



Alberta

FIRE NEWS

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Profile on Tom Makey, former Fire Commissioner

Greetings from Guy Boutilier

The end of an era

April 30, 2001 marked the end of an era in the Alberta fire service as Fire Commissioner of Alberta, Tom Makey worked his last day as an employee of the Alberta Government.

Despite a forced entrance into the fire service, Tom Makey has built an illustrious career over the past 40 years. Tom's fire service career began in 1960 when he trained and then worked as a registered psychiatric nurse for the Provincial Mental Institute (now Alberta Hospital Edmonton). When he moved into residence at the hospital in the spring of 1961, Tom was informed that a condition of living in residence was joining the volunteer fire department. As Tom recalls, it was worth doing. "By doing five fire watch tours I could earn \$25 a month which translated into free room and board."

After responding to his first fire, Tom met with Fire Chief Lorne Vandenberg to discuss training opportunities. As Tom recalls, "Lorne began providing me with training within days of the fire. He spent time with



Tom Makey shows Municipal Affairs Minister Guy Boutilier some resources used to educate Alberta children about fire and injury prevention.

me over and above the training nights and spared no effort to teach me anything I wanted to know." By 1962, Tom was starting to do some training of others. After taking a number of courses, including the first Pump Operator Course at the Alberta Fire Training School (AFTS) Tom soon found himself in a position of providing most of the training to others on the fire department. Shortly thereafter, Tom was promoted to Deputy Fire Chief, a position he maintained till he left the fire department.

According to Laird Burton, current Fire Chief for Strathcona County Emergency Services, and a former supervisor for the AFTS, Tom left a lasting impression at the

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A new Minister

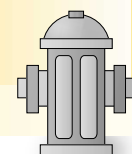
It is my great pleasure to greet the readers of Alberta Fire News for the first time as Minister of Municipal Affairs.

I welcome the opportunity to work with Alberta's fire service through the Fire Commissioner's Office. Alberta Municipal Affairs works to ensure that Albertans live in safe and sustainable communities. Fire protection is an important component of this responsibility. Through the Fire Commissioner's Office, this Ministry will continue to provide leadership to all municipal fire services in the province and help them deliver a high level of service to the people in their communities.

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The end of an era

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fire department. “Tom was considered a model for all firefighters at Alberta Hospital Edmonton. Although I didn’t meet him until I took a course at the Alberta Fire Training School, I had heard about him, and always admired him. He is a consummate fire professional,” said Burton.

In June 1968, Tom joined the Fire Commissioner’s Office as an Inspector. This position enabled Tom to travel through much of the north/central and northern parts of Alberta which, he says, “was a great experience.” Austin Bridges was the Fire Commissioner, Bill MacKay was the Deputy Fire Commissioner and managed the inspection program and Dixie Shuttleworth was the “old hand” at inspections. It was Dixie who provided Tom with his orientation and training—instruction over a two-week period and then Tom was on his own.

Tom transferred to the Fire Services Section, which included the Fire Services Field Unit and the Alberta Fire Training School in April 1970. There were no full-time staff members at AFTS, so the advisors from the regional offices gathered each spring at the school and everyone worked as instructors. At the end of June, everyone would go back to their advisor duties.

A couple of years after transferring to the Red Deer office, and serving as an advisor there, Tom was asked to take on the duties of Director at AFTS. At first, he worked as Director on a part-time basis, out of Red Deer, but two years later, Tom moved to Vermilion as the first full-time Director of the AFTS. Only a year later, after the retirement of Dick Beland, Tom’s friend, mentor and boss, Tom moved back to Edmonton as the Deputy Fire Commissioner in charge of the Fire Services Section.

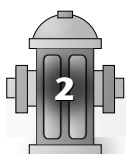
According to Bill MacKay, former Fire Commissioner, Tom was both a steady influence and a man of vision for the fire service in Alberta. “Tom is a real forward thinker. He was very good at looking ahead, stepping outside of the box and preparing for future developments,” said

Milestones of an illustrious career dedicated to improving fire service in Alberta

- | | |
|--|--|
| 1960 Commenced government service at Provincial Mental Institute (PMI) | 1976 Transferred to Vermilion. Full time as Director of AFTS. Still Fire Inspector III |
| 1961 Became part of the PMI Fire Department | 1977 Promoted to Deputy Fire Commissioner-Edmonton office, with Fire Services Section, which included AFTS and Fire Services Advisors in the regional offices |
| 1968 Transferred from Health to Fire Commissioner’s Office. Worked as Fire Inspector (Fire Inspector I) | 1983 Added responsibility for Program Support Section which included Statistics and Public Education |
| 1970 Promoted to Fire Inspector II. Worked as Fire Services Advisor, Edmonton Office | 1987 Promoted to Fire Commissioner |
| 1972 Transferred to Red Deer Office, Fire Services Advisor | 2001 Retired April 30, 2001 |
| 1974 Promoted to Fire Inspector III. Worked as Director of Alberta Fire Training School. Also did Fire Services Advisor work in Red Deer area | |



Tom Makey kicking off the Fire Prevention Week launch at the Centre Block in Ottawa, October 2000.



MacKay. In fact, the expansion of the AFTS is in large part the result of Tom's vision and efforts. "Tom did an excellent job with the training school. He took charge, worked hard to get the facilities developed and turned it into a first-class operation," said MacKay.

In October 1987, Tom replaced MacKay as Fire Commissioner. Tom remained in this position for 13 and a half years. During his years as deputy fire commissioner and fire commissioner, fire-related deaths and injuries in Alberta dropped by 50 per cent due, in large part, to the effective public education efforts of Tom's staff, the tremendous effort of the municipal fire departments and the support of the media.

Looking back over his career, Tom is proud of the accomplishments and improvements that have been made over the years. "In my opinion, it was as effective an operation as any in Canada and certainly stronger than most," said Makey. One thing that Tom is especially proud of is the ability of the Fire Commissioner's Office to produce amazing results with a small staff. "I dare say the production from those six positions is something I am extremely proud of," said Makey.


Reflecting back on his 40-year career to date, Tom is quick to acknowledge the benefits that he has gained. "I consider it a rare privilege to have worked with so many really fine and dedicated people in the Fire Commissioner's Office, the Government of Alberta in general and in the fire departments and communities throughout Alberta. The position also offered me the opportunity to meet with many great people from across Canada, the United States and even the Swedish Fire Protection Association. We are all dealing with so many of the same problems and fortunately we are all blessed to have truly dedicated people working with us," said Makey.



Guy Boutilier congratulates Tom Makey on his illustrious career and his retirement.

In fire service organizations across Alberta and throughout Canada, there is a tremendous respect for Tom's dedication to the fire service. According to MacKay, "Tom's retirement will leave a big hole. Many people have faith in Tom and what he's done. It will be tough to find a good replacement."

Burton also agrees that it will be tough to replace Tom. "He really cared about the profession and helped others to become more professional. He looked at the whole broad perspective and made sure that the Fire Commissioner's Office played a pivotal role in Alberta." Burton adds that, in addition to the tremendous amount of influence that Tom has, he leaves a legacy to allow some of his vision to carry on.

While Tom is leaving the provincial government, he's not ending his contribution to the fire service in Canada. In fact, he is looking forward to his retirement so that he can spend more time working with the Council of Canadian Fire Marshals and Fire Commissioners, Fire Prevention Canada and the Alberta Fire Chiefs Association. 

A new Minister

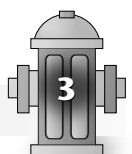
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Tom Makey has provided excellent leadership as Fire Commissioner and his experience will be missed. I understand that he plans to continue some of his volunteer work in the fire service during his retirement and this is good news for all of us! Enjoy your retirement Tom, and keep in touch.

In the upcoming months, Municipal Affairs will continue to administer funds from the Municipal Sponsorship Program for fire services training. We will also continue to emphasize the importance of regional partnerships and intermunicipal cooperation in the area of fire and emergency services.

I look forward to meeting as many of you as possible in the coming months.

Guy Boutilier, Minister of Municipal Affairs



A year to remember

2000 was an incredible year for the Red Deer County Fire Department, and it had nothing to do with the Y2K problem. During a nine-month period, the department responded to two very large hangar fires as well as the devastating tornado that touched down at Pine Lake on July 14, 2000.

“Most of our calls relate to grass fires, especially in the spring, but this past year certainly changed that,” said then Acting Chief Cliff Fuller. “With more infrastructure going up around the province, we’re getting more calls for structural fires. As well, no one ever knows when a disaster such as the Pine Lake tornado will strike, so we always need to be prepared.”

The department consists of two full-time firefighters—the chief and deputy chief—working together with 35 volunteer firefighters who work from four stations located around the county. When necessary, the county also counts on assistance from its sister fire departments located in Sylvan Lake, Innisfail, Bowden, Spruce View, Elnora and Delburne. The Red Deer County Fire Department has mutual aid agreements with each of its sister fire departments as well as with the City of Red Deer Fire Department. “We put our mutual aid into place quite often and have gotten to know the firefighters in the other departments quite well,” said Fuller.

Serving a population of 17,000, the Red Deer County Fire Department’s jurisdiction starts on the west at the fifth meridian and extends east to Range Road 252. The north boundary is at the Blindman River and goes south to Highway 42.

The Pine Lake story

It’s every fire department’s nightmare—a major emergency that results in deaths and numerous injuries. All the training, practice and experience are put into action in dealing with the emergency, and how well the emergency is handled depends on those who are in charge. On the night of

Twelve people were killed by the Pine Lake tornado: four women, seven men and a two-year-old boy. A total of 140 people were transported to hospitals in Red Deer, Lacombe, Innisfail, Olds and Stettler for treatment, with the majority being treated and released relatively quickly. Thirty of the seriously injured were transferred to hospitals in Calgary and Edmonton. Approximately 450 RV sites were hit by the tornado, with virtually complete destruction of the RVs.

July 14, 2000, Cliff Fuller was the first to receive the 911 call and he immediately raced to the scene. “At home the weather wasn’t bad, but off in the distance I could see black clouds so I knew something was up. As we got closer to the scene we had an idea of what we were coming into. Trees were strewn across the road and large hay bales were all over the place.”

As the initial responder, Fuller immediately mobilized an Emergency Operations Centre command post, pulled in all fire departments in their mutual aid agreements and set up a temporary morgue. “As my men came up over the hill, they immediately saw the catastrophe they were facing,” said Fuller. He remained on scene for 10 days as the emergency site manager.

Dealing with the devastation that resulted from the Pine Lake tornado involved thousands of volunteers. More than 20 fire departments were involved including the

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Firefighters and rescue personnel search through the rubble for victims of the Pine Lake tornado.



Alberta fire losses in 2000

Nearly three-quarters of all Alberta fire deaths during 2000 happened in private homes. However, only one-quarter of the province's fires during the same period were located in private homes. This means that home fires are more likely to result in death than other fires, so education about home fire safety is especially important.

Home fires at a glance

(% of All Fires)

Fires-25%

Fire Deaths-73%

Fire Injuries-54%

Property Losses-35%

This information was extracted from the Fire Statistics Information System at the Fire Commissioner's Office. This system also revealed other useful information about fire losses in 2000.

As of March 26, 2001, a total of 5,925 fires were recorded for the year 2000. These fires resulted in 22 deaths, 306 injuries, and \$136,322,221 in property damage.

Fire deaths in the year 2000 were reduced by 57% from the 1999 total of 51. Fatalities included: 13 men, 8 women and one child under 16 years of age. The causes of fatal fires were: arson (4); smoking (4); ignition of bedding or gasoline and physical/mental disability (2); falling asleep while deep frying (2); light bulb igniting drapery (2); flammable/combustible liquid ignition (2); thawing with a torch (1); hot engine igniting grass/brush/leaves (1); inadequate control of open fire in grass/trash/rubbish (1); ignition of paper/packing material and impaired (suspect alcohol/drugs/medication) (1); and unknown causes (2).

Of the 306 injuries, 28% were to firefighters and 72% to civilians. The male to female ratio for civilian injuries was 3:1. The major causes of fires where injuries occurred in both firefighters and civilians

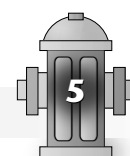
were: stove-top deep-fat fryer/pan (14%); smoking (10%); heating equipment (10%); other cooking on stove-top burner (8%); arson/set fires (8%); child fireplay (6%); and electrical wiring related (5%).

Table 1: Fire losses in Alberta 1991-2000

Type	Fires	Deaths	Injuries	Property Loss \$
1991	8097	51	345	117,713,851
1992	6882	25	448	103,587,506
1993	6735	36	491	103,320,281
1994	6897	25	490	110,138,438
1995	6528	37	424	111,140,466
1996	6304	41	451	120,556,379
1997	6670	37	448	141,960,034
1998	6576	20	429	139,511,345
1999	6376	51	388	143,473,507
2000	5925	22	306	136,322,221
Total	66,990	345	4,220	1,227,724,028

Table 2: Fire losses in Alberta by major property classes

Property Classification	Fires	%	Deaths	Injuries	Property Loss \$
Special Property-Transportation Equipment	2936	50	4	62	25,619,368
Residential	1656	28	16	180	52,635,786
Miscellaneous Property	556	9	0	8	12,345,929
Storage Properties	297	5	2	14	19,724,294
Assembly	178	3	0	10	5,479,006
Mercantile	118	2	0	11	13,273,970
Industrial Manufacturing Properties	98	2	0	11	5,035,851
Institutional	37	1	0	7	245,076
Business and Personal Service	35	1	0	1	1,817,280
Unknown	14	0	0	2	145,661
Total	5,925	100	22	306	136,322,221



Fire losses by major property classes are shown in Table 2. The special property-transportation equipment category comprised mainly of ground transport vehicles and outdoor properties accounted for the largest number of fires (50%) followed by residential properties (28%). The majority of fire deaths (16), injuries (180) and property losses (\$53 million) occurred in residential properties.

Homes representing one/two-family dwellings, apartments and mobile homes accounted for 1,507 or 91% of residential properties (Table 3), and these fires are further analyzed below.

Major causes of home fires in Alberta for 2000 are presented in Table 4. The top six known causes of home fires were related to cooking, home heating, smoking, arson/set fires, candles and electrical.

Fires related to cooking comprised the majority (24%) of the known causes of home fires. Cooking fires can be divided into two types: those involving overheated cooking oil and all "other types of cooking." In 2000, nearly two-thirds of cooking fires involved the second type. These fires resulted in two deaths and accounted for 33 (20%) fire injuries in homes. It must be noted, however, that 30 per cent of "other types of cooking" involved cooking oil as the material first ignited. Therefore, cooking oil was the most common material ignited first in all cooking-related fires.

Home heating fires were comprised mainly of fires originating in fireplaces (33%); central heating furnaces (22%); chimney/fluepipe (20%); space heaters (13%); water heaters (11%); and other (1%).

Smoking-related fires accounted for 25% of home fire fatalities. These fires ignited mainly agricultural/forestry products (22%); bedding/mattress/pillow (17%); upholstered furniture (16%); trash (12%); and paper/cardboard (9%).

Arson or set fires comprised mainly of unclassified/motivation cannot be determined (43%); suspected arson (20%); vandalism/mischief (10%); vengeance/spite (7%); arson to satisfy compulsive desires (6%); arson to cover crime or for fraud (3%); and all other (11%).

Table 3: Alberta home fires: 2000

Type of Home	Fires	Deaths	Injuries	Property Loss \$
One/Two-family dwellings	1036	11	101	35,214,526
Apartments	351	3	57	9,487,181
Mobile Homes	120	2	8	3,221,895
Total	1,507	16	166	47,923,602

Table 4: Major causes of home fires in Alberta: 2000

Fire Causes	Fires	% Fires	Deaths	Injuries	Property Loss \$
Other Cooking	231	15	2	33	3,359,657
Heating Eqpt. Related	189	13	0	24	6,579,792
Smoking	166	11	4	21	6,884,829
Overheated Cooking Oil Fire	135	9	0	18	2,034,644
Arson/Set Fire	128	8	4	13	4,006,472
Candle (accident)	96	6	0	9	2,349,675
Electrical Distribution Equipment	92	6	0	8	4,899,856
Child Fireplay	65	4	0	11	2,088,401
Clothes Dryer	55	4	0	0	398,587
Exposure Fire	54	4	0	0	1,474,895
Appliance/Equipment Related	52	3	0	3	1,063,555
Light/Fluorescent Bulb	32	2	2	0	1,497,531
Flammable/Combustible Liquid Ignition	20	1	1	3	431,867
Other Causes/Unknown	192	13	3	23	10,853,841
Total	1507	100	16	166	47,923,602

Accidents (74%) were the leading act or omission in candle fires. Other notable acts or omissions were falling asleep or being distracted (8%), combustibles placed too close (6%) and improper container (2%). Candle-related fires mostly ignited furniture (24%), clothing/fabric (15%), paper/cardboard (10%), bedding (8%) and carpets (4%).

Electrical fires were primarily associated with permanent or temporary electrical wiring (68%) and electrical switch/outlet/fuse/circuit breaker (17%).

Smoke alarms were installed in only 59% of Alberta homes that experienced fires in 2000. Of these only 40% activated during fires. Where alarms did not activate 33% were due to lack of a power source or battery (19%); dead battery (5%); electricity off (2%); and electrical not connected (7%). 🔥

For further information on fire statistics, please call the Fire Commissioner's Office at (780) 415-0546.



Profile on M.D. of Wood Buffalo Fire Services

Urban expansion is creating an interesting challenge for the fire department of one of Alberta's fastest growing communities. With the fourth highest housing market in Canada, expanding industrial and economic growth and a recently retired regional fire chief, Fort McMurray's newly appointed regional fire chief Jeff Carlisle has a lot on his hands. "One of our major focuses is on strategic planning to ensure that we stay ahead of the challenge," says Carlisle. "We have a long history of outstanding service delivery and we want to make sure that continues."

The Fort McMurray Fire Department is responsible for fire and emergency response within the large expanse of the Regional Municipality of Wood Buffalo, an area that spans 69,000 square kilometres. The current estimated permanent population in the municipality is 42,000 with an additional 10,000 to 15,000 located in worksite camps throughout the area.

The staff of the fire department deliver fire and emergency response services, including emergency medical services (EMS), firefighting, 911 call answer services and dispatching of fire and EMS as well as clerical and administrative support. The department is also responsible for road ambulances and the Emergency Air Medevac service through helicopter. It averages about 2,500 responses each year, with about 80 per cent being EMS calls. The department currently has a staff of 78, "but with the projected increase in industrial and economic development over the next five years, we'll be expanding our department to meet the growing need," says Carlisle.

One of Fort McMurray's unique features is the fact that its major industry is remote from the main urban area. Having a huge industrial component, which encompasses a large area of the fire department's jurisdiction, isn't a problem though because both Suncor and Syncrude have their own resources for fire and emergency response. However, a mutual aid agreement with the Fort McMurray Fire Department ensures assistance whenever it's needed. Given that the City of Fort McMurray is approximately 400 kilometres northeast of the nearest large centre, Edmonton, the mutual aid agreement provides the assurance of additional services and personnel when necessary.

The Fort McMurray Fire Department primarily services the urban and surrounding area of the City of Fort McMurray. With mostly residential and some small light industry within the urban area, most of the responses are for structural fire protection, EMS, Air Medevac, vehicle collisions and extrications, medical emergencies and patient transfers. Additionally, the department's fire marshal has regional responsibility for the safety codes officers and overall compliance with regulations. This office also works closely with the community in promoting fire prevention education and participating in fire safety activities.



New fire chief, Jeff Carlisle, is prepared for the challenges ahead. Prior to being appointed chief of the Fort McMurray Fire Department, Jeff served a 24-year career with DND Fire Services then served as the Director of Emergency and Environment Services for SERCO Facilities Management at Goose Bay, Labrador.

The rural areas of the municipal district are covered by six volunteer fire departments located in the communities of Saprae Creek, Anzac, Conklin, Chard-Janvier, Fort Chipewyan and Fort MacKay. The volunteer departments are under the Regional Fire Chief who is responsible for their services and budgets. These fire departments serve as primary responders for the areas around them. Each volunteer fire department has a fire hall equipped with at least a pumper, with some having a tanker and light rescue vehicles. "The distance between our most northern fire department to our most southern fire department is approximately 500 kilometres, with the other departments scattered between these two points in a north/south line," says Carlisle. "Working closely with the volunteer fire chiefs of these six locations ensures a smooth delivery of service throughout the jurisdiction." 🔥



AWNA Fire Prevention Week contest winners

Central Alberta weekly newspapers captured two of the three first-place prizes in the Alberta Weekly Newspapers Association (AWNA) Fire Prevention Week 2000 Coverage Competition.

The competition is sponsored by the Fire Commissioner's Office (FCO) in recognition of the valuable support that AWWA provides in educating Albertans about fire safety. According to Dennis Merrell, AWWA's executive director, the competition, which has been running since the 1970s, provides an excellent incentive for weekly newspapers to participate in the FCO's fire prevention week campaign. "The contest provides an added bonus in encouraging the newspapers to put effort into spreading the messages about fire safety education. We are certainly pleased that so many of our member papers get involved in this very important message," said Merrell.

The competition awards prizes in three circulation categories: Less than 2,500, 2,501-5,000, and 5,001 and over. The *Innisfail Province* won in the 5,001+ category, the *Airdrie Echo* won in the middle category and the *Fort MacLeod Gazette* captured first prize in the circulation less than 2,500 category.

the local community and fire department; innovative coverage and attractiveness; and use of articles supplied by the Fire Commissioner's Office.

In addition to first place in the three circulation categories, honourable mentions in each category were also awarded. The *Provost News* and *Sundre Round-Up* were awarded in the Less than 2,500 category; the *Edson Leader* and the *Sedgewick Community Press* received honourable mention in the 2,501-5,000 category; and the *Wetaskiwin Times Advertiser* and the *Redwater Review* were recognized in the 5,001+ category.

First-place winners in each category were presented with a plaque and honourable mention winners received certificates at the January 2001 AWWA Symposium in Calgary. Additionally, the *Innisfail Province* won the random draw from the first place and honourable mention recipients for a luxurious weekend for two at the Westin Hotel in Calgary, compliments of the Alberta Fire Chiefs Association, the Fire Commissioner's Office and the Westin Hotel. 🔥



Entries are judged on a variety of criteria including: overall effort and interest of the publisher in bringing the fire safety message to its readership; locally written articles, editorials and photographs; involvement with

Annual Fire Chiefs Conference and Trade Show June 24-27

Alberta Fire Chiefs Association hosts 53rd conference

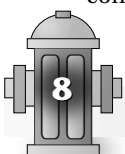
Strathcona County serves as the ideal location for Alberta's 53rd Annual Fire Chiefs Conference and Trade Show. Jointly hosted by Strathcona County Emergency Services (Sherwood Park) and the City of Fort Saskatchewan Protective Services, this year's conference takes place June 24-27, 2001, and also includes a golf tournament on Saturday June 23rd. This year's conference theme is *Working with Industry*.



With both communities surrounded by petrochemical and other industries, the hands-on aspects and practical knowledge of the conference will benefit everyone. The theme not only reflects the cooperation between the fire service and the petrochemical industry, but also acknowledges the rate of industrial growth in Alberta communities. An industry-based panel discussion and industrial site visits will enable conference

delegates to obtain firsthand knowledge about working with industry, transporting industry-based goods and cooperating to create safe communities. The addition of close to 100 booths at the trade show will provide a well-rounded conference of interest to all fire service personnel. 🔥

For more information about the conference, which also includes a golf tournament, barbeque and companion's program, call Connie Sararas, Strathcona County Emergency Services, at (780) 467-5216 or Betty Carbert, Fort Saskatchewan Protective Services, at (780) 992-6274.



Air bags carry double whammy

New equipment in many General Motors vehicles may have an impact on fire service personnel responding to vehicle collisions.

According to Alan Nagel, instructor at the General Motors Training Centre in Calgary, many 2001 model year General Motors vehicles including the 2001 Buick LeSabre, Pontiac Bonneville and Oldsmobile Aurora as well as the 2001 Chevrolet Monte Carlo are equipped with a 'Dual-Stage' Supplemental Inflatable Restraint system. "A 'dual-stage' deployment module is equipped with two independent deployment charges," says Alan.

"These systems sense the impact severity to determine if the conditions warrant a less forceful deployment of the front air bags.

During a low intensity (low-pressure) deployment, the Sensing Diagnostic Module initiates a single charge. **A more severe impact will result in both charges being deployed to increase the speed and pressure of the deployed frontal system."**

As a result, fire and paramedic crews should be aware that, in the event of a low intensity impact that resulted in the single-stage deployment of the air bags,

the secondary charge will still have the electrical potential for an accidental re-deployment.

If, during extrication for instance, an electrical short to the battery positive (+) and negative (-) occurs in the secondary deployment circuit, the bags will be re-inflated with the secondary charge. According to Alan, the best course of action is to sever the electrical cabling at the battery prior to any extrication procedures. 🔥

For more information, contact Alan Nagel at the General Motors Training Centre at (403) 287-5550.

Saving lives through drowning prevention

Specialized training offered for first responders

An organization dedicated to saving lives through water safety education has developed two new courses specifically for first responders. The Lifesaving Society's mission is to prevent drowning and water-related incidents through public education and lifesaving, lifeguarding and leadership training. The society's efforts have certainly paid off. Over the last 24 years drownings in Canada have decreased by 50 per cent.

According to Larry Patterson, program manager, the inclusion of two new courses for first responders reflects the growth in water-related activities. "We know that first responders are well trained in first aid and rescue, but not necessarily water-related rescue. As a result, we've developed two courses specifically for first responders to assist them in their first aid and rescue efforts," said Patterson.

The **Swiftwater Rescue** course prepares participants to assume a leadership role in the event of a whitewater emergency situation. The training promotes the decision-making process that allows

participants to evaluate many emergency situations in different aquatic environments and adopt the appropriate method of assistance. The course is intended for people with previous first aid and rescue training who may not have learned or practised specific rescue techniques related to moving water.

The **Boat Rescue for First Responders** course teaches participants how to plan and lead a boat rescue mission, how to recognize the different types of emergencies and determine the level of alert required, and how to respond to a boating emergency without putting their own lives in danger.

branch focuses on public education and research to decrease the number of injuries and deaths from water-related incidents. Since 1988, the society has made drowning research its number one priority.

In addition to its focus on education, the Lifesaving Society also honours and recognizes individual, affiliate, partner and associate members in many ways. The society distributes proficiency awards, which are earned by individuals who have achieved advanced rescue skill levels, as well as branch, national and Commonwealth service and rescue awards. In fact, the Lifesaving Society of Canada issues the most lifesaving awards of all countries affiliated with the Royal Life Saving Society.

The Lifesaving Society is affiliated with many national organizations, agencies and institutions that work closely with the society to save lives through drowning prevention. 🔥

More information about the society, its programs or awards is available by calling (780) 415-1755, e-mailing the society at experts@lifesaving.org or visiting its web site at www.lifesaving.org.

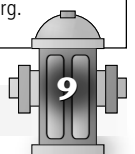


LIFESAVING SOCIETY

The Lifeguarding Experts

The Lifesaving Society is a charitable, not-for-profit organization dedicated to saving lives through drowning prevention. It is volunteer based and operates nationally.

The Alberta branch of the society was created in 1924 and now includes responsibility for the Northwest Territories. The




Lethbridge Fire Service awards 2000

A tradition of recognizing achievement in fire safety is alive and well in Lethbridge, Alberta. Each year the Lethbridge Fire Department coordinates an official recognition during Fire Prevention Week for individuals and organizations that have made a difference in improving fire safety in the city. The department's seventh annual Awards Day Ceremony took place on October 13, 2000 at the Lethbridge Seniors Centre.

According to Jack Chapman, safety codes officer with the Lethbridge Fire Prevention Bureau and master of ceremonies for the event, "this year's award ceremony was a great success. Not only did we have a good attendance level of recipients, their families, dignitaries, presenters and firefighters, but we also had great success in locating sponsors for the awards."

This year, 17 awards were presented to local businesses and organizations. Awards are given for businesses and organizations that promote fire safety, including first-time and long-term recipients that have continued to focus on fire safety. Additionally, the Michael Enander Scholarship was awarded for the sixth year. The scholarship, started by Michael Enander's family after his death in a motor vehicle collision, is awarded to a child of a fellow firefighter.

The ceremony also recognized winners of the department's Fire Prevention Week contest, with prizes awarded for first-, second- and third-place in both junior and senior high school. Members of the local media judged the poster contest.

A contest was also held at the elementary school level for the best home escape plan. The contest encouraged junior and senior high school students to create effective wall posters while elementary students drew home fire escape plans. More than 30 prizes were awarded to students. 



City of Lethbridge Fire Chief Tom Wickersham (left) and Chief Fire Marshall Paul Little present Henry England (left) and Paul Peacock of Kawneer Company of Canada with their 7th year Life Safety Award, presented to local businesses that maintain their establishments to the Alberta Fire Code for a period of three years or more.

Contest Winners

Fire Safety Awards were presented to:

7th year recipient

- Kawneer Company of Canada

6th year recipients

- The Black Velvet Distilling Company
- Lethbridge School District No. 51
- CEP Automotive
- Parkside Inn
- Professional Building
- Catelli-Borden Foods

5th year recipients

- Cargill/ATL Terminal
- Super 8 Motel
- Petro Canada (16 Ave & Mayor Magrath Drive)

4th year recipient

- Pratt & Whitney

3rd year recipient

- Lethbridge & District Exhibition

1st year recipient

- Hillhurst Towers
- Honkers Pub
- Taco Time 13th Street North
- Berkley Square Apartments
- Kosmos Apartments

There was no 2nd year recipient this year.

Poster Contest Winners

Senior High

- 1st place - Meghan Maruyama
- 2nd place - Fabian Baiguera
- 3rd place - Leslie Small & Katie Firth

Junior High

- 1st place - Evelyn Eisses
- 2nd place - Cheryl Houweling
- 3rd place - Dallyn Robinson

Michael Enander Scholarship was awarded to:

- Jeff Brooks

Elementary Student Contests

Thirty prizes were donated for the elementary students contest, ranging from skiing packages for two to a family plane ride over the city to t-shirts. One student in each of the 21 elementary schools in the city received a bowling pass from Top Ten Bowling Centre valued at \$35.00.

Additionally, the following businesses donated the prizes for the elementary school contest:

Alpenland Ski & Sport

Ski equipment rentals for a family

Cineplex Odeon Theatres

Movie passes for 4 persons & movie posters

City of Lethbridge

Fire Department-Fire truck ride for a family

City of Lethbridge

Leisure Services-3 month recreation pass

Lethbridge Flying Centre

1 hour flight around the city for 3 persons

Lethbridge Hurricanes Hockey Club

12 game passes

Pepsi Cola Canada

2 Pepsi t-shirts and 2 Timex watches

Sears Canada

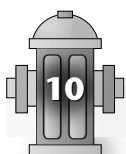
ABC fire extinguisher and a smoke alarm

Streetside Eatery

Dinner value of \$40.00

Superior Propane

Small outdoor barbecue



Safe kids for a safe future

A focused approach to lessen the incidence of preventable injury and death among children is gaining momentum in the Municipal District of Bonnyville.

“Safe Kids for a Safe Future” is a unique partnership of people who are excited about working together to prepare children for an injury-free future. The partnership includes representatives from fire departments, ambulance service, schools, health units, the RCMP and Alberta Agriculture.

The partnership evolved from a meeting in October 2000 between Brian McEvoy, fire chief of the Bonnyville Regional Fire Authority, and Lida Thomson, community facilitator for the Lakeland Regional Health Authority’s Injury Control Project. Together with Robert Kosterman, supervisor of protective services with the City of Cold Lake Fire Rescue Department, they came up with an idea to obtain *Risk Watch* materials funded by the 1999/2000 Municipal 2000 Sponsorship Program and administered by the Fire Commissioner’s Office at Alberta Municipal Affairs. They also applied for and received additional funding from the Alberta Centre for Injury Control and Research Community Funding and from the Municipal 2000/2001 Sponsorship Program.

Risk Watch was launched in Glendon School, near Bonnyville, with about 150 students in Grades K to 9. Thomson and the local volunteer fire chief, Albert Karas, oriented the school staff and each teacher received a manual that, according to Thomson, “is fundamental to the success of the project.” Based on an idea developed by Pat Graham of the Municipal District of Rocky View, the Lakeland Injury Control Project team compiled “resource tubs” that include items to support each teaching module, such as a bike bell, cell phone, life jacket, infant car seat, reflec-

tive tape, pill bottles and pool toys. As Thomson points out, “this makes the *Risk Watch* curriculum an easy choice for teachers and makes learning fun for the children.”

The ideas and energy created have attracted the interest of other district partners, including people from the health sector, other school divisions, Metis Settlement schools, the local emergency medical services, community health councils, various agricultural agencies and local industry. According to Thomson, “these partners will be instrumental in changing the current perception that injuries are beyond anyone’s control. Injuries are predictable and preventable and the ‘Safe Kids for a Safe Future’ network will help change how people look at accidents.”

The program curriculum is being implemented in all schools in the Lakeland School Division and the Northern Lights School Division. As McEvoy says, “You will not have a significant impact on injury rates unless the program is consistently applied across the region.” As a result, McEvoy and the Lakeland injury control project team will also be approaching fire chiefs and school superintendents from the Elk Island, Sturgeon Public, Aspenview and Catholic school divisions over the next several months to assess their interest and commitment to implement the program. 🔥



Lida Thomson discusses the *Risk Watch* program with a group of teachers at Elizabeth Settlement School.

How did they do it?

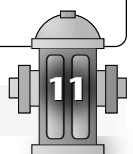
Much of the funding for the program came from the municipality and from the Municipal 2000 Sponsorship Programs (1999/2000 and 2000/2001) administered by the Fire Commissioner’s Office at Alberta Municipal Affairs.

Initially, the project team received 79 copies of the *Risk Watch* binders from the Fire Commissioner’s Office (15 units of Level 1, 15 units of Level 2, 28 units of Level 3, 21 units of Level 4). Based on a cost of \$100 per unit, the municipal grant funding provided \$7900 in *Risk Watch* material to the Bonnyville region.

The 2000/2001 program provided an additional \$4000, with which the municipality plans to purchase more *Risk Watch* materials.

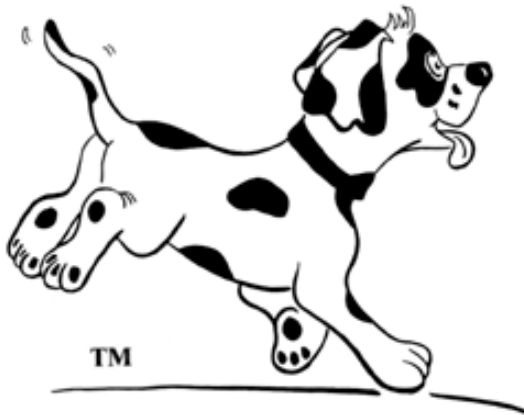
Additionally, the project team received funding of \$10,000 from the Alberta Centre for Injury Control and Research (ACICR) Community Funding to complete the required number of binders for all classrooms in the area.

The resource tubs, which cost about \$300 each, were not included in the funding obtained through the Municipal 2000 Sponsorship Programs and ACICR.



The Dowzer Project

A new fire-hall puppy named Dowzer is making inroads in fire safety education. Teaching children how to take control of household fire and burn prevention are the ideas behind this new education program, simply entitled *The Dowzer Project*. According to Peter Clark, a burn survivor and one of the Edmonton project's originators, "This is the biggest advance in fire safety education in years. Through the many adventures of Dowzer, children are shown the control they have in making their world safer for everyone. Dowzer is a symbol of empowerment, courage, the need for education and the wisdom that comes from experience."



The educational kit includes the storybook, *The Adventures of Dowzer*, a read-along CD of the story with sound effects, plus eight case-file stories of Dowzer's adventures with specific fire issues. The Fire Commissioner's Office provided editorial assistance during the development of the storybook.

Tammy Oleksyn, a special education teacher at St. Gabriel Catholic Elementary School in Edmonton, used the material last year with her students and plans to continue using it this year. "There are so many things you can do with the material," said Oleksyn. Beyond reading the stories and related messages in Language Arts and doing the writing assignment, Oleksyn found it easy to include the


project material in the other courses too: in Science with mini 'teacher controlled' experiments on "What does and doesn't burn?" and "What factors contribute to starting fires?"; in Social Studies by visiting a senior citizens lodge, church group and daycares to give fire prevention presentations; and in Math through adding and subtracting the responses to "How many people have a smoke alarm in their house and an escape plan?" "It was so easy to use the material and tie it in with Language Arts, Science, Math, Social Studies, Art and Drama," she said.

Another important feature of the material is its relevance to everyday life. "The students went home and implemented many of the ideas we discussed in class. They also got their parents involved in many of the activities, which helps reinforce the behaviours and teaches parents about fire safety education too. That is a real plus," said Oleksyn.

To test the educational value of the program, the material was reviewed and evaluated by principals, teachers and parents in over 30 elementary schools in Edmonton and those schools have now requested *The Dowzer Project* for their students. The program recently received approval from Alberta Learning as an approved learning resource for Grades 2-4. The federal government, through Human Resources Development Canada, has officially included *The Dowzer Project* as a major part of the fire/burn prevention program for First Nation schools and is in the process of supplying Dowzer programs to every school on First Nation reservations across Canada. The program is also being translated into French and Spanish.



Kim Ryan (left) and Peter Clark present one of Tammy Oleksyn's students with her Pledge of Honour plaque at St. Gabriel's Elementary School in Edmonton, Alberta.

Clark is also hoping that fire departments see the Dowzer program as a valuable resource in their community. "They are welcome to sponsor and present the Dowzer program to schools in their area. Not only will it enhance children's safety but it will also increase the fire department's profile in the community. The Alberta Burn Rehabilitation Society is also interested in working with fire departments to further promote the Dowzer program in their community." 

For more information about the **Dowzer Project** contact the Dowzer Communications Group Inc. at (780) 433-3857 or visit www.dowzer.com.

You were asking...

- Q.** We would like to establish a paper-recycling program within our office. Are there any restrictions on the quantities of material we can accumulate and where containers are to be located?
- A.** Small containers for use in recycling programs are permitted in an individual's office. These small containers can be emptied by individuals into larger containers within the building. Large containers in excess of 0.125 m³ must be of fully enclosed non-combustible construction with a tight-fitting lid; or be located in a sprinklered storage room; or conform to Underwriters' Laboratories of Canada (ULC) standards. Only one large container per suite is permitted. The material from these containers should be emptied on a

regular basis and removed to a collection location. *See Articles 2.4.1.4. and 2.4.1.5. of the Alberta Fire Code 1997 for further information.*

- Q.** My children's school places a lot of student artwork on classroom walls and corridors. This material looks like it might be a fire hazard. Are there any restrictions on the amount of material that can be placed on classroom walls?
- A.** Combustible materials, such as student artwork and teaching aids attached to school classroom and corridor walls and ceilings should not exceed 20 per cent of a wall or ceiling surface unless the material meets ULC standards or has a flame-spread rating that does not exceed the flame-spread rating of the interior finish materials. *Contact your local fire department if you are concerned about displays of this type.* 🔥



Ray Cox, Edmonton & Ray Ligenza, Calgary

These questions and answers were prepared by Ray Cox (780) 415-0508, Edmonton, and Ray Ligenza (403) 297-5797, Calgary. Both Cox and Ligenza are Technical Advisors for Technical Services, Building and Fire Safety in the Public Safety Division of Alberta Municipal Affairs.

Reaching out to teachers



Fire Prevention Officer Richard Hildebrand presents Betty Carney with the candy bouquet she won as the grand prize from the Learn Not To Burn booth at the Lethbridge Teachers Convention. Betty is a Grade 3-8 teacher at Senator Buchanan Elementary School. In total, 10 trade show booths at Teachers Conventions held across Alberta were purchased by the Fire Commissioner's Office. Both Risk Watch and Learn Not To Burn curriculums were promoted with the assistance of members of the Public Fire Safety Education Committee of the Alberta Fire Chiefs Association and Kids Safe Connection. 🔥

Children and fire in Alberta

A child is often the cause or the victim of fire in this province, and sometimes the same child is both. The Fire Commissioner's office (FCO) has analyzed the incidence of fires involving children in Alberta during the 10-year period 1990 to 1999.

Data from the FCO Fire Statistics Information System (FSIS) was used for this analysis. Supplementary data from Statistics Canada and the Alberta Centre for Injury Control and Research (ACICR) were used for comparative purposes.

Definitions

According to the FCO Fire Statistics Reporting Manual (1988 edition), a "child" is defined as a person under 16 years of age in the casualty section of the Fire Incident Report form CF-40. "Children playing with fire" or "Fireplay" as an Act or Omission is defined as the misuse of source of ignition by children under 12 years or younger leading to a fire incident. Fire losses from deliberate fire-setting by juvenile firesetters is not discussed in this article.

Fire deaths in children

Children die from a variety of injury causes including fire. Table 1 presents injury deaths from all causes in Alberta children compiled by ACICR for the 10-year period 1988-1997 (latest available data from Vital Statistics). The data shows that deaths from fire rank sixth in the list of injuries, which include both intentional and unintentional injuries. The ACICR defines fire deaths as unintentional injuries caused by fire, flames and smoke. Scalds and burns are classified in a separate category, and no deaths were attributed to scalds and burns in the 10-year period. Data in Table 1 show that the risk of death from fire is highest in children in the age groups 1-4 (32%), 5-9 (25%) and 15-19 years (23%). Analysis of fire casualty data in the FSIS for the 1988-1997 period revealed 98 deaths in children 0 to 19 years of age in contrast to 73 in the ACICR

Table 1: Causes of death in Alberta children during 1988-1997

Cause of Death	Age < 1	Age 1-4	Age 5-9	Age 10-14	Age 15-19	Total
Motor Vehicle Related	12	48	50	87	556	753
Suicide	0	0	1	59	329	389
Homicide	13	12	11	9	64	109
Pedestrian	0	29	25	10	44	108
Drowning	4	34	12	16	31	97
Fire	6	24	18	8	17	73
Suffocation/Foreign Body in Natural Opening	26	17	10	12	6	71
Unspecified Accident	4	10	7	11	37	69
Falls – Excluding Playground Equipment	4	5	3	4	23	39
Unintentional Poisoning	0	8	3	3	18	32
Bicyclist	0	0	10	10	10	30
Other Injuries Undetermined Intent	5	6	0	5	14	30
Firearms	0	1	9	13	6	29
Machinery	0	7	5	4	8	24
Poisoning – Undetermined Intent	1	3	2	2	14	22
Struck by Object/People	1	4	1	1	5	12
Other Transportation Related	0	0	1	4	4	9
Excessive Cold	0	0	0	1	7	8
Non-Venomous Animals	0	1	3	2	2	8
Drowning	0	0	0	0	5	5
Natural Disasters	0	0	0	2	2	4
Late Effects of Injury	0	0	2	0	2	4
Explosive Materials	0	0	2	0	1	3
Other Transportation Related	0	0	1	0	1	2
Cutting/Piercing	0	0	0	0	2	2
Explosion of a Pressure Vessel	0	2	0	0	0	2
Fracture	0	0	0	1	0	1
Exposure/Neglect	0	0	0	0	1	1
Electricity	0	0	0	0	1	1
Total:	76	211	176	264	1210	1937



Table 2: A comparison of fireplay and all other fire causes: Alberta (1990-1999)

Year	All Other Fire Causes						Fireplay					
	#of Fires	All Deaths	Child Deaths	All Injuries	Child Injuries	\$ Loss	#of Fires	All Deaths	Child Deaths	All Injuries	Child Injuries	\$ Loss
1990	7510	46	10	412	33	133,356,702	326	2	2	28	9	2,592,084
1991	7808	48	9	326	15	115,623,689	289	3	3	19	9	2,090,162
1992	6576	21	2	411	3	100,324,077	306	4	4	37	14	3,263,429
1993	6458	34	5	437	37	99,276,039	277	2	2	54	21	4,044,242
1994	6635	23	0	439	34	106,710,015	262	2	1	51	21	3,428,423
1995	6325	33	7	373	29	107,872,956	203	4	2	51	26	3,267,510
1996	6155	40	4	418	40	117,373,106	149	1	1	33	15	3,183,273
1997	6488	37	6	423	40	138,673,244	182	0	0	25	10	3,286,790
1998	6424	20	2	405	21	136,521,609	149	0	0	24	14	2,975,009
1999	6198	48	12	348	31	136,179,536	158	3	2	38	19	3,415,981
Total:	66577	350	57	3992	316	1,191,910,973	2301	21	17	360	158	31,546,903

data. This disparity is due to differences in coding and to the inclusion of “Deaths involving Fire” in the FSIS.

Figure 1 provides the age specific fire death rates per 100,000 population for different age groups of persons who died in fires during the 1990-1999 period. The figure shows children four years and under rank fourth as a high-risk group. The other three high-risk groups are: 20-24, 50-59 and over 65.

Fire losses from fireplay

Table 2 presents a comparison of the yearly fire incidence, associated deaths, injuries and property loss (\$) from fireplay fires and fires from causes other than fireplay in Alberta.

The number of fireplay fire incidents have declined from 1990 to 1999, although not consistently. Annually, these fires caused approximately 2.1 deaths, 36 injuries, and \$3.1 million in property damage. Further conclusions follow:

- Fireplay accounts for 3.3% of all fire incidents, 5.7% of all fire deaths, 8.3% of all fire injuries and 2.6% of all property losses from fires in Alberta.
- Children account for the majority of casualties in fires they start themselves. Child deaths and injuries account for 81% and 44% of all deaths and injuries in fireplay fires, respectively.

Figure 1: Fire deaths expressed as age specific death rates

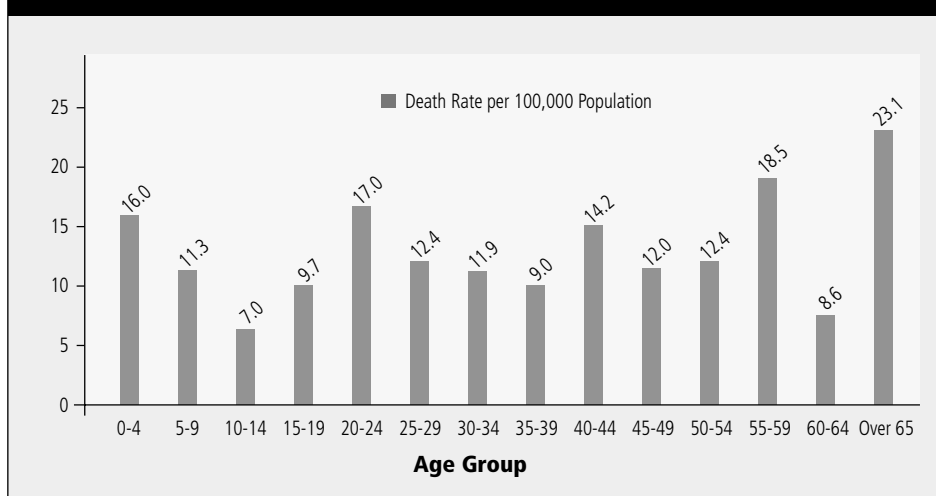
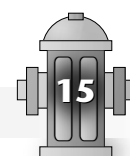


Table 3: Distribution of fireplay and all other fires by community type

	Fireplay				All Other Fire Causes			
	#of Fires	Deaths	Injuries	\$ Losses	#of Fires	Deaths	Injuries	\$ Losses
Urban	1,593	13	293	18,016,933	39,113	135	2,984	443,914,045
Rural	585	5	52	10,112,885	26,597	168	956	721,449,056
First Nations	123	3	15	3,417,085	867	47	52	26,547,872
Alberta	2301	21	360	31,546,903	66,577	350	3,992	1,191,910,973

The definitions of urban, rural and First Nations communities are provided on page 1 in the Nov. 1997 issue of Alberta Fire News.



- In fires resulting from causes other than fireplay, child deaths and injuries account for 16 and 8 per cent of all deaths and injuries, respectively. Thus, adults form the majority of casualties in non-fireplay fires.
- Fire deaths and injuries in children expressed as a ratio of fireplay to all other fire causes were 1:3 and 1:2. This means three times as many children die or twice as many children are injured as a result of fire causes other than fireplay.

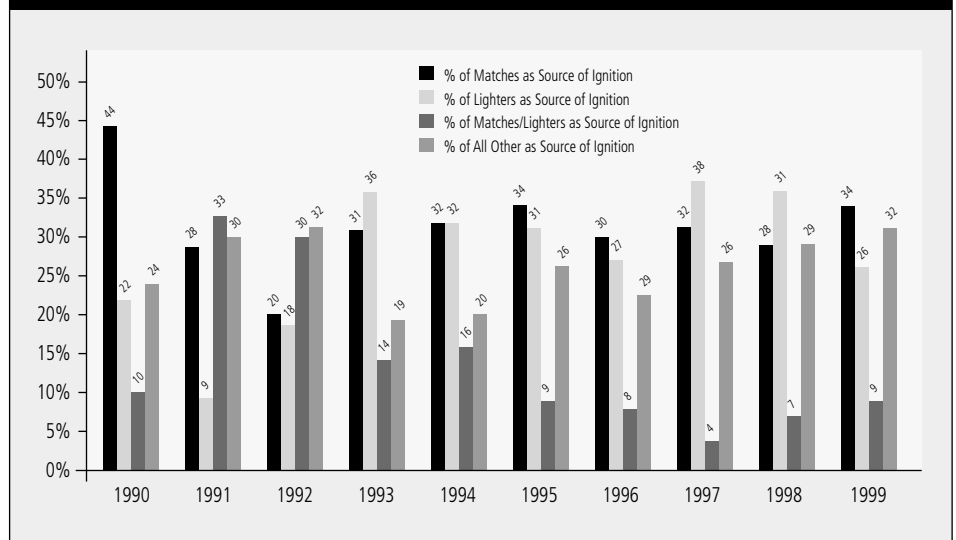
Table 3 provides a breakdown of child fireplay fires versus fires from all other causes in urban, rural, First Nations communities and the province as a whole. The incidence of fireplay fires expressed as a percentage of all fires was highest in First Nations communities (12) compared to urban (4) and rural (2) areas. The percentage of fire deaths attributed to fireplay fires was highest in urban areas (9) compared to First Nations (6) and rural areas (3). The dollar losses from fireplay fires as a percentage of all dollar losses from fires were First Nations (11), urban (4) and rural (1).

Table 4 provides a breakdown of child fireplay fires by the most frequently affected property classes. Homes representing one and two family dwellings, apartments and mobile homes accounted for the most losses: 52% of incidents, 76% of deaths, 87% of injuries and 87% of property losses in all property classes from fireplay fires. Outdoor properties, particularly trash and associated containers, fences, brush/grass, crops/orchards, were the next category involving fireplay fires. Individual auto parking garages, cars and general trucks with non-flammable cargo comprise the third group of property classes frequently affected by child fireplay.

Fireplay fires within and outside homes

Since the majority of deaths and injuries related to fireplay fires occur in homes, these fire incidents were further analyzed by area of origin, sources of ignition, and

Figure 2: Sources of ignition in fireplay fires



materials first ignited. A similar analysis was done for fireplay fires that occurred outside of homes.

The most frequent areas of fire origin in fireplay fires in Alberta homes were as follows: Bedroom (43%), living/family room (15%), kitchen (5%), closet (5%), heating equipment room (3%), laundry area (3%), bathroom (2%), and court/patio/terrace (2%). All other areas of fire origin, which varied widely, accounted individually to 1 or less than 1% of all fireplay incidents. Bedroom and living room fires accounted for most fire deaths and injuries.

Outside of homes, fireplay fires were most frequent in open area/lawn/field/park (24%), trash/rubbish area (23%), exterior wall (7%), vehicle (garage) (7%), vehicle (passenger or cargo area) (4%).

Sources of ignition frequently involved in fireplay fires within homes included: lighter (39%), match (23%), match or lighter (16%), candle (5%), stove top burner (3%), furnace/water heater/fireplace (4%), lamp (2%). Most deaths and injuries were associated with lighter, match or furnace-related fireplay fires.

The most common sources of ignition in fireplay fires outside homes were: match (40%), exposure fire (originated from a fireplay fire) from grass/shrub/brush/rubbish/camp fire (24%), match or lighter (17%), lighter (11%).

Figure 2 presents the sources of ignition used in fireplay during the 10-year period 1990-1999. It is evident that matches and lighters were used with similar frequency in most years except 1990 and 1991. Amendment in June 1995, to the *Hazardous Products (Lighters) Regulations* in Canada required all disposable and some refillable lighters be child resistant. The frequency of fireplay fires has declined since 1995 and has stayed below the 10-year average. Furthermore, the average number of fireplay fires has declined by 42% between 1990-1994 (292) and 1995-1999 (168). Also, the average number of fireplay fires involving lighters was 67 from 1990-1994 and 52 from 1995-1999, a reduction of 22%. There were a total of three deaths involving cigarette lighters during the 1995-1999 period; 2 in 1995 and 1 in 1999. This compares with a total of 5 deaths during the previous five-year period. The above analysis shows that the child resistant cigarette lighter regulation may have had a positive impact on reducing both the frequency and severity of fireplay incidents in Alberta. However, Figure 2 indicates about one-third of fireplay fires during 1995-1999 involved cigarette lighters. This may indicate that older, non-child-resistant cigarette lighters were still in use and left accessible to children for fireplay.

Materials first ignited in fireplay fires at home were primarily, bedding/mattress/pillow (25%), paper/cardboard (17%),



clothing (13%), upholstered furniture (7%), carpet/rug (3%), drapes/blinds (3%), plastics (2%) and garbage/trash/rubbish (2%). Although these are the most frequently ignited, a wide range of combustible materials was found to have ignited in home fireplay fires. The most deadly and injurious fires were related to the ignition of upholstered furniture, bedding, and paper/cardboard.

Materials most frequently ignited first, in fireplay fires outside homes were: garbage/trash/rubbish (23%); clothing (16%); paper/cardboard (15%); grass/brush/hay (14%); wooden items/plywood (7%); exterior wall cover (6%); gasoline (5%). Out of 5 fire deaths outside homes, 2 were related to hay, 1 to diesel and 2 to unknown materials.

Child fireplay and smoke alarms

Smoke alarms were found in only 68% of the homes where fireplay fire incidents occurred. Ten deaths (63% from a total of 16) and 115 injuries (37% from a total of 314) occurred in homes without smoke alarms or where smoke alarms did not activate.

Conversely, from a total of 14 child fire deaths and 128 child fire injuries in fireplay fires in homes, 8 deaths (57%) and 36 injuries (28%) were in homes without smoke alarms or where smoke alarms did not activate. These findings emphasize the importance of the detection of smoke and fire danger in homes to provide early warning to allow safe escape.

Conclusions

A number of province-wide initiatives directed to child fire safety have been undertaken by the Fire Commissioner's Office in the last two decades. These province-wide initiatives together with the many and varied local initiatives by both municipal fire departments, regional health authorities and safety organizations continue to impact the fire safety knowledge, attitudes and skills in Alberta children. In addition, Health Canada's *Hazardous Products (Lighters) Regulations*

Property Class	Fires	% of Fires	Deaths	Injuries	Property Loss \$
One/Two-Family Dwelling	752	33	11	185	19,745,011
Apartment	375	16	5	109	5,628,862
Trash + Container	218	9	0	1	17,044
Individual Parking Garage	123	5	0	12	751,385
Fence	119	5	0	1	33,812
Brush/Grass	78	3	0	9	16,824
Shed	72	3	0	1	153,238
Mobile Home	70	3	0	20	2,220,805
Crops/Orchards	56	2	0	3	158,933
Outdoor/Unclass.	51	2	0	9	30,793
Car	43	2	0	0	61,135
Vacant or Condemned Property	30	1	0	0	209,346
Barn Storage	25	1	2	0	318,136
Truck (with non flammable cargo)	22	1	0	1	43,401
School- Elem./Jun./High	18	1	0	0	244,942
Animal Barn	15	1	0	0	264,704
All Other*	234	10	3	9	1,648,532
Total:	2301	100	21	360	31,546,903


All other represents property classes that individually contributed to less than one per cent of all fireplay fires.

Measure	1980-1989	1990-1999	Change
# of fireplay fire incidents	5356	2302	-57%
# of all deaths ¹ from fireplay fires	51	19	-63%
# of child deaths from fireplay fires	42	15	-64%
# of child deaths from all fires ²	110	72	-35%
Age specific fire death rate ³ in children 0-4 years (from all fire causes)	37.5	16	-57%

¹All deaths include deaths of adults, firefighters and children.
²All fires incidents including child fireplay fires.
³Age specific death rate = $\left(\frac{\# \text{ of deaths in a specific age group}}{\text{population of the specific age group}} \right) 100,000$

Population figures to calculate age specific death rates were obtained from Statistics Canada.

continues to ensure child resistance in cigarette lighters. These initiatives together appear to have collectively reduced both the frequency and severity of fireplay fires, as shown in the comparative data in Table 5 for two decades: 1980-1989 and 1990-1999.

The data presented in this report highlight the continued importance of keeping matches and lighters out of children's reach, adequate supervision and teaching of fire safety skills to children, and having working smoke alarms in homes to further reduce both the incidence and consequences of fireplay fires in the future. 

Digest

Same service, different location



As some of you may already know, the office of the Provincial Fire Commissioner has moved to a new location. Now in Commerce Place in downtown Edmonton, the office is situated in close proximity to other branches of Municipal Affairs. While the phone and fax numbers remain the same, the street address has been changed to:

Fire Commissioner's Office
11th Floor, Commerce Place
10155 - 102 Street
Edmonton, Alberta
T5J 4L4

They don't teach you this in fire training ...

Calgary firefighters recently faced a new challenge when rescuing a 23-month old child trapped in an elevator. While trying out a church elevator on his own, the tyke pushed the big red button, stopping the car between floors and setting off electronic alarms. Firefighters tried to tell the boy to pull on the red button to restart the elevator with no success—the boy didn't know what red was! That's when they moved to Plan B and pried the doors open, rescuing the frightened boy and returning him to his much-relieved Mom after a 20-minute absence. It's all in a day's work...

Disaster training grants generate high interest

Alberta's small- and medium-sized municipalities were quick to apply for conditional grants to offer fire and disaster services training. Grants totalling \$1 million were made available this year under the Municipal 2000 Sponsorship Program, as a result of a similar initiative being well received last year. In total, 318 applications were submitted and funds have been distributed to all who were eligible.

AFTS expansion update

Expansion plans for the Alberta Fire Training School (AFTS) are proceeding thanks to a special one-time grant of \$400,000 from Alberta Municipal Affairs to develop a plan to provide expanded emergency services training for Alberta municipalities and industries. The need for expanded services was identified through an independently conducted assessment of the school's opportunities for growth and a further market survey of industrial sector needs. The studies indicated the need for greater scope of training for municipal, industrial and airport sectors in areas that include firefighting, dangerous goods response, emergency response, emergency preparedness, transportation emergency response and risk assessment. According to Don Gnatiuk, CEO of AFTS, "our vision at AFTS is to be recognized as a world leader in providing the full range of emergency services training. Our client sectors and advisory group have also been very supportive in this process."

New videos available

Evacuation of Health Care Facilities is a new VHS video available from the National Fire Protection Association (NFPA). The video, which is 12 minutes long, presents a detailed explanation of the fundamentals that all health care facility staff need to master to act appropriately during a fire emergency. The key segments of the presentation include: a fire safety plan for the facility; teaching staff how to protect themselves and patients from the dangers of smoke and fire; fire emergency procedures; the importance of periodic drills; significance of smoke compartmentation and smoke barrier doors; horizontal and vertical evacuation methods; and the importance of relying on personal judgment and the fire safety plan. A booklet, *A Guide for Presenters*, accompanies the video.

Workplace Fire Safety is a 21-minute VHS video that emphasizes fire prevention, safety and emergency responses relevant to workplaces. Key areas include: classes of fire, extinguisher types (includes Halotron and K-Class), evacuation plans, electrical fires and proper storage of hazardous materials. The video is accompanied by a Trainer's Manual.

To order these and other fire protection videos please contact the Audio-visual Section of the Alberta Human Resources and Employment Library at (780) 415-0576.

Mark your calendar

- This year's Provincial Hose Coupling contest takes place Saturday, August 11, in Strathcona County. For more information contact Steve Witiuk at (780) 464-8463.
- The Canadian Association of Fire Chiefs conference is being held in London, Ontario from September 23-26, 2001.

Edmonton fire tower plans to move ahead

The City of Edmonton is moving closer to development of a new fire tower. Tenders recently closed, and construction will begin shortly on the site at 184 Street and 106A Avenue. A service centre for fire service vehicles is already being developed at the site, which is large enough to support phasing in new developments over the years. According to Dick Veldhuis of Edmonton's Fire Department, the new training tower will provide a facility that is complementary to the Alberta Fire Training School (AFTS) and reflects the city's push to work in partnership with AFTS.

A wealth of resources at your fingertips

Fire protection publications and other related resources are available from the following organizations/associations.

Organization	Items	Contact Info
Alberta Fire Chiefs Association	<ul style="list-style-type: none"> • NFPA publications and videos • Fire Engineering • Action Training Systems 	<ul style="list-style-type: none"> • FITS • Chief Life Line • IFSTA products Phone: (403) 357-9011 Fax: (403) 347-5592 jdubois@telusplanet.net
Canadian Association of Fire Chiefs	<ul style="list-style-type: none"> • NFPA publications, videos and IFSTA products 	Phone: 1-800-668-2955
Fire Prevention Canada	<ul style="list-style-type: none"> • Fire prevention promotional materials • Chief Life Line 	1-877-906-6651



A year to remember

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County of Red Deer Fire Department's sister stations plus the City of Red Deer Fire Department. Search and rescue volunteers, the RCMP, ambulance personnel, the Red Cross and others all played a major role in helping the victims of this horrific event.

According to Fuller, everyone who took part in providing assistance was tremendous. "I can't say enough about the Search and Rescue and the military. They went into places where the dogs couldn't go,

and never gave up. They were diligent in their efforts and I am truly thankful for all they did."

The tornado tore a 15-mile path through the County of Red Deer, and every inch of it had to be checked. The team went till 4:30 a.m. searching for victims, then started again at 6 a.m. when more light enabled them to continue the search, which didn't end until Wednesday, five days later.

One of the most difficult things for the initial responders was the rush of victims who wanted their assistance immediately. But they couldn't start helping the victims right away because they had to set up the command post to set the stage for others to help the victims. "It's really hard not to help people that need it," says Fuller.

The donations from businesses and individuals were amazing, said Fuller. "We had a tent set up for donations and every item that came in was recorded. NOVA was a key factor with their involvement. They brought in a decontamination unit for hydrocarbons in the water. This enabled us to start our water search right away. I'm really proud of the actions of everyone during this catastrophe. I'm certainly proud to live in Alberta."

Fuller says his military experience and the training he received at Arnprior (the federal government's emergency preparedness college) were incredibly helpful. "The PIO (Public Information Officer)

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Sharing their experiences

One of the positive outcomes resulting from the Pine Lake Tornado is a presentation that Cliff and his colleague Captain Dave Harvey prepared for other fire service personnel about the tornado. As the Emergency Site Managers at Pine Lake, Cliff and Dave worked jointly and were instrumental in coordinating the rescue efforts and the assistance offered by organizations and individuals.

The presentation was the result of suggestions from many involved in the tornado. Through a practical review of the response, participants hear firsthand how the Red Deer County Fire Department responded to the disaster. The presentation also includes lessons learned and offers practical advice for other responders.

To date, Cliff and Dave have made a number of presentations at the Alberta Fire Training School (AFTS) Site Management Courses and to fire departments in several cities around the province. "The presentation that Cliff and Dave put together is valuable in many ways," said George Roddick, Emergency Preparedness Manager, AFTS. "In addition to providing current material, it also focuses on an Alberta experience and validates the process we're teaching in the Emergency Site Management Course."

Participants of the AFTS courses include fire service personnel as well as police, Emergency Medical Services, social services, public works and search and rescue staff, providing a wide range of people who are learning from the disaster.

"Disasters don't come along that often, thank God," said Cliff, "so let's share and learn from each one to make it work a little better each time."

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11th Floor, Commerce Place
10155-102 Street
Edmonton, Alberta T5J 4L4
Phone: (780) 427-8392
Fax: (780) 427-5898
Web site: www.gov.ab.ca/ma

Jayne Jeneroux
Writer

Jack Born
Graphic Design Services
Design Quarry

Editorial Board

Lyle Birnie
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The NOVA decontamination unit and a pumper supplied by the Red Deer County fire department ensure that all firefighters and search and rescue personnel get decontaminated.

Taking precautions

The most important precaution you can take to protect yourself is to keep informed of the possibility of severe weather and plan accordingly. Before undertaking outdoor activities, listen to the weather forecast for your area.

When a tornado funnel touches the ground, a cloud of debris is stirred up which may obscure the funnel. In some cases, a tornado may resemble a large, low-lying cloud, or may be mistaken for a large rain shaft or even smoke from a fire.

Tornadoes last anywhere from a few minutes to almost one hour and are characterized by a loud, roaring noise which can resemble the sound of a nearby jet plane or train. While most tornadoes move from the southwest to the northeast, their direction can be erratic and may change suddenly. If you see a tornado and it does not appear to be moving, it is either moving straight away or straight at you.


Tornadoes almost always require hot and humid weather. As a result, tornadoes in Canada usually occur between May and August, with a peak occurrence in late June and early July. They are most likely to occur during the afternoon and early evening hours.

A year to remember

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course as well as the site-management components included in the course provided the framework that we used in setting up the EOC (emergency operations centre) at Pine Lake.”

Fuller also has high praise for the media. “We had very good relations with the press. We looked at them not as the enemy but as a tool to help us get information out. As a result, the communication worked really great.”

At the end of the ordeal, the County of Red Deer Fire Department put advertisements in the newspapers and sent out letters to many organizations to say a huge thank you for everyone's efforts. Fuller attributes the recovery operation's success to cooperation all around. “Everyone worked as a team and, as the saying goes, ‘they checked their egos at the door.’ The reality is, we couldn't have done it without them.” 

For more information about tornadoes and other severe weather disturbances, visit the Environment Canada web site at www.pnr-rpn.ec.gc.ca/air/severewthr/ak00s11.en.html

UPDATE: The Red Deer County Fire Department was also involved as a mutual-aid partner at the anhydrous ammonia spill, which resulted at a Canadian Pacific train derailment on February 2, 2001.

