More Than Hurt Feelings

The Health and Safety Costs of Workplace Bullying
TAKE CARE OF IT BEFORE IT’S AN INJURY

If you see something unsafe, do something about it.
That’s how you prevent a workplace injury. That’s how you stay safe.
Learn more at worksafe.alberta.ca or call toll-free 1-866-415-8690
(Edmonton and area (780) 415-8690).
OCCUPATIONAL HEALTH & SAFETY

December 2012, Volume 35, Number 3

Brent McEwan Managing Editor
Lee Craig Editor

Occupational Health & Safety is a Human Services publication. This magazine is published three times a year. Magazine policy is guided by the Occupational Health & Safety magazine advisory board, which includes members representing both industry and government.

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.

Occupational Health & Safety Magazine Advisory Board
Brent McEwan (Chair) Human Services, Occupational Health & Safety
Lisa Glover Human Services, Communications
Rick Ennis, CRSP Christensen & McLean Roofing Co.
Trevor Johnson, CRSP, CSP Systemera Inc.
Lorne Kleppe, CHRP, CRSP Manufacturers’ Health & Safety Association
Cameron Mercer, C.Tech (IHT) Human Services, Occupational Health & Safety
Dianne Paulson Alberta Construction Safety Association
Lynn Robertson Alberta Health Services

If there is a discrepancy between statements in this publication and the Occupational Health and Safety Act, Regulation or Code, the legislation takes precedence. Opinions expressed in this publication do not necessarily reflect the views or policy of Human Services or the Government of Alberta.

Copyright is held by the Government of Alberta. Reproduction of articles in their entirety is permitted. A reproduced article must include the author’s name; title of the article; and the full name of the magazine with its date, volume and issue number. For permission to reproduce excerpts of an article, please contact the magazine’s administration office.

The magazine is also available as a PDF file at www.employment.alberta.ca/SFW/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 Contact Centre. Phone 1-866-415-8690 or e-mail whs@gov.ab.ca.

Publication Mail Agreement No. 40062521

Return Undeliverable Canadian Addresses to
Circulation Department
Human Services
Occupational Health and Safety
6th Floor, Labour Building
10808 – 99 Avenue, Edmonton, AB T5K 0G5
e-mail: whs@gov.ab.ca

Proofreading by Deborah Lawson, Word Circus, Inc.
Design and layout by FREE
Printing by Transcontinental Printing

ISSN 0846-9229 © 2012

CONTENTS

STORIES

<table>
<thead>
<tr>
<th>8</th>
<th>More Than Hurt Feelings</th>
<th>by Wes Bellmore</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Reading the Signs</td>
<td>by Deborah Lawson</td>
</tr>
<tr>
<td>19</td>
<td>Radiation in the Workplace</td>
<td></td>
</tr>
</tbody>
</table>

ERGO TIPS

| 12 | Preventing an Ergonomic Mess | by Jasmine Lee |

MUCH MORE

| 4-6 | News and Notes |
| 7 | Partnerships News |
| 18 | The View from the Field |
| 18 | From the Courtroom |
| 22 | The Last Resort |
| 23 | Fatalities |
A creative sentencing award to the Job Safety Skills Society has led to a new scholarship for students pursuing a career related to occupational health and safety.

The OH&S Memorial Scholarship is named for James Rintoul. He was less than a month away from his 21st birthday when he was killed in a workplace incident in Calgary on August 8, 2008.

“James’ loss was one that could have been prevented,” says Dr. Michael Alpern, the executive director of the JSSS. “We are very happy that the creative sentencing award has allowed us to establish a memorial in James’ name. The scholarship helps young people invest in acquiring certification in health and safety at the beginning of their careers.”

The first scholarship was awarded to David Cunningham from Sherwood Park. The scholarship will cover his enrollment costs, up to $5500, for the OH&S certificate program at the University of Alberta’s Faculty of Extension.

Rintoul was fatally injured after being run over by a transport trailer in the yard of Volker Stevin Contracting Ltd., where Denel Trucking, his employer, had rented space.

The trucking company and a co-worker of James’ were subsequently fined after pleading guilty to charges under Alberta’s Occupational Health and Safety Act, Section 2(1)(a)(i).

At the first scholarship award ceremony, a video of James’ life was shown.

“It was extremely emotional,” says Dr. Alpern. “There were very few dry eyes in the audience.”

Now that the first of five scholarships has been awarded, the scholarship will be awarded to one candidate in each of the next four years for the certificate program at the Faculty of Extension. Applicants must be between 18 and 24 years of age.

For more information on the James Rintoul OH&S Memorial Scholarship, see www.jobsafetyskills.com/scholarship.html. The deadline for application is May 2013.

The Job Safety Skills Society’s mission is to facilitate the provision of safety education and training to young people. Its aim is to significantly reduce fatalities, injuries and illness in the workplace.

Dr. Alpern says that JSSS also wants to encourage people to take safety education into everyday life. “We want to build the awareness and skills of what safety means. Safety is safety whether at school, home, work and play," he says. “We want to have people ask themselves, ‘Is this hazardous to me?’ If it is, ‘What are the hazards and what can I do to prevent myself from being injured?’ ”
MANUFACTURERS’ HEALTH AND SAFETY ASSOCIATION OPENS NEW OFFICE

The Manufacturers’ Health and Safety Association opened an office in Red Deer in September. The new office will provide central Alberta with the same services as the MHSA’s Rocky View and Edmonton locations, such as health and safety training, expert audit service, and mentorship and support to the members of the manufacturing industry.

“Opening our Red Deer office will allow us to reach out to more employers in the central Alberta region,” says Rob Hendry, chair of the MHSA board of directors. “The Red Deer area will now have health and safety training and other safety services at its fingertips.”

“One of the major concerns we hear from smaller employers is they do not have the resources to hire a full-time safety person to implement a health and safety program,” says Guy Clyne, southern regional coordinator at the MHSA. “We assist our members by providing the safety training and mentorship they need to meet the required occupational health and safety standards.”

The MHSA is a non-profit organization funded and directed by the manufacturing industry. It provides services to companies in the steel fabricating, plastics, machine shop, steel recycling, compressor/power unit manufacturing, steel sales/service, furniture manufacturing, recycling, electronics manufacturing and hydraulic industries.

Don’t RIP through construction zones.

SPEEDING FINES DOUBLE WHEN WORKERS ARE PRESENT www.dont-RIP.ca
Do you know how to assess the risks of workplace violence at your work site? Do you know how to develop an effective workplace violence prevention program? A single incident can have life-long consequences for workers and their families and can forever affect how a company does business.

The Workers’ Compensation Board-Alberta offers a free seminar for employers that want to develop a workplace violence prevention program. It teaches employers how to ensure compliance with the OHS Code and how to develop and implement practical strategies for creating a safer workplace.

For more information or to register for the Workplace Violence Prevention seminar, call WCB-Alberta’s corporate security team at 780-498-4990 (in northern Alberta) or 403-517-6003 (in southern Alberta). You can also register online at www.wcb.ab.ca/webforms/violence.asp.

NEW PENALTIES FOR HEALTH, SAFETY AND TRADE VIOLATIONS

Alberta workers and employers who violate Alberta’s safety rules and fair trading practices are facing new penalties and significantly greater fines.

Bill 6: The Protections and Compliance Statutes Amendment Act introduces new administrative penalties and significantly increases fines for penalties that already exist. It affects three pieces of legislation: the Safety Codes Act, the Fair Trading Act and the Occupational Health and Safety Act.

“There will be no more slaps on the wrist in Alberta. A worker or employer who puts health and safety at risk or is misleading or unfair in their business dealings will be held accountable,” says Human Services Minister Dave Hancock.

Among the proposed changes are
• increased maximum fines through the courts for Safety Codes Act violations—from $15,000 to $100,000 for a first offence, and from $30,000 to $500,000 for subsequent offences
• new administrative penalties for Fair Trading Act violations of up to $100,000, and increased maximum fines through the courts—from $100,000 to $300,000
• new administrative penalties for Occupational Health and Safety Act violations—up to $10,000

Administrative penalties are an addition to the tools enforcement uses. They fill an enforcement gap that exists between two extremes: orders or warnings, and court prosecutions, says Hancock. Another addition—which will allow Occupational Health and Safety officers to issue tickets for on-the-spot violations—will come through regulation in 2013.

“Together these changes will help protect the public, the consumer and the workplace,” he says.

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 region), or email whs@gov.ab.ca.
Additional elements an option for COR audits

The number of Certificate of Recognition holders continues to climb (to over 9500 in September 2012). Employers that have actively maintained health and safety management systems for a number of years are starting to look for ways to measure parts of their system that go beyond the elements addressed by the Partnerships audit standard. Partnerships and the Certifying Partner group are responding to the needs of these stakeholders by introducing an option to add new elements to employer COR audits.

A standard governing the use of additional elements was recently approved. It will allow employers to substitute new audit elements for traditional ones in maintenance years and add additional elements in certification years. This change will give employers the opportunity to expand the scope of their audits and assess systems outside the basic eight elements required for COR certification.

Before an element can be added to a COR audit, however, an approved standard must be in place and a CP-sanctioned set of questions must be available. A new element that addresses Contractor Safety Management is the first to get approval from the CP group. Other proposed element topics include Change Management, Health and Safety Committees, and Chemical Hazard Management. Anyone with suggestions for an additional element should contact their CP.

Recertify early and avoid the rush

Employers that need an active COR in order to bid on work should be aware that a lot of time can pass between the audit date and the day on which a new COR is issued. Auditors have up to 45 days from their last day on site to submit their report to the CP for quality assurance. If corrections are required, they have another 30 days to submit a redraft. More than one set of corrections may be required before a report can be approved.

The time it takes the CP to review the reports must also be considered. This review time will vary based on a number of factors, including when the audit is conducted—audits completed near the end of the calendar year will take more time to process. The majority of audits in Alberta are scheduled between October and December. The large volume of reports submitted during “audit season” is sure to mean a longer wait for your new COR.

To avoid a lapse in COR status while waiting for a recertification audit to be processed, employers are advised to book their audits earlier in the year, and at least four months before the expiry date of their current COR. Employers should also inform their auditor about the importance of timely report submissions. Stay in touch with the auditor to check on their progress.

New Partners in Injury Reduction

Alberta Human Services would like to welcome Bethany Care Society as its newest Partner in Injury Reduction. Partners are recognized as health and safety leaders in their industry. Through a Memorandum of Understanding with Alberta Human Services, they commit to taking an active role in promoting workplace health and safety in the province.

Is that COR valid?

All Certificates of Recognition have an expiry date printed on the lower right corner of the copy. Because 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 by visiting humanservices.alberta.ca/documents/WHS-PS-COR.pdf.
MORE THAN HURT FEELINGS

THE HEALTH AND SAFETY COSTS OF WORKPLACE BULLYING

by Wes Bellmore

A hard hat can protect your head from falling debris in the workplace, but it can’t protect your emotions from cruel co-workers.

Some people may think that workplace bullying is a harmless pastime—a bit of fun the targets can simply laugh off—but it is a widespread problem that can lead to a variety of psychological and other health issues. According to a recent survey, nearly half of Canadians say they have felt bullied at work.

“It was surprising to see that bullying comes from so many different avenues,” says Mark Bania, managing director of CareerBuilder.ca, which conducted the survey.

The survey of more than 550 workers also found that almost half of the victims do not confront their tormenters, and most do not report the incidents.

“Our goal with this survey was to give a true snapshot of what’s happening in the Canadian labour market as a whole,” says Bania. “We made sure to include organizations large and small to get an accurate representation of what is happening in the workplace.”

Wide-ranging consequences

Of the 45 per cent of surveyed workers who said they have felt victimized by workplace bullying, one-third reported that they suffered health-related problems. Research out of Simon Fraser University in British Columbia has linked workplace bullying to psychological complaints, depression, burnout, anxiety, aggression, psychosomatic complaints and musculoskeletal health complaints. And bullying affects not only those directly involved but also bystanders, who can experience higher levels of stress. According to Alberta Health Services, mental health claims are the fastest-growing category of disability claims.

If a fire breaks out in a workplace, everybody will start shouting to raise the alarm. Not so with bullying. Jennifer Yelland, a corporate wellness advisor with Alberta Health Services, says it can crawl under the radar for years, destroying careers and job satisfaction as it goes. She says employees may not report bullying because they may be afraid that it could get worse or that they may lose their job. In some situations, Yelland says some people may choose to change jobs rather than report the bullying.

“If the bully is your supervisor or boss you can report it to HR,” says Yelland, “but quite often nothing ends up happening. Or the situation could get worse.”

In a case of one person’s word against another, Yelland believes the judgment could be linked to many factors. “Unless you have a clearcut case of discrimination, sexual harassment or something like that, it can be quite hard to come up with a case.”

More employee turnover

Margot Ross-Graham, vice-president of integration with Williams Engineering Canada, says the damages of bullying go far past an employee’s hurt feelings. “A

“A damaging implication of workplace bullying is increased employee turnover.”

—Margot Ross-Graham, Williams Engineering Canada
MAIN ELEMENTS OF AN ANTI-BULLYING POLICY

- Clear message that harassing behaviour will not be tolerated
- Clear and complete definition of harassment
- Description of proper business conduct and expected behaviour
- Explanation of workers’ responsibilities
- Explanation of the complaint investigation procedure (e.g., who conducts the investigation, when and how investigations are conducted, parameters and importance of confidentiality, timeframe for filing, where and how long records are kept)
- Possible consequences for violations
- Consequences of filing a malicious or frivolous complaint
- Support systems for a victim of harassment (e.g., employee and family assistance programs)

(Source: Gayle Joyes-Bond, OH&S Policy and Program Development)
damaging implication of workplace bullying is increased employee turnover,” says Ross-Graham, whose portfolio includes human resources. “Workplaces that see people leave because of bullying will have a more difficult time finding new workers. It is a vicious cycle—the employer has to continually recruit and train new employees only to have them leave.”

Ross-Graham believes a major reason employees choose to leave is from feeling a bad situation isn’t being taken care of. “If my colleague is being treated poorly and is not getting any support,” she says, “I wonder what is going to happen to me when I’m in that spot.”

She says many people choose to work at a particular organization because the culture and values align with their own beliefs. “As an employee, if I see bullying going on and nothing is being done about it, I run into conflict because that is not the culture I joined. Those are not the values I want to live by.”

Even when workers don’t choose to resign, bullying creates a negative effect on an organization’s bottom line. Ross-Graham says a stressed employee might choose to stay home, which creates absenteeism problems. “And there are other runoff effects that represent significant costs to an employer,” she says. “Probably the biggest negative effect is loss of productivity and motivation in the workplace.”

### Anti-bullying solutions

Despite the difficulties many people experience in coming forward, Yelland says it is essential for someone who feels bullied to take appropriate steps to remedy the situation. She is currently working on a pilot project called Minding the Workplace. The Alberta Health Services project is looking at how to address workplace psychological safety, which includes bullying, among healthcare providers. Participants in the study are advised to address the unwanted behaviour in an organized, dispassionate way.

“Keep a detailed record of each incident, such as date, time, who might have witnessed the incident, and what was said or done,” says Yelland. “Then calmly tell the bully that their behaviour is unacceptable to you.”

She says it is best to stay unemotional and clearly state the facts about what is bothering you. Yelland also suggests a worker should notify whoever is in control: a direct supervisor, upper management or the human resources department. In extreme cases a worker could also consider legal action, but that can be tricky, says Yelland.

There seems to be no argument that bullying is harmful in a variety of ways, but is it actually illegal? The short answer is no. Unless the behaviour of a workplace goon strays into the realm of the criminal code—things like threats to cause death or bodily harm, or inciting racial hatred—there is no easy legislative fix to bullying.

Gayle Joyes-Bond, an occupational health specialist with Alberta’s Occupational Health and Safety Policy and Program Development Branch, says Alberta legislation is more or less silent on bullying.

“Workplace violence is covered in the OH&S Code,” she says, “but bullying and harassment that do not cause or are not likely to cause physical injury are not covered,” she says.

Joyes-Bond says that while employers are bound to protect their workers under the general duty clause of Section 2 of the code, not everyone will agree on how this applies to things like teasing, name calling and veiled threats.

“There may be difficulties in using legislation to address bullying,” she says, “because there is a subjective component to the definition of what constitutes bullying and harassment. The reaction to this behaviour may vary between individuals, and this could be a challenge when

### TOP 10 WORKPLACE BULLYING COMPLAINTS

1. Standards or policies are applied inconsistently among workers: 50%
2. Being ignored: 49%
3. False accusation of mistakes: 47%
4. Constant criticism: 36%
5. Job performance belittled during meetings: 30%
6. Work performance suffers when co-worker neglects their own duties: 30%
7. Target of gossip: 29%
8. Co-worker steals credit for work: 25%
9. Yelled at by boss in front of co-workers: 24%
10. Excluded from projects or meetings: 22%

(Source: CareerBuilder.ca survey)
interpreting and enforcing the legislation.”

Because the issue occupies a grey legislative area, Joyes-Bond believes the solutions to workplace friction need to come from somewhere other than a law book. “Effective resolution or the elimination of harassment may not necessarily be achieved by the enforcement of legislation,” she says. “A bully-free workplace relies on positive relationships among workers and employers.

We recommend that employers have an anti-harassment policy and procedures respecting potential workplace harassment. Any worker’s complaint about being harassed or bullied on the job should be taken seriously and investigated in a timely manner.”

Wes Bellmore is a freelance writer living in Edmonton.
When the word “ergonomic” comes up, I think it would be safe to say that most people think of office desks and carpal tunnel syndrome. To be fair, a lot of public service announcements and airtime around ergonomics are a result of those very things.

As I said in my last column, the Canadian Centre for Occupational Health and Safety explains ergonomics as the interaction between a worker and the job demands, and how the work affects the worker. By being aware of these interactions, we can identify well known adverse affects, such as repetitive strain injuries, and endeavour to prevent them in order to optimize worker well being.

As a safety professional, worker health and wellness is music to my ears. As a regulatory compliance officer, it isn’t the reality in many work sites I visit. Common responses I’ve heard from not just the employer, but workers themselves, include the lack of time, money and interest.

So let me add the rest of the ergonomic definition by the International Ergonomics Association and explain that the purpose of understanding worker-job interaction is also to optimize overall system performance. To me that means efficiencies, and that’s language appreciated by all kinds of management.

Like most workplace health and safety issues, ergonomics can be approached in either a reactive or proactive manner. Efficiencies can be inserted into both. Unfortunately because of other apparent priorities, many ergonomic changes are not identified or addressed until something fails.

To the workers: it’s an automatic reaction to adapt your body to your surroundings. It’s a skill we’ve learned since the playground, but don’t let the inanimate objects of your work life bully you. Think about how you can make your workstation adapt to you. You know more than management about what you do on a daily basis, so take some of the onus on yourself. If you have to continually reach for a tool because it’s just a little too far away, see if you can move the tool closer. It sounds simplistic, but if you’ve seen and done something the same every day, it might not be so obvious. Not having to repeatedly stretch for something may shave some time off your task. It also helps you maintain a neutral posture, keep your sanity in check and potentially prevent a mysterious dull backache that would otherwise wear you down.

To the employers: consult with your workers! Early intervention in the design phase with field staff, of any working environment, is efficiency to the nth degree. Why not invest a little extra time upfront to prevent future setbacks from injured workers or stalls in production? Again it may sound intuitive to some, but the number of misplaced valves and awkward work environments I’ve seen contributing to incidents I investigated would warrant a reminder. The reality of complex design stages and vast numbers of individuals involved in each step definitely make this suggestion harder to implement, but until robots outnumber our workforce, ergonomics is a relevant topic to be discussed.

These steps toward efficiencies don’t require rocket science if a collaborative approach toward ergonomics is taken. It most definitely will take a little extra time and money, but isn’t it easier to prevent a mess than clean it up?

Jasmine Lee is an investigator with OH&S Provincial Standards in Human Services.

---

**RESOURCES**

www.ccohs.ca
Canadian Centre for Occupational Health and Safety

www.iea.cc
International Ergonomics Association
Stretch and Go

www.backactive.ca

A public awareness campaign partnership between: Alberta Human Services; Alberta Construction Safety Association; Alberta Hotel Safety Association; Workers’ Compensation Board Alberta.
From the January 2007 issue:

... The important thing, says Pedersen, is not how many stop orders he wrote against the job, but how the roofing company responded to his intervention. “The response was positive right from the beginning. I had the owner’s ear. I went over to his office. They hired a safety consultant. They took the training. They trained the whole crew.”

The result: a safety-conscious working environment in which workers are equipped and trained to work safely at heights. That, says Pedersen, is the result of a positive working relationship between him and the contractor. “If you take the advice of the provincial government and follow the legislation, it does pay dividends.”

—Fall Protection: An Alberta Company Discovers the Benefits of Policies and Equipment, by Allan Sheppard
READING THE SIGNS

LITERACY IS ESSENTIAL TO HEALTH AND SAFETY

by Deborah Lawson

The first few days on a new job, workers often receive armloads of forms, reference materials and manuals. Health and safety procedures are likely to be among them. Employers might have put a lot of effort into writing those manuals so everything is documented where their workers can review it at their own pace. But what if some of those workers can’t properly understand written instructions?

First step toward safety

According to Alison Howard, a research associate at the Conference Board of Canada, it is important for employers to bypass assumptions and recognize that literacy problems may exist. “Literacy skills are the foundation for participating in more advanced training, including health and safety training,” she says.

Howard, who studies organizational effectiveness and learning, says employers developing safety materials need to take into account the literacy skills of the person they’re trying to keep safe. “It’s important to ask, ‘Is it the manual, or is it the employee’s ability to read it?’ ”

Cindy Messaros is executive director of the Alberta Workforce Essential Skills Society. The society designs and delivers learning solutions that focus on literacy as an essential workplace skill. “Literacy is a significant factor in health and safety,” she says, “and its importance is underestimated.”

Essential skills assessment

One important aspect of her organization’s work is conducting essential skills needs assessments. Messaros says people may not even realize their low-level literacy skills are holding them back in their careers.

“Many times a person has just been getting by, or has found other ways to cope,” says Messaros. “But low literacy skills prevent them from getting promotions, taking on new responsibilities or advancing within the organization.”

In 2003, Statistics Canada released the Canadian results from the International Adult Literacy and Skills Survey. Level 3 (out of 5) is the desired competence level for managing well in a knowledge-based information economy. That level is roughly equivalent to high school completion. The IALS survey revealed that approximately 72 per cent of Canadians who score below Level 3 are employed. Put another way, up to 40 per cent of working-age Canadians may lack the functional literacy skills to ensure safe, effective, up-to-standard work.

Added benefits

The economic benefits of functional literacy are clear. According to Literacy Alberta, every 1 per cent increase in literacy nets an increase of 1.5 per cent in gross domestic product and 2.5 per cent in productivity.

Janet Lane, the executive director of Literacy Alberta, says the demand for workers with high literacy skills is
greater than ever before. She says training and instruction manuals are more complex because work is more complex. As a result, safety procedures require higher skill levels to implement.

“A worker’s lack of confidence shows when they quit rather than accept a promotion,” she says. “They’re fearful about their ability to do the job because of their lack of essential skills.”

**Interactive safety tool**

Alberta Human Services, through Occupational Health and Safety’s Work Safe Alberta, has developed an online tool called My Health and Safety Questions. The e-learning video follows a new employee called Sunil on his first day at a new job. Emma, the health and safety supervisor, takes him on a tour of the plant. Emma guides Sunil in identifying the 10 crucial safety questions any employee should know or find out the answers to, no matter where they work.

My Health and Safety Questions avoids typical assumptions about the understanding or literacy levels of users. Instructions are frequent and clear. The video either explains things as it goes along or refers users to definitions they can view while pausing the video. The tool is interactive, so users make choices as the video proceeds. The users can also control the speed of the viewing session or go back to a previous slide if they feel they may have missed something.

The Edmonton Community Adult Learning Association has used this interactive e-learning video to great effect. CEO Carol Aubee Girard says, “My Health and Safety Questions is a great tool to help new employees recognize the safety implications of their job, and to realize that they need to ask the right questions.”

Girard says the tool can also remind employers that not everyone may understand their safety manuals.

---

**THE ESSENTIAL SKILLS OF LITERACY**

Traditionally, literacy has been defined as the ability to read and write. Recent definitions of literacy encompass a more inclusive set of “essential skills”:

- reading
- writing
- document use
- numeracy
- computer use
- thinking
- oral communication
- working with others
- continuous learning

**Source:** Literacy Alberta [literacyalberta.ca/what-literacy]

---

**DEFINITIONS OF LITERACY**

**Prose literacy:** A person has the knowledge and skills needed to understand and use information from written material, including editorials, news stories, brochures and instruction manuals.

**Document literacy:** A person has the skills needed to understand information presented in various formats, such as charts, graphs, forms and maps.

**Quantitative literacy (numeracy):** A person has the ability to apply mathematical skills to printed materials, such as calculating a tip at a restaurant.

**Source:** Canadian Council on Learning [www.ccl-cca.ca/CCL/Topic/Literacy/WhatIsLiteracy.html]
“Their written material should use clear, plain language that they should be prepared to augment with verbal safety training. This will ensure that all their employees, including those with low literacy skills, understand what’s required of them in terms of safety.”

Overcoming reluctance

Howard says employees may hesitate to attend literacy improvement training because of confidentiality concerns. She says they may fear the possibility of an entry on their permanent record that could affect their job security or potential for advancement. They may also worry about looking bad to co-workers.

But Howard stresses that essential skills training can be offered without making employees feel the stigma connected to low literacy. Rather than using the word “literacy,” employers can refer to “communications” or “business skills” training. Howard says a sensitive communications plan can ease many workers’ concerns about attending literacy upgrading programs “We have to look at health and safety through the lens of literacy skills,” says Howard.

Deborah Lawson is an Edmonton-based freelance writer and editor. Her first book, Reckless Toward Blossoming, will be published by Frontenac House in 2013.

10 QUESTIONS TO ASK YOUR EMPLOYER

1. What are the hazards of my job?
2. Are there any other health and safety hazards I should know about?
3. Will I receive job safety training?
4. Do we have safety meetings?
5. Is there safety equipment? When’s training?
6. Is there emergency training? When?
7. Where are the fire extinguishers, first aid kits and emergency equipment?
8. Who is the first aid person?
9. What are my health and safety responsibilities?
10. Who do I ask if I have a health and safety question?

Source: Human Services [humanservices.alberta.ca/working-in-alberta/5373.html]

RESOURCES

WEB LINKS

employment.alberta.ca/elearning/questions/MyHealthAndSafetyQuestions.html
My Health and Safety Questions

www.ecala.org
Edmonton Community Adult Learning Association

www.literacyalberta.ca/essential-skills
Literacy Alberta

www.awes.ca
Alberta Workforce Essential Skills Society

abclifeliteracy.ca/workplace-literacy-facts
ABC Life Literacy Canada

www.conferenceboard.ca/hcp/details/education/adult-literacy-rate-low-skills.aspx
Adult Literacy Rate—Low-Level Skills, Conference Board of Canada

www.statcan.gc.ca/pub/89-617-x/89-617-x2005001-eng.pdf
Building on Our Competencies: Canadian Results of the International Adult Literacy and Skills Survey (2003), Statistics Canada
During the course of inspections at work sites, OH&S officers asking about follow-up response to injuries or about a company’s housekeeping procedures may uncover an unexpected problem. Their questions often reveal that companies are unaware of the need to protect workers from biohazardous materials, such as bodily fluids. Part 35 of the OH&S Code, Health Care and Industries with Biological Hazards, addresses this requirement.

At one time or other, many of us have seen images of a traumatic workplace injury or a situation where an individual has been sick, possibly due to chemical exposure or illness. Someone has to clean that up, and the employer is responsible for ensuring that someone is protected. Section 528 of the code requires employers to establish procedures for dealing with biohazardous materials. The intent of this section is to protect workers from potential exposure to things such as hepatitis, influenza and other viruses.

Employers need to establish protocols for the cleanup and proper disposal of soiled or contaminated materials and surfaces. In a fabrication shop, for example, a brake shear might have blood on it after a traumatic injury sustained by a worker. You aren't going to dispose of the brake shear, so it needs to be cleaned up. And the cleanup has to be done in a way that protects the cleanup crew. The same need for cleanup protocols applies to a retail environment, where employees clean the public washrooms on the premises as well as any “accidents” that occur in the retail spaces. These are just two examples from outside of the health-care sector where this part of the code can apply.

Companies need to consider cleanup tasks in their hazard assessments, and they must have adequate mechanisms in place to address these potential hazards. For example, they could obtain cleanup kits and put them near the first aid station. The key, though, is to identify the hazard and implement the most appropriate controls for the work site.

David J. Sperling is an OH&S officer with Human Services.

The Occupational Health and Safety Act empowers officers to conduct inspections at work sites. Among other things, section 8 of the act authorizes officers to enter work sites and secure the production of various records that relate to the health and safety of workers.

The typical mechanism by which officers obtain records is a Notice to Produce. Officers don't need to issue this document to a director of a company (for instance). They often deliver it to an individual with access to the records and who appears knowledgeable of the organization’s business operations. There are no restrictions on the means of delivery, so a Notice to Produce could be hand-delivered, emailed or sent by fax, as circumstances permit.

While the issuance of a Notice to Produce gives rise to an obligation on the part of a recipient to provide the records specified, it is not an “order” as envisioned in the legislation.

Officers are authorized to issue an “order” only when, pursuant to other provisions of the act, they form an opinion

- that work is being carried out in a manner that is unhealthy or unsafe to workers (section 9[1])
- that a person is not complying with the act, regulations or adopted code (section 9[2])
- that a danger to the health and safety of a worker exists in respect of that worker's employment (section 10[1])

No such opinion is involved in the issuance of a Notice to Produce; the officer is simply requesting documentation. Therefore, a Notice to Produce is not an “order” and the recipient of a Notice to Produce cannot avail itself of the appeal mechanism set out in section 16 of the act.

Brian Caruk is the Regulatory Unit Coordinator, Specialized Prosecutions, for Alberta Justice.
RADIATION IN THE WORKPLACE

HOW TO STAY SAFE WORKING WITH A HAZARD YOU CAN’T SEE OR FEEL

Most people would be surprised at how many industries use radiation. Safe work practices are well established to protect workers from radiation and limit their exposure to this invisible and potentially harmful hazard. Occupational Health and Safety magazine spoke with Claire Cohalan, a radiation scientist from the Radiation Safety Institute of Canada, to get answers to some questions about workplace radiation safety.

How is radiation used in the workplace?
Cohalan: Radiation is used in workplaces a lot more than people think. The main uses of radiation, and the ones the public are more aware of, are radiation uses in healthcare—for diagnostic and therapeutic purposes—and radiation used to produce power (nuclear power plants). But radiation can be used in practically any type of manufacturing. It is used in the bottling industry to measure levels, in electronics to image small components, in pulp and paper to measure the thickness of paper, in the aerospace industry for quality assurance, etc. Radiation is also used in construction, mining, research and pharmaceuticals.

What types of radiation are found in the workplace?
Cohalan: One type of radiation used in these workplaces is from radioactive substances. These substances are perpetually emitting radiation and must be shielded at all times to reduce exposure. They are typically encased in very thick amounts of lead, and then you push out the substance temporarily to use it. The other type of radiation is from X-ray machines. These devices only emit radiation when they are turned on.

Is radiation safe to work with?
Cohalan: People’s fear about radiation goes way back. The first time we really used radiation was in nuclear bombs, so there’s a huge fear about it. What that fear has done is make the industry very safe. We can’t see it or feel radiation, so we always go over the top protecting ourselves from it—which is great. If you are exposed to the maximum dose you are allowed to get every year, then your risk would be on the same level as other professions. But the truth of the matter is nobody gets even close to the limit anywhere in Canada. The limit is set, but the policy is always to keep your dose “as low as reasonably achievable.” It’s called the ALARA principle.

What occupations are at risk of exposure to radiation?
Cohalan: Although radiation is used frequently in industry, few workers are at risk of radiation exposure. Most industrial radiation equipment is designed in such a way that no body part can fit in the radiation beam. The equipment is shielded, and it’s designed to give a negligible dose even to someone working close to the device for 2000 hours a year (40 hours a week for 50 weeks). Occupations at a higher risk of radiation exposure are typically those that use open beams—radiation fields in which a person or body part can fit—or radioactive substances that can be inhaled or ingested. These occupations are mainly in healthcare and in nuclear power plants. Another occupation that receives significant radiation exposure is industrial radiography. In that field, highly radioactive substances are used to look for faults in large structures without having to take them apart. Workers at a higher risk are typically required to have radiation safety training and wear devices to measure radiation doses.

How can workers protect themselves from radiation exposure?
Cohalan: The basic principles of radiation protection are time, distance and shielding. Reducing the time spent around a nuclear substance or an active X-ray machine...
will directly reduce your radiation dose. Increasing your distance from a nuclear substance or X-ray machine will greatly decrease your dose, as well. In fact, taking a few steps back from a cabinet X-ray machine or a nuclear gauge is typically enough to reduce your dose to a negligible amount. However, shielding is the main tool used to protect workers from radiation exposure. For most uses of radiation in industry, thin layers of a heavy metal, such as lead or steel, or thicker layers of concrete are sufficient to protect workers. If you can’t shield the radiation source, then you shield the worker. For example, if dentists have to be in the room with the X-ray, then they should be wearing a lead apron. Other workers may wear lead-lined gloves. Especially veterinarians, who often have to hold animals in place under X-rays. In certain cases, if the radiation field is going toward your face, then lead-lined goggles are very good.

What are the health effects of radiation exposure?
Cohalan: The health effects associated with radiation exposure depend on the area of the body that is exposed and the amount of radiation dose received. In general, occupational exposures are chronic exposures: a worker may get exposed to a small amount of radiation over a long period of time. The main possible long-term effect of low radiation doses is cancer. In most cases, the radiation either does not damage your cells or your cells can easily repair the damage. Cells get damaged continuously, not only by radiation, but by chemicals, heat, exercise, foods and many other means. If a cell is damaged beyond repair, our bodies kill the cell. There is a low probability that damage to a cell will be repaired improperly, leading to a mutation. The mutation then has a certain probability of being bad and eventually becoming a cancer many years or decades down the road. Cancer is a low probability, but it is the main concern when we talk about exposure to low doses of radiation over long periods of time. The more you get exposed to radiation, in theory, the greater the chance of developing cancer.

There are also immediate effects of exposure to radiation, but only at large doses that are high enough to kill a substantial number of cells at once. These effects are referred to as radiation sickness. They are characterized by fatigue, vomiting, diarrhea and general malaise. The higher the dose, the worse the symptoms. A high enough dose can be fatal, but here we are talking about huge doses—for example, doses received by some emergency workers during the Chernobyl disaster [in 1986 in Ukraine].

How is radiation exposure measured?
Cohalan: We cannot see, hear, smell or feel radiation produced by radioactive particles or X-rays. We therefore use instruments to detect and measure radiation. Radiation detection instruments can either measure radiation dose rates or individual doses to workers over time. The main unit of measurement for radiation dose in Canada is the milliSievert (mSv). It not only indicates the amount of radiation absorbed, but also takes into account the biological damage expected, which depends on the type of radiation that is present.

Do Canada and Alberta have rules for acceptable exposure limits?
Cohalan: In Canada, different levels of government are responsible for different types of radiation. The Canadian Nuclear Safety Commission regulates all nuclear substances (radioactive particles) in Canada, as well as high energy X-rays. The CNSC has regulations in place to limit the amount of radiation workers receive from occupational exposures (under the Radiation Protection Regulations). Provinces, on the other hand, regulate the use of lower-energy X-ray equipment, which typically includes all diagnostic X-ray equipment, and most X-ray equipment used in industry. In Alberta, the Radiation Protection Act and Regulation and the Radiation Health Administration Regulation fall under Human Services. Provinces are also responsible for other forms of radiation, such as laser radiation, ultraviolet radiation and radiation emitted by naturally occurring radioactive materials.

The Alberta regulations are similar to the CNSC regulations. The same limits are used for the amount of occupational exposure different types of workers are allowed to be exposed to. People designated as Nuclear Energy Workers or Radiation Workers are allowed to receive up to 50 mSv of radiation dose in a single year, but no more than 100 mSv over five years. People not designated as Nuclear Energy Workers or Radiation Workers, as well as members of the public, can only receive up to 1 mSv in a year. Other limits apply to pregnant workers who are designated as Radiation Workers.

In general, how should someone approach working with radiation?
Cohalan: First they need to get training about it. It’s important for people to know what they’re dealing with. And then if you follow the rules it is quite safe to work with radiation. I talked about time, distance and shielding—the three rules for radiation protection—and they’re very simple. If you just keep those in mind you shouldn’t have a problem.
Do you think people working with radiation understand a lot about it?

Cohalan: Most people know when they are working with radiation, but we [at institute] often come across people that have not been appropriately trained or have very little understanding of what kind of radiation they are working with. One example is people who are working with X-rays. We often get asked the question, “Does this mean I will become radioactive? Does this mean when I go home at the end of the day and I hug my kids that I’m giving them radiation?” That’s something that just does not happen with X-rays. And it’s important for people to know that. Training will always make people feel more secure because they will understand radiation better.

Claire Cohalan participates in the development and teaching of the Radiation Safety Institute of Canada’s radiation safety training courses. She also answers questions from radiation professionals and the general public about the effects of different types of radiation.

EDUCATION AND TRAINING

The Radiation Safety Institute of Canada offers education and training programs in the following areas:

- professional certificate courses
- radiation safety awareness
- employee radiation safety training


RESOURCES

WEB LINKS

- [humanservices.alberta.ca/working-in-alberta/12524.html](http://humanservices.alberta.ca/working-in-alberta/12524.html) Radiation Health and Safety Resources
- [humanservices.alberta.ca/working-in-alberta/292.html](http://humanservices.alberta.ca/working-in-alberta/292.html) Radiation Legislation
- [www.radiationsafety.ca](http://www.radiationsafety.ca) Radiation Safety Institute of Canada
Between January 27 and May 30, 2012, three companies were convicted under the Occupational Health and Safety Act.

**CCS Contracting Ltd.**
On January 21, 2009, a worker was seriously injured when he fell 12 metres from a roof while helping a co-worker operate a roof cutting machine. On May 30, 2012, CCS Contracting Ltd. pleaded guilty to Section 2(1)(a)(i) of the OH&S Act for failing to ensure, as far as it is reasonably practicable for the employer to do so, the health and safety of workers engaged in the work of that employer. CCS Contracting Ltd. was sentenced to a total penalty of $70,000: a fine of $5,000, inclusive of the victim fine surcharge, and a payment of $65,000 under Section 41.1. The creative sentence order included payments of $25,000 to the Bent Arrow program for funding to provide Occupational Safety Tickets to people who do not meet their program criteria and $40,000 to the Alberta Roofing Construction Safety Association for developing a fall arrest and fall protection program and an industry-specific first aid course.

**Finning International Inc. (Finning)**
On July 8, 2008, a third-year apprentice heavy duty mechanic was run over by a Caterpillar 797F heavy haul truck while attempting to tow the disabled haul truck to the maintenance shop. On February 16, 2012, Finning International Inc. pleaded guilty to Section 15(1) of the OH&S Regulation for failing to ensure that a worker is trained in the safe operation of the equipment the worker is required to operate. Finning International Inc. received a total penalty of $275,000, consisting of a fine of $2500, inclusive of the victim fine surcharge, and a payment of $272,500 under Section 41.1. The creative sentence order included payments of $212,500 to Injury Alberta and $60,000 to the Alberta Workers Health Centre to support collaboration between the two companies to develop an electronic, interactive, motivational and educational platform to promote worker involvement in effective hazard assessments when the scope of work has changed. It is expected that this platform will ultimately support an application for mobile systems so the tool can be used in the field.

**Perera Development Corporation and Perera Shawnee Ltd.**
On February 14, 2008, a dump truck operator was fatally crushed inside the cab when a 16-metre straight cut excavation wall collapsed, burying the dump truck. On June 4, 2012, Perera Development Corporation was found guilty of nine charges: three contrary to Section 2(1)(a)(i) of the OH&S Act; two contrary to Section 2(1)(a)(ii) of the OH&S Act; three contrary to Section 3(3) of the OH&S Act; and one contrary to Section 443(1)(a) of the OH&S Code. Perera Shawnee Ltd. was found guilty of three charges contrary to Section 3(3) of the OH&S Act. Perera Development Corporation was fined a total of $1,250,000 plus a 15 per cent victim fine surcharge of $187,000. Perera Shawnee Ltd. was fined a total of $900,000 plus a victim fine surcharge of $120,000.
March 1 to July 17, 2012

Occupational Health and Safety investigates most work-related incident fatalities that fall under provincial jurisdiction. In general, OH&S does not investigate highway traffic, farm or medically related fatalities. In many cases, investigations into the fatalities described here is continuing. Final investigation reports are filed at the Alberta Government Library – Telus Plaza Site and can be reviewed there or at humanservices.alberta.ca/working-in-alberta/132.html.

<table>
<thead>
<tr>
<th>Year-to-date occupational fatalities investigated in 2012 (as of July 12):</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational fatalities investigated from January 1 to July 12, 2011:</td>
<td>10</td>
</tr>
<tr>
<td>Total occupational fatalities investigated in 2011:</td>
<td>28</td>
</tr>
<tr>
<td>Total occupational fatalities investigated in 2010:</td>
<td>33</td>
</tr>
</tbody>
</table>


A male worker was steaming a frozen pipe when a section of the pipe ruptured and struck the worker in the leg, causing fatal injuries.

A male worker was operating a small bobcat with an attached sweeper. The worker was cleaning mud and gravel from a public highway when a vacuum truck travelling south on the highway collided with the bobcat. The collision impact moved the bobcat 30 metres and resulted in the worker’s death.

A male worker was conducting maintenance on gravel sorting equipment when a chain broke and struck the worker, causing fatal injuries.

A male worker fell four metres off a ladder and landed on a concrete floor. The worker was transported to hospital and died later that same day.

A female worker was found dead in the care home where she was employed. A resident of the home is charged with second degree murder in relation to her death.

Workers on a construction site were moving a tall electrical panel with a pallet jack when the panel fell onto one of the workers. The worker was transported to hospital, where he later died.

A male worker inadvertently released the hydraulic pressure on a raised front-end loader bucket. The bucket came down and crushed the worker against the loader.

A male worker was operating a lathe when his glove was caught in a rotating part. The worker, who received severe injuries, was found the following morning. He was transported to a local hospital and later air lifted to the University of Alberta hospital. The worker died from his injuries the following day.

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 region, or email whs@gov.ab.ca.
TRUST your GUT!

If your safety senses start to tingle, stop and consider – if it doesn’t feel right, it probably isn’t. Talk to your boss.

HEADS UP
work smart. work safe.