NEW STANDARD GIVES ELECTRICAL SAFETY A BOOST
Have you checked your dictionary lately? If you’re in Alberta, you might find the word “accident” has been crossed out and replaced with “incident.” In Alberta we don’t use the word “accident” in connection with workplace injuries and death—we speak, write and mean “incident.” Why is this? It’s quite simple, but also incredibly complex.

First of all, “accident” does not truly reflect responsibility for the actions leading to an injury. However, with “incident” there seems to be an inherent recognition that something was responsible in the actions that resulted in an injury. Secondly, “accident” is overused for all kinds of actions. The one that always worked for us as little children was “It’s not my fault, Mommy. It was an accident.”

Language is important
The first thing to remember is that language and the way you use it are very important. You are not only imparting information and instruction, but you are revealing your culture, your values and your personal perspective as you go about your life. This is the complex part, and I can’t over-emphasize the importance of the words you choose when you speak or write. The use of the word “accident” was discouraged in the workplace in Alberta in 2001. Industry and government wanted there to be no mistake about the recognition and acceptance of responsibility for what was happening at the workplace.

Work Safe Alberta was chosen as the name of the joint industry, labour and government initiative to reduce work-related injuries, illnesses and fatalities in Alberta. Responsible officials from companies, unions, work groups and government were asked to draft a plan for workplace health and safety; a plan for work site implementation and recommendations for consequences; and penalties for actions causing incidents in the workplace.

Implementing the Work Safe plan
These programs were presented at public meetings involving every stakeholder we could think of. Some changes were made through this process, we arrived at a final plan and implementation began. Legislation was upgraded and changed. Penalties and fines were increased. Judges were granted the ability to be creative in sentencing guilty parties. Workers were made aware of their individual and collective responsibilities at the work site and in the courts. Victims and family members were recruited to speak at seminars and safety meetings.

The Workers’ Compensation Board-Alberta underwent changes as well. Legislation was changed and a medical panel was added to the process. In fact, funds from WCB-Alberta paid for the initial implementation and have contributed to workplace health and safety ever since.

Lost time reductions
When the Work Safe Alberta initiative started in 2001 the percentage of time lost due to workplace injury was at 3.4 per cent of all hours worked in Alberta by all companies covered by WCB-Alberta. At the time, Work Safe Alberta used the slogan “2 by 4,” meaning the objective of two per cent lost time by 2004. Okay, so we missed it by a year or two, but Alberta has shown steady improvement under Work Safe Alberta. That number today is about 1.6 per cent—the best in Canada. Your efforts are the envy of your nation.

Injury in the workplace has been cut in half. Think of the suffering that has been reduced. Think of the money that has been saved by avoiding injury and the need for injury replacement. We want 1.6 per cent to become zero, so that every worker who leaves his or her loved ones for the assigned shift can return to them safely at the end of that shift.

Continue to stand on the shoulders of those who went before you. Improve the numbers. Be proud. And look out for your fellow workers, especially the new ones. Work safely with Work Safe Alberta.

Clint Dunford was a Member of the Legislative Assembly of Alberta (Lethbridge West) from 1993 to 2008. He was the Minister of Alberta Human Resources and Employment from 1999 to 2004.
OCCUPATIONAL
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A construction worker, a welder and an electrical utility worker were just a few of the Alberta workers “playing it safe” on the Work Safe for Life parade float at both the Calgary Stampede and Edmonton Capital EX parades during the summer.

The bright yellow float caught the attention of parade goers in both cities. Its aim was to communicate the importance of workplace safety and raise awareness about common safety hazards at the work site.

The float was the creation of Work Safe for Life, a partnership of the Alberta government, health and safety associations, and industry representatives. Organizers chose the theme “Stop, Think and Act” for 2010’s parade entry because of the importance of assessing safety hazards at the work site before beginning work.

The float, a converted school bus, was built with materials and equipment donated by local businesses. It took hundreds of volunteer hours to construct. Workers representing the diversity of Alberta’s workforce participated on the parade days.

Thank you to the many industry and safety association partners who contributed to the Work Safe for Life float.
LIST OF DONORS AND PARTICIPANTS FOR 2010

A&W
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Alberta Association for Safety Partnerships
Alberta Construction Safety Association
Alberta Government – Occupational Health and Safety & Call Centre
Alberta Government – Work Safe Alberta
Alberta Motor Transport Association
Armour Equipment Ltd.
Avenir Operations Corp.
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Totem Building Supplies
TSE Consulting Inc.
Turner Valley Fire Department
Western Patrol and Guard Services Inc.
WCB-Alberta
Fewer people were hurt on the job last year as Alberta’s workplace injury rate hit a record low. Occupational fatalities were also down, from 166 in 2008 to 110 in 2009.

“We’ve made good progress reducing workplace injuries, but we can still do better,” says Thomas Lukaszuk, Minister of Employment and Immigration.

The disabling injury claim rate was 3.09 per 100 full-time jobs in 2009, down from 3.63 per 100 in 2008. This rate includes injured workers who cannot work their next shift (lost time) or who have to be placed on modified work to accommodate their injuries.

Lost-time claim rates were down across all major industry sectors. The manufacturing, processing and packaging sector and the mining and petroleum development sector experienced the biggest drops. The provincial lost-time claim rate for 2009 was 1.69 per 100 full-time jobs, down almost 10 per cent from the previous year. Overall employment was down nearly eight per cent.

The provincial fatality rate decreased by 28.5 per cent to 71 fatalities per million full-time jobs in 2009. Of the 110 occupational fatalities in 2009, 49 were occupational disease, 41 were workplace incidents and 20 were motor vehicle incidents.

Updated statistics are available at www.employment.alberta.ca/OHS-stats.

If you own or operate designated radiation equipment in commercial, industrial, research, educational or entertainment facilities, your equipment may require inspection and registration under the Radiation Protection Act and regulation.

The following types of X-ray equipment require registration certificates:

- Industrial Radiographic X-Ray
- Diagnostic X-Ray
- Diffraction and Analytical X-Ray
- Baggage Inspection X-Ray
- Cabinet X-Ray
- Security X-Ray
- Hand-held X-Ray Fluorescence Analyzers
- Irradiation X-Ray

Class 3b and Class 4 lasers also require inspection and registration. These classifications indicate that the laser radiation emitted directly from these devices is hazardous to unprotected eyes or skin. Exposure to the reflected or scattered beam may also be hazardous under some conditions.

Examples of Class 3b and Class 4 lasers:

- Welding Lasers
- Laser Hair Removal Devices
- Cutting and Marking Lasers
- Laser Light Shows

Alberta Employment and Immigration has delegated the authority for issuing registration certificates to the University of Calgary and other professional associations and colleges. Designated radiation equipment must be inspected and registered prior to the installation of new equipment or the operation of existing equipment. Registration certificates are valid for a term of five years. Radiation equipment that is in transit or in storage and is not capable of being energized does not require a registration certificate.

For information about the inspection and registration of your radiation equipment, please contact the University of Calgary—Environment, Health and Safety at 403-220-7653 or ucsafety@ucalgary.ca.
ALBERTA HEALTH AND SAFETY CONFERENCE FOCUSES ON DRIVING SAFETY

The ninth annual Alberta Health and Safety Conference and Trade Fair is set for November 8 to 10, 2010, at the Shaw Conference Centre in Edmonton.

This year’s conference theme is “Workplaces on the Move,” and the technical stream focuses on driving health and safety.

For more information, visit the Health and Safety Conference Society of Alberta website at www.hsconference.com.

ALBERTA’S DISTRACTED DRIVING LEGISLATION SET FOR FALL DEBATE

Bill 16, the Traffic Safety (Distracted Driving) Amendment Act, 2010, which was introduced in April, is expected to be debated in the legislature this fall.

“I am pleased with the efforts that have been made on bringing forward a piece of legislation that strives to make our roads safer,” says Art Johnston, the Calgary-Hays MLA who introduced the legislation.

“This is a complex issue, and I believe we have found a good balance between enforcement and safety.”

The bill proposes a ban on the use of hand-held cellphones and activities such as texting, reading, writing and personal grooming while driving. It also puts restrictions on using other electronic devices while driving.

Bill 16 would allow the use of hands-free phones. CB radios and other radio communications would be allowed for commercial purposes and search and rescue services. Drivers could use hand-held devices to contact emergency services, and the legislation would not affect the official duties of emergency service personnel.

Drivers engaged in any of the banned activities could be charged under this amendment. The bill proposes a fine of $172 with no demerit points. The bill would also complement the current driving without due care and attention law. It would give law enforcement agencies more flexibility in dealing with a wider range of behaviours.

“This is a great step forward for traffic safety in our province,” says Frank Oberle, Solicitor General and Minister of Public Security. “Bill 16 is part of a comprehensive law enforcement strategy to help continue reducing fatalities and injuries on our roadways.”

More information is available at www.transportation.alberta.ca/distracteddriving.htm. To provide your comments and feedback on Bill 16, go to Alberta Connects (alberta.ca/home/feedback.cfm).

The column “Real World Solutions” returns next issue.
CROWN GUIDELINES FOR PROSECUTIONS

by Brian Caruk

Recent media attention leads me to use this column to revisit the Alberta Justice guidelines for prosecutions.

It is almost always in the public interest to prosecute violations of our occupational health and safety legislation. In my experience, the rare exception is when spouses are the sole owners of the employer company and one of them is killed in the course of their work for that company. Prosecuting the employer in those circumstances would be tantamount to prosecuting the grieving widow or widower and likely would not be in the public interest.

In terms of assessing the reasonable likelihood of conviction, crown prosecutors—whose primary focus is dedicated to this area of the law—comprehensively review the files. These files all tend to involve a tragic loss of life or serious injuries, some of which will heal over time and others that will forever alter the lives of workers and their families.

However, the consequences of an incident and the desire to hold someone accountable for that outcome cannot dictate whether or not charges proceed. Alberta Justice guidelines ensure that charges are laid only in those situations where a defendant can be fairly accused of wrongdoing. This standard requires a reasonable likelihood of conviction.

There must be sufficient evidence that, if the matter were to proceed to trial, there would be a reasonable chance that the court would convict. Because the Crown must prove its case beyond a reasonable doubt, it is also important to consider the meaning of this latter term. In a decision from 2000, the Supreme Court of Canada stated that “trial judges should generally instruct juries that ‘proof beyond a reasonable doubt’ falls much closer to absolute certainty than to proof on a balance of probabilities.” This high burden of proof is what we must keep in mind in assessing whether or not a case warrants the laying of charges.

Brian Caruk is Acting Chief Crown Prosecutor with Regulatory Prosecutions, Alberta Justice.

SAFETY TIPS IF YOU STAY LATE AT WORK

Staying late at work when other colleagues have left is a reality for many workers. When that need arises, be aware that you can face security risks that would be much less likely during regular hours. Whether a situation is a high or low risk will depend on your location, the type of work you do, whether or not you interact with the public and many other factors.

Here are some safety tips:

- Always let a friend, family member or security guard know you are working late and when you expect to leave.
- If possible, use the “buddy system”: arrange to work late on the same night as a friend or colleague.
- If possible, move your car before dark to a well-lit area close to your building or a parking lot attendant.
- Before your co-workers leave, check that all the doors and windows are locked and make sure nobody is in the washrooms and storage rooms.
- If you enter a room and suspect that someone might be inside, do not call out. Back out quietly and go to a safe area with a lockable door. Call for help.
- If you encounter someone you do not know, indicate that you are not alone. Say, “My supervisor will be right here and will be able to help you.”
- If you suspect someone is lurking outside, call the police or security officers.
- Ask your employer to consider providing safe transportation home or to parking areas after hours. Consider designating parking spots that are close to the building and are well lit for people who work after hours.

Before staying late at work, also consider whether it is necessary. Can the work be done just as well at home?

—Canadian Centre for Occupational Health and Safety

Please also see section 2 of Alberta’s OH&S Act and part 28 of the OH&S Code.
TOUGHENING OUR STANCE ON WORKER SAFETY

by Thomas A. Lukaszuk, Minister of Employment and Immigration

In his April 2010 report, Auditor General Merwan Saher said that while the provincial safety system is doing well, it could be much better. He recommended several improvements.

Government will be acting on those recommendations because the balance between education and enforcement has got to change. I think we have gone as far as we can with the education approach. It is time to re-focus on the enforcement side of the ledger.

We have already taken three steps toward improving compliance with the Occupational Health and Safety Act: more staff, stronger processes and more information.

Government is hiring eight new occupational health and safety officers, bringing the total to 94. These officers inspect work sites, provide information about safe work practices, write orders where needed and conduct investigations after an incident. They are the people who visit your work sites, and you will be seeing more of them.

There will be changes in the way those officers work. Previously, orders for compliance were issued, and companies and officers worked together to ensure that they were complied with. There will be a clearer process for cases where employers are not making significant and timely efforts to comply. This includes follow-up inspections by officers, a stronger approach to stop-work orders and the use of court orders where failure to comply could result in arrest.

Finally, we will be posting five years of data about lost-time claims and occupational fatalities. A committee of representatives from government, the Workers’ Compensation Board-Alberta, and safety and industry associations has looked at what information will be most useful for Albertans. The information will be available this fall at www.employment.alberta.ca/employerrecords.

Generally, Alberta’s safety record is solid. More than 90 per cent of employers had no injuries at all last year. We have record low injury rates, strong legislation and comparatively high OH&S sentences in court.

But to the small number of employers who continue to put their workers at risk—take note. I assure you, we will be taking action.

OCCUPATIONAL HEALTH & SAFETY

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

Sign up for Occupational Health and Safety news
To be notified by e-mail of all new Occupational Health and Safety website postings, sign up for a FREE subscription service through employment.alberta.ca/SFW/126.html.

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 materials, 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

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

Library fax 780-422-9694

Occupational Health and Safety is an Alberta Employment and Immigration program that falls under the jurisdiction of Minister Thomas Lukaszuk.
Between February 1 and May 31, 2010, five companies were convicted under the Occupational Health and Safety Act. One earlier conviction was overturned.

**M & H Wood Specialties Ltd.**
On December 4, 2006, a worker was walking on a floor joist. He lost his balance and fell approximately 3.1 metres into the basement. He was seriously injured. On March 1, 2010, M & H Wood Specialties Ltd. pleaded guilty to one count, contrary to Section 7(1) of the Occupational Health and Safety Code, for failing to identify existing and potential hazards before work begins at the work site. The total penalty of $100,000 was made up of a fine of $1000, a victim fine surcharge of $150 and a payment of $98,850 to Professional Medical Associates.

**Garneau Inc.**
On June 13, 2006, a worker was fatally crushed between rolling pipes at the Garneau Inc. pipe coating facility in Camrose. On February 11, 2010, Garneau Inc. pleaded guilty to one count, contrary to Section 2(1)(a)(i) of the Occupational Health and Safety Act, for failing to ensure the health and safety of workers. The total penalty of $300,000 was made up of a fine of $10,000 (including a victim fine surcharge) and a payment of $290,000 to the Industrial Safety and Loss Management program at the University of Alberta.

**Total Energy Services Ltd.**
On July 16, 2005, near Cold Lake, Alberta, a worker was seriously injured as he walked between a hydraulic lifting arm and some pipe collars. The driller activated the lifting arm and it impaled the worker. On February 19, 2010, Total Energy Services Ltd. pleaded guilty to one count, contrary to Section 212(1) of the Occupational Health and Safety Code, for failing to ensure that all hazardous energy at the work location was isolated and secured by an energy-isolating device. The total penalty of $85,750 was made up of a fine of $5000, a victim fine surcharge of $5000 and payments of $27,960.25 to Cold Lake EMS and $52,039.75 to STARS air ambulance.

**Tesco Corporation**
On September 10, 2006, a worker employed by Tesco Corporation was seriously injured when he was pinned between two sections of casing in a pipe rack. One of the sections of casing was contacted and moved by a front-end loader that was backing up. On February 22, 2010, Tesco Corporation pleaded guilty to one count, contrary to Section 189 of the Occupational Health and Safety Code, for failing to take all reasonable steps to ensure that equipment was contained or restrained to eliminate potential danger. The total penalty of $125,000 was made up of a fine of $5000 (including a victim fine surcharge) and a payment of $120,000 to Enform for contractor and supervisor competency training.

**Earl Rockerfeller Rutherford (operating as R-K Construction)**
On June 28, 2006, at Hythe, Alberta, a worker for R-K Construction was installing roofing materials on an 18-metre high fabrication shop when he fell and was fatally injured. On February 12, 2010, Earl Rockerfeller Rutherford pleaded guilty to one count, contrary to Section 2(2)(a) of the Occupational Health and Safety Act, as a worker, for failing to take reasonable care to protect the health and safety of other workers. The total fine was $10,000, including a victim fine surcharge.

**Conviction overturned**
The July 2009 conviction of the Sunshine Village Corporation in the death of a ski lift operator was overturned by Court of Queen’s Bench Justice Suzanne Bensler. The written ruling on July 28, 2010, said a lower court judge erred in finding the ski resort guilty of failing to protect the health and safety of worker Jan-Karl Stunt, who died in 2004.
DAY OF MOURNING FROM ANOTHER PERSPECTIVE

by Stephanie Benay-Dexter

As for most people, death makes me uncomfortable. All aspects of it. The funerals. The music. The crying. The overwhelming sense of sadness and loss that hangs in the air. I never know what to say to the family. It’s particularly tough when the deceased did not die of old age.

April 28 is the National Day of Mourning in Canada. It’s a day when we must all stop and think about the many workers who have needlessly died while on the job. It’s also a time to reflect on the role safety plays within your workplace. What will you think about?

Because I am a health and safety professional, you might think my job is to be a pain in your “butt.” In some instances you might be right. The constant, “You need to go home to your families ... You need to be healthy ... You need to be safe ...” does sound like a broken record. However, the law says I need to protect you and I take my job seriously.

Early in my career, I thought being an effective safety professional meant addressing common workplace hazards and repeating compliance requirements at the health and safety committee meetings. So I’d endure the rolling of your eyes when I walked into the warehouse or hangar. I’d disregard that smirk when my truck pulled into the field. I’d ignore that look on your face when you disagreed or didn’t “buy into” something I said—because in your mind, you’d been doing your job for 20 years and “nothing” had ever happened to you.

I’m one of the first people to get called should you die on the job.

But I’d like to share with you another aspect of my job. It’s why I look at death from a different perspective than most people. It’s why I no longer endure anyone’s disdain for safety practices. And it’s why the national day of mourning is of particular importance to both you AND me.

I’m one of the first people to get called should you die on the job. I will probably arrive at the same time as emergency services. That means I get to see you while you are still crushed under that piece of machinery or being
taken away in an ambulance to be declared dead at the hospital. I am the person who will take charge of the scene until the occupational health and safety investigators arrive to start their investigation. I will look into the eyes of your friends and co-workers—the people you have spent more time with than your own families—and I will send them home, reeling, as I shut down the work site. They will be terrified that they’ve done something wrong, that they could have said something, done something or been there to prevent this from happening. They will wonder if it could have been them; after all, they take the same shortcuts. They will wonder for how long the site will be shut down, because they have to put food on the table for their kids. Every hour they don’t work is another they don’t get paid.

They will be terrified that they’ve done something wrong, that they could have said something, done something or been there to prevent this from happening.

I’m also the person who will go to your home. Hopefully, you’ve updated your contact information so at least I know the names of your spouse and children. And when I do this, I will get a lump in my throat—like I have done in every other situation like this. I’ll knock on the door of your home and chances are I’ll be with someone else, like your best workmate or your supervisor. They will be in stunned silence—they always are—so I will do most
of the talking. I’ll introduce myself and ask to come in to sit down at that kitchen table you won’t be at anymore. I always hope that the kids aren’t around. You see, as a mom it breaks my heart to see the kids, knowing that most of the time they really won’t understand what is going on.

I will wonder what it will be like for your family with you not around to support them.

Your spouse will suspect right away that something is wrong. I mean, why is your boss here? Who is this woman? Why are they so sad? I’ll give a brief explanation of what has happened, but your spouse won’t really hear anything I say after hearing that you are dead. I’ll reach for their hand and they may cry or not because they are in shock. I’ll ask if there is anyone I can call to come to your home to stay with them at this time. Being polite and a good host, your spouse will offer us something to eat and drink. We will wait for the family to start to arrive until we leave, but your spouse will not have heard anything we said about the investigation, WCB, planning your funeral or any of the support we will provide.

As your kids come home from school, I will be shocked as I always am at how instantly your wife goes into caregiver mode. She will take care of your children above all else. And as she’s dealing with them, I’ll be struck by how much your son looks just like you in that family photo or by how incredibly proud you must have been at your daughter’s graduation. I can tell by the beaming smile on your face in that picture. I’ll be amazed at how very much of a family man you must have been, because I only ever saw you as that gruff, rough guy who gave me grief every time I reminded you to follow a safety protocol or wear your personal protective equipment.

I will wonder what it will be like for your family with you not around to support them. I’m not just talking about financially, but when your son is getting bullied at school and you’re not there. Or when daddy’s girl gets her heart broken for the first time and you’re not there. Or the first time your wife rolls over in the night to cuddle up behind you and she’s forgotten that you’re not there anymore and the ache inside of her causes her to scream into her pillow in agony. I will wonder.

As I leave your home, my job has only just begun. I will start to gather paperwork and work with the investigation team to determine a root cause to the accident. I will work with management to get your friends back to work as soon as possible after the investigation. And I will sit with your spouse and family, day after day, as they plan the funeral and desperately try to give some semblance of order to their lives again.

I will hold your wife as she asks me, “How could this happen?” I will comfort her as she wonders how she will support the family. I will cry tears of joy and sadness with your family as they share stories of what a wonderful father, brother, uncle, friend and husband you were. I didn’t know that you loved to camp and fish or that you were a cub scout leader. I never knew that Christmas was your favourite holiday and that you made the best eggnog EVER. I didn’t know that each time one of your children was born, you cried the first time you held them.

I will go to your funeral and watch your friends from work as they try to hold it together. I will watch your lifelong best friend from 8th grade give your eulogy talking about what a hockey star you were, how you thought your mullet was the coolest in the ’80s, how the moment you met your wife you knew she was the one and how proud you were of your children. I will listen as they play your favourite songs and watch the video presentation of your life. I will watch the tears roll down your children’s cheeks.

And that night I will go home. As I lie in bed, I won’t sleep. I never do after this type of experience. I will go over and over in my head what I could have done better, what equipment could have been safer, what training could have been given or what procedure did I miss? I will see flashes of your wife and children, and of you at work, rolling your eyes at me.

And as I close my eyes, I will wish I would have been a bigger pain in your “butt.”

BENDEX Safety Specialists, a Calgary-based safety company, provides safety mentoring, on-site training, safety administration and safety management services.

This article has been reprinted with permission from the Human Resources Institute of Alberta (HRIA). For more information, visit www.hria.ca.
A new workplace electrical safety standard from the Canadian Standards Association is bringing electrical safety to a new level. It will help protect electrical workers by raising awareness of hazards, detailing measures to be taken in particular situations and providing guidelines for personal protection.

Based in part on the safety principles first established in CSA’s Z460 Standard on Control of Hazardous Energy—Lockout and Other Methods, the new CSA standard is a home-grown version of the standard used in the United States. In 1979, the U.S. National Fire Protection Association created a Standard for Electrical Safety in the Workplace that was eventually adopted across the continent. But in 2005 the CSA suggested that Canada develop its own equivalent standard in collaboration with the NFPA.

“The U.S. standard did not fit well with the Canadian Electrical Code and other Canadian safety standards,” says Dave Shanahan, OHS Standards project manager, CSA Standards. Shanahan calls the new standard, CSA-Z462, a “Canadianized” version of the old U.S. standard.
Among other things, the new standard

- recognizes the need for electrical work to be performed by “qualified electrical workers”
- calls for the training of machinery operators and non-electrical maintenance personnel in hazard awareness and safety practices around electrical equipment
- sets out safety procedures for instances where energized work is necessary (e.g., troubleshooting)
- guides workers in the selection of appropriate personal protective equipment

Better protection for workers
Pierre McDonald, Alberta’s chief inspector, Electrical Codes and Standards, says the new national standard is a valuable tool in protecting workers. For example, it raises awareness of the hazards posed by electrical arc flash events. Although rare, these events can be deadly, according to McDonald.

“I am not aware of any arc flash fatalities in Alberta, but they are life-threatening,” says McDonald. “With these arc flashes, if they’re severe you get metal ‘busbars’ vaporizing in an instant. Most people don’t survive them.” Busbars are thick strips of copper or aluminium that conduct large electrical currents within a switchboard, distribution board or other electrical apparatus.

“Recognition of arc flash hazards has become widespread in many industries,” says Shanahan, “and Canadian employers are gradually accepting the need for electrical work to be performed exclusively by ‘qualified electrical workers.’ ”

Working with live equipment
McDonald says the Canadian Electrical Code states broadly that the safest condition is to disconnect electrical equipment before working on it. But he says under some circumstances work needs to be done on “live” equipment. CSA-Z462 provides electrical workers with important information about how to protect themselves when they are working on live electrical equipment.

“This provides guidelines for owners of electrical switch gear to determine what kinds of hazards are associated with working on that switch gear [when it is] live, and the hazards based on energy that would be present should a fault occur,” he says. Switch gear, in its most basic form, includes the electrical panel in your house, where electrical power is knocked down to useable levels and distributed.

Under the new standard, labels on switch gear will show the calculated energy of a potential arc flash and advise workers on what level of precautions to take.

“It tells you basically what personal protective gear you need to use based on calculated energy, which could

POWER LINE SAFETY DAY

Every day at least three Albertans contact power lines—a statistic that the province’s electrical industry as a whole finds unacceptable.

Earlier in 2010, the Joint Utility Safety Team instituted Power Line Safety Day. It is observed on the first Monday of a full week in May—kicking off North American Occupational Safety and Health Week.

It also runs a series of radio and television ads to raise awareness of the risks posed by overhead and underground power lines. Each of the spots uses the tag line, “Always ask yourself: Where’s the line?”

The group’s website [www.wherestheline.ca] offers safety information and a code of practice for workers or companies. This year JUST brought in mandatory power line safety awareness training for the oil and gas industries.

Alberta’s farming community is another important audience, says Mona Bartsoff, communications advisor for FortisAlberta Inc. With three power line–related farm fatalities in Alberta this year alone, every farm equipment dealer in the province has received power line safety literature to pass along to its customers.

“Grain augers, tractors, combines—all of these pieces of equipment are growing in size,” says Bartsoff. “They are huge and our power lines, which have been in place for about 50 years, are at the same height. You are not thinking about our power line when you bring home this new $300,000 piece of equipment—and all of a sudden you contacted it.”

WHERE’S THE LINE?
POWER LINE SAFETY
be anything from just fire resistant coveralls to full-on protective suits,” says McDonald.

**More companies adopting code**

While the standard hasn’t been written into provincial or federal legislation—the Canadian Electrical Code is the standard that electrical installations must meet—McDonald is confident that Alberta employers will adopt it.

“I think that what is happening is that corporations are voluntarily adopting it,” he says.

And that is a good thing, according to Shilo Neveu, a lawyer with the law firm McLennan Ross LLP. Neveu, whose primary practice is occupational health and safety law, is an instructor for the Occupational Health and Safety Certificate Program at the University of Alberta Faculty of Extension. He teaches the courses “Managing Contractor Safety Performance” and “Health and Safety Legislation and Policy.”

Neveu predicts that because industry is voluntarily adopting the new standard, and because it is a national standard, there is a good chance it will be adopted the next time Alberta’s Occupational Health and Safety Code is updated.

“Right now the CSA standard isn’t recognized in most Canadian provinces, including Alberta. As such, it isn’t a legally binding authority. This means, if you are not following it, you won’t be charged,” says Neveu. “But I don’t recommend employers ignore it. I would advise them to look at it and recognize that this is the direction we are going in and get ahead of that curve.”

**Simple language**

Neveu says one of the strengths of the new standard is that it is written in language anyone can fathom.

“It breaks down step-by-step basic safety knowledge—anyone can pick it up and become very educated on how to deal with this hazard. It is written quite well and pretty much any lay person can pick it up and know what is going on and what they should be doing.”

This means, for example, that the Alberta Government’s Occupational Health and Safety officers can be more effective, he says.

“Most OH&S officers aren’t from the electrical trade to begin with, and with this document they can pick it up and start asking very specific questions about what a worker is doing and how they are doing it.”

Shanahan says a concerted effort to raise awareness of the new standard is already making a difference in workplaces across Canada.

“Many thousands of copies of Z462 have been distributed across Canada, regulatory authorities have begun to recognize the standard in most jurisdictions, and training programs based on Z462 have been delivered by CSA and various electrical safety groups in all provinces,” he says.

“Better, well-informed choices are being made.”

Richard Cairney is a communications officer for the Faculty of Engineering at the University of Alberta.
COR numbers continue to rise
Certificates of Recognition are jointly issued by Alberta Employment and Immigration and the province’s Certifying Partners to recognize employers whose health and safety systems have been successfully audited to the provincial standard.

Despite the economic downturn, the number of CORs issued in Alberta continues to rise, with over 8600 active CORs as of March 2010. According to the Workers’ Compensation Board-Alberta, this number covers about 46 per cent of the payroll in the province, and resulted in over $68 million in WCB-Alberta rebates in 2009.

The WCB-Alberta measures further indicate that the steady growth of the program continues to benefit Alberta workers. Participants in the Partnerships in Injury Reduction program had a 28.6 per cent lower loss-ratio than employers who have not yet achieved a COR.

Partnerships expanding SECOR survey
Partnerships recognizes that small employers should have access to COR certification through an audit process specifically suited to smaller, less formal health and safety management systems. The Small Employer Certificate of Recognition process was designed to meet the needs of employers with fewer than 10 workers. Currently, over 3000 employers hold an active SECOR. This certification makes employers eligible for WCB incentives, and it may also help them meet bid-list requirements.

To ensure the program continues to add value for small employers and their workers, Partnerships has committed to conducting a review of the program. It recently completed a survey asking SECOR holders for their opinions on the current SECOR process.

Plans for a second round of surveys are now in the works, and will be directed at the thousands of small employers who do not currently hold a SECOR. Large employers to whom small operations provide their services will also be invited to participate in the survey, to ensure that all program stakeholders have the opportunity to provide feedback.

The final results from all parts of the survey will be considered by Partnerships and the Certifying Partner group, and used to determine if changes to the program are needed.

Contractor management
Over the last couple of years, many employers have begun to use third-party contractor data management companies to validate contractor health and safety requirements. These services offer prime contractors a method to gather data concerning subcontractor compliance with legislation, insurance requirements and other conditions (including COR certification) specified by the contracting employer.

This type of check, whether completed through a registry or by the company itself, is part of a process that may demonstrate due diligence on the part of the prime contractor. However, contrary to the understanding of some employers, meeting the requirements of a registry’s review does not replace an employer’s obligations under Alberta OH&S legislation. Owners or prime contractors are ultimately responsible for the health and safety of everyone on the work site. While a proactive check is important, it cannot replace an effective health and safety system that includes plans for contractor communication and health and safety management.

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

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

For more information, call the Partnerships Hotline at 1-866-415-8690 or visit employment.alberta.ca/whs-partnerships/.
This year two students, Ron Taylor and Peter Wright, tied for first place as winners of an Alberta Employment and Immigration award. Alberta Employment and Immigration gives $500 annually to the graduate of the Occupational Health and Safety Certificate Program who has the highest grade point average.

The University of Alberta Faculty of Extension program was created in cooperation with several professional associations. It is designed to teach the skills needed to be effective in the development, implementation and evaluation of occupational health and safety programs and systems in a wide variety of occupational settings.

Assistant Deputy Minister Dan Kennedy, Workplace Standards, presented the shared award on June 4, 2010, during graduation ceremonies at the Jubilee Auditorium in Edmonton.

**Ron Taylor:**
*Bringing together the classroom and the workplace*

Before registering in the Faculty of Extension certificate program, Ron Taylor had just moved into a health and safety role with his employer, the Alberta Centre for Advanced MNT Products. He had previously worked in a maintenance role for over a decade. When ACAMP saw that it needed a full-time health and safety person, it was natural for it to approach Taylor, who had already been providing employee orientation and WHMIS training.

After having taken the certificate program, Taylor says he realized that most organizations could do a better job of hazard identification.

“I work for a research organization that is constantly using new tools and active chemicals, developing cutting-edge processes, and so on,” says Taylor. “It’s vital to identify potential hazards before they become a problem.”

He hopes to put a program into place that will help both management and employees become more aware of safety hazards and to recognize them before they become safety issues.

Taylor says his interest in safety is built on a lifelong involvement in training and in helping people improve themselves. He has been a leader in Scouts Canada for many years, and he enjoys helping people and working
with them to find solutions to everyday problems. He finds the troubleshooting component of his job to be one of its most gratifying.

“T’m satisfied that I was able to excel in the academic aspect,” says Taylor, “but what excites me more is the opportunity to use what I’ve learned in an ongoing way in the workplace.”

Taylor says his current position at ACAMP will give him that opportunity. And because the company has only been operating for two years, he will be able to participate in its health and safety program development from the ground up.

“It’s very rewarding to develop programs that overcome health and safety issues in the workplace.”

Peter Wright:
Applying workplace standards globally
Peter Wright spent 30 years in the Canadian military and several years in network engineering before studying occupational health and safety. He expects it will be his last career.

“It’s very rewarding to develop programs that overcome health and safety issues in the workplace and to provide training to employees to help them work safely,” he says.

Wright’s occupational health and safety career began in April 2010 when he started working at Weatherford Canada in Edmonton. Weatherford is a global company that grows, in part, through the acquisition of businesses from countries around the world. Wright says the company has a well-established health and safety program. Regardless of the country in which any new acquisition is located, every company must comply with Weatherford’s global safety policies. Wright is responsible for implementing these policies at his Edmonton location.

“Industry and government are increasingly collaborating to make safety a normal part of doing business,” says Wright. “Nobody wants to see someone hurt on the job, or worse, killed on their watch, when it could easily have been prevented.”

Wright stresses that he’s not a safety cop. Rather, his job is to support management, to let workers know the company is there to help them, to build a team mentality and to develop a safety culture in the workplace. He wants safety to become second nature for everyone. “It’s not just about getting a COR or a safety manual on the shelf,” says Wright. “The challenge is to find creative safety solutions—alternatives that allow a company to stay competitive and still protect its workers.”

Yes, safety costs money, but Wright is convinced it’s worth it. “All the money spent on health and safety is cheap insurance against the potential risk of a serious incident.”

Deborah Lawson is an Edmonton-based freelance writer and editor. This is her second article for Occupational Health & Safety magazine.

RESOURCES

Health and Safety Division Award
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www.extension.ualberta.ca/sciences/prog_ohs.aspx
I have a long-standing and passionate relationship with ergonomics. I currently work as an Occupational Health and Safety officer, a position I’ve held for about five years. Prior to working in the safety industry, I was employed as a disability claims manager, where I saw many claims of ergonomics related injuries, such as repetitive strain injury, come past my desk. Before this, I worked as a personal trainer, where I helped many clients with injuries that resulted from improper ergonomic practices. And before all of this work experience, I received my degree in kinesiology, which is the study of human movement.

You may or may not know what ergonomics is or how it applies to you during your everyday activities. While most of you are reading this article, I expect that you are sitting. Take a moment to notice how you are sitting; start with your feet, and move up your body all the way to your head:

- Are your feet flat on the ground?
- Are you sitting with your hips square in your seat?
- Is your back straight?
- Are you looking straight forward without turning or straining your neck?

One of the most important factors in ergonomics is alignment. Ideal alignment is “a balanced posture in which positioning is centred and relaxed for all the joints of the body.” When the body is in the most mechanically efficient position, muscles relax and unnecessary static tension does not build.

If you do most of your daily activities in poor postural alignment, this can lead to muscle spasm and/or spinal misalignment. Every small divergence from ideal alignment will affect your entire body. To demonstrate this, lift the heel of your left foot off the ground. Whether you are standing or sitting, your hips will shift to offset for this change in alignment, and then your spine, your shoulders and your neck will all shift slightly (even if only very slightly) to compensate. Similarly, if you move the magazine you are reading, your neck will have to change position to accommodate the position of the magazine, which affects your shoulders, your spine, your hips—I think you get the point.

So rather than simply bringing to light the fact that you may not be in what we now know as ideal alignment, I’ll offer some principles that may help you return to the place where your muscles and joints are at their best:

- If your chin is dropped or raised, your neck muscles have to work hard to support your head (it does weigh about 15 pounds). Ensure that what you are looking at is neither too high nor too low and your eye level is at the middle of the target.
- If your back consistently does not make contact with the back of your chair, you may be inclined to slump in your chair, which may feel more comfortable, but is placing pretty serious static strain on your spine and back muscles.
- If your feet are not placed flat on a firm surface, either the weight of your legs will be carried by your spine or you will be reaching to place your feet on something too far from you.

If you’ve been sitting for a while, actively absorbing what I’ve written, take the time to stand up for a minute and stretch. Any position, if held for too long, can cause static strain.

Next time: All the Right Moves.

RESOURCES


Asher, Anne. “Back and Neck Pain.” April 13, 2005. backandneck.about.com/od/i/g/idealalignment.htm

When it comes to worker safety, you have a right to know

Employer records
Alberta is taking a leading role in Canada in making workplace injury and fatality records public. The records will include five years of data about lost-time claims (claims for occupational injuries or diseases that cause workers to take time away from work beyond the day of injury) and occupational fatalities. By making this information available, 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 information will be available this fall at www.employment.alberta.ca/employerrecords
A 74-year-old male worker and a co-worker were moving a wooden truck bed liner into a wood-working shop. As the bed liner entered the shop, it contacted a wooden end wall, tipped over, knocked the worker to the ground and pinned him in place.

A 42-year-old male worker was driving a vehicle as part of a convoy. The worker was crossing a single lane bridge when the truck he was driving went over the side of the bridge and landed on its roof.

A 29-year-old male worker was installing siding on the gable end of a new two-storey home. He was working from the platform of a pump jack scaffold system. The work platform was not installed correctly, the guardrails were inadequate, and fall protection was not provided. The worker died after falling 6.3 metres from the platform to the ground.

A 47-year-old male worker died while attempting to adjust the centrifuge of a machine used to separate pork blood. The worker lifted the lid off the centrifuge while it was rotating very quickly (900 RPMs). The lid flew off the machine and struck him in the chest area. It knocked the worker back 1.8 to 2.4 metres.

A 56-year-old male worker was moving equipment at the end of his shift when he collapsed and died. A heart attack is the suspected cause of death.

A 50-year-old male flag man was struck and killed while performing flag duties near the site of an earlier traffic incident.

A 64-year-old male worker was in the process of off-loading a truck from a flatbed trailer that was attached to another truck. The worker was at the rear of the truck being off-loaded when it unexpectedly rolled backward onto the worker and crushed him.
A 71-year-old male worker was painting on the second storey of a home under construction. The worker died after he fell 3.2 metres to the lower level.

A 59-year-old male worker collapsed and died on the job. No one witnessed the incident, and a heart attack is the suspected cause of death.

A 37-year-old male worker was attempting to remove girder forms from a 50-metre-long precast bridge when he was struck by a piece of failed rigging equipment used to remove the forms.

A 30-year-old male worker was fatally injured when the ATV he was operating flipped end over end.

A 49-year-old male supervisor had just set up a light plant at a new clay dump site. The worker had visually contacted a nearby dozer operator to stop and started to walk toward the dozer. The worker was run over by the front left tire of a grader that approached him from behind.

A 19-year-old male worker was crushed by a large metal cabinet that fell from the deck of a truck trailer being unloaded.

A 53-year-old male, employed on a county work crew, was moving a packer on a highway construction site. The packer got too close to the east edge of the roadway and flopped onto its side.

A 58-year-old male drywall technician was performing touch-up to a finished suite’s loft. He died after falling approximately 3 metres from the loft to the main floor.

A 66-year-old male janitor was found by other workers collapsed in the lunch trailer. A heart attack is the suspected cause of death.

A 54-year-old male worker died after the pickup truck in which he was a passenger collided with a grader/scaper on a work site. The grader/scaper had turned left as the pickup was attempting to pass it.

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

WHAT IS A HAZARD?

by David Sperling

Quite often during work site visits, Occupational Health and Safety officers notice that employers have overlooked some hazards. I use the term “hidden hazard” for these types of hazards to emphasize that while they are not as obvious as a sharp edge or a pinch point, they still need to be addressed.

It is very easy for individuals to be “blinkered” during their assessments of processes or operations in accordance with Section 7 of the OH&S Code. They can look at a process and identify such issues as lifting, pinch points, rotating shafts, sharp edges and working at height, but miss a range of other issues. These hidden hazards can include chemicals (e.g., carbon monoxide, combustion products, benzene or off-gases from products), dust (e.g., silica, lead or red cedar wood dust), ergonomics (e.g., safe lifting) and metal fumes (e.g., nickel, zinc, hexavalent chromium or fluoride).

In some cases, a noise survey would be needed under Section 219 of the OH&S Code to assess worker exposure, to ensure that adequate hearing protective devices are provided to the workers, and to identify and test any noise-exposed workers (Sections 221 to 223). In other cases, worker exposure to chemicals needs to be evaluated under Sections 16 to 20 of the OH&S Code to ensure that adequate engineering controls or personal protective equipment (e.g., respiratory protection or gloves) are provided.

Tools are available to help employers find all the hidden hazards during assessments. These tools include Material Safety Data Sheets (MSDS); manufacturer specifications and operating manuals, as specified in Section 13 of the OH&S Code; and a quick little “talking test”—if you have to raise your voice to speak to the person next to you, then you likely need a noise assessment and hearing protection to be in compliance.

By including these hidden hazards in the hazard assessment process, employers can better protect their workers and make everyone more aware of the potential dangers that lurk in the shadows of any operation.

David Sperling is an OH&S officer in the Calgary South Region.
Don’t call in stiff.

1. [Image of a person standing]
2. [Image of a person stretching]

BACKPAIN> DON’T TAKE IT LYING DOWN

Health care professionals agree staying active is key.

www.wcb.ab.ca/back@it