



SAFETY CANADA

The member newsletter of the Canada Safety Council

How Safe are School Field Trips?

The Canada Safety Council is encouraging parents to ask questions about safety on their children's school outings. Most parents sign the consent form and assume their child will be safe. Yet thousands of injuries and even a few deaths happen every year on school outings.

The Canada Safety Council identified this issue a couple of years ago. In 2000 there were seven fatalities on school field trips. In Ontario, two elementary school children drowned when their tour boat sank in bad weather, and two high school students were killed at a workplace they were visiting as part of a school program. Also that year, two Calgary students and a parent chaperone drowned when they were swept into the ocean while on a beach hike in California.

During the first half of 2002, an Ontario teenager was killed and another became a quadriplegic from injuries suffered on school ski trips, and a Winnipeg girl drowned on a school-sponsored swimming trip.

Parents have a right to ask for assurance that precautions have been taken. How does the school plan to ensure the children's safety during the outing? What are the

potential hazards? Have there been mishaps on similar trips? How have they been addressed? How many adults will be supervising? What are their qualifications? What is expected of the children? What is the educational value of the trip?

Parents should find out the details of the trip, give written permission for their child to go, and reinforce the behavior expectations. Liability issues are bringing many popular school activities under increased scrutiny.

A Balancing Act

School administrators have the responsibility of deciding where to draw the line between student safety and real-world learning experiences.

Sometimes a principal must say no to a proposed activity or impose precautions that seem unreasonable.

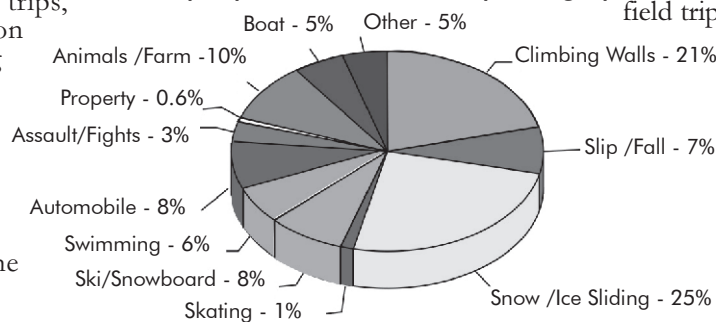
This can produce vocal opposition from students and parents. The activities that generate the most controversy tend to be those with little relationship to the curriculum, which have mainly recreation, social or entertainment objectives.

Schools are under increasing pressure to organize field trips to theme parks, recreational facilities and resorts. Organizers need to measure the educational value against the chances of injury.

An activity that might be perfectly safe in a family setting may not be safe in a school setting where the level of supervision can't be guaranteed. Some suggested activities have obvious risks. For instance, anyone proposing a rock climbing expedition or a trip to a war zone to "experience history in the making" (these are actual requests) can expect to be turned down.

During the Canadian winter, field trips often centre on snow sports. Skiing and snowboarding represent over 40% of the injuries reported on school field trips. Snowblading and tubing, relatively new activities, are also high-risk, and require a high level of supervision as well as expertise.

Field Trip Injuries: Claims Paid by Category



OSBIE Incurred Claims 1995-2000 (\$)

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Head Injuries in Soccer

Across the United States, from league meetings to scientific conferences, there is a continuing debate about whether young soccer players should head soccer balls. Head and neck injuries are the concern — balls can be as big as a child's head and almost as heavy in wet conditions.

America Youth Soccer Organization (AYSO) represents almost 700,000 players on 50,000 teams in the US. AYSO members have proposed a rule that would ban heading in practices and games for all players under 10 years of age. That proposal was narrowly defeated in May 2001 by a vote of AYSO's Executive Committee. It received overwhelming support from subcommittees of coaches and referees, but was defeated by a mere 10 votes out of 500. Supporters of the proposal plan to push for it again. In some American cities where parks and recreation departments run soccer leagues, heading is banned in both games and practices.

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President's Perspective

On Labour Day weekend five years ago (August 31, 1997), the Princess of Wales was killed in a motor vehicle crash. Investigators later determined that if she had been wearing her seat-belt, she may have survived.

That tragedy mirrors many less public crashes that are just as devastating. One simple precaution — wearing a seat-belt — can make the difference between life and death.

In 2000, there were 2,969 fatalities on Canadian roads. A survey that year by Transport Canada found that over 90% of those surveyed were wearing seat-belts. Only 8% of drivers and 9% passengers were not. Yet 37% of drivers and 35% of passengers killed in crashes were unbelted. The 8 or 9% of people who didn't wear seat-belts accounted for over 820 fatalities.

This huge disparity shows you are much more likely to survive a crash with your seat-belt on, or conversely, you are much more likely to be killed if you don't wear it.

Unbelted vehicle occupants become "missiles." In a serious collision, they can suffer secondary impacts, hit other occupants or be ejected. If ejected, they are 23 times more likely to be killed than those properly belted inside the vehicle.

The chances you will survive a crash are not 100% even if you have your seat-belt on. Wearing a seat-belt greatly increases your chances of survival but does not prevent the crash from happening. Defensive driving is always the first line of defense.

There were, of course, two other notorious factors in that tragic crash five years ago — speed and alcohol. There is no substitute for a safety conscious, sober driver.



SAFETY CANADA

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Just What the Doctor Ordered...

The Healthy Canadian Media Group will distribute health and safety information from the Canada Safety Council on television screens in family medical clinics across Canada.

Healthy Canadian Media Group's *PatientDirect TV* combines closed circuit television and digital computer technology to deliver educational content and advertising messages to waiting rooms of Canadian healthcare facilities. Using computer graphics, animation and motion video, information is displayed on a large screen TV, in a looped format, repeating every 20 to 30 minutes. Programming at each site consists of health information focused around monthly features, health hints, FAQs and news and weather updates.

As a result of this partnership, *PatientDirect TV* will improve its ability to educate Canadians on health and safety matters. The service is currently narrowcast to over 750 physicians' practices across Canada, notably in Vancouver, Calgary, London, Hamilton, Greater Toronto, Ottawa and Montreal. Messages and tips from the Canada Safety Council will reach about nine million patients annually while they wait to see their doctors.

Doctors' waiting rooms provide an ideal opportunity to inform and educate people about what they can do to enhance personal and family safety. □

Road Safety Vision 2010, from page 3

- an increase from 90 to 95% in the rate of seat belt use;
- a 20% reduction in serious injuries and fatalities (down from approximately 1,100 and 160, respectively) of young drivers or riders between the ages of 16 and 19;
- a 20% reduction in serious injuries and fatalities (down from approximately 1,800 and 610, respectively) in crashes involving commercial carriers;
- a 30% reduction in serious injuries and fatalities (down from approximately 3,800 and 620, respectively) of pedestrians, motorcyclists and cyclists; and
- a 40% reduction in serious injuries and fatalities (down from about 7,400 and 1,500, respectively) on rural roads.

The program also includes targets aimed at reducing the effects of high-risk driving practices, including:

- a 40% reduction in serious injuries and fatalities (down from approximately 2,900 and 900, respectively) of occupants not wearing seat belts; and
- a 40% reduction in serious injuries and fatalities (down from approximately 3,600 and 1,070, respectively) in crashes involving a drinking driver.

Achieving the goals set out in *Road Safety Vision 2010* will save an estimated 5,000 lives over the next eight years.

Details can be found on Transport Canada's Web site (www.tc.gc.ca/roadsafety/vision). □

Transport Canada, July 2002

Intersection

Police Officers Awarded for Traffic Safety

For most front line police officers, protecting the public is more than just a job.

The *National Police Award for Traffic Safety* recognizes dedicated officers who go beyond the call of duty to keep road users safe. It is a joint initiative of the Canadian Association of Chiefs of Police, the Canada Safety Council and Transport Canada. The award was presented August 27 at the annual conference of the Canadian Association of Chiefs of Police in Quebec City. An innovative system to manage traffic policing topped the list of outstanding initiatives.

Effective policing saves lives. Traffic fatalities were dropped by almost half in the past 20 years despite twice as many licensed drivers. In 2000, motor vehicle crashes took 2,917 lives — a high number, but far lower than the 5,461 killed in 1980.

The winner of the 2002 National Police Award for Traffic Safety developed a database tool that supports the goals of *Road Safety Vision 2010*. Sergeant Norman Gaumont of the Royal Canadian Mounted Police, West Kootenay Traffic Services Unit, West Kootenay, British Columbia was honoured for designing a Traffic Service Management Information Tool that helps police target unsafe driving behaviours. The system identifies crash patterns and police responses, which enables police to manage traffic enforcement more effectively. Strategies developed using this computerized tool reduced deaths and injuries in the West Kootenay area.

Three Honourable Mention Awards were also presented:

- Provincial Constable Christopher Dingman of the Ontario Provincial Police, Whitby Detachment created an Automated Input Management System which enables officers to process impaired drivers more efficiently by streamlining the paperwork.
- Sergeant Rick Hunt, RCMP "K" Division Traffic Services, Red Deer, Alberta and Constable Bruce Reinbold, RCMP "K" Division Traffic Services Edmonton addressed the low rate of criminal



RCMP Sergeant Norman Gaumont, winner of the 2002 National Police Award for Traffic Safety

convictions in serious collisions. They formed three Criminal Collision

Investigation Teams whose expert members perform high quality investigations to ensure charges are not dismissed or reduced.

• La Sûreté du Québec de la MRC de Bellechasse et Service de la sécurité routière de la police de Lévis led a multidisciplinary campaign which resulted in a 22% drop in fatal collisions.

Parallel projects by various community partners covered driver behaviour, public education, roadway lights, signage and design, impaired driving countermeasures and media strategies.

The Transport Canada Director General's Road Safety Lifetime Achievement Award was introduced in 2002. Senior Constable Evan Scott

Kwiz Korner

Sharing the road — true or false?

1. When driving a normal passenger vehicle, leave at least three seconds following distance.
2. Cyclists have the same rights and responsibilities as drivers of motor vehicles.
3. When passing a large truck, pull in close in front of the truck so the driver can see you.
4. Other vehicles can safely pull into the space between a truck or bus and the curb.
5. Drivers are required to yield right-of-way to pedestrians.

Answers on page 4

of the Rothesay Regional Police Service, Quispamsis, New Brunswick and Staff Sergeant Robert J. Thériault, RCMP Fredericton, New Brunswick were both recognized for their outstanding dedication to safety on Canadian roadways.

Successful strategies from the *National Police Award for Traffic Safety* appear in the Best Practices Warehouse housed on Transport Canada's Web site (www.tc.gc.ca/roadsafety). □

Canada to Lead the World in Traffic Safety

Road Safety Vision 2001 was developed in 1996 to support the goal of Canada having the safest roads in the world. Since 1996, road fatalities have decreased by six percent, and serious injuries related to road travel have decreased by 15%. Under the leadership of the federal government and with broad-based input from the traffic safety community, including all jurisdictions, a national action plan is in place to continue the progress.

Road Safety Vision 2010 aims to reduce the number of road fatalities and serious injuries in Canada by 30% compared to 1996-2001 average figures. More than 2,900 road users were killed and 227,000 injured in crashes in 2000. Achievement of the plan's targets would reduce Canada's road fatalities to fewer than 2,100 by 2010.

From 1981 to 2000, the number of licensed drivers in Canada rose by 43%, from about 14.5 million to 20.5 million. The number of registered vehicles increased by 36%, from 13.8 million to 18.8 million. Despite these increases, fatalities and serious injuries decreased over the same period.

The *Road Safety Vision 2010* targets include:

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Answers to Kwiz Korner

- 1. True.** In ideal conditions, leave three seconds for each six metres (20 ft.) of vehicle length.* If conditions are less than ideal, such as in heavy traffic or bad weather, increase the following distance. If cars cut in front of you, drop back to keep your separation.
- 2. True.** Cyclists must obey the same rules of the road as motorists — e.g. ride with traffic on the right side of the road, be sober, stop for stop signs and red lights, signal turns and yield to traffic that has the right-of way.
- 3. False.** If you cut in front of another vehicle, you may create an emergency-braking situation. Forcing a large vehicle to stop quickly could cause a serious, even fatal, collision. Always pass a truck on the left side, wait until you see its front in your rear-view mirror before you switch back, and maintain your speed after you pass.
- 4. False.** When a truck approaches an intersection to make a right turn, it may move to the left to avoid running the trailer into the curb. The driver may not see a bike or car and this could cause a collision when the truck swings into its turn.
- 5. True.** Pedestrians have special status as road users. Give them as much time as they need. Children and seniors may take longer to cross than others.

* Pick out a stationary object on the road ahead, such as a pole or tree. When the rear of the vehicle you are following arrives at that object, begin to count — one thousand one, one thousand two, one thousand three. If your vehicle arrives at the object before you finish, you are too close.

Would a Lower Criminal BAC Save Lives?

In Canada, any person with a blood alcohol concentration (BAC) of 80 mg% (80 milligrams of alcohol in 100 millilitres of blood, or 0.08) or over who is operating a motor vehicle can be charged with a criminal offense. Yet, for most people impairment starts much below that level. That is why some believe that lowering the *per se* limit in the Criminal Code to 0.05 will reduce deaths and injuries from impaired driving.

All provinces except Quebec already have short-term administrative roadside suspensions at 0.05 or lower. The procedure is simple and can be carried out by police officers at the side of the road. If necessary and deemed warranted by the officer, the vehicle is towed and stored at the driver's expense. Some provinces have licence reinstatement fees and requirements for assessment and treatment in the case of repeat suspensions. These administrative measures are effective tools in the fight against impaired driving, in part because they provide swift and certain punishment.

Would eliminating these successful administrative sanctions in favor of criminal sanctions at the 0.05 level have a beneficial impact on road safety?

A study sponsored by the Canada Safety Council found that Canada's law is among the strictest in the developed world for BAC offenses (*Safety Canada*, April 2002). In most countries, drivers with BACs below 0.08 are simply fined. Where license suspensions are possible, they tend to be much shorter in other countries than in Canada. BACs of 0.05 and lower are addressed mostly in motor vehicle acts with offenses such as speeding — not in criminal law alongside murder, robbery, and sexual assault, as would be the case in Canada if the federal BAC limit were lowered to 0.05.

A study by the Traffic Injury Research Foundation (TIRF), released in May 2002, found that lowering the BAC limit, in and of itself, would not have a substantial impact on the incidence of impaired driving or alcohol-related crashes. The study concluded that simply having and enforcing a *per se* BAC limit, regardless of the level, is an efficient and effective way to deal with the impaired driving problem. The actual value of the BAC level may make little difference in the overall context of policies, programs and procedures implemented to enforce it.

Canada has seen a strong downward trend in deaths related to impaired driving, including a 30% drop between 1995 and 1999. The nature of the problem is now quite different from 20 years ago. Today, the majority of drivers involved in alcohol-related fatal crashes typically have BACs over 0.15 — about twice the legal limit. The TIRF study maintains that if these offenders don't obey existing BAC limits, it would be simplistic and naive to expect them to comply with a lower limit.

From the Canada Safety Council's perspective, resources are urgently needed to make existing laws work more effectively. New countermeasures should target the chronic high-BAC offender.

The 110 report, *The Safety Impact of Lowering the BAC Limit for Drivers in Canada*, can be downloaded from www.trafficinjuryresearch.com. □

Helmet Controversy in Alberta

Members of Alberta's Sikh community have opposed Alberta's new bicycle helmet law. They maintain that in order to comply their children must remove their turbans, which violates their religious freedom. The Canada Safety Council strongly endorses the Alberta government's stand that there should be no exemptions.

Bicycle helmets are critical safety equipment, not unlike seat-belts in vehicles. In 1989, a citizen of Alberta challenged the mandatory seat-belt legislation, claiming it infringed on his personal liberty. The court said that even if fundamental rights are infringed by the law, considerations of individual safety and costs to the health care system take precedence. □

Jammers Still Illegal

Starting in 2001, Industry Canada held public consultations into broadening the use of radio frequency jamming devices. These devices can block wireless communications services and eliminate the ringing and/or operation of cell phones in a variety of public and private environments.

The majority of participants in the consultation, including the Canada Safety Council, opposed the legalization of these devices. The arguments for continuing the existing restricted use policy included that wide availability could: compromise public safety, such as 911 calls; impede personal freedoms, for example the ability to receive important phone calls; and, impair communications for law enforcement and security agencies. (After the events of September 11 the reasons become even more cogent.) As a result Industry Canada has concluded that the prohibition against possession and use of these devices should remain unchanged. □

Public Platform

Cigarettes and Fire Safety

Smoking is not only bad for your health. It's also a fire hazard. Fires started by cigarettes cause one out of every five fire fatalities, and careless smoking remains a leading cause of home fire deaths in Canada. In 1999, smoker's material caused 2,868 fires with losses of \$36.5 million.

The good news is that fewer Canadians are dying in smoking-related fires. Recently released statistics show a 30% drop in fire fatalities due to smoker's material over four years — from 100 in 1996 down to 71 in 1999.

Why are smoking-related fire deaths down?

Most fires related to smoking occur in the home. The Canada Safety Council attributes the decrease to the widespread use of smoke alarms, fire-retardant furnishings, fire codes and public education about fire safety.

Almost all Canadian homes have at least one smoke alarm — 95%, according to a 1998 Canada Safety Council survey. Smoke alarms detect smoke in the early stages of a fire and sound an alarm, allowing time to escape. Careless smoking may lead to fires which can burn for hours before bursting into flame. The increased availability of photoelectric type smoke alarms, designed to detect smouldering fires may be a further factor in reducing the number of smoking-related fire deaths.

Since 1985, bedding and upholstery sold in Canada must meet requirements for fire resistance. In fact, the test method for flame spread in mattresses involves the use of a burning cigarette. The requirements have more effect year by year, as older furnishings are replaced with sofas, easy chairs and mattresses that cannot be easily ignited by a cigarette.

Are fire-safe cigarettes possible?

A fire-safe cigarette would offer an antidote to irresponsible behaviour — falling asleep with a lit cigarette, discarding it carelessly or leaving it unattended. Such a cigarette would be engineered with reduced propensity to start a fire when dropped or left unattended. It might be designed to extinguish itself within minutes if a puff is not taken, or not to develop enough heat to ignite a flammable surface even if it falls and burns to ashes.

Critics allege manufacturers have known how to make fire-safe cigarettes for at least 20 years.

Characteristics that make cigarettes less fire-prone include: lower paper porosity; smaller circumference; shorter filter; reducing or eliminating paper burn additives; and lower tobacco density.

The technology to produce fire-safe cigarettes has been available for over a decade, but the industry, by and large, does not appear to want it.

Photoelectric Alarms a Must for Smokers

Ionization type smoke alarms typically respond first to fast flaming fires. They are best suited for rooms where there are highly combustible materials.

Photoelectric type smoke alarms perform more effectively with slow burning, smouldering types of fires, such as cigarettes burning in furnishings and bedding.

For maximum protection, use combination smoke alarms that have both an ionization sensor for flames and a photoelectric sensor for smoke.

Cigarette companies say smokers will not buy a product that goes out very quickly after a puff. They may also be concerned about product liability suits. For example, in 2000, a Toronto couple whose three-year-old daughter had died in a fire blamed on a smouldering cigarette filed a law suit against Canada's three major tobacco companies. They claimed that the companies knew how to make a fire-safe cigarette and failed to do so.



Careless smoking is a leading cause of home fire deaths.

Mass-produced commercial cigarettes that self-extinguish are already on the market. The Merit brand from Philip Morris uses "speed bumps" in the cigarette's paper which make it go out within minutes if a puff is not taken.

Governments Slow to Act

The idea of regulating a product standard for fire-safe cigarettes is not new. Our neighbour to the south — whose history is rooted in tobacco —

Continued on page 8...

Falls from High Rise Apartments

In April, a three-year-old boy fell 18 storeys to his death from the window of a Toronto apartment building. In September, a six-year-old boy died when he fell from a twelfth floor apartment balcony, and a five-year-old girl died when she fell from 22 storeys from a condominium balcony. Over the years, several Toronto area children have died after falling out of windows. A report dating back to 1976 said there had been 16 such fatalities in the previous 10 year period in the city.

From a survey of 15 children's hospitals across the country between 1990 and 2000, Health Canada statistics reveal that 362 children ended up at emergency wards after falling from windows. Most of the victims were between one and four years old, including 32 with concussions, 43 with skull fractures, and 52 with fractures to limbs.

The model *National Building Code 1995* has requirements for houses and small residential buildings that address this risk. However, there is no similar requirement for buildings four storeys and higher. The Canada Safety Council has contacted the Canadian Commission on Building and Fire Codes to ask that it address this issue. □

Snow and ice sliding (sledding and tobogganing) may seem less risky. However, they can cause serious injuries to children. Although the number of claims and injuries are relatively few, when an injury occurs, it is serious. This activity accounts for 25 per cent of insurance payments for field trips.

Managing Risks on School Outings

The Ontario School Boards' Insurance Exchange (OSBIE) insures 90% of the publicly funded school boards in Ontario. It receives reports of thousands of injuries each year to students on school field trips, some resulting in permanent disability and even death. The most tragic part of these incidents is that most could have been prevented by simple risk management.

Risk management is a systematic approach to prevent or reduce exposure to losses. It involves identifying and analyzing risks or hazards, and taking steps to remove or control risks that may cause injury. Evaluating the risk profile of an activity is frequently based on intuition and professional experience, rather than on hard scientific or medical evidence.

Risk management can prevent most serious mishaps.

Because it is an imprecise science, applying risk management to school activities can lead to objections from parents or students. Restrictions may be seen as inconvenient, expensive, unreasonable, or even an infringement of personal liberties.

Risk identification and analysis is the first critical stage for each proposed activity. What are the known risks and how much exposure to injury do they pose? Has someone pre-visited and checked the site? What qualifications and training should the adults in charge have?

Schools should not sponsor activities with a high chance of injury unless the risks can be removed. If this is not possible, the activity must be vetoed, often to the chagrin of some students and parents.

In many cases, hazards can be reduced or removed by following safety standards or guidelines. These can be internal policies and procedures, or can originate from external organizations such as athletic associations, safety organizations or regulating authorities. For instance, they may require precautions such as the use of proper safety equipment, or they may require organizers and operators to train and supervise the participants.

School trips and outings often involve outside commercial vendors or operators such as amusement park operators, ski resorts, excursion or tour operators, or equipment suppliers. Schools must ensure that service providers are reputable, have effective safety measures in place, and accept responsibility for any negligent acts of their employees.

When a school outing ends in serious injury, a lapse in risk management can usually be identified. Perhaps risks were not assessed properly at the planning stage, or safety rules were not enforced during the event itself. Good risk management practices can prevent most serious mishaps. □

Safety on school trips is the theme for National School Safety Week (October 17 to 23, 2002).

In October 2001, the Institute of Medicine of the American National Academy of Sciences convened a conference where experts on head injuries discussed the potential risks of heading, but reached no firm conclusions. However, some studies reveal that a startling percentage of soccer players have neuropsychological deficiencies of attention, concentration, memory and judgement. These result not only from heading; player collisions and running into goal posts also lead to a significant number of concussions.

In 1999, the team physician for McGill's football and soccer teams realized he was seeing more head injuries in soccer players than in football players. Dr. Scott Delaney noticed that some soccer players were lost for the entire season. Many missed weeks of school, unable to keep up with their studies in more advanced fields.

Dr. Delaney identified three high risk groups: those who have previously suffered a concussion, goalkeepers and children. The youngest group, eager but largely unskilled, was of particular concern. Though heading the ball is intrinsic to the game, most young players don't know how to head the ball safely. They have thinner skulls to protect the brain than adults, and weaker necks that don't absorb or dissipate forces applied to the head. He recommended head protection for these players — not hard-shell protection like a bicycle helmet, but something modeled loosely on the old-style leather football helmet.

The American Society for Testing and Material (ASTM) currently has a committee whose objective is to set standards for soccer headgear. However, no such protection is currently sold in Canada.

Indoor soccer is a popular wintertime sport in some Canadian centers. The game is played in an area similar to a hockey rink. Children can be pushed into the boards or can trip on the carpeted cement floors. With smaller, heavier balls, heading is a concern. FIFA (Fédération Internationale de Football Association), soccer's world governing body, recognizes Futsal, a safer version of the game that does not have boards and has stricter rules. Most soccer associations in Canada do not offer Futsal.

Although some neurologists have expressed concerns, the Canadian Soccer Association (CSA) does not accept the U.S. studies. CSA officials maintain that most soccer head injuries are from collisions, and are not considering a ban on heading for younger players. The association recommends not teaching the skill until a child is nine or 10. At that time, a ball that is smaller than the approved No. 5 FIFA ball should be used to teach proper technique. One official recommends something as light as a beach ball. CSA officials say children have to learn to keep their eyes on the ball and make contact with the top of the forehead, the hardest bone. □



Photo: Kangaroo Soccer Headgear
(www.soccerheadgear.com)

On the Job

Driving Near Big Trucks

In fatal crashes involving a car and a truck, the car occupants are far more likely to be killed. Driving mistakes around trucks can have tragic consequences.

A recent survey sponsored by the American Automobile Association (AAA) examined crashes involving passenger vehicles (including cars, pickups, minivans and SUVs) and trucks. That organization estimates some 5,000 deaths and 140,000 injuries in the US can be attributed to dangerous driving near commercial trucks and tractor-trailers

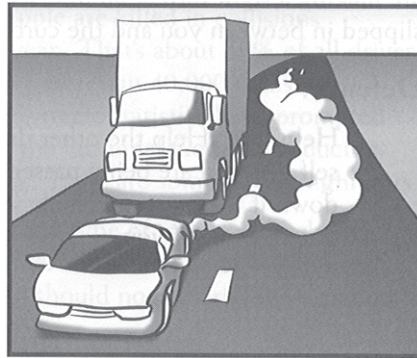
In collisions, the sheer size of some trucks puts car occupants at a disadvantage. Many drivers are intimidated when they must share the road with large trucks, and not without reason. According to AAA, people in passenger vehicles account for 98% of the deaths in fatal two-vehicle crashes involving a car and a truck over 10,000 pounds. However, the survey found that in most cases, police, survivors or witnesses identified at least one unsafe act by the car driver.

A manoeuvre by a car near a large truck may be more dangerous than the same manoeuvre near another car. Similarly, a large truck may perform a manoeuvre that carries low risk of a crash near another truck in the traffic stream, but a higher risk when performed near a smaller vehicle.

The study, by the University of Michigan Transportation Research Institute, found that drivers who get involved in fatal crashes probably drive the same way around trucks as they do around other cars. It identified five driving behaviors that were factors in most of the fatal crashes:

- failing to stay in the lane or running off the road;
- failing to yield the right of way;
- driving too fast for conditions or above the speed limit;
- failing to obey signs and signals; and
- driver inattention.

The study reinforces the message that a few basic defensive driving habits could save a lot of lives:



- Don't change lanes abruptly.
- Slow down to let trucks have the right of way.
- Drive at a safe speed.
- Stay alert to traffic signals and road conditions.
- Use turn signals.
- Never cut in front of a truck.
- Avoid driving alongside trucks whenever possible — if you can't see the truck driver's face in the side mirror, he or she can't see you.
- Avoid tailgating.

Identifying Unsafe Driver Actions that Lead to Fatal Car-Truck Crashes, University of Michigan, Transportation Research Institute, sponsored by AAA Foundation for Traffic Safety, 2002. Available online (76 pages): www.aaafoundation.org/pdf/CarTruck.pdf

Europeans Launch OH&S Site

The European Agency for Safety and Health at work has launched a new Web site with an interface in all 11 official EU languages. The site provides free access to the agency's portfolio of publications and information services on safety and health at work, and features such as shortcuts to key information on occupational health. The organization hopes to use the site as a vehicle for educating employers on how to develop a 'preventive culture' in the workplace. The Web site can be accessed at: <http://agency.osha.eu.int>

Shocking News About Call Centres

With the growth of the call centre industry, acoustic shock may become a major new occupational injury of the 21st century.

In Europe call centre operators have seen a steady stream of claims from affected staff. In Australia, a review of workers' compensation claims for call centre stress and hearing injuries found a total of \$3 million in claim costs from 1997-2000.

Acoustic shock injury can be caused by a sudden, loud or piercing sound at a high decibel level. Such noises can travel over telephone communication equipment due to electronic feedback, fax modems or even malicious callers who use devices such as whistles. Acoustic shock may lead to:

- temporary or permanent damage to the inner ear;
- loss of hearing, tinnitus (ringing in the ear), earaches and reduced tolerance to noise;
- headaches and nausea;
- dizziness and impaired balance; and
- fatigue and anxiety.

The Communication Workers Union in the UK and the Australian Council of Trade Unions have identified acoustic shock as a significant risk. Both have released educational kits for call centre workers. These organizations recommend preventive strategies such as the following:

- A detailed noise reporting procedure which calls for the supervisor to complete an incident report.
- Measures to reduce noise in the workplace; for example, isolation of call centres from other noisy work areas and machinery. Often call centre agents will adjust their headsets to a higher volume to cope with the noise around them.
- Strict maintenance requirements for electronic equipment.
- Use of new technologies such as sound shields to filter narrow band tones which may cause acoustic shock. □

Did you know?

According to the US Centers for Disease Control and Prevention, children of parents with the highest income and education levels are more than twice as likely to suffer a recreational injury requiring medical attention than children whose parents earn less and have less education. Based on a study of 40,000 injuries, there were 52 injuries per 1,000 children in poor families, and 119 per 1,000 in affluent families. Researchers suggest the higher injury rate can be partly explained by exposure to activities that less affluent families cannot afford, such as skiing and organized sports.
National Post, April 12, 2002

In 2001, Canada's impaired driving incidents rose for the first time in nearly 20 years. Reported incidents went up 7%, and the number of persons charged by police rose 1%. Police reported more than 90,000 incidents of impaired driving, with about 71,000 persons charged. Given that alcohol-related road fatalities continued to decline, it is difficult to say how much of this increase was due to a change in reporting procedure, and how much was an actual increase.
Crime Statistics, Juristat, July 17, Canadian Centre for Justice Statistics

A New Zealand study found that drivers who identified themselves as sleepy had an 11 times higher injury crash risk compared with alert drivers. The risk of driving between 2 and 5 a.m. was five times that of other times of day. Drivers who had five hours sleep or less in the last 24 hours had nearly three times the risk of crashing. The University of Auckland researchers concluded that reducing the prevalence of these three behaviors may reduce the incidence of injury crashes by up to 19%.
Driver sleepiness and risk of serious car occupant injury: population based case-control study, J. Connor et al., *British Medical Journal*, 11 May 2002, from IP Online

There were 20 ATV deaths in Alberta between July, 1999 and June 2002 (three years). Victims ranged in age from three to 80 years old; 45% were children and teenagers. At least 60% died as a result of head injuries. Over half of the deaths occurred between July and September. The majority of deaths (45%) were due to the ATV flipping or rolling, and 85% of the deceased were the ATV drivers. Alcohol was involved in 45% of the fatalities.
Alberta Centre for Injury Control & Research Newsletter, Volume 4, No. 12, August 2002.

An Australian report summarizes the characteristics of 36 events between 1996 and 1998 involving young children being killed by low-speed motor vehicles. Most of the cases involved young toddlers close to stationary vehicles in the driveways of suburban residences. They were old enough to be mobile but too small for the driver to see easily. The vehicles tended to be large. These events typically involve very young children — mainly toddlers — in driveways or other private property, and require their own set of safety countermeasures. Driveway deaths: fatalities of young children in Australia as a result of low-speed motor vehicle impacts, *Australian Transport Safety Board, published April 2002, downloadable from ATSB Web site (www.atsb.gov.au/road/rpts/cr208/index.cfm)*

An Alabama study suggests that older drivers who have cataract surgery are half as likely to be in a collision as those who do not have the operation. The study of 277 cataract patients aged 55 to 84 found that collisions increased for both groups. The rate rose 27% for those who had surgery, compared with 75% for those who refused it. Cataracts are the leading cause of vision impairment among the elderly. Impact of Cataract Surgery on Motor Vehicle Crash Involvement by Older Adults, *Journal of the American Medical Association*, August 21, 2002, vol. 288:841-849

Last winter, more people died in skiing accidents at Colorado resorts than ever before. There were a total of 15 deaths at nine resorts, with no discernable common elements. As a result, major resorts such as Vail and Aspen will require children to wear helmets in the 2002-2003 season. Medical officers say helmets can reduce the severity of head injuries, which account for as much as 90% of all skiing deaths.
New York Times, March 31, 2002

During the September 11 terrorist attack on the World Trade Center, the New York police did not communicate. The police failed to warn the fire department that the second tower was about to collapse. Over 120 firefighters, a third of the ones who died that day, were in the north tower when it fell. Most did not know about the risk of collapse or even that the south tower had fallen. The New York Times discovered that the two departments were not talking to each other. Even if they had been, they did not use a shared radio frequency. In addition, there was no record of joint disaster response training.
Globe and Mail, July 8, 2002

Fire-Safe Cigarettes, from page 5.

has actively addressed ignition propensity of cigarettes over the years.

The American Congress first raised the issue in 1929. Research was conducted by the US National Bureau of Standards at that time. In 1974, after a long hiatus, legislation mandating fire-safe cigarettes passed the Senate. However, the legislation failed in the House of Representatives. Progress stalled again until a Technical Study Group released a report to Congress in 1987 affirming that it is technically and economically feasible to make a fire-safe cigarette. By 1993 a test method was developed as a means to implement a fire safety standard for cigarettes.

The idea of fire-safe cigarettes is not new.

A *Fire Safe Cigarette Act* was introduced in 1999. It required the establishment of a cigarette safety standard and directed the Consumer Product Safety Commission to implement this standard within 18 months of the date of enactment. That Act did not pass, but was re-introduced as the *Fire Safe Cigarette Act of 2002*.

In the meantime, in 2000, New York passed the first state law requiring fire-safe cigarettes, to take effect by July 1, 2003 unless federal legislation is enacted which supersedes it. Massachusetts and several other states are considering similar laws.

A 1995 coroner's inquest in Toronto recommended the federal government mandate fire-safe cigarettes, referring to the US studies. However, only very recently has Canada's federal government taken action to look at a possible fire safety standard for cigarettes, despite requests from the Canada Safety Council and other health and safety groups. In November 2001, a sub-committee of the Health Minister's Advisory Council on Tobacco Control decided to make fire-safe cigarettes a priority. □

*Statistics:
Fire Losses in Canada, Council of Canadian Fire Marshals and Fire Commissioners: Annual Report 1996 and Annual Report 1999*