 payable to the Northern Alberta Institute of Technology for its Occupational Health and Safety Diploma Program.

Skyline Drywall Ltd. On March 24, 2005, a framer was lowering two steel studs from the third floor through the stairwell opening to another framer on the second floor. The framer on the third floor released the studs before the framer on the second floor was holding the studs. The studs fell through the stairwell opening to the ground floor. One stud bounced off a bunch of flagging bars and struck a worker working directly below the stairwell opening. The worker received serious injuries. On September 30, 2008, Skyline Drywall Ltd. pleaded guilty to one charge under Section 2(1)(a)(i) of the Occupational Health and Safety Act, as an employer, failing to ensure the health and safety of the worker. The employer received a total penalty of \$72,875: a fine of \$2500, a \$375 victim fine surcharge and a payment of \$70,000 to SAIT Polytechnic.

SSI Special Services Inc. On November 6, 2004, workers were pulling a pipe from a well during a snubbing operation when the pipe broke. Flammable gases under pressure escaped into the environment and caught fire. The derrick man employed by Nabors Production Services was unable to escape and died in the fire. Two workers employed by SSI Special Services Inc. were severely burnt. Petro-Canada Oil and Gas was the prime contractor at the site. Nabors Production Services was the owner of the rig. On September 4, 2008, SSI Special Services Inc. entered a plea of guilty to one charge under Section 7 (1) of the Occupational Health and Safety Code, failing to assess a work site and identify existing or potential hazards before work began at the work site. SSI Special Services Inc. received a total penalty of \$425,000.00: a fine of \$5000, a \$750 victim fine surcharge and \$150,000 to Northern Alberta Institute of Technology, \$150,000 to Red Deer College, \$79,250 to Alberta Shock Trauma and Air Rescue Service Foundation and \$40,000 to Threads of Life.

Correction:

The September 2008 issue of the magazine incorrectly stated that Lonkar Well Testing Ltd. pleaded guilty to its charge. In fact, it did not. There was a trial and the company was found guilty by a provincial judge in Grande Prairie in April 2008. OH&S magazine apologizes for the error.

WHAT IMPROVEMENTS HAVE YOU MADE AT YOUR WORKPLACE?

If you've found a solution worth sharing, please send it to ray.cislo@gov.ab.ca.

RACK FOR PORTABLE LADDER ON ROOF

The Problem

Portable ladders stowed on the roof of a van can be difficult to load or unload. Awkward overhead reaching can be hard on the shoulders and back.

A Solution

Several manufacturers offer racks that raise and lower the ladder so that it can be handled more easily, often at chest level or lower.

Benefits

Workers can avoid awkward body positions, which reduces the potential for back injuries.



DUAL TRIGGER SPRAY GUN

The Problem

With a single trigger spray gun, the worker must bend the wrist awkwardly to keep the spray perpendicular to the surface being sprayed.

A Solution

Spray guns that have two triggers are available; two triggers allow the gun to be used in multiple positions without the worker having to bend wrists and hands into awkward positions.

Benefits

This solution avoids placing stress on the hands, wrists, elbows and shoulders.



FROM THE COURTROOM

by Brian Caruk

Exercise More Than Due Diligence

From the information we see in files sent to our office for review it is evident that companies are paying more attention and committing greater resources to worker safety issues than ever before. We commend these efforts. Yet we continue to see an increasing number of files and an ongoing failure to address safety concerns that arise in the course of regularly performed tasks.

One misconception that appears to be prevalent is that having a general health and safety program in a company is enough to establish due diligence. Broadly speaking, the simple presence of such a program does not suffice. Alberta's legislation imposes a duty on companies to exercise more than just generic due diligence when it comes to ensuring worker safety.

In other words, having a general health and safety program or a Certificate of Recognition does not meet the standard set out in the Occupational Health and Safety Act.

Let's assume an incident occurs that involves failing to use fall protection. It is certainly admirable if the company involved identifies various hazards, has an orientation for new employees and has regular safety meetings. But due diligence is not met if the specific issue of fall protection is not identified, and if rules and procedures are not established and then enforced. The company would find itself before the Court if there was an incident involving failure to use fall protection.

Remember that the test is whether all reasonably practicable steps have been taken, not just some of those steps. Accordingly, the extent to which a company has attempted to comply with the Act will typically reduce the penalty imposed by the Court. But taking only some of the steps that were reasonable to ensure worker safety will fall short of establishing due diligence.

Brian Caruk is an Assistant Chief Prosecutor in Regulatory Prosecutions, Alberta Justice.

SURVIVING THE BACKCOUNTRY

HOW TO EQUIP YOUR WORKERS

by **Bill Corbett**

Helicopter crashes. Grizzly bear attacks. Frozen fingers. Lost in the deep woods. Sound like a Hollywood action script? Actually, it's just a partial list of the hazards Hernan Rodriguez considers when Talisman Energy crews are dispatched into the backcountry of Alberta, Alaska or the far side of the world.

"We always try to prepare for the worst-case scenarios," says Rodriguez, a safety specialist in the Calgary-based Talisman's exploration department. "If you're stuck in a remote place, it doesn't take long to recognize you're a long ways from help or medical services. That's why we provide our employees with the training and equipment to survive and come safely home."

Talisman is one of a number of Alberta companies that equips its workers to handle the health and safety risks they can encounter when venturing into the backcountry—whether it's the foothills, mountains, boreal forest or unpopulated prairie. Alberta employers are required to provide safe working conditions for their employees, but there are few regulations dealing specifically with potential backcountry hazards, such as rugged terrain, cold climate, sudden storms, dangerous animals or being stranded miles from help.

These companies have developed policies and training programs to prepare their employees for anything they might have to deal with when far from the office. In the oil

and gas industry, for example, typical backcountry workers include field geologists, geophysicists and seismic crews—all of whom should be prepared for the unexpected. But it might also include occasional backcountry visitors, such as executives, maintenance crews, summer students or even pickup truck drivers delivering parts to isolated drilling rigs.

"When things go wrong, a natural reaction is to panic and to start moving rapidly, rather than sitting down and analyzing the situation."

—Gerry Gallagher

"It's so easy for things to go wrong in Alberta," says Gerry Gallagher. Phoenix Survival, his Edmonton-based company, teaches survival courses to a variety of corporate clients. "The weather suddenly moves in and you skid off a remote road into a ditch. It might be a couple of hours or a couple of days before someone gets to you."

Even a divided highway, he says, can pose a similar predicament if, say, an office worker in a suit and dress shoes slides his vehicle into a drift during a winter storm and is invisible to passing motorists.

Backcountry training can range from a quick outdoor first-aid session to a week-long course in wilderness survival, learning such skills as building shelters and starting fires without matches. Beyond the basics, the training is often customized to meet the specific hazards of the environment the company is working in. For instance, Talisman employees who will travel to offshore sites practise underwater escapes from a helicopter submerged in a water tank. If they also travel over mountains or in the Arctic, they would learn how to survive for several days with materials at hand.

“We always try to prepare for the worst-case scenarios.”

—Hernan Rodriguez

Because many seismic crews with Calgary-based CGGVeritas work in bear country, they receive considerable instruction in dealing with black bear and grizzly bear encounters. They also carry deterrents such as bear spray and noise makers. Company crews working in the Arctic are often accompanied by local hunters or trappers equipped to deal with polar bear encounters.



CGGVeritas seismic crews also work extensively in the backcountry during the winter, so they are well schooled in dealing with potential frostbite, hypothermia and winter storms. And while trained medics or paramedics are typically part of any seismic crew and thus able to treat these and other calamities, prevention is the much preferred option.

“Frostbite is something that can easily occur if you don’t learn to dress properly, identify the warning signs and take preventive actions before it happens,” says Mike Scott, general manager of CGGVeritas’s Land Acquisition Group in Canada.

Cold weather training, he says, also addresses human tendencies. “Some guys might think they need to be tougher than the next guy.”

More and more workers from other parts of Canada and the world are being dispatched to the backcountry and thus need to be familiarized with Alberta’s often rough terrain and unpredictable weather. But in today’s increasingly urban society, many native Albertans are also ill prepared for the surprises the outdoors can throw at them.

As a conservation officer in Kananaskis Country, Christine Scotland has first-hand experience with many such backcountry hikers. Some are improperly dressed and equipped, with minimal navigation skills and little ability to look after themselves if something goes wrong. Even with her considerable experience, she takes regular public safety courses, which deal with the backcountry, and travels with all the necessary clothing, gear and communications equipment to handle any misadventures that may befall her, or others, in the mountains.

“It’s basically a matter of being informed, knowing your limitations and carrying the proper gear,” she says.

In his courses, Gerry Gallagher emphasizes survival skills and the ability to recognize and deal with threats such as fatigue, hunger and falling temperatures. “But the main one is your mental attitude,” says Gallagher, who previously worked in search and rescue for Canada’s military. “When things go wrong, a natural reaction is to panic and to start moving rapidly, rather than sitting down and analyzing the situation. If you have the right attitude, you can survive a lot more than you might think.”

As boy scouts have long known, the most important thing when working in the backcountry is to be prepared.

“We do a lot of planning before trips,” says Talisman’s Rodriguez. “This includes having a safety meeting to figure out potential hazards and what survival equipment is needed. We also develop a comprehensive communications plan, which includes determining the coordinates for where a crew is going, letting people know when they’re going and coming back and making sure they have the necessary GPS units and satellite and radio phones.”

Bill Corbett is a Calgary writer.



photos by Gerry Gallagher

RESOURCES

WEB LINKS

www.phoenixsurvival.ca
Phoenix Survival

employment.alberta.ca/documents/WHS/WHS-PUB_mg021.pdf
WHS Bulletin (Alberta) Working in the Cold

www.srd.gov.ab.ca/fishwildlife/livingwith/bearfacts/bearsmart.aspx
Alberta BearSmart Program

VIDEO

Safe Operations and Use of All-terrain Vehicles (DVD 015)
All-terrain vehicles, popularly known as ATVs or four-wheelers, were originally designed for recreation, but many companies have found their

mobility and adaptability to workplace applications ideal for use on their premises. While most people think of ATVs as mere toys, they are not toys. This video discusses the safe operating procedures that must be followed to avoid injuries while riding an ATV.

Bear Aware (DVD 017)

This video was produced by the B.C. Forest Service to keep people safe in bear country. Topics covered include planning to avoid encounters, recognizing risks, knowing what to do when bears are in an area and knowing what to do in a confrontation with a bear.

Winter Safety (VC 0273)

This video is designed to help you avoid losing your fingers and toes to frostbite or risking your life to hypothermia. It will also prepare you to help any victims of these conditions. Also discussed in this program are the causes and symptoms of hypothermia and frostbite and how to prevent and treat frostbite and hypothermia as well as off-the-job winter safety.

MANY HANDS MAKE LIGHT WORK— THE SELF CHECK FUTURE

by Ray Cislo

Grocery store checkout clerks and library staff at the circulation desk are prone to musculoskeletal injuries because they often lift and scan thousands of items in a single work shift. Self-serve checkouts may have been designed to save money or improve efficiency, but the benefits include safer working conditions for workers.

The combination of highly repetitive motions, the forces required to handle objects, and the time spent on tasks can contribute to injuries involving the hands, wrists, elbows, shoulders and back. Some of these musculoskeletal injuries, which involve the muscles, nerves and joints, can result in reduced function of the injured body part, time off work and possibly long-term discomfort or impairment.

An improvement benefiting some of these workers is the self-serve checkout area of grocery stores and the self-serve checkout areas of libraries. In the case of some libraries, patrons are able to return borrowed items themselves, which eliminates the need for library staff to manually handle and scan items. In another example, guests at airline self-check-in counters are able to get boarding passes for themselves, eliminating repetitive keyboard work that would have otherwise been done by a ticket agent.

How many grocery items is a cashier expected to scan in one hour? The number may vary from employer to employer, but 500 items per hour is about right in my opinion. That's thousands of items in a shift. No wonder cashiers try for shorter shifts interrupted with breaks or alternate work activities.

How many items can a library loan out in a year? In 2006 in Calgary that number was 13.5 million. In Edmonton, it was 9.6 million. In a recent review of practices at a large European library system, 82% of materials went through self-service checkout, while 92% went through self-service return. The resulting numbers are impressively large. This means that although millions

of materials have to be unavoidably re-shelved by someone, at least the task of scanning those items can be largely eliminated.

Freeing workers of repetitive, manually intense routine tasks allows them to do other tasks—hopefully not tasks that are equally or more manually intense, or having them lose employment altogether—that may provide more value to the organization and customers or patrons. Doing so improves staff working conditions because fewer workers are exposed to a hazard that could result in injury. Well-trained workers can put their skills to use elsewhere, increasing their own job satisfaction.

Given the potential advantages to employers, the use of self-service options will continue to grow. Hopefully, some benefits will flow back to workers with fewer musculoskeletal injuries and an improved quality of working life.

Ray Cislo, P.Eng., B.Sc.(H.K.), is a safety engineering specialist at Alberta Employment and Immigration.

REFERENCES

www.public-libraries.net/html/x_media/pdf/selfservice_engL_mit_fotos.pdf *Customer Self Service in the Hybrid Library*, Bertelsmann Foundation, Gütersloh, 2002.

www.dir.salon.com/story/tech/feature/2004/07/26/rfid_library/index.html Mieszkowski, Katharine. *The Check-out Line or the Check-you-out Line?* Salon.

www.books.google.ca/books?id=LleASBhXYmAC Barndt, Deborah. *Tangled Routes: Women, Work and Globalization on the Tomato Trail*. Rowman & Littlefield, 2002.

WORKPLACE FATALITIES

Investigated in Alberta

June 8, 2008, to October 31, 2008

Workplace Health and Safety investigates most work-related incident fatalities that fall under provincial jurisdiction. In general, highway traffic, farm, disease or heart attack fatalities are not investigated.

In many cases, investigation into these fatalities is continuing. Final investigation reports are filed at the Alberta Government Library–Labour Building site and can be reviewed there or at employment.alberta.ca/whs-fatalities.

Total fatalities investigated in 2007: 33

Fatalities investigated in 2008
(year-to-date, as of October 31): 28

For further information about comparing trends in fatalities over time, please see the Occupational Fatalities in Alberta report: employment.alberta.ca/documents/WHs/WHs-PUB_10yr_fatal.pdf.

A 40-year-old male heavy-duty mechanic was fatally injured when he was caught and run over by the wheels of a heavy hauler. The hauler had broken down, and a front-end loader was towing it away from the mine. During the tow, the cable tow hook came free from the hauler. The mechanic and another worker were walking backwards from the front-end loader towards the hauler, pulling the cables towards the hauler. The hauler suddenly started to roll downhill towards the two workers. The operator was unable to warn the workers that the hauler was moving, or to turn or stop the hauler.

A 23-year-old male worker was crushed between a wagon loaded with a compressor and a railroad tie crane.

A 20-year-old male truck driver was slowly moving a truck with two attached trailers to a wash bay in the yard. The worker was steering the rear trailer using controls on the side of the trailer. The worker was run over by the rear wheels of the trailer.

A 46-year-old male rig worker was sent on a quad ATV to collect a spare part and did not return. Other workers searched and found him unconscious with the ATV on top

of him. Emergency services pronounced the worker dead at the scene.

A 47-year-old male worker was operating a floating excavator when it entered a tailings pond from shore. Approximately 5 metres from shore the excavator flipped on the left onto the operator's side, trapping the worker as it sank approximately 3 metres to the bottom of the pond.

A male worker was found pinned underneath a riding lawn mower at a golf course. Both the worker and the lawn mower were submerged in a pond.

A 49-year-old male worker was travelling to a work site in a 10,000-ton zoom boom. The worker went off the road and the zoom boom tipped over. The worker was ejected from the zoom boom and sustained serious injuries. He died later from his injuries.

A 41-year-old male consultant was fatally struck on the head by a portion of the discharge piping for a safety valve on a gas separator unit. The unsecured discharge piping had rotated rapidly when the safety valve activated.

A 27-year-old male labourer was pulling electrical cable from a large cable drum suspended from the front bucket of a backhoe and laying the cable in a shallow trench. When the chains holding the cable drum to the backhoe broke, the cable drum dropped onto the worker, pinning him against the side of the trench.

A 25-year-old female worker, employed as a bus service person, slipped as she stepped off a bus onto a steel plate floor. She fell onto her side, suffering a sprained ankle and bruising to her side. Ten days after the incident, the worker started to suffer chest pains at home. She was pronounced dead on arrival at the hospital.

A 27-year-old male worker, employed as a lease hand man, was working with a motor hand man to reposition a shale slide that was hung up between a shale tank and a mud tank. The worker was caught and crushed between the shale tank and the mud tank.

A 48-year-old male painter was painting the upper gable end of a new house under construction. He was on an unsecured ladder placed on the sloped roof of the garage. He fell and sustained fatal head injuries.

Return Undeliverable Canadian Addresses to:

CIRCULATION DEPARTMENT

Alberta Employment and Immigration

Workplace Partnerships (Director's Office)

7th Floor, Labour Building

10808-99 Avenue, Edmonton, AB T5K 0G5

E-mail whs@gov.ab.ca

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Alberta