

Alberta On Scene



FOR PARTNERS IN FIRE AND
EMERGENCY MANAGEMENT IN ALBERTA

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NOVEMBER 2009

Is Dave Nedohin's home fire safe?

Province and city partner to kickoff Fire Prevention Week



STAY FIRE SMART! DON'T GET BURNED was the 2009 Fire Prevention Week theme.

On Monday October 5, Municipal Affairs Minister Ray Danyluk and Edmonton Fire Chief Ken Block formally kicked off the week at the home of world curling champion, Dave Nedohin.

Nedohin generously donated his name and celebrity to promote Fire Prevention Week and encourage Alberta families to make fire safety a part of their daily lives. Media were invited to take a tour of the home for practical tips on fire safety. Among other tips, fire officials shared these 10 simple steps to stay fire safe:

1. Install at least one smoke alarm in every level of your home. Test them monthly and change batteries yearly.

Continued on the back cover ►►



City of Edmonton Assistant Fire Marshal Tim Vandenbrink discussed fire safety with Dave Nedohin and his children on October 5 during a media event that promoted Fire Prevention Week. Professional curler Dave Nedohin generously donated his name to the cause to bring more profile to fire prevention in Alberta.



Municipal Affairs Minister Ray Danyluk promotes www.3minutedrill.alberta.ca, a new and interactive government website and a one-stop source for a wide variety of information about fire safety.

Children across the province participated in Fire Prevention Week activities that educated them about fire safety. Fire hats, t-shirts and activity books were some of the tools used to get youth involved.



This is the fourth issue of *On Scene*.
Let us know what you think, write to:
aema@gov.ab.ca

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From the Managing Director of AEMA

Ready and taking action

When it comes to fire, rescue and emergency management services, we need to continually ask ourselves; are we ready? Within the Alberta Emergency Management



Dave Hodgins

Agency (AEMA) we believe we are ready and are proud of recent accomplishments. So what have we done to be geared up?

One of our critical first initiatives was co-locating the Alberta Government Emergency Operations Centre (GEOC) with the newly created Agency Response Readiness Centre (ARRC) in Edmonton. The GEOC coordinates a cross-government response when communities or industry require assistance preparing for, responding to or recovering from an emergency event. The Alberta Emergency Plan (2008) describes who can activate the GEOC and under what conditions. The GEOC has also undergone a recent major technical refresh to improve system efficiency and connectivity.

GEOC staff operate under the Incident Command System (ICS) and are able to support communities and industry by coordinating and sourcing needed resources such as technical expertise or sandbags as required. The benefit to the Government of Alberta (GoA) is the ability to connect with all fire, rescue, police, paramedic and other emergency management system partners involved in an event. The GEOC directs planning for all pertinent organizations and provides information and updates to government ministries and their executive leadership, the media and other stakeholders. GoA ministries and agencies are represented within the GEOC as are federal partners including the RCMP, the Department of National Defence (DND) and Public Safety Canada (PSC) representatives. The Non-Government Organization (NGO) Council may also participate when the GEOC is activated to ensure the appropriate response from St. John Ambulance, the

“Being ready goes beyond the lights and sirens of response and requires a solid Hazard Identification and Risk Assessment program to be in place. To get there means embracing a “joined-up” system and approach.”

Canadian Red Cross and others. Through a “one window” approach, the NGO ensures effective communications and a coordinated response for communities and/or industry. A director leads the GEOC and has Operations, Plans, Logistics and Finance/Administration Chiefs in accordance with the ICS.

The “join-up” of the GEOC with the ARRC was central to setting the stage for full effectiveness of the AEMA. We have also achieved many other accomplishments, and some of those are detailed in the AEMA update on page 26.

The fire, rescue and emergency management challenges we face are too important to leave unattended until we find the time to deal with them. The key to success is a “joined-up” system that takes advantage of combined resources. The agency has resources available to assist you with the challenges in your community. Please call us. We look forward to working with you hand-in-hand to enhance our collective preparedness, prevention, response and recovery plans and services. 🔥

E. David Hodgins, S.B.St.J., B. App.Bus:E.S., CEM
Managing Director,
Alberta Emergency Management Agency

The day we won't forget!

BY TRUDY SMITH, Fire Chief, Barons Fire Department | Photos courtesy of Lee Sagert, Lethbridge firefighter

A DAY THAT HAS BECOME THE DAY to remember firefighters that we have lost, be it through work-related health issues or a death in the line of duty, is a day we celebrate their life and mourn their loss.

I have had a couple of opportunities now to participate in this special day, and each one is as difficult as the last one. I don't think it will ever get easier. Lethbridge Emergency Services had their memorial day on Sept. 11, 2009 at 11 a.m. It was a day that saw a lot of retired and active firefighters in attendance and participating. The newly formed Lethbridge Fire Department Pipe Band had the honour of leading their own active and retired members, as well as firefighters from different departments, members of the RCMP and Lethbridge Regional Police Service in the Memorial Day Parade, and they did a terrific job.


As always, the bagpipes have that "special" effect on your tear ducts, especially when they play Amazing Grace, a song familiar to all of us. There are few memorial



Lethbridge's Pipe Band leading the Memorial Parade.

services involving a uniform of any kind that do not include this special tribute. We all know that it could be our name on the list that is being read aloud at

“We all know that it could be our name on the list that is being read aloud at this special service, yet we keep doing what we do, because we are who we are...”

this special service, yet we keep doing what we do, because we are who we are – a profession the public has come to respect and depend on, a profession that is ready to help when the call comes in, without a thought to the possible consequence. We are firefighters and proud of it! 



Two symbols of the firefighters profession, the helmet that protects you and the bell that announces the passing of one of our own!

Exploring risk management and hazard assessment

BY DOUG MCCUTCHEON, P Eng., Professor and Director, Engineering Safety and Risk Management Program, Faculty of Engineering, University of Alberta

I VERY MUCH APPRECIATE the opportunity to talk about risk management and what it means in today's world. The theme for this issue of "Alberta On Scene" is "Risk Management/Hazard Assessment" which certainly fits with the program I teach at the University of Alberta's Faculty of Engineering. This is a topic where much has happened over the previous 25 years to advance our ability to manage our risks, yet not very many people understand the topic, let alone practice it.

Fundamentally, we can predict the consequences of a major industrial incident and the likelihood of it ever happening very accurately now. This is understanding risk. What this means is hazard assessment and risk management are activities we can conduct on a "proactive basis". As a result we can go a very long way to "prevent incidents" by being proactive. This is a sound business approach to managing a company's activities as being proactive will reduce cost, increase employee morale, boost productivity and make the company more competitive, to mention a few benefits.

Let me start by re-living the one incident that crystallized the need for better management of hazards in the workplace, that being the 1984 Bhopal, India disaster. I find very few of my students can relate to this major disaster and I also find many of us have forgotten about this event where a toxic gas release killed 2,500 people within a few hours while they slept. The number of deaths directly linked to the toxic cloud release is now over 20,000 and expected to be near 100,000 by the time the generation has passed us by. The cause was inappropriate management of risk. The company, Union Carbide, did not put enough emphasis on proper management of the hazards they were dealing with.

This one event shook all industry and governments around the world to look at the potential for similar incidents. Globally, action began and the development of tools to determine levels of risk was quickly provided. Industry and governments began to utilize those tools, which led to many improvements. Suffice it to say, the world has developed very sound methods to predict just what can happen. These tools have been put into practice and they work. The management programs for companies to use have been developed with several elements specific to keeping the risk under control. Today these management elements are well known and, in some cases, such as the USA, a requirement by law for all companies to use if their operations can impact the public. This is referred to as OSHA-PSM and also required through the Environmental Protection Agency (EPA) and their Risk Management Program (EPA-RMP). In Canada, we do not regulate; we focus on best practices, using the same recommended practices through the Major Industrial Accidents Council of Canada (MIACC) criteria, the CSA Q850-97 (reaffirmed in 2002) standard on risk management and many industrial association requirements.

These elements, better-stated management activities, are complex and very detailed but they have been shown to work and work well. They refer to the "risk management process" which involves:

- the ongoing process of continually looking for hazards;
- tools to use to determine accurately the consequences of an incident to both the health and safety of people, the environment and the company's ability to do business;
- knowledge around the likelihood (probability) of the unwanted event happening;

“There is essentially nothing we do that does not have some level of risk associated with it. As a society, we have set standards that define what is acceptable.”

- criteria to determine if the risk is acceptable or not;
- and, because the risk does not go away once we accept it, the use of the "management elements" to control the risk.

All of us are part of society today and as members of society we, the public, have many demands. Most of those demands are to do with enjoying our standard of living. It turns out that in order to enjoy that standard we must accept some level of risk. There is essentially nothing we do that does not have some level of risk associated with it. As a society, we have set standards that define what is acceptable. To control risk to those standards we can impose layers of protection to reduce the probability of the unwanted event from happening and as a society live with it. If we as a society were unable to accept risk then we would do nothing at all. That is not who we are, so understanding risk and managing it is key.

"Alberta On Scene" is a publication directed to emergency responders. The emergency response plans developed for municipalities and industry are an integral part of risk management. Again, risk management is all about a proactive approach to controlling risks we accept, but, as there is always a probability that an unwanted incident will happen, it is very important to be prepared with an emergency plan to respond effectively.

In order to respond, a well-developed and practiced emergency response plan (ERP) must be always at the ready. Now this sounds like a reactive approach and it is but being prepared by developing and testing the ERP makes the plan a proactive part of managing risk. A good plan will serve to reduce the impact of the unwanted incident.

Emergency planning starts with and depends upon the identification of hazards, and then evaluating the worst case scenario(s) impact (consequence). It also has a probability component used to determine priorities. Once the worst case scenario(s) are known, the emergency plan can be developed to ensure both trained personnel and the proper equipment can be in place to handle even the largest emergency. Without this approach, any response may be putting

emergency responders and their equipment at risk and unable to mitigate the incident. CSA Z731-03 is the guideline in Canada for the development of emergency plans and emphasizes this point as a crucial first step in developing an emergency plan.

While risk management is not new, it has been relatively ignored. It is just now that people are realizing this approach to protecting people and the environment and that a company's ability to do business is the best path forward to a better society. Risk management is a process we all should be doing in our lives and careers, and for the most part is; we just don't realize it. By formalizing the process in a global way, our risk management approach will improve by leaps and bounds.

To reiterate, risk management is a means to being successful, more competitive, more productive, providing a positive atmosphere

and just plain good business. I hope my comments have helped. I could go on in much more detail but this article needs to stop somewhere. Should you want to learn more about risk management and hazard identification, NAIT, the University of Alberta and the University of Alberta Faculty of Extension all offer course instruction. As well there are many independent courses too.

Again, thank you for the opportunity to present my thoughts on risk management and the importance of identification of hazards of all types in our working world as well as our personal world. 🔥

For more information about this article, please contact Doug McCutcheon at 780.492.6931.

Industrial Emergency Management and Public Sector Emergency Management Certificates

NAIT launches two new emergency management certificates

To complement their emergency management diploma program, NAIT has just launched two new certificates in emergency management. At the request of industry advisors, NAIT is now offering an Industrial Emergency Management Certificate and a Public Sector Emergency Management Certificate.

Each certificate requires the completion of five courses, which are completely transferable toward the NAIT Emergency Management diploma. The new certificates provide credentials for those students who need professional EM education, but perhaps not necessarily up to a diploma level. They also reward students in the diploma program with early credentials and provide an opportunity to pause and celebrate in the journey towards a full diploma.

Pre-requisites for the certificates

All students will be required to have successfully completed the "Overview of Emergency Management" course in the NAIT curriculum. In lieu of this course, successful completion within the past five years of a Basic Emergency Management course at the local, provincial, territorial or federal level may also be accepted, or students can complete the NAIT Emergency Management Certificate prior learning assessment examination.

Industrial Emergency Management Certificate

Emergency Management practitioners need to have knowledge and skills in several key areas to ensure that their organization is prepared and can respond effectively to major emergencies and disasters. The Certificate in Industrial Emergency Management addresses the central aspects of emergency preparedness and response: risk analysis, physical security, planning, emergency exercises and managing the emergency response.



**THE NORTHERN ALBERTA
INSTITUTE OF TECHNOLOGY**

Public Sector Emergency Management Certificate

Public sector emergency managers provide leadership to communities and organizations at all phases of the emergency management cycle. The Certificate in Public Sector Emergency Management builds skills in the areas of mitigation, development and maintenance of emergency plans, managing the emergency response, community disaster recovery and building emergency-resilient communities. This certificate program is intended for an individual with emergency management responsibilities within the local, provincial, territorial or federal government. 🔥

Want to learn more? E-mail EMtraining@nait.ca or call 780-471-6248 or toll-free at 1-877-333-6248.

Second phase of fire education campaign launched

The Three Minute Drill Campaign was launched for its second season around Fire Prevention Week. The 30-second commercial was run on Global TV from September 14 to October 11, 2009. The TV campaign was supported by posters and postcards covering four fire safety issues distributed through participating fire departments.

The Alberta Emergency Management Agency (AEMA) encourages fire services to continue promoting the Three Minute Drill Campaign by informing the public they serve to visit the unique interactive website (www.3minutedrill.alberta.ca) that provides easily understood fire safety messages to keep homes safe from fires.

The AEMA will make available free of charge posters and postcards that can be

used or distributed at community events.

Both posters and postcards are titled:

- Cooks fries in 8 minutes, can engulf your kitchen in 3.
- Cooks ribs in 30 minutes. Can ignite your siding in 3 (Barbecue fire safety).
- It can take 3 minutes for arson to destroy your home or 30 seconds to prevent it.
- It takes 3 minutes for toxic smoke to make a house fire deadly or 30 seconds to check your smoke alarm.


The Three Minute Drill Campaign has committed to a radio public service announcement (PSA) campaign if and when a fire problem becomes significant in a community or region. Four PSAs address:

- cooking
- general fire safety
- arson
- smoke alarms



3minutedrill.alberta.ca

A DVD containing the 30-second TV commercial and the four radio PSAs is available on request from the AEMA.

The Alberta fire service is encouraged to inform the AEMA at 1-866-618-2362 or email: aema@gov.ab.ca to initiate the radio announcements when appropriate criteria are met. 

For more information on the campaign, please visit: [www.aema.alberta.ca/documents/ema/Three_Minute_Drill_Campaign_Info\(1\).doc](http://www.aema.alberta.ca/documents/ema/Three_Minute_Drill_Campaign_Info(1).doc)
Campaign coordination is done by the AEMA and any questions or requests for assistance can be addressed to Mahendra Wijayasinghe, Manager, Research and Analysis, at 780-415-0546 or email at: mahendra.wijayasinghe@gov.ab.ca.

Recruitment/retention update

Task force continues with crucial information gathering

As a follow-up to previous information provided about the Joint Firefighter Recruitment Initiative (JFRI) working group (see May 2009 issue of *Alberta On Scene*), significant inroads are being made on this very important and crucial topic.

The working group has expanded upon the information acquired from the Fall 2008 consultation and has identified a number of barriers, as well as feedback on what is working and what is not working. Some of the barriers are:


- employer issues
- family-related issues
- availability of people
- time commitment
- community perception/public image
- structural challenges.

Other identified concerns include changes to demographics that impact fire departments in Alberta, training requirements and the physical demands of the job.

“With the identification of these issues from the AFCA consultation last fall, we knew that some additional key information was required to enable us to identify and develop potential solutions,” said Brian McEvoy, Bonnyville Regional Fire Authority Fire Chief and Co-Chair of the JFRI working group. “Through discussion, the group determined that the most effective way to drill down to the essence of these issues

What is the JFRI?

The Joint Firefighter Recruitment Initiative was created as a collaborative effort between the Alberta Emergency Management Agency (AEMA) and the Alberta Fire Chiefs Association (AFCA). The working group is comprised of 20 members that represent a broad spectrum of the fire service across Alberta. This includes volunteer, part-time and paid, First Nations and Métis as well as representatives from the Government of Alberta, the Alberta Urban Municipalities Association and the Alberta Association of Municipal Districts and Counties.

was to employ experts in the field. This has resulted in using some of the grant funding from Alberta Municipal Affairs to contract Volunteer Alberta to undertake a comprehensive survey sampling to determine best practices that are currently in place and are achieving the necessary results. We expect that by the next issue of *Alberta On Scene*, results of the survey will be available.” 

From hazard assessment to action – FireSmart showcase at the Cache Percotte Forest

DURING THE SUMMER MONTHS, wildfire is a constant and dangerous threat to homes and properties within Alberta's forested area. Nearly 1800 wildfires burned through Alberta's forest protection area in 2008, some of which destroyed valuable structures and resources. By implementing FireSmart principles to structures and surrounding areas, stakeholders can greatly reduce the risk of property loss due to a raging wildfire.

After four years of work, Alberta Sustainable Resource Development (SRD) recently completed the Cache Percotte FireSmart Structure Protection Showcase near Hinton. The main objective of the program was to create a secure water supply and permanent sprinkler system to minimize wildfire damages or losses to infrastructures at the historic camp.

"This project was definitely a joint effort," said Rod Houle, a wildfire prevention officer for SRD. "We could not have completed the program without the support and cooperation of the FireSmart unit, Foothills area staff and the Hinton Training Centre."

The spring camp was originally created in 1960 as a permanent school forest reservation. The first of five cabins was built with the help of the Junior Forest Rangers in 1968. Today, the camp is used by the Hinton



One of the cabins in the Cache Percotte forest

Training Centre, NAIT, Lakeland College and the University of Alberta forestry students. The camp also serves as a worksite and summer home for Junior Forest Rangers.

As part of the Wildland Urban Interface Plan for the Cache Percotte Forest, hazard and threat assessments were conducted to validate mitigation strategies for the camp. The results showed a high to extreme fire hazard level in and around the structures of the camp. Access to the structures was inadequate and emergency vehicles would not be able to access the single lane road. The camp also had no visible fire

suppression equipment and no municipal water supply. It was clear that something needed to be done.

"Before completing the project, the camp would have been extremely at risk if a wildfire were to burn through the area," said Houle. "Vegetation management and the addition of sprinklers and a secure water supply have greatly enhanced the structural protection of the area."

Work on the project began in 2005. Now fully functional, the sprinkler system consists of 47 strategically-placed sprinkler heads installed on the structures. Four water pumps (three gas-powered and one electric) were installed to draw water from three different sources – a nearby creek, a pond and two newly-installed 2500 gallon water storage tanks. The finished sprinkler system is actually three systems that can be operated individually or all together. Once the entire system is running, the engine houses will provide three hours of water to the structures.

"The completed project offers more than just structural protection," added Houle. "The camp is also a showcase that can be used to educate others about sprinkler systems and the importance of FireSmart principles."

Program managers are now developing ways to use the spring camp as an educational tool. There are now opportunities to showcase the project to many external audiences through courses and hosted events. 🔥



For more information on FireSmart visit firesmart.alberta.ca

Disasters and climate change adaptation

BY DAN SANDINK M.A., Manager, Resilient Communities & Research, Institute for Catastrophic Loss Reduction

Disaster costs in Canada and Alberta

Figures from Public Safety Canada and the insurance industry show a marked increase in both the severity and frequency of natural disasters in Canada. For example, Canada has experienced a three-fold increase in the number of climate and weather-related disasters between the 1960s and the 1990s (Figure 1). Many of the events that have resulted in the greatest payouts from the insurance industry have occurred recently, and include the 1998 Ontario-Québec Ice Storm with insured damages of \$1.95 billion and the 2005 heavy rainfall event in Ontario with insured damages of \$509 million. The third most expensive payout event in the Canadian insurance industry's history was the 1991 hail event in Calgary, which resulted in 116,311 insurance claims valued at \$452 million (2006 dollars).

Hail remains one of the greatest causes of large insurance payouts in Alberta. During the period 1986 to 2006, the Insurance Bureau of Canada reported eight large hail events in Canada resulting in over \$50 million in payouts and seven of these events occurred in Alberta. While hail presents a substantial risk to Alberta communities, drought is the most commonly occurring natural disaster in Alberta, followed by flooding (Figure 2).

In terms of overall costs, drought is also one of the most expensive types of disasters. For example, the Canadian Disaster Database reported costs associated with the 1980 Prairie Drought at \$5.8 billion, exceeding overall insured and uninsured damages caused by the 1998 Ontario-Québec Ice Storm, estimated at \$5.4 billion.

Alberta has experienced several extreme rainfall events in the past few years, which have resulted in substantial insured and uninsured damages. For example, severe flooding in southern Alberta in 2005 resulted in \$306 million in insured

damages (2006 dollars), and 10s of millions in uninsured damages. Flooding caused by extreme rainfall in Edmonton in 2004 resulted in 9,500 insurance claims for sewer backup, valued at \$143 million – a significant portion of the \$166 million tab for overall insured damages for that event.

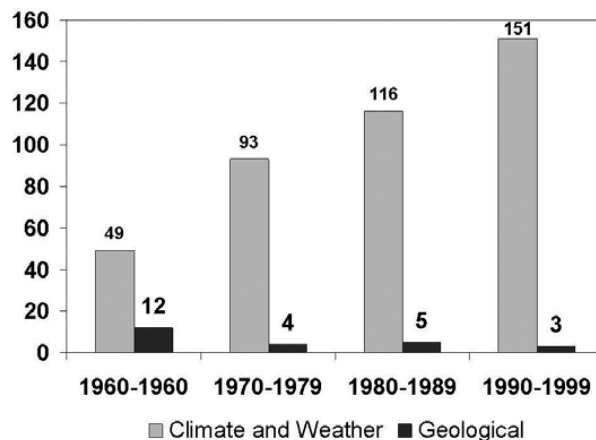
What causes disasters?

Natural disasters can be broken down into two components: hazards and vulnerability. A hazard is a natural event that has the potential to cause damage to human systems or represents a threat to human health and safety. Examples of hazards include floods and wildfires. Vulnerability

is the propensity of a system (community, individual, ecosystem) to suffer loss from a hazard event, or the degree to which a system is susceptible to hazards.

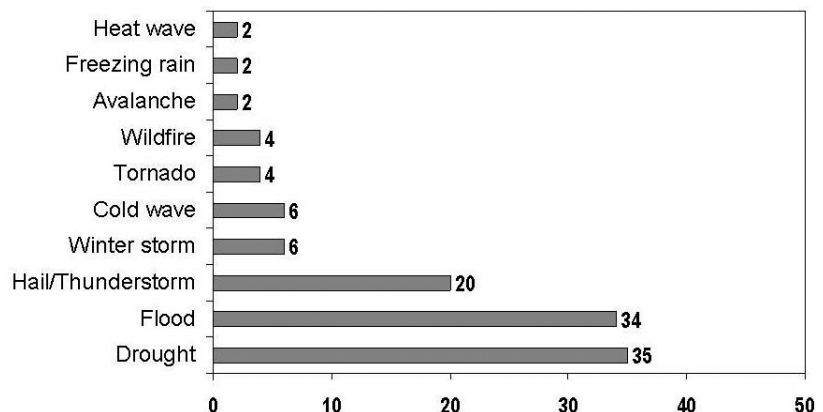
Vulnerability has many causes, and may include the location of development (e.g. building in flood plains), the condition and design of infrastructure and various social factors including household income levels and risk perceptions. In Alberta, rapidly increasing population and income levels may affect vulnerability, through intensification of development in urban areas and higher valued property which can be destroyed during disaster events.

Figure 1: Frequency of Disaster Events in Canada by Decade, 1960 - 1999



Data source: Public Safety Canada

Figure 2: Disaster Occurrences in Alberta: 1900 - 2005



Data source: Public Safety Canada

Disaster losses are expected to grow as climate change affects the frequency and severity of hazards. The Intergovernmental Panel on Climate Change's 2007 report suggests climate change impacts in Canada could affect wind and storm intensity, extreme precipitation, drought conditions and will lead to an increase in the number of hot days.

The 2008 report "From Impacts to Adaptation: Canada in a Changing Climate 2007" suggests that water scarcity will be the greatest climate change risk to prairie provinces. The report identifies specific impacts of water scarcity, including reduced stream flows in summer, reduced lake levels and glacier retreat. Glacier retreat is particularly pertinent in Alberta, where many communities attain their water supply from glacier-fed rivers. Climate change is also expected to have an impact on wildfires, where longer burning seasons and dryer conditions will increase wildfire risk.

What is to be done about increasing disaster risk?

Changes in hazard frequency and severity and changes in vulnerability mean that the nature of disasters will change in the future. Climate change adaptation is a strategy where risk management is applied to identify changes in hazards and how communities may be vulnerable to such changes, and is in many ways analogous to proactive disaster mitigation. Though all levels of government have an important role in disaster mitigation, municipal governments have a large role to play in many of the most effective tools for disaster mitigation and climate change adaptation, including enforcement of building codes, infrastructure management and planning, emergency preparedness and response and land-use planning.

Due to the root causes of disasters (hazards and vulnerability), effective climate change adaptation will require the engagement and support of a wide

range of stakeholders. For example, much of Canada's infrastructure has been built with the assumption that the weather of the past will reflect the weather of the future – however, climate change scenarios indicate that this will not be the case. Therefore, municipal engineers will have to consider increasing severity and intensity of extreme weather events when designing and building infrastructure. Urban planners will have to consider climate change impacts and disasters in the design of urban communities, for example, through reconsidering flood plain delineations. Also, emergency managers will have to prepare for a greater frequency and scale of disasters.

Conclusion

Disasters are increasing in severity and intensity, and are expected to get worse as the climate changes. Applying climate change adaptation strategies to address the causes of disasters, namely hazards and vulnerability, can serve to reduce disaster risk in the future. 🔥

Children's fire safety booklet from Edmonton Fire and Rescue

Homegrown talent put to good use

Over the years, there have been many children's activity books created that focus on fire prevention. The former Alberta Fire Commissioner's Office produced an award-winning one several years ago, the NFPA produces one each year and many other fire safety organizations have also produced various versions. However, a version recently created by Edmonton Fire and Rescue provides a new twist. In addition to covering burns and fire safety, the book also covers bike safety, choking, poison and injury hazards and includes statistics on many of the injury hazards.

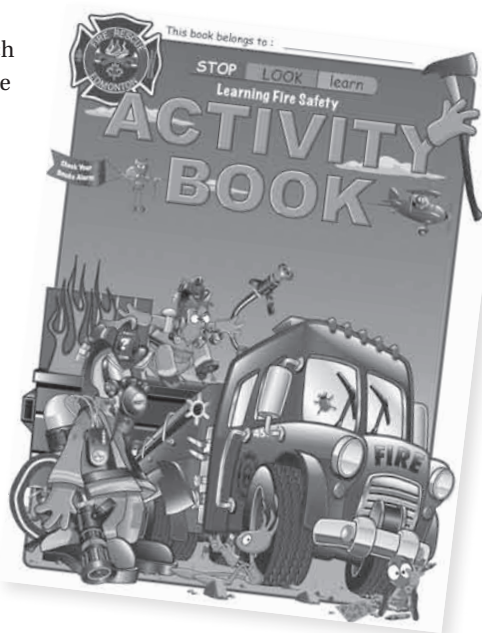
More like a comic book than a colouring book, the activity booklet is targeted to Kindergarten to Grade 3 students in a humorous way that reinforces safety messages through quizzes, games and

mazes. It also includes a pull-out sticker page. Using bold and vibrant colours, the book presents the adventures of brothers Freddie, Bio, Happ and Pip Hazard along with Fire Captain Marty.

The concept for the book evolved from a conversation between Fire Prevention Captain

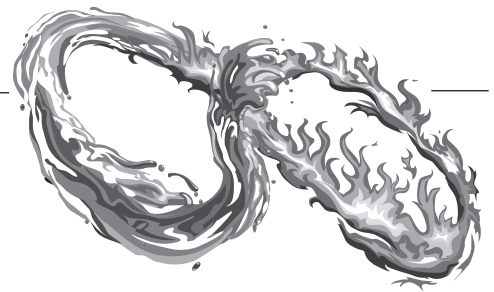
Tom Karpa and firefighter Mike Prangley, who was on desk duty due to a leg injury. When Prangley mentioned that he used to be a graphic designer, Karpa found an ally in helping him revamp the department's current children's resource materials. Prangley then created a draft activity book that was met with rave reviews.

Earlier this year, 10,000 copies of Prangley's initial 16-page activity book were produced; now, with sponsorship from Canadian Tire and Quebecor Printing, a new 28-page edition has been printed with distribution this fall. But that's not all – plans are already underway to produce 1,000 pins. There is also talk about making t-shirts and the possibility of making the activity booklet available throughout Alberta. All sponsorship dollars go directly towards creating products for children. 🔥



For more about the activity booklet, contact Mike Prangley at 780-619-2241; for sponsorship opportunities, contact Tom Karpa at tom.karpa@edmonton.ca

fire etc. celebrates 50 years of training excellence



fire etc. LAKELAND COLLEGE emergency training centre

fire etc., Lakeland College's emergency training centre, celebrated its 50th anniversary with activities on Friday September 25 and Saturday September 26, 2009 at the Vermilion campus. About 500 visitors attended the event, which included a meet and greet reception, pancake breakfast, tours, demonstrations, family activities and a banquet.

"It was wonderful to see people who had worked or trained at **fire etc.** return for the weekend and reconnect with our organization," said Lorelee Nichols, co-chair of the 50th anniversary planning committee. "People were impressed with our facility and equipment and were surprised to see how much we've grown."

A lot of community members participated in tours of the training field and watched field demonstrations.

"It was a good opportunity for people to see what we do. For many people, it was the first time they'd visited **fire etc.**," added Nichols.

The banquet was the final event of the festivities. Among those in attendance were David

Hodgins, Managing Director of the Alberta Emergency Management Agency; Trent West, Alberta Fire Commissioner; and Tom Makey and Bill McKay, former Alberta Fire Commissioners. Former **fire etc.** directors Bob Moffat, Laird Burton and Don Gnatiuk also attended as did local dignitaries MLA Lloyd Snelgrove, Vermilion Mayor Bruce Marriott, Lloydminster Mayor Ken Baker and County of Vermilion Mayor Reeve Richard Van Ee.

While many people spoke of the history of **fire etc.**, Denis Cunninghame, acting dean of **fire etc.**, talked about the future. "We are increasing our programming into areas that we have not yet touched. The introduction of pre-hospital care programs has already started. Other areas include risk assessment


and risk management for disaster planners and others involved in the management of incidents," he said.

People can also expect to see **fire etc.** develop more online programs to assist people who want to keep working while continuing their

"It was a good opportunity for people to see what we do. For many people, it was the first time they'd visited fire etc."



From left to right; Tom Makey, Bob Moffatt, Denis Cunninghame, Laird Burton and Don Gnatiuk.

education, however, Cunninghame noted, Lakeland College "will not forget where we have come from and will maintain classroom-based courses for those who prefer instructor-facilitated training." 

The chronology

1959: Fire Officer's Training School is established at Vermilion under the jurisdiction of the Alberta Fire Commissioner's Office. Vermilion becomes the school's permanent home. It was selected over other sites including Calgary, Olds and Fairview because of its large, accessible body of water at the reservoir, receptive community spirit and housing/storage facilities at the Vermilion Agricultural and Vocational College, now Lakeland College.

1966-69: Construction of three-storey burn tower, administration building, classroom and apparatus bays. School is renamed as the Alberta Fire Training School (AFTS).

1996: The emergency services technology program begins. Remote training site opens south of Vermilion. Aircraft crash rescue simulator prop completed in 2000.

1998: AFTS becomes a subsidiary corporation of Lakeland College.

2002: AFTS name change to **fire etc.** (fire emergency training centre)

2004: **fire etc.** fully integrated with Lakeland College.

Town of Edson Fire Department donates ambulance

Never underestimate the power of networking at conferences.

While attending the Alberta Fire Chiefs Association Conference in Red Deer in May, Ed Kohel and Chris Senaratne (former **fire etc.** dean now working with Alberta Emergency Management Agency) mentioned to various delegates that Lakeland College needed an ambulance for the practical component of the new paramedic and emergency medical technician programs being offered by **fire etc.**, Lakeland College's emergency training centre.

Showing the exceptional response time of their department, one week after the conference the Town of Edson donated a fully equipped ambulance to Lakeland College.

"Al Schram, Edson Fire Chief, and Tyler Robinson, Edson Deputy Fire Chief, have

always been strong supporters of Lakeland College and the training offered at the emergency training centre. They were very happy to lend us a helping hand," said Kohel, coordinator of business development at **fire etc.**

The new paramedic and emergency medical technician programs are offered primarily online but there are some days spent in class learning technical skills. "This ambulance and the equipment



Denis Cunninghame and Kirk McInroy of Lakeland College accept the keys to a donated ambulance from Fire Chief Al Schram and Deputy Chief Tyler Robinson on behalf of the Town of Edson Fire Department

in it will make it possible for our students in these programs to live the learning in a realistic environment," added Kohel. 🔥

To learn more about Lakeland College's emergency medical services programs, visit www.lakelandcollege.ca.

University of Alberta certificate programs

Emergency management part of University of Alberta program

In its 37th year since inception, the University of Alberta's (UofA) Occupational Health and Safety Certificate Program offers a 329-hour certificate program of which two courses focus directly on the field of emergency services: Emergency Management (two-day workshop) and Safety Hazard Recognition, Evaluation and Control (four-day elective).

The Emergency Management workshop provides a much needed overview of emergency management. The workshop allows individuals with little (if any) background in emergency management an understanding of the key concepts, activities and processes unique to this field of practice. For those who arrive from other fields of practice (e.g. OH&S, Environmental Health and Security) the workshop provides a valuable linkage in both theory and practice. This two-day workshop is often

a launching point for students who are not sure where to go within the field. It addresses preparedness and planning, emergency exercises, disaster response strategies and business recovery.

The Safety Hazard Recognition, Evaluation and Control course discusses the basics of identifying hazards, assessing the associated risks and determining and implementing controls to reduce the risk to the individuals and organizations. Hazard identification and risk assessment is a key pillar for any quality health and safety program. Students learn how to develop hazard identification and risk assessment tools for a variety of

applications; they become familiar with many common hazards in a variety of industries, such as fall protection, confined spaces, excavations, equipment guarding and control of hazardous energy. Students also develop a strong understanding of the hierarchy of hazard control. Engineering, administrative and personal protective equipment are all discussed as potential controls for workplace hazards. 🔥

The Occupational Health and Safety Certificate Program is offered throughout Alberta in a variety of formats. Please visit the U of A website at www.extension.ualberta.ca/ohs for more information or contact them at 1-800.808.4784.

Risk of death in Alberta

BY MAHENDRA WIJAYASINGHE, PhD, Manager, Research and Analysis, Alberta Emergency Management Agency

THE PURPOSE OF THIS SHORT article is to present data on deaths in Alberta from a risk perspective. Risk is usually defined as “risk = probability x exposure x consequences”. However, where death or injury is considered, the risk can be defined as a straight probability. Thus, risk = probability. When considering the probability of death, it is important to remember that we all die sometime and we must all die of some cause. The measurement of probability of death must attempt to account for this fact.

In Alberta out of a total population of 3.3 million people, 19,523 people died in the year 2006 from all causes (Table 1). Then the probability of a person dying per year is 19,523/3,297,767 or 592 per 100,000 population or 1/170 or .006 or 6×10^{-3} . This ‘average’ or ‘typical’ death is called a “statistical death”. It is a crude risk estimate averaged over the whole population. However, for a subgroup of the population consisting of males over the age of 85 for example, the risk of dying would be substantially higher. Thus the crude risk estimate conceals very wide variations such as age, gender, occupation, etc.

Table 1. Age specific death rates and risk of death – Alberta (2006)

Age	Deaths	Death rate per 100,000 population	% Deaths	Population	Risk of death ($\times 10^{-3}$)
0 - 0	250	581.15	1.28	43,018	6.0
1 - 4	41	24.80	0.21	165,297	0.3
5 - 9	30	14.50	0.15	206,910	0.1
10 - 14	37	16.34	0.19	226,372	0.2
15 - 19	142	59.40	0.73	239,058	0.6
20 - 24	181	73.86	0.93	245,053	0.7
25 - 29	181	75.29	0.93	240,415	0.8
30 - 34	175	74.36	0.90	235,331	0.7
35 - 39	253	105.28	1.30	240,309	1.0
40 - 44	415	154.98	2.13	267,769	1.5
45 - 49	648	235.65	3.32	274,986	2.3
50 - 54	845	356.02	4.33	237,347	3.6
55 - 59	980	517.61	5.02	189,330	5.2
60 - 64	1,111	830.10	5.69	133,839	8.3
65 - 69	1,324	1,285.14	6.78	103,024	12.8
70 - 74	1,818	2,102.71	9.31	86,460	21.0
75 - 79	2,460	3,451.95	12.60	71,264	34.5
80 - 84	2,936	5,914.94	15.04	49,637	59.1
85 - 89	2,851	10,206.57	14.60	27,933	102.1
90+	2,845	19,736.39	14.57	14,415	197.4
ALL	19,523	592.01	100.00	3,297,767	6.0

Source: Alberta Health and Wellness. Interactive Health Data Application – www.ahw.gov.ab.ca/IHDA_Retrieval



“Injuries are the leading cause of death for people between the ages of 5 and 44 in Alberta.”

Table 2. Major causes of death – Alberta (2006)

Age	Cancer	Circulatory	Respiratory	Injury	Other
0 - 4	3.8	1.4	1.7	4.5	88.7
5 - 9	30.0	0.0	6.7	36.7	26.7
10 - 14	13.5	5.4	5.4	51.4	24.3
15 - 19	5.6	0.7	1.4	79.6	12.7
20 - 24	4.9	2.7	1.6	78.0	12.6
25 - 29	8.9	3.9	2.2	73.9	11.1
30 - 34	13.1	10.9	2.3	55.4	18.3
35 - 39	17.8	8.7	3.2	51.0	19.4
40 - 44	22.0	12.3	3.4	39.9	22.5
45 - 49	28.9	16.8	4.2	30.0	20.1
50 - 54	37.4	22.3	4.6	15.9	19.8
55 - 59	44.4	22.2	5.3	11.1	17.0
60 - 64	46.4	25.7	6.0	5.8	16.1
65 - 69	46.1	26.9	7.0	3.5	16.6
70 - 74	40.0	32.8	8.0	3.1	16.1
75 - 79	34.3	32.9	10.9	3.0	18.9
80 - 84	26.6	36.4	12.2	2.4	22.4
85 - 89	18.4	44.0	12.1	2.0	23.5
90 +	11.2	45.3	13.0	2.6	27.8
Percent	28.1	32.2	9.3	8.7	21.8

Source: Alberta Centre for Injury Control and Research (ACICR).

“Of all age groups, youth 15 - 24 years had the highest percentage of injury deaths with 80 per cent.”

According to Alberta Health and Wellness data, the leading causes of death in Alberta are, in this order, circulatory diseases, cancer, respiratory diseases and injuries, a broad category that includes many random events scattered over time. Major causes of death in Alberta in Table 2 show that injury is the leading cause of death for Albertans aged 5 to 44 years. Cancer is the leading cause of death for Albertans between 45 and 74 years of age. For those 75 years of age and older, circulatory disease is the leading cause of death.

Continued on next page ►►

Only the tip of the iceberg

Injuries that cause death are only the tip of the iceberg. The levels below deaths are wider because they show that more people are affected by non-fatal injuries. Just below deaths are injuries requiring hospitalization. Below that, the iceberg shows that even more people go to the emergency department (ED) because of an injury. Outpatient visits shows how many people go to see their regular doctors for injury treatment. The largest numbers of people with injuries are those who do not go to see a doctor, receive no medical care or treat themselves.

The extent of non-fatal injuries must be included in a total risk measurement for Albertans. A commonly used ratio for Deaths: Hospitalizations: ED visits is 1: 34: 278, and is illustrated in the injury iceberg. The injury iceberg illustrates why deaths or serious injuries should not be considered discrete events.



Table 3 shows percentage distribution of the major causes of death by rank and age groups. It is clear that injury-related deaths dominate between the ages of 5 to 44 years. While cancers, respiratory and circulatory diseases receive a great deal of public attention, it is injuries that claim the greatest number of young lives. Of all age groups, youth 15 - 24 years had the highest percentage of injury deaths with 80 per cent.

“According to ACICR, the most important cause of premature mortality, measured as potential years of life lost (PYLL), in 2006 was injury-related deaths (auto crashes, other injuries) followed by cancer...”

Table 3. Deaths by major causes ranked by age group – Alberta (2006)

RANK	0-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+
1	Congenital Anomalies (72%)	Injuries (37%)	Injuries (61%)	Injuries (79%)	Injuries (65%)	Injuries (44%)	Cancer (34%)	Cancer (45%)	Circulatory (38%)
2	Injuries (4%)	Cancer (30%)	Cancer (14%)	Cancer (5%)	Cancer (11%)	Cancer (20%)	Injuries (22%)	Circulatory (24%)	Cancer (27%)
3	Cancer (5%)	Nervous (10%)	Nervous System (11%)	Nervous (4%)	Circulatory (7%)	Circulatory (11%)	Circulatory (20%)	Injuries (8%)	Respiratory (11%)

Source: ACICR/Alberta Vital Statistics, 2006

Table 4 presents the mechanisms that contributed to injury deaths in Alberta. According to ACICR, the most important cause of premature mortality, measured as potential years of life lost (PYLL), in 2006 was injury-related deaths (auto crashes, other injuries) followed by cancer, all other causes, heart disease, suicide, respiratory disease, cerebrovascular disease and congenital anomalies. PYLL gives greater weight to causes of death occurring at a younger age than to those at later ages. It is the number of years of life “lost” when a person dies “prematurely” from any cause – before age 75. A person dying at age 25, for example, has lost 50 years of life (www.statcan.gc.ca/pub/82-221-x/2004002/4063097-eng.htm#33). According to the Alberta Centre for Injury Control and Research, males accounted for 70 per cent of injury deaths, 51 per cent of injury hospital admissions and 60 per cent of emergency department visits.

Table 4. Injury deaths by age group and mechanism of injury – Alberta (2002-06)

Mechanism of Injury	1-19	20-34	35-49	50-64	65+	1-65+	%
Suicide and self inflicted	154	505	803	456	221	2139	22.24
Motor vehicle	342	618	468	284	251	1963	20.41
Poisoning	27	362	785	404	119	1697	17.65
Undetermined: unintentionally/ purposely inflicted	34	275	520	289	51	1169	12.16
Falls	11	31	56	87	357	542	5.64
Violence and injury purposely inflicted	71	167	98	42	18	396	4.12
Other transportation	39	63	44	28	34	208	2.16
Suffocation/foreign body/choking	26	10	21	13	135	205	2.13
Fire	14	43	43	30	25	155	1.61
Drowning	37	28	34	25	11	135	1.40
Natural and environmental factors	12	20	29	25	25	111	1.15
All other injuries	22	52	90	129	584	877	9.12
Total injury deaths	789	2174	2991	1812	1831	9597	100
Injury death rate per 100,000 population	19.00	62.64	76.93	71.39	109.71	60.29	
Fire death rate per 100,000 population	0.34	1.24	1.11	1.18	1.50	0.97	

Source: Table compiled from data provided by ACICR. Fire death data are from the Fire Statistics Information System at the Alberta Emergency Management Agency.

The odds of dying...

Odds and probabilities essentially convey the same idea but in a different form. Probability scale ranges from 0 (absolute impossibility) to 1 (absolute certainty) whereas odds are expressed, for example, as one in “x” number of people.

Odds translate directly to probability. The odds of one in four is equivalent to a probability 1/4 or 0.25.

The odds given below in Table 5 are statistical averages over the whole Alberta population and do not necessarily reflect

the chances of death for a particular person from a particular external cause. Lifetime odds are calculated assuming a life expectancy of 80 years for a person born in 2002 in Alberta:

www.statcan.gc.ca/studies-etudes/82-003/archive/2005/8709-eng.pdf

Table 5. Causes of death by lifetime odds, death rates and risk – Alberta

Cause of death	Annual deaths	Lifetime odds	Death rate per 100,000 population	Risk of death ($\times 10^{-3}$)	Lifetime odds (US – 2005)*
Circulatory diseases	6,337	1 in 7	192.15	2.0	
Neoplasms (cancers)	5,475	1 in 8	166.01	1.7	
Respiratory diseases	1,792	1 in 23	54.34	0.5	
All injuries	1,919	1 in 21	60.30	0.6	1 in 22
Suicides	428	1 in 93	13.44	0.1	1 in 117
Motor vehicle crashes	393	1 in 101	12.33	0.1	1 in 84
Poisonings	339	1 in 117	10.66	0.1	1 in 161
Work places	166	1 in 263	4.74	0.05	
Falls	108	1 in 367	3.40	0.03	1 in 194
Violence/injury purposely inflicted	79	1 in 502	2.49	0.02	
Suffocation/foreign body/choking	41	1 in 971	1.29	0.01	
Fires	31	1 in 1,284	0.97	0.009	1 in 1,192
Drowning	27	1 in 1,474	0.85	0.008	1 in 1,064
HIV/AIDS	27	1 in 1,524	0.82	0.008	
Tornados	2.4	1 in 16,000	0.07	0.0007	
Avalanches	2.2	1 in 18,771	0.06	0.0007	
Firearms	1.4	1 in 31,250	0.04	0.0004	
Bear attacks	0.8	1 in 51,621	0.02	0.00024	
Insect bites	0.6	1 in 68,828	0.02	0.00020	
Lightning	0.4	1 in 103,243	0.01	0.00012	1 in 79,399
Dog bites	0.4	1 in 103,243	0.01	0.00012	
Floods					1 in 317,595

*Odds of Death Due to Injury, United States, 2005: National Safety Council website at www.nsc.org. The US data are provided for rough comparisons only as data collection and coding may differ from Alberta.

Data sources: rows 1 to 3 and 14 (column 2) data (2006) are from Alberta Health and Wellness: Interactive Health Data Application; rows 4-7, 9-11, 13 and 17 data (2002-06) are from the ACICR; row 8 data (2008) is from <http://employment.alberta.ca/SFW/129.html>; row 12 (2002-06) and row 15 data (tornado at Pine Lake AB, July 14, 2000; 12 deaths averaged over 2000-04) are from the Alberta Emergency Management Agency; rows 16 and 18-21 are preliminary data (2004 to 2008) from the Office of the Chief Medical Examiner in Edmonton.




Table 5 lists the life time odds for causes of death from the most common to the most rare. However, the list is not complete. The lifetime odds of dying in a motor vehicle crash is about one in 101. This translates to 1 out of every 101 people dying in a motor vehicle crash over the course of their life. All odds fluctuate from year-to-year.

Conclusion

Injuries are the leading cause of death for people between the ages of 5 and 44 in Alberta. These injury events mostly happen at random in time and space. Unless we carefully consider the likelihood of fatal events, as attempted in this article, we may overestimate or underestimate their likelihood. While we need to know the potential dangers, we also need to understand their risks. The data presented here apply to the whole population so the odds of any one person being directly affected by any event would be even more remote.

Acknowledgements

The assistance provided by Colleen Drul at the ACICR and by Kim Borden at the Office of the Chief Medical Examiner is gratefully acknowledged. 



Risk managewhats?

BY CHAD SARTISON, CEO, The Fire Within, Priddis Volunteer Firefighter – chad@thefirewithin.ca

LIKE TO SAY, “Fire has nature on its side and we have been tasked to conquer it”. It sounds cool and has a bit of mystery and intrigue – all of which are things we like as firefighters.

When I first joined the fire service, I secretly harboured grandiose, romantic notions of running into a smoke-filled house, axe in hand and leaping out with a baby under one arm and a puppy under the other. Perhaps a slight exaggeration, but more to the point I thought I had something to offer, something to give that might just make a difference. What I didn't expect was that I would get far more out of the service than I would ever be able to give back in return.

The idea of being part of something larger never really hit home until I became a firefighter and experienced it for myself. As firefighters, we have a job to do. However, we must rely completely on the men and women on our team for the leadership, technical expertise and professionalism required to accomplish the task at hand. Along with minding the health and welfare of our fellow firefighters and their families (yes I said families), every single person has a role to play in a department's success.

I have long believed that our families receive far too little recognition for their sacrifices in the name of our duty.

The theme for this month's issue of *Alberta on Scene* is risk management. Like most, my thoughts instinctively gravitate to the fire scene and what we can do to make firefighters safer when they are performing their duties.

Ironically, from a statistical standpoint most of us are as safe on your fire scene as we were on the job we just left. Sounds cliché, but statistics support the fact that one of the most dangerous aspects of our job is indeed driving to the fire hall or the scene itself.

The simple fact is that Standard Operating Procedures (SOPs) and rules, all designed to manage risk, are useless if we are not attracting enough volunteers to implement them. When is the last time you had a BA controller, safety officer or an officer in command that wasn't operating the pump panel and a Rapid Intervention Team (RIT) crew standing by?

The irony is that as our resources continue to shrink, the very SOPs designed to protect us may eventually get volunteer departments into trouble. SOPs and NFPA are all

voluntary until someone gets hurt and/or dies. It is then that the injured firefighter's family, the media and lawyers all wonder why we are not following our own rules of engagement.

Today is the day the public, our politicians and we as firefighters must start taking our fire departments seriously. We have to consider recruitment, retention and funding as factors that are as important as SOPs and RIT crews. Departments and municipalities have to integrate these issues seamlessly into the job of firefighting; allocating budgets and strategies to meet goals and objectives designed by the chiefs and firefighters who run these halls.

The days have passed where we can just dump these issues onto the chief's desk and expect him to deliver. The successful recruitment and retention of firefighters no longer comes for free and no longer comes to the disorganized. The time has come for us as firefighters, the people who support us, and the people we support to 'step up'.

As for the puppy under one arm, I will have to be satisfied with two terrified angry cats trying to scratch through a BA mask. I guess I got the smoke-filled part right. 🔥

Reaching new heights

Heroes In the Sky 2009 a huge success!

Fire departments from across Canada came together September 12 and 13 to raise funds and awareness for volunteer firefighters by participating in The Fire Within's third annual Heroes In the Sky event.

Along with a very successful weekend that raised nearly \$200,000 for the participating fire departments, this event gave firefighters a chance to connect with the public, share some information on fire prevention and have a lot of FUN! 🔥



From dunk tanks and water balloon wars to vehicle extrication demonstrations, live bands, karaoke and impromptu dance routines, there was no shortage of entertainment for the firefighters or the public.

Continuing the learning

Len Hancock, District Officer, North Central Alberta, Alberta Emergency Management Agency, is one of the first graduates of a Masters in Disaster and Emergency Management (MADEM) program.

The first of its kind to be offered in Canada, the two-year university degree program is a blend of theory and practice. It provides a comprehensive interdisciplinary overview of the field of emergency management with practical knowledge and skills required to prepare for, manage and recover from traditional and contemporary emergencies and disasters. Delivered through distance learning courses, the program also includes two residencies at the university, a practicum and a major research project. The first year is comprised of both residencies and mandatory courses; the second year is focused on the comprehensive major research project.

The intense program includes examination of many key factors within the field of disaster and emergency management, including:

- the relationship of disaster and emergency management in relation to international politics, economics, ecology and culture;
- cross-jurisdictional relations;
- community resiliency; and
- issues relating to health, legal considerations and insurance.

Students are also schooled in the processes involved in analyzing risks and developing strategic plans for mitigating the effects of complex incidents and crises.

“The program also focuses on the subtle but undoubtedly noticeable intercultural issues and socio-psychological aspects within the disaster and emergency management field,” noted Hancock. “The program has enhanced my communication skills along with my skills in conflict and crisis management, leadership, human resources and volunteer management, public education and media management.”

For his major research project, Hancock conducted an analysis of the Incident Command System (ICS) in Alberta. This undertaking was the culmination of

all the skills and knowledge obtained during the first year, and dominated Hancock’s life for the majority of 2008 - 09.

“I had many ups and downs during that time as I strove to meet some very tight deadlines,” added Hancock. “Overall, the program was challenging and demanding but extremely worthwhile.” Hancock also advised that the support of the agency, current and previous managers and especially his wife’s support and encouragement were significant factors in his ability to complete the program.

“The program is an important step in the promotion of emergency management as a distinct profession,” stated Hancock.

“My passion towards this field compels me to strongly believe that trained and educated emergency management practitioners are a crucial factor for the success of this



Len Hancock proudly stands in front of Royal Roads University where he received his Masters degree.

university program and, consequently, the advancement of emergency management as a profession.” 🔥

For more information about the Masters in Disaster and Emergency Management program, contact Len Hancock at len.hancock@gov.ab.ca or visit www.royalroads.ca/program/disaster-and-emergency-management-ma

Firefighting, anyone?

There’s nothing like walking a mile in someone else’s shoes – or boots – as these fine young gentlemen did during Lakeland College’s Firefighter for a Day camp held Aug. 25 at Vermilion. Pictured below are Nathan Tompkins of Edmonton, Alberta, Jonathan Kadler of North Battleford, Saskatchewan, Matt Foers of St. Albert, Alberta, Stefan Kratchmer of Grande Prairie, Alberta, and Billy Rozell of Woodstock, Ontario. All the participants said they used the camp experience as part of their own personal career investigations for the firefighting and emergency services field.



Top tips for preventing tragedy

BY KYLIE-JANE DEGELING, Training Officer, Alberta Emergency Management Agency

IF YOU ASK A GROUP OF FIREFIGHTERS about their most memorable call-outs, you're bound to leave the discussion feeling a little bit shaken. The stories they tell are the variety that could give anyone nightmares, yet they seem to have a common theme – human error. The vast majority of the emergencies to which they respond are easily preventable. This means that if we were all a bit more prepared, we could substantially reduce the number of injuries, deaths and losses of property that Albertans face each year due to emergencies.

At a recent Personal Emergency Preparedness course, I caught up with Regional Fire Chief for Clearwater Regional Fire Rescue Services, Cammie Laird; volunteer firefighter and emergency medical responder, Gennifer Laird; and Travis Bartsch, a peace officer and volunteer firefighter. When asked if they would agree to an interview about tips for preventing tragedy, their enthusiasm was tangible; it turns out firefighters are very passionate about emergency preparedness. Although they each love being able to help the people of their communities in emergencies, they'd be much happier if their citizens were safe and didn't need them at all.

Regional Fire Chief Cammie Laird said, "There's no honour in going to a call that could have been prevented."

“Regional Fire Chief Cammie Laird said, “There’s no honour in going to a call that could have been prevented.””

... tips include wearing a seatbelt in any motor vehicle, wearing a helmet on ATVs and bikes, not texting or chatting on your cell phone while driving and driving for the road conditions, and within the speed limit.”

Gas stations

"There are signs at every gas station that say, 'Shut your car off,'" said Cammie. "So shut your car off! It's so easy for your car's engine to spark an explosion." Travis adds, "Don't talk on your cell phone while filling up either; few people realise it can actually be an ignition source, and it's the fuel's vapours all around you that could ignite and cause an explosion." Remembering news stories of abductions by car thieves, Travis adds, "Also remember to take your child out and lock the door when you go inside to pay. It takes seconds for someone to drive away with your kid."

Road safety

Both Cammie and Gennifer vividly remember a horrific crash involving a minivan and a car. The young female driver of the car was distracted due to simultaneously driving while chatting with her boyfriend on a cell phone. She caused a crash killing two children in the minivan, as well as herself and a passenger in her car. The boyfriend she was talking to was actually two cars in front of her, heard the screams through the cell phone, and ended up witnessing the crash she caused through his rearview mirror. "He was so distraught, he later attempted suicide," said Gennifer. On the topic of road safety, all three firefighters have seen more than their fair share of tragedy. Through the many examples they gave, the common theme was clear – pay attention to the road.

Cammie said, "In severe weather, don't drive unless you absolutely must – but then, drive slowly and give the road your full attention." Gennifer added, "We've seen way too many

drunk driving crashes. Please don't drink and drive!" Travis would like people to be prepared in case their car breaks down, or they are in a crash. "Have blankets, a first aid kit and appropriate weather gear like toques, jackets and mittens in your car."

Many of the firefighters' tips seem obvious, yet numerous crashes in Alberta are caused by people not following them. These tips include wearing a seatbelt in any motor vehicle, wearing a helmet on ATVs and bikes, not texting or chatting on your cell phone while driving and driving for the road conditions, and within the speed limit.

Finally, the three firefighters would like people to be more aware of exactly where they are driving, so that if they need to call 911, they can give an accurate description. Travis advised, "People frequently call with the wrong directions, so we go the wrong way!" Gennifer added, "There's often a small window of time for us to save lives and prevent a bad situation from getting worse. Inaccurate information can be the difference between life and death."

Rural preparedness

All three firefighters live in a rural environment and have some extra tips for anyone on a farm or living in a small community. Their first concern is the time it takes for emergency services to respond. "Unlike the major cities, where emergency services can often respond in a matter of minutes, rural areas rely largely on volunteers. This means that they need to leave their job or home, drive to the station, get suited up and pick up the truck. Depending on the time of day the

call comes in, it could take anywhere from 7 to 20 minutes for the first unit to roll with additional units responding as needed shortly thereafter. And then we need to find you wherever you are," noted Gennifer. This increases the need for personal preparedness – having a first aid kit handy, being trained in first aid and knowing your legal land description in case you need to make a call to 911. "So many people try to describe where they live, but having the actual legal land description makes it much easier for us to find you," said Gennifer.

Cammie would like all rural home and farm owners to fill out a copy of the Alberta Rural

Emergency Plan and attach it to the power pole in front of their home. "Many know it as the Emergency Farm Plan, but really, every rural homeowner should use it, as it tells us where the hazards are on your property so that we can do more to protect you and your family during a call-out." To get started, head to www.ruralemergencyplan.com

Gennifer would like all children in rural areas to take farm safety courses, and for their parents to ensure they have thoroughly discussed all the hazards with them. "So many kids lose limbs and lives on farm equipment, but it can be easily prevented with education and following safety guidelines."

Further information

Whether in the home, car or workplace, it becomes evident when talking to these three firefighters that preparedness is the key to preventing and surviving emergencies. They had enough tips to fill a book, so it would be impossible to include them all in a single article. But the good news is the Alberta Emergency Management Agency's website, www.aema.gov.ab.ca, has loads of useful information for emergency preparedness. Check out the website for fact sheets dealing with fire prevention, home safety, being prepared for at least 72 hours following a disaster and many other useful tips. 🔥

ACICR update

Finding Balance Campaign – preventing seniors' falls before they happen

BY LIZA SUNLEY, Alberta Centre for Injury Control & Research

What do the Queen Mother, Nancy Reagan, Ed McMahon, Pope Benedict XVI and Fidel Castro have in common? They are all seniors who have suffered the serious consequences of a preventable fall.

Sadly, thousands of seniors fall every year in Alberta, often with devastating results. While falling may not seem serious, falls can disable, cause physical and mental distress, and seriously diminish the quality of life, especially for seniors.

Research shows falls are the result of a complex interaction of risk factors, one of which is age. The risk of falling and being injured increases as people get older. One in three persons over 65 will fall at least once a year.

In Alberta, about 62,500 seniors fall every year. In 2003, the year of the latest detailed statistics, fall-related injuries among seniors resulted in about 50 deaths, more than 6,200 hospital admissions and 17,350 emergency department visits.

The hospitalization costs for fall-related injuries currently are estimated at \$88 million per year not including visits to emergency departments, physicians, physiotherapists, the costs of medication or home care. Hospitalization costs will reach \$250 million by 2033 unless something is done to counter the trend.



Alberta Centre for

INJURY
Control & Research

Many falls can be avoided and researchers have identified numerous simple but effective falls-prevention strategies.

The Alberta Centre for Injury Control & Research in the University of Alberta's School of Public Health and the Alberta Medical Association have developed an information and advocacy campaign called *Finding Balance* that focuses on reducing the number of falls among seniors in Alberta. *Finding Balance* is being launched early in November targeting independent, well seniors.

The campaign's themes are based on current research and evidence-based practice. *Finding Balance* is guided by an advisory committee of multi-disciplinary health care professionals from all over Alberta.

The themes of the informational materials are:

- Check Your Medications: Talk to Your Doctor or Pharmacist

- Keep Active: Exercise for Strength and Balance
- Watch Your Step: Wherever You Are

Seniors and caregivers will be able to find falls prevention programs in their communities through *Health Link Alberta* and the *Finding Balance* website at www.findingbalancealberta.ca.

Finding Balance posters, flyers and other support materials will be available in clinics and pharmacies. In November there will be an extensive media support campaign. This will include commercial spots around newscasts on Global TV stations across the province, an extensive web-site promotion and public media interviews with health care professionals talking about steps that can be taken to prevent falls. 🔥

For more information about the campaign, contact the Alberta Centre for Injury Control & Research by calling 780-492-6019 or at acicr@ualberta.ca.

Introducing Alberta's Search and Rescue

ON JULY 1, 1990, Brett Luoma, who was not quite two, wandered away from the Prairie Creek group campsite, about an hour southwest of Rocky Mountain House. Over 300 people showed up to look for Brett, searching all day and into the night. He was found the next day by the British military training in the area. He had drowned in the creek. Just a few years before, another little boy from the Rocky Mountain House area, two year old Jesse Rinker, wandered away from his home and was lost. Though over 1,000 people searched for Jesse his remains were not found until a number of years later when a fire burned through the area where he had gone missing.

After the search for Brett Luoma, a number of residents from the Rocky Mountain House area decided to form a properly-trained search and rescue team. Richard Smith, an RCMP officer stationed at Rocky, had taken a search and rescue course in the U.S. and offered to teach the new volunteers. Search and rescue teams had been operating for many years in the United States and much of the early training for teams in Alberta came from U.S.-based courses. Foothills Search and Rescue, located near Turner Valley, was the next volunteer team to start up followed by others across the province. Today there are 40 ground search and rescue teams in Alberta, three of those being specialized dog teams.

Search and rescue teams are self-sufficient units with their own structures, equipment, training and other resources. Most teams have their own command posts and radio systems. Team members pay for their own personal gear and groups fundraise to buy equipment, land, command posts, vehicles, boats and other needed items. The police, in particular the RCMP, are the primary users and tasking agencies for search and rescue. Municipalities have also tasked search and rescue as a resource during local disasters.

About SAR Alberta

Search and rescue in Alberta began in the early 1990s as a grassroots response to an identified need for trained people to look for lost individuals in wildness settings. The Search and Rescue Dog Association of Alberta is the longest running group in the province, followed by Rocky Mountain House Volunteer Search and Rescue and Foothills Search and Rescue.

The Search and Rescue Association of Alberta – SAR Alberta was incorporated as a society in 1994 with the support of the RCMP, provincial emergency measures, Edmonton Police Service, Calgary Fire Department Dive Rescue, the Search and Rescue Dog Association of Alberta, the Civil Air Search and Rescue Association and numerous volunteer ground SAR groups. Disaster Services and the RCMP were provided with non-voting seats on the board and regularly attend meetings.

What makes volunteer search and rescue such a valuable resource is the fact that a wide range of people with diverse backgrounds and skills are brought to the table. Search and rescue members are farmers, welders, business owners, doctors, lawyers, police officers, plumbers, oilfield workers, heavy equipment operators, housewives, retirees ... the list goes on.

“Being able to adapt to the needs of their community and local environment is the key strength of volunteer search and rescue teams.”

The primary role of search and rescue is to look for lost or missing persons, in both wilderness and urban environments. Looking for missing people (known as Search) is a discipline unto itself, with its own theory, methodology and specialized training and management system. Training in Search includes such courses as search basics, mantracking, evidence searches, searching in an urban environment, lost person behaviour, searching for bodies and bones, using dogs to search and avalanche searching, to name a few. All search and rescue teams also train in the Incident Command System.


Search and rescue teams also have training in various rescue disciplines. All volunteers have standard first aid, patient packaging and wilderness extraction training. However, due to the environments in which they regularly work, some teams will also have advanced rescue capabilities. Many teams have swift water rescue, ice rescue and low angle rescue capabilities. Teams along the eastern slopes of the Rockies may have high angle or mountain rescue capabilities and will do more advanced training on avalanche response. Other teams develop strong civil emergency response capabilities to assist at disasters and other major events. These teams are well equipped, trained and experienced.

Being able to adapt to the needs of their community and local environment is the key strength of volunteer search and rescue teams. Each team can develop the resources, training and partnerships needed to do an effective and professional job for the local police force, municipality and people in their area. However, because the foundational training for search and rescue is the same across Alberta (and in most cases across Canada) search and rescue teams can also come together to provide a huge resource for the province or the country in times of need.

Preventative education has also been a large part of search and rescue in the last 18 years. Two programs delivered to children are Lost-In-The Woods and Hug-A-Tree. Both programs teach basic survival skills to children ranging in age from three to 12. A new national program has recently been introduced into Alberta called Adventure Smart. Adventure Smart incorporates the above two programs and has models that can be used to adapt the program for a wide range of audiences and ages.

The Search and Rescue Association of Alberta, (SAR Alberta) was incorporated

in 1995 as the provincial voice and liaison for the teams. One of the main purposes of SAR Alberta is to act as a single point of contact for government agencies and police forces for volunteer search and rescue in the province. The organization develops standards and policies for search and rescue in Alberta, works with government and law enforcement agencies on SAR-related issues, advocates on behalf of its membership with elected officials, liaises and builds relationships with other emergency response organizations and is a contact point for the media.

One of the main goals over the next year for SAR Alberta is to establish, and in many cases re-establish, partnerships with other emergency response organizations and agencies across the province. SAR Alberta believes that finding common ground and working together to achieve goals at a grassroots level with other volunteers and professionals is one of the best ways to provide effective, professional and efficient service to the people of Alberta. 

For more information about SAR Alberta, contact Monica Ahlstrom, SAR Alberta President, at 780-963-5603, 780-721-6123 or mavada@cruzinternet.com

Helping improve the sustainability of organizations

Developing a common understanding of risk management

BY ELIZABETH RANKIN, B.A.Sc., CRSP, Project Manager, Canadian Standards Association

The need for a common understanding of risk management is critical, particularly in these times of global trade, innovation, economic crisis and threats to public safety and security. Risk can have positive results or negative consequences. However, in many instances, the risk has not been appropriately understood, communicated and managed and has led to negative consequences, such as harmful side effects from medical interventions, major industrial accidents, environmental disasters, occupational injuries and the recent financial meltdown. The need for a common understanding of risk management, by internal and external stakeholders, is critical to the success and sustainability of organizations.

In 1997, the Canadian Standards Association (CSA) developed CSA Q850 Risk Management: Guidelines for Decision-Makers. This standard established a well respected six-step process for managing risk with an emphasis on communication and consultation, which has carried forward into other risk management standards. In 2009 the International Organization on Standardization (ISO) developed ISO 31000 Risk Management – Principles and Guidelines (ISO 31000) with input of numerous countries around the world, giving it great credibility and potential for use.


ISO 31000, in conjunction with the new edition of ISO Guide 73 Risk Management – Terminology, provides a common set of terms and definitions, as well as guidance for establishing a framework and implementing a process for risk management. IEC 31010 Risk Management – Risk Assessment Techniques provides guidance on selection and use of various risk assessment techniques.

Canada contributed to the development of these international standards through its Canadian Advisory Committee (CAC) and its three working group experts. International experts agreed that risk management is not a stand alone activity. To be effective, risk management must be integrated into the governance and operational processes of organizations. ISO 31000 provides generic principles and guidelines for the implementation of a risk management framework and process to help facilitate this.

While ISO 31000 provides generic guidance that can be applied to both public and private sectors, it is not a one-size-fits-all standard, but emphasizes tailoring it to the needs of the organization. Nations can develop their own guidance where deemed necessary.

CSA intends to adopt all three international standards and is developing a new edition of Q850 titled Risk Management – Implementing CAN/CSA-ISO 31000 to help meet the needs of Canadian stakeholders. These standards, along with CSA Z1600 Emergency Management and Business Continuity and CSA Z1002 Occupational Health and Safety – Hazards and Risk – Identification, Assessment, Elimination and Control (under development), will form the basis of the suite of Canadian risk management standards.

CAN/CSA-ISO 31000 and CAN/CSA-ISO Guide 73 are expected to be available in November 2009, with the option to pre-order Q850-10, which will be available mid-2010, from www.shopCSA.ca.

These standards help provide a unique solution to organizations to establish a reliable basis for decision making and planning, improve stakeholder trust and confidence and increase the likelihood of achieving objectives while minimizing the potential for negative consequences, helping improve the sustainability of organizations in Canada and beyond. 

For more information please contact Elizabeth Rankin, Project Manager, elizabeth.rankin@csa.ca.

Dreams and hopes can become a successful reality!

BY TRUDY SMITH, Fire Chief, Barons Fire Department – group photo courtesy of Kenda Lubeck, Farm Safety Grande Prairie; equipment photos courtesy of Launa Donaldson, Stavely and Nanton Fire Department

BACK IN 2006 when I became a fire chief I thought that we should host and run a farm machinery extrication course.

Being in an agricultural province, aside from the oil and gas industry, I believed that firefighters should know what to do in case we receive a call like “Someone is stuck or injured in some piece of farm machinery equipment!”

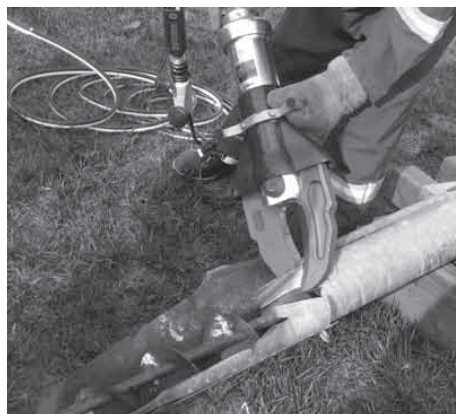
Instead of wondering what to do, and if we are doing the right thing, I was firmly convinced that we needed to be in the “know”! To make a long story short, from August 8 - 11, 2009, in the small village of Barons, we conducted a farm machinery extrication course. Our population of 297 people tripled that weekend.



The second group of students – 49 plus their instructors.



Lifting and cribbing inch by inch – safety at all times.



Not much room for your arm, the jaws of life and the equipment.

Farm machinery statistics

Since 1997, there has been an average of 19 deaths each year and an average of 1,413 farm-related injuries. Children aged 0-18 accounted for 21% of farm deaths and 14% of farm injuries.



Now that's what you call team work!

Through this course we learned a lot. The most important thing we learned was that safety comes first, no matter whose safety we are talking about – be it the farmer, the bystander, the first responders. The saying haste makes waste is true. Take a step back and see what is involved, spend an extra minute observing the situation and then make your decision. Prepare the scene so that it is safe for everyone involved.

The same principle can be applied for any situation, in everyday life. Make sure there are no hazards around that can hurt anyone, and keep your “circles” intact. The Hot Zone is where you are working and don't want anyone that is not involved in the actual rescue; your Warm Zone is where you have your tools, your back-up crew and the material you need. Everything and everyone else stays in the Cold Zone, out of the way of any harm and the people performing the tasks. 🔥

Assessing the hazard of sour gas

BY PHIL HENDY, Assessor, Emergency Planning and Assessment team at the Energy Resources Conservation Board

As much as our wonderful province of Alberta has to offer, it is not without its hazards and associated risks. These hazards and risks can take the form of naturally occurring events such as floods, tornados and landslides or through a technological source such as toxic chemicals generated by industrial operations. For the Energy Resources Conservation Board (ERCB), the technological hazard of sour gas (natural gas containing hydrogen sulphide) is of prime importance. The stringent ERCB regulations aim to ensure that this hazard is fully accounted for through engineering safeguards, emergency preparedness and ERCB audits and inspections.

As sour gas can be very dangerous in relatively low doses, one might ask why the province should allow its exploitation. Well, developing this resource provides sizeable economic revenue and social benefits that can then be passed back to all Albertans via government programs and initiatives. Of course the trade-off, as with any hazardous activity, is that it presents risks. What must always be ensured is that development of this resource is done in the safest manner possible, protecting people, the environment and property.

The concept of risk is expressed in many ways from personal harm to environmental damage or economic impacts. Each type of hazard can present a varying level of associated risk. It is for this reason the ERCB requires industry to assess the hazard of sour gas so that a licensee can create a corresponding emergency response plan (ERP) to help mitigate the risk.

A realistic hazard assessment enables a licensee to calculate the distance and area that an uncontrolled release of sour gas could initially impact. This area is called an emergency planning zone (EPZ) and is required to be included in ERPs that account for sour gas operations. The EPZ then basically becomes a visual representation of the hazard's possible impact area that can be overlaid on a map to show which members of the public must first be accounted for during an emergency. This is why it is so important that the ERCB have the best available assessment of the hazard.

“It is these types of projects and initiatives that work to ensure that the ERCB is a world leader in regulatory standards for the oil and gas industry and that public safety remains of paramount importance in everything that we do.”

In the past, the ERCB requirement for calculating EPZs was based on simplistic dispersion models and a simplified representation of the emergency incident. As science progressed and new technologies were developed, the ERCB also evolved its emergency response requirements. The result of these advancements is the creation of a complex and custom computer modelling program known as ERCBH2S.

ERCBH2S allows industry to provide more realistic site-specific predictions of a sour gas release using state-of-the-art atmospheric dispersion modeling and

hydrogen sulphide toxicology. Although a computer model can only give a best guess as to what “real life” will look like, when used carefully and skillfully it is an excellent tool for undertaking a hazard assessment.

This new method of calculating EPZs now accounts for a variety of details that were simplified in the past. Through the help of this computer program, the ERCB can now account for factors like the composition of the gas; the atmospheric conditions; fluctuations in the concentration of gas; and the length of time an individual might be exposed to a release. All of this helps address the primary issue of how far a potentially dangerous sour gas plume could spread under poor weather conditions. What must be remembered is that as realistic as the model is designed to be, it still contains many safety factors and accounts for uncertainty of the key inputs to ensure the final size of the EPZ errs on the side of public safety. Furthermore, the final shape of the EPZ must then account for site-specific features such as roads, rivers and terrain that might impact a safe and efficient evacuation of the impacted area.

What's next for the ERCB's hazard and risk assessment process? As the ERCB is committed to continually reviewing its requirements to ensure that operations remain as safe as possible, the development of a risk-based component that utilizes the hazard assessment capability of ERCBH2S is currently underway. It is these types of projects and initiatives that work to ensure that the ERCB is a world leader in regulatory standards for the oil and gas industry and that public safety remains of paramount importance in everything that we do. 🔥

You can find everything with Google! Really?

GOOGLE HAS BECOME almost synonymous with Internet searching. It's free, it's easy and it finds lots of information.

Think of an ordinary pair of pliers. They are easy to use and, with a little practice, creativity and instruction can accomplish seemingly endless tasks. They grip, twist, pull, hammer, spread, lever and even scratch. But a screwdriver is almost always better at twisting in screws and pliers will never saw a 2x4 in half.

The point is that Google and other free search engines have limitations. Here are some concepts, strategies and alternatives to make your searching more effective and efficient. The field of information retrieval is extremely complex with many nuances; the following is extremely simplified and only meant to give some concepts and vocabulary so you can explore more.

Information scarcity versus information overload

It used to be challenging to find just a few pieces of useful information. Now, the challenge is filtering out too much useless information. "Everything" on a topic is NOT what you want! You want the most relevant, so you have to think more carefully to clarify and limit your questions.

Free

Information has always been valuable so why is there so much on the Internet for free? Is it trying to sell something? Does it have a particular political bias? Is it just someone needing an outlet for their opinions (or crazy ideas)?

Relevancy rankings

Some search engines offer relevancy rankings indicating the "best" results with stars or bars while others automatically list the "best" ones first. Remember that some website owners pay big bucks to manipulate their pages higher in the results list. Furthermore, relevancy is very personal and context dependent; one minute you might want an academic research article and the

next a cartoon. Or, a webpage might be very useful if you happen to see it first but if it has the same information as the 15 sites you just saw, it's useless and annoying.

Satisficing

A combination of satisfy and suffice. It means settling for an answer that seems "good enough" even if it is not the "best" answer. It can be a good decision-making strategy if you do not need the optimal answers and/or the cost of finding information is expensive in money, time or effort. Sometimes, good enough is not good enough! Other times it is.

Information gaps

Despite the billions (if not trillions) of information packages¹ out there, there is not an answer to every question. Information creation is an arduous road; some ideas never get beyond a thought and many others fall by the wayside between defining the question, finding and compiling data and publishing answers. There is a lot of duplication (same information, different package) and a lot of "secret" information (i.e. not free or not public).

Search engines and indexing databases

Google and Yahoo are pretty much limited to information that is freely available. However, many (or most) of the valuable information in journals, articles, datasets, legislation, etc. are only available for a fee. Free search engines troll the Internet pretty haphazardly but there are many subscription databases that only include results from pre-specified sources known to be high-quality and targeted to certain needs. Of course, these cost for the value-added but many organizations have staff subscriptions (including the Alberta Government Library).

Searching terms and tips: Effective searching is a fine balance between getting too little or too much. These concepts will help you tweak search results but BE

¹ Fancy expression for books, CDs, maps, web pages, photos, brochures, DVDs, recordings, etc.



AWARE that almost every search engine has slightly different mechanisms - check the help information.

Exact phrase: Easy and powerful. "Fire prevention" gets much more targeted results than entering fire and prevention separately. Some systems require single quotes ('), others double quotes (") and some allow either.

Boolean: The Boolean operators AND, OR, NOT help to narrow or expand results. Often, they must be entered in capital letters.

- **AND reduces hits:** fire AND prevention requires both of these words to appear in the document or website. They could be anywhere in the document, though, even 20 pages apart.
- **OR increases hits:** fire OR prevention finds anything with either of those words. Results would likely include items on fireflies and losing one's job.
- **NOT reduces hits (not often recommended for use):** fire NOT job might eliminate items about losing your job but would also eliminate a reference like "it is the job of the fire department to prevent fire."

Proximity

Some expressions might have several variations; such as fire prevention, prevention of fires, prevention of chemical fires. Most search engines allow some variant of "within", "adjacent" or "near" and have distinctions for whether the words are in the order entered or any order.

Examples:

- fire N5 prevention (i.e. near 5 words, any order) would match fire prevention as well as prevention of forest fire
- fire W5 prevention (i.e. within 5 words, specified order) would find fire prevention (or fire and flood prevention but not prevention of fire).

Note: check the terminology - some databases might use something like fire adj/5 prevention.

Truncation and Wildcards: These let you capture word variations like prevent, prevention, preventing. Frequently used characters (e.g. \$, ?, *, #, %) might replace only one character or several.

Examples:

- ho?e might find hose, hole but not hoe (replaces 1 character)
- ho#e might find hose, hole, hoe (replaces 1 or 0 characters)
- ho*e might find hose, hole, hoe, and horde (replaces any number of characters)

Note: be careful about truncating too much

- prevent* would find prevention, prevent, preventing and preventable
- prev* would also get prevail, previous, prevaricate, etc.

Limiters: Many search engines allow you to limit results according to various criteria such as date range, images only, full-text only, a certain journal, holdings of a particular library only and many others. Searching only one field at a time (e.g. title, author, publisher, keyword, subject) helps avoid results that have your search words in other fields.

Thesaurus: Many databases and search tools categorize items by topic or subject to help narrow results. However, if you don't know which words were used, this is not very helpful. A search tool's thesaurus might tell you that nothing comes up under "firemen" because "fire-fighter" is a preferred term.

Librarians and other information professionals work with the challenges of finding information on a daily basis. We know the complexities of organizing

information to increase the odds that it might be found. More importantly, we know that there is no perfect system for organizing and that what constitutes a good piece of information is highly personal to the person asking.

So, if you are looking for simple information, Google might be appropriate. However, be critical of the results, be aware that there is much more information than is found in Google's world and be assured that library staff can help you with ways of finding relevant information. 🔥

For more information about this or other services available through the Alberta Government Library, contact Mica Wickramasekara, Acting Head Librarian, Alberta Government Library, Commerce Place Site at mica.wickramasekara@gov.ab.ca or by phone at 780-427-0389.

AFCA update

Focusing on important member issues

BY BILL PURDY, AFCA Executive Director

Since our 2009 conference in June, the AFCA Board and management have been involved in a number of key member issues. One of the most important is the transfer of ambulance service from the local municipality to the province. While the transfer went smoothly, a number of outstanding issues remain to be resolved. After the Emergency Health Services Act was approved, the department committed to working with the AFCA in developing regulations for first responders, air ambulance and dispatch. A committee was established with members from Edmonton, Calgary and other centres to work on proposed regulations. This process was to have started in March 2009, however, the new start date is now March 2010. The Minister's office has stated that first responders are an integral part of emergency services and that we will continue to be involved, as we were in the past.

The Board held its quarterly meeting August 21, 2009, with 95 per cent of the Board in attendance. Both the 2010 conference in Edmonton and the 2011 conference in Red Deer were discussed.

The conference committee is working on a theme for 2010, as well as keynote speakers. As part of the fine imposed on CN from the Lake Wabamun oil spill in August 2005, the AFCA received a cheque for \$20,000 with the stipulation that the funds be designated towards a speaker on spills and clean up. If you know of an individual, please contact me at bpurdy@explornet.com or 780-719-7939.

The Board has received requests from Drayton Valley and Leduc to hold future conferences. Some time ago, the AFCA Board was advised by its membership that conferences should be held in locations able to accommodate all conference components under one roof to avoid members being bussed from one venue to another. As a result, four years ago the Board approved by resolution that conferences be held at the Mayfield Inn in Edmonton and the Capri Centre in Red Deer until other suitable facilities become available. If you know of such a facility in your area, please contact me (see above paragraph for contact information).

Cory Chegwyn, Yellowhead County Fire Chief, updated the Board on the provincial

radio system. The tending process closed on May 20, 2009 and after an evaluation process was initiated on the vendor proposals received, it was

determined that none of the vendor proposals met the minimum mandatory requirements of Alberta's first responders as specified in the RFP. As a result, the working group is reviewing whether other vendors are available.

The retention and recruitment process is also moving forward. By the time this article is published, Volunteer Alberta will have completed its interviews with various fire departments. The original date for the final report was December 2009, however, the last working group meeting determined that the report would not be completed by December 2009 and recommended to the AFCA Board that the working group be extended for one year. The Board approved the recommendation. 🔥



Highlighting agency successes to date

BY DWIGHT OSBALDESTON, Senior Advisor, Alberta Emergency Management Agency

THE ALBERTA EMERGENCY MANAGEMENT AGENCY (AEMA) was established in May 2007. In addition to combining the Alberta Fire Commissioner's Office with Emergency Management Alberta, the AEMA was charged with creating a world-class organization that co-ordinates a comprehensive, cross-government all-hazards approach to managing emergencies in the province. Provided below are some of the significant successes that have been made to date.

As indicated in the Managing Director's message in this issue, one of the most critical first initiatives was the creation of the AEMA Agency Response Readiness Centre (ARRC), which serves as a central communication and response and resource co-ordination centre for Alberta. It is a central point for the collection, evaluation and dissemination of emergency event intelligence. The ARRC is operational 24x7 and one of its key responsibilities and services is to ensure that Government of Alberta (GoA) ministers and MLAs and federal MPs, as well as stakeholders, are informed in a timely manner of all significant emergency events within their jurisdictions and the GoA's involvement, including response services. The ARRC has been using SoftRisk® to log and monitor incident information since June and is now ready to connect with other users as it is rolled out to stakeholders.

Agency field officers are working at the local level encouraging communities and industry to be connected to and directly involved with the ARRC. Once we have contact information for local officials, we are able to disseminate emergency event information and reports including how the GoA is involved. The real success here requires two-way communication. We need local responders to tell the ARRC when a major event is happening and that GoA support may be needed. The ARRC has matured with respect to its ability to provide necessary services in the past 1½ year and agencies such as the Energy Resource Conservation Board (ERCB) have become strong supporting partners that rely on us to notify other GoA departments and others of their involvement during events. Others, such as Search and Rescue Alberta are key system partners in the execution of our responsibilities.

The ARRC is AEMA's central nervous system and continues to grow beyond the agency, while we seek to provide support for communities and industry. There were seven GEOC activations in 2009 initiated through the ARRC. This is more activations than in a number of recent years combined. Emergency events included pipeline leaks, severe weather, multiple wild fires, warning of space debris and potential impact, H1N1 influenza preparedness and a potential dam breach.

Being ready goes beyond the lights and sirens of response and requires a solid Hazard Identification and Risk Assessment program to be in place. To get there means embracing a "joined-up" system and approach.

Some believe hazard identification and risk assessment is a complicated process and beyond the means of the average fire chief or director of emergency management. The reality

is that this is not the case for the majority of Alberta communities. Generally, an "all hazards" approach gets you to where you need to be and that is being prepared for the effects of most emergency events within the capabilities of the resources that are available. It's about knowing what your limitations are and having a plan in place that addresses those restrictions. Beyond the "all hazards" approach, it's prudent to evaluate special hazards and risks, but it still doesn't have to be overly complicated. For example, in British Columbia the BC Forest Service has simplified the process so everyone involved is capable of assessing risks using a system known as RAC IT - Recognize, Assess, Control IT.

The same uncomplicated principle of "recognizing" special hazards can be applied within Alberta communities to develop a risk profile by identifying and assessing how to mitigate the hazards with the support of individuals readily available within the community. These may include representatives from business and industrial and other local expertise, AEMA staff, as well as the fire chief and director of emergency management. The benefit of a risk assessment is that it allows a community to prioritize the risks and prepare for those with high impact and probability. The agency's new Municipal/Emergency Management Program and the development of the Alberta Risk Protocol are critically effective tools that all municipalities can use.

Additional agency accomplishments include the following:

- Pursuing a province-wide joined-up system for fire, rescue and emergency management. Major consultations have occurred across the GoA and with our stakeholders province-wide. A very successful first-time internal GoA emergency partners symposium was held in February and the second annual agency-sponsored stakeholder summit was attended by more than 350 individuals from communities, industry and others. This two-day event allowed

“The same uncomplicated principle of “recognizing” special hazards can be applied within Alberta communities to develop a risk profile by identifying and assessing how to mitigate the hazards with the support of individuals readily available within the community.”

for networking and orientation sessions. It was one of the largest multi-sector gatherings ever conducted. As well, fourteen community-based regional consultation forums involving key stakeholders were conducted.

- Three major training exercises guided by the agency, recently involving several GoA ministries and related agencies, federal government departments and our neighbours to the south. The ministry has acted decisively on high-intensity residential fire losses. Changes to the Alberta Building and Fire Codes were expedited with very positive reactions from emergency responders and other key stakeholders. A public safety education campaign was created and has been very well received.

- With the solid support of Edmonton-based Public Safety Canada representatives, we have successfully secured and distributed to local communities more federal "Joint Emergency Preparedness Program" (JEPP) dollars than any other province. The agency is working very closely with Alberta Health and Wellness and Alberta Health Services to ensure the GoA and its partners have a plan in place to deal with a potential H1N1/pandemic emergency with clear roles and responsibilities for ministries and others. We are also sponsoring regional community-based joined-up fire/rescue and emergency management systems at the local level; two demonstration projects involving communities in both Grande Prairie and Beaver County are up and running.

- We have also developed a highly effective and successful public education awareness program. The "Three Minute Drill" campaign, which gives Albertans information to prevent fires, has been very well received and has even reached out on an international level.
- To enhance agency effectiveness, we have expanded our organizational network to include a broader and more diverse realm of emergency preparedness and management organizations. In addition to fire, emergency and policy, we have also included various organizations. One of these key systems partners is Search and Rescue Alberta. 🔥

Digest

Agency comings and goings

Shannon Powell joined the agency on July 6 for a one-year term position in the Research and Analysis unit of Operations Support to backfill Gloria Mercer's absence. Shannon came from the private sector with nearly 20 years of experience in various capacities including work with databases. She is located in the CWB office. If you have questions on fire reporting, FERS, milenet or fire safety publications and educational resources, please contact Shannon at 780-644-4823 or email: shannon.powell@gov.ab.ca

Ernie Polsom left the agency to become the Fire Chief and Director of Emergency Management with the City of Leduc on October 19. Ernie has had a very successful career with the Fire Commissioner's Office, and then the Agency where his contribution to public safety was captured in a major revision

of the fire codes, his leadership and commitment to occupational health and safety regulations that particularly improved safety for field officers, and for his significant leadership in establishing High Intensity Residential Fires (HIRF) as a huge public safety milestone for the citizens of Alberta. In addition, his mark is on major improvements to search and rescue and in the work of the Fire Safety Advisory Committee that will bring significant improvement to the fire and emergency management system once fully developed. We will miss Ernie's almost boundless enthusiasm, innovation and passion for our work. And as a great, and indeed founding friend of the Agency, we will remain in close touch with him in his new position as we continue to improve fire and emergency management practices and processes.

2009 Holiday Safety Campaign

The 2009 Holiday Fire Safety campaign kit will be posted on the the AEMA website – www.aema.alberta.ca – in mid-November. Please click the "Public Awareness/Education" tab to access this information.

Donations requested

The fire and emergency services community is in a difficult position with two people currently dealing with cancer – Gloria Mercer with the Alberta Emergency Management Agency and Kyle Resch, a firefighter with the Irvine Fire Department. In an effort to assist these individuals and their family in dealing with the ramifications of the disease, trust funds have been established for both individuals. Information about these two trust funds is provided below.

Gloria Mercer's trust fund has been set up at the Mundare ATB Financial Services Branch. Contributions can be made at any ATB Branch or agency.

Mercer Family Trust Account
ATB Financial, Vegreville, Alberta
Transit # 7779, Account # 1187422-01

The account is being maintained by:

- Glenda Dales, Fire Chief, Mundare Fire & Rescue 780-497-8610
- Charles Gargus, Deputy Chief, Mundare Fire & Rescue 780-764-3062

- Dale McCarty
S.C.O. ATB
Financial Rep
780-764-3786

If you have any questions, please feel free to contact any of the above members. Your assistance is greatly appreciated.

Kyle Resch's trust fund has also been set up through ATB Branch 893, account # 1191446-01. Donations can be made at any ATB branch.

For more information, please contact Lynette at 403-502-9725 or lynette@shockware.com or contact Trudy at 403-330-1734 or email at trudy@safire.ca

In Memoriam

Captain Al Harris of Edmonton Fire and Rescue lost his battle with esophageal cancer on Saturday June 20, 2009 at the age of 53.

A firefighter with 30 years experience, his death was considered in the line of duty related to carcinogens in the air at fire scenes. Flags at city fire halls flew at half mast in honour of Captain Harris. 🔥



►► Continued from the cover page.

2. Never leave cooking unattended.
3. Do not overload electrical circuits.
4. Never leave candles unattended.
5. Put cigarettes out completely and dispose of them safely.
6. Never store gasoline indoors.
7. Prevent arson by keeping your property clean of trash and flammables.
8. Keep flammable materials, such as curtains and furniture, at least one metre away from space heaters.
9. Store matches and lighters in a child proof drawer or cabinet.
10. Create and practice a fire escape plan with your whole family. Get out, stay out and call 911.

“Fire not only destroys homes, it can forever change lives,” said Danyluk. “It is the responsibility of every Albertan to prevent fires. We can all make small changes that will help keep our families safe and secure.” 🔥

To learn more about keeping your family fire safe, visit www.3minutedrill.alberta.ca, a new and interactive website and one-stop source for a wide variety of information about fire safety.



Edmonton Fire Chief Ken Block presents the Nedohin family with Edmonton fire prevention activity books. These books are packed with fire safety activities. Children across the city were given the book as a fire prevention education tool.



Edmonton Assistant Fire Marshal Tim Vandenberg formally kicks-off the 2009 Fire Prevention Week.



Edmonton Assistant Fire Marshal Tim Vandenberg and Municipal Affairs Minister Ray Danyluk test a smoke alarm at Dave Nedohin's home.

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Fire Services Medal update

The Fire Services Exemplary Service Medals/Bars/Certificates have been received from the Chancellery. There are two ceremonies (Edmonton/Calgary) currently being planned for March 2010. Further details will be made available in early 2010. If your department would like to coordinate your own presentation in advance of the March ceremonies, please contact Shannon Powell before January 15, 2010. Shannon can be reached via email (shannon.powell@gov.ab.ca) or you can call her toll-free by dialing 310-0000, then 780-644-4823. Shannon will then coordinate the delivery of your medals/certificates.