PREPARING FOR AN EMERGENCY MAKES IT MUCH LESS OF ONE
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).
In 2010, there were approximately 820 power line incidents in Alberta compared to 843 in 2009. While the number of incidents was lower than in 2009, the severity remained high—2010 saw five fatalities (four involving farm operators and the fifth related to a recreational incident). These fatalities are a reminder of the need for ongoing power line safety awareness and education.

Five common pieces of commercial and farm equipment make up the majority of power line contacts for large equipment operators and truck drivers in Alberta, who are typically males 18 to 50 years old.

#1 Track hoes
The most prevalent type of power line contacts are track-hoe incidents, which account for about 25 per cent of direct contacts in Alberta. These incidents usually involve overhead lines, but in some cases the contact is with underground power lines. Track-hoe incidents can occur when the equipment is being operated or transported.

The main reason for track-hoe contacts is that operators don't realize that the size of the equipment has increased, while the height of power lines has remained the same. When transporting track hoes, operators need to take into account the combined height of the trailer bed and the track-hoe arm.

#2 Back hoes
Back hoes are the second most prevalent piece of commercial equipment making contact with power lines. They are number one when it comes to underground power line contacts, which have remained consistently high during the past few years. Unfortunately, it is not clear whether the driving issue is a failure to get underground utility lines properly located or operator inexperience in working with marked utility lines.

#3 Gravel/dump trucks
Gravel and dump trucks rank third for power line contacts. These incidents typically happen when the truck is being driven with the box in the “up” position.

#4 & #5 Air seeders and sprayers
In 2010, farm equipment was involved in about 21 per cent of all power line contacts. A number of these contacts resulted from air seeders or sprayers snagging a power line when they were in the transport position.

Many farm families have been working the same piece of land for generations, repeatedly passing under power lines with their equipment. But the increased size of equipment—from tractors to implements—means that they may now be too high to pass safely under a power line.

There were four power line–related farm fatalities in Alberta in 2010. Three of these resulted from farmers moving grain augers into energized power lines. The fourth fatality occurred when a farmer moved a piece of equipment and contacted a power line.

Raising the bar on safety
If equipment is over 4.15 metres high, it’s considered too tall to be travelling on a public road or highway in Alberta. Such equipment requires a permit from Alberta Transportation for transporting on public roads. If equipment is over 5.3 metres high, the transporter must also contact the local utility in advance of the move.

Stay “seven metres safe”
It can be the distance between life and death.

Operators and their equipment must stay a minimum of seven metres away from overhead power lines. When working closer, call the utility company. Always call Alberta One Call (1-800-242-3447) before digging to avoid hitting underground power lines.

This article was provided by Alberta’s Joint Utility Safety Team. Learn more about staying safe at www.wherestheline.ca.
OH&S REGULATION REVIEW

The OH&S Regulation outlines administrative requirements relating to health and safety at Alberta work sites. The regulation is set to expire on March 31, 2013, and a review is now underway. After considering suggestions from workers and employers, Human Services is proposing changes to the regulation. For information on how to provide feedback on those changes, visit www.employment.alberta.ca/ohs-regreview.

ALBERTA UPDATES WORKPLACE INJURY AND FATALITY RECORDS

In October, the Alberta government updated online information about workplace injuries and fatalities for more than 150,000 employers insured by the Workers’ Compensation Board-Alberta.

The records provide a five-year snapshot based on information reported to WCB-Alberta by March 31, 2011. Albertans can see the following information for each employer:
- number of lost time claims
- estimated number of workers
- lost time claim rates
- number of fatalities, including those resulting from motor vehicle and workplace incidents, and occupational diseases
- whether the employer holds a Certificate of Recognition
- industry and province-wide lost time claim rates for comparison purposes

The records were first released in September 2010. A number of improvements were made to the 2011 update, including more detailed information about fatalities and a video to help users conduct searches.

The annual release of these records is part of the Alberta government’s plan for achieving greater transparency and accountability for occupational health and safety.

The records can be found online at www.employment.alberta.ca/employerrecords.

PREPARE FOR WINTER DRIVING WITH EMERGENCY CAR KIT

By definition, emergencies happen when you don’t expect them. A simple way to be more prepared to handle emergencies is to put together emergency kits—for work, home, recreation and travel.

Driving in winter can be a challenge. You have to contend with the cold temperatures and short daylight hours. A basic emergency kit for cars—to be kept in the passenger compartment—should include the following items:
- food that won’t spoil, such as energy bars
- water in plastic bottles so they won’t break if frozen (change every six months)
- blanket
- extra clothing and shoes
- first aid kit (with a seatbelt cutter)
- small shovel, scraper and snowbrush
- candle (in a deep can) and matches
- wind-up flashlight
- whistle (in case you need to attract attention)
- roadmaps
- copy of your emergency plan and personal documents

Also keep the following items in your trunk:
- sand, salt or cat litter (non clumping)
- antifreeze/windshield washer fluid
- tow rope
- jumper cables
- fire extinguisher
- warning lights or road flares

Find out more about being prepared for vehicle and other emergencies at www.getprepared.ca.

NAOSH WEEK 2012

Watch for North American Occupational Safety and Health Week activities from May 6 to 12, 2012. NAOSH Week is an excellent opportunity to focus, reinforce and strengthen your commitment to preventing injury and illness in the workplace, at home and in the community.

The theme for 2012 is “Making It Work.” Your workplace can take part by
- setting new goals for workplace health and safety
- creating awareness of these goals within and outside your organization
- making a plan to accomplish these goals

NAOSH Week is led by the Canadian Society of Safety Engineering in partnership with the Canadian Centre for Occupational Health and Safety, Human Resources and Skills Development Canada, Threads of Life, the American Society of Safety Engineers and partners in Mexico.
The results of a recent focused inspection campaign on residential construction sites in Alberta show continued room for safety improvements.

From September 12 to October 11, 2011, over 600 initial and follow-up inspections involving 387 employers resulted in 394 orders issued, including 83 stop work orders. A lack of fall protection or of a fall protection plan accounted for 131 orders—about one-third of all orders issued.

“Clearly, we need to further create a culture of workplace health and safety in all Albertans. Our province’s workforce deserves nothing less, and I expect to see these numbers continue to improve,” says Minister of Human Services Dave Hancock, who is responsible for Alberta Occupational Health and Safety.

“I want to assess the impact of all three focused inspection campaigns we conducted this year. Are they having the desired impact? What other tools do we need to ensure compliance across the province?”

For several months, including during the residential construction campaign, OH&S carried out a pilot program of evening and weekend inspections. This increased schedule will continue on a regular basis as part of the ongoing inspection program.

“Many sectors of our province’s workforce don’t clock in from 9 to 5,” says Hancock. “Revising the working hours of our OH&S officers to include weekends and evenings only makes sense.”

The findings of the Occupational Health and Safety Focused Inspection Project: Residential Construction are available at employment.alberta.ca/newsroom.

With the welcoming of the New Year, people often set goals for the year ahead. In 2012, as we move forward with the important mandates of the new ministry of Human Services, I am recommitting myself to our goal of helping children and their families be resilient and strong.

As Minister of Human Services, I believe that people are central to our work, and that work includes keeping them informed of their rights and responsibilities in the workplace. Every worker in Alberta deserves a healthy, safe and fair working environment. Helping workers get home safely to their families at the end of the work day will remain a top priority.

That’s why we need to continue to build on the department’s multi-point plan for Occupational Health and Safety. Over the past two years, the department has introduced a number of new initiatives—from updating compliance and enforcement procedures to reviewing open orders to posting online the safety records of Alberta companies. The plan originally started with 10 points, but it has grown to include others.

Over the coming months, the Ministry will implement the remaining initiatives, which include hiring additional OH&S officers and identifying new ways to reduce work-related motor-vehicle incidents and occupational diseases. We will also continue to promote occupational health and safety through partnerships, resources, education and enforcement.

Since becoming the minister responsible for OH&S, I have a heightened awareness of the number of serious workplace incidents. When I hear the details, I realize how each of them could have been avoided if there were a stronger culture of workplace health and safety. I also realize that in spite of the progress we’re making, we still have a lot of work to do.

Human Services is about doing the right thing for Alberta families, in the right way—whether that’s helping people find jobs and affordable childcare or promoting safe, healthy and fair workplaces. So while employers and workers have significant roles in improving workplace health and safety, you can be sure government is also doing its part.

WE WELCOME YOUR FEEDBACK
IF YOU’RE INTERESTED IN SHARING OPINIONS OR COMMENTS ABOUT WORKPLACE HEALTH AND SAFETY ISSUES, PLEASE CONTACT THE MAGAZINE’S EDITOR THROUGH THE OHS CONTACT CENTRE, 1-866-415-8690 (OR 780-415-8690, IF YOU ARE IN THE EDMONTON AREA), OR E-MAIL WHS@GOV.AB.CA.
CONSIDERING HUMAN FACTORS

by Chiara Fritzler

For this article, we are going to take a small step away from pure ergonomics and talk about an important concept that is becoming increasingly prevalent in the ergonomic world—human factors. The terms “human factors” and “ergonomics” are often used interchangeably in workplaces; both describe the interaction between the worker and the demands of the work. The difference is that ergonomics focus on the effect that work has on workers, and human factors emphasize that human characteristics need to be taken into consideration when designing systems. Assessing human factors is about changing our focus from what work does to workers to how work systems can be changed to fit the workers.

Physical characteristics, physiological characteristics and psychological or behavioural characteristics are the three categories of human factors that often combine and determine how each person does their job. Physical characteristics include physical attributes of the human body, such as height, weight, body proportions and arm reach. Physiological characteristics include such things as muscle strength, endurance and hearing range. Psychological characteristics include things such as reaction time, associations with certain colours (yellow often means “caution”), and memory capabilities and limitations. Each of these characteristics will determine how a person will interact with the systems at their workplace.

There are also three interrelated aspects that must be considered: the job, the individual and the organization.

• The job: includes the nature of the task, the workload, the working environment and its design, the procedures applied to complete the task, etc. Tasks should be designed to take the human characteristics described above into consideration, matching the job to the physical, physiological, and psychological strengths and limitations of workers.
• The individual: similar (but not the same as) psychological/behavioural factors. These include a worker’s experience, competence, personality, risk perception, etc. Some characteristics, such as personality, and others, such as skills and attitudes, may be changed or enhanced.
• The organization: includes work patterns, the culture of the workplace, resources, communication of expectations, leadership, etc. These factors are often overlooked during the design of jobs, but they have a significant influence on individual and group behaviour.

To summarize, human factors take individual human characteristics (physical, physiological and psychological) and apply these to what people are being asked to do (the job and work environment), who is doing it (the individual and their competence) and where they are working (the organization and its attributes).

Considering human factors in your workplace is not effective if taken into account on its own. Human factors can, and should, be included within a good safety management system. They can be examined similarly to any other hazard control system and could be considered under either engineered or administrative controls.

Workers need to consider human factors and their own individual characteristics. They should ensure that their interaction with whatever work systems they are exposed to will not cause harm or injury. As a good practice, employers need to address human factors in hazard assessments, as required under Part 2 of the Occupational Health and Safety Code.

Chiara Fritzler is an OH&S officer with Human Services.

Next time: A spring in your step

REFERENCES


Results of On-Site Audit Review pilot project
In March 2011, Partnerships wrapped up the On-Site Audit Review pilot project. The pilot sampled audits completed for seven different Certifying Partners. It was conducted to determine if an on-site quality assurance process is necessary to verify audit report findings. It also looked at whether auditors are following the procedures to which they are trained. Five experienced health and safety auditors, who were working directly under contract to Partnerships and selected from a pool nominated by the CPs, conducted the reviews.

Results of the pilot project indicated that the majority of sampled auditors are meeting the audit standards expected, and that the current quality assurance review process is effective in identifying most auditor errors. However, concerns were identified with a small number of audits. These included deliberate misrepresentation of audit dates; disregard for interview and work site sampling standards; use of a group interview process; application of inappropriate shortcuts to perform documentation review and site observations; and the use of untrained, uncertified and unacknowledged “helpers” as part of an audit team.

These practices devalue the audit report and put audit findings and the employer’s eligibility for a Certificate of Recognition into question. In addition, seven per cent of the auditors sampled were found to be deviating from standard audit processes in ways that could significantly affect the validity of audit results, and/or which appeared to violate the Auditor Code of Ethics.

As the issues identified would be difficult to detect through desktop review alone, Partnerships and the CP group are currently developing a plan for implementation of OSAR as a permanent part of the quality assurance standards already in place.

For more information on OSAR, visit www.employment.alberta.ca/partnerships.

Partnerships Auditor Code of Ethics
As of December 31, 2011, all Certifying Partners have implemented a common Code of Ethics to govern auditor conduct and behaviour. The code will hold all auditors to the same standards of conduct, regardless of the CP to which they are certified.

Under the code, health and safety auditors are expected to be professional, accurate, clear, honest and objective. Auditors have an obligation to comply with both legislation and Partnerships standards. They should not use their audit findings to sell employers additional health and safety services.

The code also defines specific guidelines for avoiding a conflict of interest. These guidelines include the stipulation that an “auditor or a member of the auditor’s corporate group...has not helped to build, establish, advise, consult or maintain the employer’s health and safety processes at any time during the 12-month period preceding the audit.” This stipulation means that an auditor cannot work for an employer if they or a member of their organization was recently involved in building the employer’s health and safety program, or if they provided other services that are evaluated by the certification audit. Employers should also avoid hiring an auditor with whom they have a personal relationship.

Certified auditors have a duty to report ethical violations to their CP, and employers are also encouraged to let their CP know if they suspect that an auditor has violated the Code of Ethics.

For more information on the changes to the Auditor Code of Ethics, contact your CP.

New Partners in health and safety
Representatives from the Alberta Education Health and Safety Association and Penn West Exploration received their Partner certificates at the Minister’s Breakfast on September 27, 2011, in Calgary. Thomas Lukaszkuk, then Minister of Employment and Immigration and now Minister of Education, welcomed the new Partners to the program.

Is that COR valid?
All CORs have an expiry date printed on the lower right corner of the copy. 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 by visiting www.employment.alberta.ca/documents/WHS/WHS-PS-COR.pdf.
The alarm rings. You plant your feet on the floor, shower, eat and head out the door. You drive your usual route to work and park in your usual spot. You perform your daily tasks, clock out and drive home the same way you came. If asked about your day, there isn’t much you can recall.

Does this sound familiar? If you can relate, you may have become a “zombie walker.”

Waking up zombies is health and safety instructor Steve Laughlin’s specialty. For over 20 years, he has worked to raise awareness of the hazards of complacency.

“Zombie walkers are all around us—in our homes, on the road and in the workplace,” says Laughlin. “They are people who have become creatures of habit—who have slipped into a routine and are basically sleepwalking through their day.” He says that keeping safety programs fresh is a challenge, but it’s key to increasing employee engagement and decreasing workplace injury.

“Even the most innovative safety programs will eventually fail at some point because they will become normal.”

Laughlin shared tips and techniques for his presentation “Waking the Living Dead” at the 10th annual Alberta Health and Safety Conference and Trade Fair in Calgary, held in October 2011. The goal of the conference is to promote health and safety in the workplace and to be a source of health and safety education for employers and employees.

Finding new ways to address safety challenges in an ever-changing environment is Laughlin’s passion. Laughlin finds inspiration in the highly creative programs, activities and incentives that he sees.
implemented in workplaces across North America. He shares these ideas and encourages participants to swap stories and brainstorm new safety solutions in his lively, interactive presentations.

“You stop noticing the normal. It’s not willful disregard; it’s human nature.”

“It’s really about breaking up the daily routine, changing up the ordinary and then changing it all over again,” he says. “Even the most innovative safety programs will eventually fail at some point because they will become normal.”

Laughlin shares the story of an employer who was frustrated with an escalating number of workplace injuries. In an effort to increase awareness of the problem, the employer purchased a crash-test dummy and hung it in the employee entrance for all to see. Each time there was a workplace injury, the details of the incident were clearly labelled on the affected body part. It got everyone’s attention and it worked...for a while. Eventually, employees stopped noticing the dummy in the entrance, even after an injury occurred. In an effort to get people to continue to pay attention to the issue, the employer started moving the dummy around the plant—the lobby, the cafeteria, the main walkway. No one knew where it would turn up next, or why.

“Changing it up is what got people’s attention,” says Laughlin. “Whether it was intentional or not, the dummy was actually an excellent metaphor. We have a saying in the industry: ‘The longer you do something, the dumber you get.’ It’s because you simply phase out. You stop noticing the normal. It’s not willful disregard; it’s human nature.”

Laughlin says there really aren’t any magic potions when it comes to getting employees to wake up. “You have to start with the basics—ask people to talk about their jobs and why they do them. Encourage them to get out of the groove, to re-engage in their daily activities and to recognize the zombie in themselves. No one knows better than they do what needs to change.”

Even small changes to a routine can be helpful when trying to stay alert throughout the day. Try taking a different route to work, switching up daily tasks when possible or eating your lunch outside. Who knows? You might even see a zombie.

Christi Retson-Spalding is a communications consultant.
I was completing an inspection the other day at a work site where workers were observed conducting roofing duties in an immediately hazardous area. Workers were removed from the area and a stop work order was issued. The two workers involved proceeded to justify the dangerous act by saying that they had just returned from a break and were just about to finish the job.

Occupational Health and Safety officers hear injured workers say from their hospital beds that the task had been completed and they were just doing the clean up. We hear from company owners that their workers were just performing a 15-minute task. Contractors point out that it was just a delivery truck. Site superintendents say they were just gone for a couple of minutes.

The Occupational Health and Safety Act, Regulation and Code use words like shall, must, direct, ensure, prepare, provide, etc. The word “just” is found in the OH&S Act, Regulation and Code exactly zero times. Site or company safety guidelines, policies and legislated requirements must be complied with at all times—not only when it is convenient.

The word “just” can mean nearly, only or barely as in: “I nearly complied with the legislation,” “You only have to worry about production,” and “We barely protected our workers.”

On an average work site the word “just” is uttered too many times to count. Equally as many times, it is used as the basis for not complying with the legislation or for not doing what you know is right. Don’t just assume you will be safe during these times, but know that you will be safe by fully complying with the legislation, remembering your training and following the site rules. Then we can all go home safe and not just the lucky ones.

We tell you these things just because we care.

Sean McIntyre is an OH&S officer with Human Services.
Between June 1 and September 30, 2011, six companies were convicted under the Occupational Health and Safety Act.

**Westcan Stucco Wire Ltd.**
On September 11, 2007, a worker fell from scaffolding and was fatally injured. On September 12, 2011, Westcan Stucco Wire Ltd. pleaded guilty to Section 323 of the OH&S Code for failing to ensure that scaffolds erected to provide working platforms during the construction of buildings and other structures complied with the Canadian Standards Association standard. Westcan Stucco Wire Ltd. received a total penalty of $345,000: a fine of $300,000 plus a $45,000 victim fine surcharge to be paid to the Government of Alberta.

**Telba Oilfield Rentals Ltd.**
On March 19, 2008, a worker was seriously injured in an explosion and fire during the shutdown of an oil battery facility. On September 6, 2011, Telba Oilfield Rentals Ltd. pleaded guilty to Section 2(1)(a)(i) of the OH&S Code for failing to ensure that scaffolds erected to provide working platforms during the construction of buildings and other structures complied with the Canadian Standards Association standard. Telba Oilfield Rentals Ltd. received a total penalty of $345,000: a fine of $300,000 plus a $45,000 victim fine surcharge to be paid to the Government of Alberta.

**Agra Foundations Ltd.**
On July 28, 2007, a crane operator’s left leg was drawn into the rotating drums of the draw works of a crane. The operator sustained serious leg injuries and his left leg required amputation. On July 19, 2011, Agra Foundations Ltd. pleaded guilty to Section 7(1) of the OH&S Code for failing to assess a work site and identify existing or potential hazards before work begins. Agra Foundations Ltd. received a total penalty of $90,750: a fine of $5000, a victim fine surcharge of $750 and a payment of $85,000 to the Alberta Construction Safety Association.

**Garda Canada Security Corp.**
On November 1, 2006, a female security guard was sexually assaulted. On September 8, 2008, the intruder was sentenced to eight years. On July 8, 2011, Garda Canada Security Corporation 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. Garda Canada Security Corp. received a total penalty of $92,750: a fine of $5,000, a victim fine surcharge of $750 and a payment of $87,000 to the Southern Alberta Institute of Technology.

**Steve’s Oilfield Services (Edson) Ltd.**
On October 22, 2003, a worker received serious injuries when run over by a bobcat that he was exiting. On February 12, 2007, the company pleaded guilty and as part of its sentence in connection to that incident, the company entered into a joint submission under Section 41.1 of the OH&S Act. Steve’s Oilfield Services (Edson) Ltd. was subsequently found guilty of failing to comply with that order. It received a fine of $100,000.
A lot of voices fill the air at the Occupational Health and Safety Contact Centre. A typical day means the centre’s four advisors are busy going over health and safety legislation with callers, answering questions about how to do hazard assessments and directing callers to other resources or areas of government. They also take calls and receive e-mails about unsafe work sites or when incidents occur.

Started in 2001, the OH&S Contact Centre received 15,422 calls and 3177 e-mails in the 2010 to 2011 fiscal year. It is a resource for workers and employers.

“We predominantly get calls from Albertans. But we also serve as a good resource for some workers and employers who are based outside of Alberta and who want to work in Alberta,” says Justin Peng, who has been an OH&S advisor with the contact centre for four and a half years.

Calls come from a number of sources: employers, employer safety representatives, emergency services, workers and members of the public who observe unsafe work activities.

Janice Pedersen, who is the centre’s supervisor, says many of the questions to the centre come from people trying to understand parts of the OH&S Act, Regulation and Code. “Often, callers know the legislation in general, but need clarification to understand specific sections they are looking at.”

In their job, contact centre advisors use every piece of the act, regulation and code, Pedersen says.

The centre is open to take calls from 8:15 a.m. to 4:30 p.m., Monday to Friday. After hours and on weekends and holidays, calls are forwarded to an answering service. The answering service asks callers where the incident or concern is from and then forwards the call to the respective on call OH&S officer for that region. If the situation has immediate danger—where workers’ risk of injury is high if the work continues—or if a serious incident has just occurred, an officer will be sent to investigate.

Contact Centre Information
1-866-415-8690, toll-free
780-415-8690, in the Edmonton area
E-mail: whs@gov.ab.ca
The 2011 Alberta Health and Safety Conference and Trade Fair was held on October 24 to 26 at the BMO Centre in Calgary. It was the 10th anniversary of the conference. For information about the Health and Safety Conference Society of Alberta, please go to www.hsconference.com.

A 2K Fun Walk and a 5K Fun Run, sponsored by 3M and Running Room Canada, were held to start off the conference. The event started from the Eau Claire Market in downtown Calgary, and the route went along the Bow River. The proceeds went to Threads of Life, an organization that helps families affected by workplace injury and illness.

Participants at the conference were led through an exercise by Dr. Kenford Nedd, who works at helping people lessen the stress in their daily lives. He was the closing speaker at the conference. He is from the International Stress Control Centre in Vancouver, B.C.
Author and leadership trainer Michael Kerr opened the conference with his presentation on “Inspiring Workplaces: Creating the Kind of Workplace Where Everyone Wants To Work.”

Dr. Kenford Nedd gave the final presentation at the conference. Photos by Susanne L’Heureux.

**OCCUPATIONAL HEALTH & SAFETY**

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**Alberta Government Library**
To review the large selection of occupational health and safety information materials available through the Alberta government, go to employment.alberta.ca/1706.html.

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

**Telus Plaza North Tower Site**
P.O. Box 1360
15th Floor, 10025 Jasper Avenue
Edmonton, AB T5J 2N3

**Library phone** 780-427-8720

**Library fax** 780-422-9694

To borrow DVDs and videos, make your requests through the inter-library loan system or visit the government library’s 107th Street Site:

**3rd Floor, 10030 – 107 Street**
Edmonton, AB T5J 3E4

**Library 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.

Occupational Health and Safety is a Human Services program that falls under the jurisdiction of Minister Dave Hancock.
PREPARING FOR AN EMERGENCY MAKES IT MUCH LESS OF ONE

by Roland Lines

When a wildfire raced toward the town of Slave Lake in May 2011, emergency plans had to kick into action. In all, the Slave Lake and South Shore fires burned up more than 21,000 hectares of land, including more than 400 homes and other structures.

Kim Laing was a volunteer in the emergency response to the Slave Lake disaster. She went first with the Red Cross and later as a firefighter. St. John Ambulance set up emergency reception centres.

“So many people don’t see the importance of having a first aid kit for their home, at work or for recreation,” she says. “First aid training truly does save lives.”

At St. John Ambulance, Laing often sees people come in for first aid training after the fact—after someone’s been injured. “So many people think that first aid training and first aid kits are only required in what they consider higher risk industries,” says Laing, “but the reality is they apply to everybody.”

Laing, who has more than 25 years’ experience in emergency response, says that many employers miss a key part of emergency preparedness: every worker has to know what is expected of them in the event of an emergency, even a very minor one.

“If I cut my finger at work, I should know if another employee is supposed to drive me to the doctor’s. Or do I call an ambulance or drive myself?” she says. “Before we start working we have to know how we get help.”

On the other side of the equation, Laing says she sees many plans that don’t specify who has the responsibility to provide assistance. “Just because I’ve taken first aid, I may not be the one to give the first aid response. If it’s not part of my job description, I may not have a duty to respond,” says Laing.

Monitor your working conditions

“This stuff is all pre-work,” says Laing. “That’s why at construction sites every morning they have ‘tailgate’ or ‘toolbox’ meetings. They talk about what the conditions are that day and whether those conditions bring additional hazards.”

It’s a practice endorsed by Robin Kotyk, chief operating officer of the Alberta Construction Safety Association.

“When workers go out to a site they are oriented to the hazards that are applicable to that site. They would also review the emergency response procedures applicable to the work site.”

For construction sites, in particular, Kotyk says safety procedures would be reviewed whenever site conditions change. That review would include the emergency preparedness plan.

“For example, road building sites are so mobile in nature that review of the emergency response plan would be ongoing as the construction goes down the road,” he says. Every time the work zone moves to another
intersecting roadway, that changes where the closest access points are, whether for the arrival of emergency response vehicles or the evacuation of workers.

“Emergency preparation is something that must be done for the protection of all workers,” says Kotyk. Even furnace repair people should be thinking about it. “Whenever they come on site they do a hazard assessment and they take a look at emergency response: Is there a dog in the house? Are there going to be people present? Am I alone here? How do I get help?”

Resources are available to help build a plan
Emergency preparedness is part of more than 20 courses offered by ACSA. “We give workers and employers the tools and information that would assist them in building a plan,” says Kotyk.

He says the Canadian Standards Association and the Alberta Occupational Health and Safety legislation are two other places employers can look for information about emergency preparedness.

“Legislation seems to scare employers,” he says. “It shouldn’t. It’s a resource that shows them good practice.”

Robert Gilchrist, an OH&S technical advisor, says the detail in Part 7 of the Occupational Health and Safety Code, which covers emergency preparedness and response, makes the review of an emergency plan relatively straightforward. “The legislation is pretty prescriptive. We go through the employer’s plan and see that it covers every one of those things listed in the code.”

The level of detail that Gilchrist applies to the review of an emergency plan depends on the workplace. “If they’re doing confined space entry then I get much more detailed. It depends on the hazards,” he says. “If I’m dealing with a liquor store, they have to have robbery and violence as potential emergencies.”

Break down complex situations into simpler pieces
The University of Alberta is one example of an Alberta employer with complicated working conditions. “We have a building on campus that is a heritage resource, is linked by pedways to many other buildings and contains a nuclear reactor,” says Adam Conway, manager of the university’s Office of Emergency Management.

“It’s complex, but what makes it challenging is trying to get people over that complexity. Because really it just comes down to two things: are you evacuating or are you sheltering?”

Once people understand that they really only need to make that decision, says Conway, it’s much simpler for them to figure out their emergency plans. “Do they have to shower before they evacuate?” he says. “Do they shelter in place because it’s too difficult for them to evacuate?”

WHAT ABOUT 911?
An employer must never rely on calling 911 as the full extent of its emergency plan, says OH&S technical advisor Robert Gilchrist. “Yes, you have to dial 911 if there’s a fire, but then you have to get your people out.”

Gilchrist has even had companies tell him they were relying on the local fire department if workers needed rescue from confined spaces. “That can be part of their plan,” he says, “but they still need their own emergency response equipment and trained workers to deal with it until the fire department arrives.”

In addition, a company would have to be sure that local rescue services were available on the day and at the time the company was doing a confined space entry.

Each department or unit at the university writes its own emergency plan. “Our governance model is definitely based on the faculties and departments, not on buildings, because so many of our buildings are multi-tenant,” says Conway. “We’re working with individual departments and units as the need arises—trying to get everybody to run off a common playbook—but we don’t have the resources to write everybody’s plan for them.”

Another complicating factor at the university is the presence of provincial and federal government units within university facilities. “We also have university staff working within their facilities,” says Ryan White, manager of safety systems and standards with Environmental Health and Safety at the university.

White’s office helps university departments work with those provincial and federal partners to build safety programs that incorporate the cross-supervision of employees. “We have built some specific programs about what the reporting requirements are, how we initiate an emergency response in those facilities and how incident reports are handled.”

Additional challenges for heavy industry
Alberta Envirofuels, which produces high-quality gasoline blending components at its plant in Edmonton, has special emergency preparedness concerns because of its business operations.

“One of the big things for our plant is the transition zone—the space around the plant,” says general manager Les Barber. “We are surrounded by open fields, similar industries or low-density heavy commercial businesses—
the closest residential area is a couple kilometres away.”

Alberta Envirofuels is a member of the Strathcona Industrial Association, which is comprised of heavy industry operators in east Edmonton and neighbouring Strathcona County. Maintaining buffer zones is one way SIA works to improve safety in the region.

“When Strathcona County was planning for a new hospital in Sherwood Park, SIA thought one of its potential locations was too close to the industrial area,” says Barber. “We told them it was a bad idea. Even though we design and run our plants so they’re safe, you want to maintain that buffer zone in case something goes wrong.”

SIA also runs a community awareness and emergency response program, which includes an update line. “If the public sees something happening, they have a place to go to get information about what’s going on,” says Barber.

Alberta Envirofuels, which has its own teams for medical, fire, rescue, spill and other emergency responses, is also part of the larger Strathcona District Mutual Aid Program. “In our emergency plans we have the levels that we can handle and the levels where we would call for mutual aid,” says Barber. If the emergency was on the scale of the tornado that hit Edmonton in 1987, he says even the mutual aid wouldn’t be coming. “That’s why facilities like ours have so much of their own capability and so much safety built into the design.”

Laing was working at a hospital in Lethbridge when the Edmonton tornado struck nearly 25 years ago. “What happened in Edmonton was such a huge eye-opener for so many of the services in Alberta—how ill-prepared they were to respond because power was down, phones were down, roads were blocked, people were injured,” says Laing. “Afterwards, the Government of Alberta worked hard to put together emergency response plans and minimum training requirements, and different aspects of emergency preparedness became law.”

Roland Lines is a writer, editor and GIS technician based in Edmonton.

RESOURCES

WEB LINKS

employment.alberta.ca/OHS-legislation
Alberta Occupational Health and Safety Act, Regulation and Code

employment.alberta.ca/SFW/3969.html

employment.alberta.ca/whs/learning/hazard/Hazard.htm
Hazard Assessment and Control is an online program that introduces employers and workers to the process for identification, assessment and control of hazards in the workplace.

www.sia.ab.ca
Strathcona Industrial Association

www.sja.ca/ALBERTA/Pages/default.aspx
St. John Ambulance Alberta

IN THE ALBERTA GOVERNMENT LIBRARY
(For contact information, please see page 17.)

VHS/DVD

Dealing with Hazardous Spills (DVD 007)
Some organizations have to deal with hazardous materials as part of their daily business and have detailed plans and highly trained workers to handle a sudden spill. This program discusses the hazard communication plan, the emergency response plan, initial spill response, spill containment, the instruments used to identify chemicals involved in a spill and additional hazards of a spill.

Emergency Evacuation: What Every Employee Should Know (DVD 047)
Fire is one of the leading causes of emergency evacuations, but there are other reasons to evacuate a facility. Emergency situations come without warning, and they require quick, decisive reactions on the part of all employees. Understanding and implementing an emergency evacuation plan is what this video is all about.

High-Rise Evacuation: Special Considerations for High-Rise Escape (DVD 046)
High-rise buildings are designed to be safe, but if an evacuation is required, workers in such buildings need to be prepared. This video teaches viewers the importance of knowing their building’s emergency plan and their role in it.

ITEMS TO INCLUDE IN A WORKPLACE EMERGENCY RESPONSE KIT:

- wind-up flashlights (not battery-powered)
- bright-coloured vests (to identify designated emergency marshals)
- handheld two-way radios (for internal communications)
- adhesive markers (to put on doors indicating rooms are empty)
- a notepad and pen that will write when it’s wet or cold
- emergency contact numbers
- sugar candies (someone who is diabetic will need them under stressful conditions)
Strathcona Industrial Association members, Strathcona County Emergency Services and Edmonton Fire and Rescue participated in a spill decontamination exercise at Alberta Envirofuels in Edmonton. Photos courtesy of the Strathcona Industrial Association.
OCCUPATIONAL FATALITIES
Investigated in Alberta

June 1 to November 2, 2011

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, investigation into the fatalities described here is continuing. Final investigation reports are filed at the Alberta Government Library site and can be reviewed there or at employment.alberta.ca/whs-fatalities.

A 55-year-old male worker was working on a well pad when a piece of equipment came loose and struck him in the chest. The worker died early the following morning.

A 33-year-old male worker and owner of a company was installing insulation and sheeting inside a steel building when he fell approximately 20 metres from the roof. He was pronounced dead at the scene.

A 27-year-old female worker died at the scene when she was involved in a quad incident.

A 24-year-old male worker—one of the unloaders from the receiving team—was out on the pad at the loading docks to take off a glad lock (a device that prevents a trailer from moving away from the dock). The worker was pinned and crushed when the driver of a semi backed up.

Year-to-date occupational fatalities investigated in 2011 (as of November 2): 24

Occupational fatalities investigated from January 1 to November 2, 2010: 25

Total occupational fatalities investigated in 2010: 33

A 25-year-old male worker was doing utility upgrades and conducting a residential tie-in when he came into contact with an overhead electrical line. He was retrieved by his co-workers and transported to hospital, where he was pronounced dead.

A 25-year-old male worker was part of a crew in the process of removing a temporary pole for a power line. As he climbed the pole to remove guy wires and attach a sling, the pole fell over, landing on him. Emergency responders transported the worker to hospital by ambulance, where he was pronounced dead.

A 34-year-old male worker was electrocuted while installing additional electrical cables for the main power distributor in a residential camp.

A 53-year-old male worker in the process of grading a secondary highway had pulled onto a range road. He apparently exited the grader he was operating, after which it struck and killed him.

A 20-year-old male worker was loading a man basket onto a flatbed trailer when the worker fell and then the basket fell onto and killed the worker.

A 46-year-old male worker was operating a bobcat with a bucket attachment. The worker was crushed when the bucket arm was raised.

A 48-year-old male worker became pinned between the pickup truck he had been operating and a front-end loader that was backing up. The worker was transported to hospital with serious injuries and later died.

A 35-year-old male equipment operator and a helper were traversing a hill while operating a low-impact seismic track drilling unit. It appears that the drilling unit hit a rock, flipped and landed on the operator, who was pronounced dead at the scene. The helper was thrown out of the unit, was taken to hospital and was later released.

A 28-year-old male ironworker was placing I-beams on a skeletal structure together with another ironworker. Each ironworker was in their own Genie lift. For a reason that has yet to be determined, one of the I-beams fell and struck one of the lifts, causing it to tip over. The ironworker in that lift fell approximately 15 metres and was fatally injured.

An 18-year-old male worker was run over by the rear wheels of the truck portion of a truck-trailer unit. He was pronounced dead at the scene. The truck was seized for a mechanical inspection.

**COMMON TYPES OF FATAL INCIDENTS INVESTIGATED BY OCCUPATIONAL HEALTH AND SAFETY**

(The examples given are based on true incidents.)

**Struck by objects:** About 20 per cent of all workplace incident fatalities are caused by the person being struck by an object. For example, a worker clearing debris from a seismic line behind a lead cat and two hand fallers walked into the path of a tree being felled and was struck.

**Falls:** About 15 per cent of workplace incident fatalities are the result of falls. For example, a worker installing and insulating a sheet metal roof was not tied off to a fall protection system and fell approximately 30 metres.

**Caught by objects:** About 12 per cent of workplace incident fatalities result from a person being caught by an object. For example, a worker clearing debris buildup and performing general maintenance around a limestone crusher was crushed to death when caught between a roller and the belt.

**Transportation incidents:** About 12 per cent of workplace incident fatalities involve industrial equipment or work-related vehicles. For example, an asphalt compactor used in road construction came too close to the edge of the road, slid sideways into the ditch and pinned the operator, causing fatal injuries.

**Exposure to harmful substances:** About 10 per cent of all workplace incident fatalities are the result of exposure to harmful substances. For example, a worker was setting up a tower for monitoring a drilling rig location. While the tower was being raised it made contact with an energized power line. The worker received an electrical shock and was killed instantly.

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

Alberta has taken a leading role in Canada by making workplace injury and fatality records public. By releasing this information, the Alberta government wants to encourage more discussion around what we can all do to help keep people safe in the workplace.

Where to go “to know”

The employer records are available at www.employment.alberta.ca/employerrecords

For more information, call the Occupational Health and Safety Contact Centre:

- 1-866-415-8690 (Toll-free within Alberta)
- 780-415-8690 (Edmonton and surrounding area)
- email whs@gov.ab.ca

Deaf/hard of hearing with TDD/TTY:

- 780-427-9999 in Edmonton
- 1-800-232-7215 throughout Alberta