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SAFETY CANADA

The member newsletter of the Canada Safety Council

Pleasure Boaters and PFDs

Freshwater lakes, ponds and rivers cover nine per cent of Canada's total area, and our country is bounded by three oceans. With this abundance of water, it is not surprising that 10 million Canadians are boaters. Powerboats, canoes and sailboats are the most popular pleasure craft. Fishing, hunting and partying are often associated with boating.

Boating is the number one cause of drowning in Canada. In 2000, about one-third of all water-related deaths occurred when boating. Eighty-five per cent of the boating deaths in 2000 (and closer to 90 per cent over the past 10 years) had one common factor — the victim was not wearing a personal flotation device (PFD) or life-jacket.

To wear or not to wear?

In 2000, the Canadian Coast Guard's Office of Boating Safety commissioned an observational study of boats six metres or less that established as a baseline that only 20 per cent of Canadian boaters wear PFDs.

Subsequent surveys revealed more useful information about Canadians' attitudes towards PFDs:

- Decisions to wear are often based on the amount of risk present.
- Most people would wear a PFD if the operator of the boat asked them to do so.
- The more often a person engages in a boating activity, the lower their perceived risk and the lower their wear rate.
- Most boaters think boating activities would be safer if they wore a PFD.
- More than 90 per cent have the right number of PFDs on board.

Most people realize the value of flotation devices and carry them. Why, then, the low wear rate? Boaters blamed discomfort, lack of mobility to hunt and fish, or stained and smelly material.

The Coast Guard's research indicates that any campaigns to increase wear must start with public education about life-jackets and PFDs, and the features now available on the market.

A life-jacket is not a PFD

Many Canadians don't know the difference between a PFD and a life-jacket. Nor do they realize these devices have become easier to wear and move around in. The bulky, ugly old orange life-jacket is a thing of the past for pleasure boaters.

Originally, life-jackets were designed for professional mariners, who might be thrown into the water face down and unconscious in an emergency at sea. A life-jacket turns the wearer into a face up position. It must be either red, orange or yellow so it can be seen by search and rescue teams in a vast expanse of water. It is worn loose, to let water flow underneath and turn the wearer face up.

Pleasure boating, in general, does not demand the high level of performance offered by life-jackets. (However, rafters are safer in a life jacket, which helps assure the mouth and nose are out of water within five seconds of falling in; with a PFD, it is possible to float face down.) PFDs are designed to keep a conscious person's head out of water in calm conditions and assist them in rough water. PFDs are designed for constant wear, and must be worn snug.

New PFDs offer comfort, style and flexibility, with a wide range of models, sizes and colours. Indeed, there's a PFD for just about every body type, taste and purpose. Manufacturers and safety officials hope boaters will look at today's PFD as a fashion accessory they want to wear.

Some PFDs are inherently bouyant (with foam panels). Others are

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The Electronic Observer in Your Car

Air, rail and marine carriers all have crash data recorders. The "black box" or flight data recorder on an aircraft provides vital data about the last few moments before a catastrophe. This information helps investigators determine what went wrong and identify ways to avoid a similar event.

A similar device installed in motor vehicles can provide data about a road crash. How fast was the vehicle moving? Was the driver's foot on the gas or the brake? How big a jolt did the occupants suffer? Were they wearing their seat-belts?

Knowing what was happening in the vehicle just prior to a crash is of tremendous value to collision investigation experts as they analyze causes and recommend preventive measures. Such information also enables automobile manufacturers to design safer vehicles.

Event Data Recorders

Many vehicles now on the road are equipped with a module that records the last few moments leading up to a crash. Several vehicle manufacturers use the

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President's Perspective

The Canada Safety Council is an independent, knowledge-based, charitable organization dedicated to the cause of safety. We provide national leadership in safety through information, education and collaboration.

Like most not-for-profit organizations, we regularly approach the private sector for funding. Companies and industry associations may sponsor initiatives related to their interests. Corporate philanthropy enables CSC to fulfil its mission while at the same time helping the sponsor achieve compatible business objectives. However, we have never and will never place the interests of any industry above public safety. We do not represent victims or commercial interests, but take into account information from a wide spectrum of experts and stakeholders in the overall context of the public good.

Our mandate is to serve as a credible third party acting on the sole basis of our commitment to safety. We do not accept funding that is conditional on taking a stand contrary to the best interests of Canadians.

By maintaining a diversified revenue base, we avoid conflicts of interest that might compromise our independence. Margins from training programs, magazine subscriptions, and sponsorships contribute to overhead. Corporate and individual members fund the Council's non-revenue-generating work through annual contributions. With this support, plus a dedicated, knowledgeable staff and cost-effective operations, we fulfil our safety mandate.

Advocacy is a small part of our overall activity, with the purpose of promoting a full and reasoned consideration of an issue. We do not lobby behind the scenes, and do not put pressure on individual politicians or other organizations. CSC's policy positions reflect sound research, and consultation with stakeholders, including police, insurers, industry, health and safety professionals, and others. Our role in representing safety interests is to help create laws and countermeasures that address clearly identified problems, are based on well-researched evidence and can be enforced.

Emile Therien

SAFETY CANADA

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Electronic Observer, from page 1.

technology. For example, General Motors has had the modules in all its models since 1999, and Ford since 2000. Less sophisticated than an airliner's black box, the Event Data Recorder (EDR) is part of air bag deployment systems. The GM devices record vehicle speed, engine speed, brake application, throttle position and whether the seat-belts were fastened.

This technology is a tool to analyze collisions with a view to improving safety and efficiency. In the 1970s, vehicle manufacturers used it to collect data to improve design and diagnose systems. Precise, accurate data from collisions helps engineers improve vehicle and highway systems, provides valuable input for regulation and enforcement, and gives insight into driver behaviour in crash situations.

Installing EDRs in fleets, with the knowledge of the drivers, has been shown to reduce collisions. A 1992 study by the European Union found that EDRs reduced the collision rate by 28 per cent and costs by 40 per cent in police fleets; the drivers knew they were being monitored. Most North American drivers, however, do not realize an electronic device may be monitoring their driving, despite the fact this is explained in their owner's manual.

Reliable and Objective

Despite a few unresolved issues, police and collision reconstruction experts are already using these devices, with the permission of the owner or by means of a court order.

In 2001, a speeding Montreal driver smashed into a car, killing a young man. Without skid marks there was no way to calculate the car's speed before impact, and only the suspect's testimony about his own actions. The EDR showed that the vehicle was traveling 157 km/h (in a 50 km/h zone), that four seconds before impact the driver floored the gas pedal, and that just before impact he took his foot off the gas but did not brake. Despite the EDR evidence, the driver was acquitted of criminal negligence causing death, and convicted instead on the lesser charge of dangerous driving causing death.

This technology is a tool to analyze collisions with a view to improving safety and efficiency.

In another case, the data proved a possible suspect was innocent. When a chain-reaction crash on an Ontario highway ended in the death of a child, witnesses blamed a speeding car. The driver of that car gave police permission to download the data on his EDR, which showed he was driving slowly and quite properly.

If a driver blames a crash on vehicle malfunction, the EDR serves as a reliable electronic observer, confirming (or not) the driver's behaviour and reactions, and how the vehicle performed.

Numerous "mystery crashes" occur every year — fatal single vehicle incidents with no witnesses. Perhaps the road was slippery, or the driver fell asleep at the wheel. Perhaps the crash was intentional. Investigators can only provide an educated guess about contributing factors. With EDR data, they may be able to solve some of the mysteries.

Due to the unique designs used by each manufacturer, there is currently a lack of standardization. As a result, EDR data cannot be easily retrieved at the crash site. This means

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Intersection

Low-BAC Drivers and the Law

How should the law treat drinking drivers whose blood alcohol concentration (BAC) is below the Criminal Code limit of 0.08?

Although impairment begins with the first drink, the majority of drivers involved in alcohol-related fatal crashes have BACs over 0.15. These high-BAC drivers represent about one per cent of the cars on the road at night and on weekends, but nearly half of all drivers killed at those times. Most fall into one of two major categories: the young (ages 19 to 24) and the hardcore.

In Canada's system, the federal government shares responsibility for impaired driving with the provinces and territories. The federal Criminal Code, for example, addresses driving or care and control of a vehicle with BACs exceeding 0.08. The Canada Safety Council recommends dealing with lower-BAC drivers under provincial and territorial highway traffic acts.

Prevention the goal

The priority must be to prevent alcohol-related traffic crashes, not merely to punish drinking drivers. Penalties for drinking and driving are very tough across Canada. The problem is that many drinking drivers do not think about consequences before taking the wheel.

Penalties, regardless of severity, have little preventive impact unless they are seen to be enforced. That is why roadside checks and visible enforcement are very effective deterrents.

The gauge of progress should be the rate of deaths and injuries due to road crashes involving a drinking driver. Criteria such as the number of licence suspensions, severity of penalties and implementation of specific types of legislation, while relevant, are not valid measures of prevention.

Highway Traffic Acts

Most jurisdictions impose administrative licence suspensions on drivers with BACs below the Criminal Code limit or if the officer believes the driver is affected by alcohol; durations vary. Some also have remedial and/or assessment programs for low-BAC drivers with repeat suspensions.

Administrative licence suspensions provide a measured response to the risk posed by low-BAC drivers. They protect the public by taking potentially dangerous drivers off the road, and give those drivers a strong warning. These suspensions are an effective tool in the fight against impaired driving, in part because they impose swift and certain consequences. Some provinces have licence reinstatement fees, as well as requirements for assessment and treatment in the case of repeat suspensions.

Specific sanctions for drinking drivers with lower BACs vary from one part of the country to another. From a national perspective, this inconsistency makes it difficult to inform Canadians about those which apply in the jurisdiction where they live. Indeed, a 2003 survey found that less than half of respondents knew there is a lower alcohol limit in their province at which police can suspend driving privileges; only six per cent could identify that limit.

Deal with lower-BAC drivers under Highway Traffic Acts.

Criminalization

There is no evidence that charging low-BAC drivers under the federal Criminal Code would prevent more deaths and injuries than dealing with them under provincial and territorial traffic regulations.

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Guardian Interlock Systems Corp.

Ignition Interlock — Incentive or Punishment?

An ignition interlock is a breath screening device which is installed in a vehicle. Before starting the car, the driver must blow into the device. The car will not start if the driver's BAC is above a pre-set limit. As long as the car is running, the driver is required to blow periodically into the device. If the BAC rises above the pre-set limit, this will be recorded, a warning issued and emergency lights and sounds will ensue until the car is turned off.

Ignition interlocks were designed to prevent drivers with an elevated BAC from operating a vehicle. The devices have been shown to interrupt drinking-driving behaviour — but not, in the long term, to change it. Ideally, ignition interlock programs should be used in conjunction with treatment programs. Otherwise, a high proportion of the users continue to drink and drive after the device has been removed.

Six Canadian provinces and 43 American states have legislation that permits ignition interlock devices. Some programs fall under the administrative authority of licensing agencies, while others are under the

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April 7, 2004: World Health Day — *Road Safety is No Accident*

The World Health Organization has recognized road traffic injuries as a deadly scourge, taking the lives of 1.26 million men, women and children around the world in 2000. In addition 10 to 15 million people are injured every year; some become permanently disabled. The vast majority of these deaths and injuries occur in developing countries, among pedestrians, cyclists, motorcyclists and users of public transport, many of whom would never be able to afford a private motor vehicle.

Road traffic injuries are the leading cause of death by injury and the ninth leading cause of all deaths worldwide. Road traffic injuries are projected to become the third leading cause of disability-adjusted life years lost worldwide by 2020, surpassed only by heart disease and major depression.

Although the number of automobiles per population is much higher in developed countries, about 90 per cent of all road traffic injury deaths occur in developing countries. Half of road fatalities worldwide involve adults aged 18 to 44 years, many of them heads of families.

Low BAC, from page 3.

Making conduct criminal is society's ultimate condemnation. The *Criminal Code of Canada* addresses offences such as murder, rape and assault, that violate basic societal norms. Criminal Code sanctions are very severe. For example, a criminal conviction, be it for armed robbery or for driving with a BAC over 0.08 limits travel and job opportunities for the rest of the offender's life. Justifiably the legal process to charge and convict a felon is intricate and costly.

Provincial and territorial transport officials, represented in the Canadian Council of Motor Transport Administrators (CCMTA), have taken a position against lowering the criminal BAC to 0.05. According to CCMTA, this would hamper the ability of the police to detect drivers with a BAC greater than 0.08 (who are a greater crash risk), due to the over-extending of enforcement resources. CCMTA says a move to criminalize drivers who are at lower risk of collision involvement would further burden an overtaxed criminal justice system without increasing the deterrent effect of the law.

Recommendations

Canada is making impressive progress in its fight against impaired driving. Between 1995 and 2000, road fatalities involving a drinking driver dropped by one-third. The problem is far from solved, but this progress indicates that countermeasures now in place are working.

How to deal with drivers with BACs below the Criminal Code limit has been the subject of much debate. CSC has developed the following recommendations to offer a realistic and practical direction for public policy. □

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Recommendations — Low-BAC Drivers

1. Deal with low-BAC drivers under highway traffic acts.

Driving ability can be impaired at low BACs, although the incidence of fatalities rises dramatically starting at 0.15. The federal Criminal Code addresses higher BAC drivers starting at 0.08, who are implicated in the majority of alcohol-related road fatalities.

It is important to deal firmly with individuals with BACs below 0.08, both to prevent them from causing immediate harm and to ensure they do not join the high-BAC group. CSC recommends that the responsibility to address drivers with BACs below 0.08 remain with the provinces and territories.

Highway traffic acts provide effective regulatory tools. For example, administrative licence suspensions enable police to apprehend low-BAC drivers, remove them from the road and give them a firm warning not to continue drinking and driving. These acts also provide a means to mandate intervention programs, which can help prevent these people from becoming chronic drinking drivers.

2. Harmonize the BAC at which administrative licence suspensions are imposed.

Canada's 13 jurisdictions vary widely in their criteria for administrative licence suspensions; see the January 2004 issue of this newsletter. This inconsistency can create confusion and inequities.

CSC recommends a common BAC for short-term suspensions in all jurisdictions. This would provide greater consistency across Canada, and would permit a stronger message to be sent to the Canadian public to increase awareness of penalties for drinking and driving.

3. Treat administrative suspensions like traffic violations.

Currently, a number of jurisdictions do not record on the driver's record the short-term suspensions or prohibitions imposed for violations of the lower BAC limit. This makes it difficult to identify recidivists so that appropriate action can be taken.

Inclusion of short-term suspensions on the driver's record will help police and licensing authorities identify those who repeatedly drink and drive. CSC recommends that BAC-related suspensions be retained on a driver's record along with demerit points, and shared with adjoining jurisdictions in the same way as other traffic violations such as speeding.

4. Provide intervention programs for repeat administrative suspensions.

Some jurisdictions already have requirements for assessment and treatment in the case of repeat suspensions. Such interventions are intended to address the root of the problem, such as alcohol dependency.

CSC recommends that Best Practices be established for such programs, and that assessment / remedial programs be provided for drivers with repeat administrative suspensions within a specified period of time. These programs should be provided at the driver's expense.

5. Enhance enforcement through well-publicized and visible roadside checks by police.

Visible, effective enforcement is critical in the fight against impaired driving. Roadside spot checks, in particular, have been shown to reduce the number of drunk drivers on the road.

Drivers with low BACs are difficult to detect through routine patrol or spot check programs because most show no obvious signs of impairment.

CSC recommends that police agencies be given resources and training to apprehend low-BAC drivers using roadside spot checks, and that they be authorized to use proven technologies such as passive alcohol sensors to detect drivers with low BACs.

6. Increase public awareness of countermeasures for low-BAC drivers.

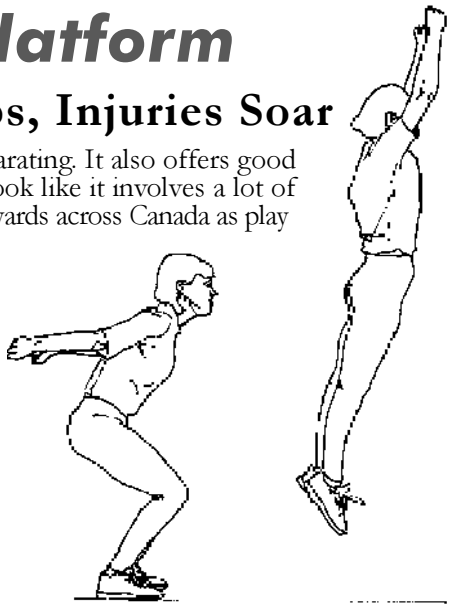
Most Canadian drivers are unaware that BAC limits lower than that in the Criminal Code already exist in most provinces/territories. This lessens the potential deterrent effect of the lower limits. (If the public does not know what they are, how can they be expected to comply?) If the administrative licence suspensions at lower BACs are to deter drivers from operating a vehicle after they have been drinking, drivers need to know about them.

CSC recommends that substantial efforts be initiated to increase public awareness about existing lower BAC limits and their associated sanctions, to enhance the potential deterrent effect of these measures.

Public Platform

Trampoline Use Jumps, Injuries Soar

Jumping on a trampoline is fun and exhilarating. It also offers good physical exercise. Best of all, it doesn't look like it involves a lot of skill. Trampolines are springing up in backyards across Canada as play equipment for school aged children.



A serious sport

More than just a recreational pastime, trampolining is a great form of aerobic exercise for athletic training.

During World War II, trampolines were used to train pilots and navigators in fitness and orientation. After the war, astronauts trained on trampolines to develop body positioning for space flight missions. Trampolining became an international sport and was introduced into school physical education programs to combine fitness and fun. However, US participation declined as trampolines were withdrawn from schools due to injury law suits.

For the first time in 2000, the Olympic Games featured trampoline gymnastics. The début of trampolining as an Olympic sport is expected to make it even more popular, and competitors are lining up for the 2004 Olympics. The Europeans now dominate the sport.

In many countries, trampolines have long been considered a piece of sporting or gymnastic equipment that demands skill — and precautions. Professional trampoline organizations and clubs enforce strict rules. For example:

- jumping must be supervised by professional spotters;
- somersaults are only allowed with permission and supervision;
- special trampolining footwear may be required; and
- jewellery or articles that may catch on equipment are prohibited.

Child's play?

Parents who buy a trampoline for their children often overlook the hazards, despite the safety precautions that come with the equipment.

In 2003, the first Canadian report to document trampolining trauma was published. From January 1996 to October 1997, the Winnipeg Children's Hospital looked at 80 children who had been injured while using a backyard trampoline. The time period covered about eight months of trampolining weather. In many cases, the injured children had been using the trampoline in what was called an "imaginative" way, in one case jumping onto the trampoline from a roof. The report revealed a number of key findings:

- Trampolining injuries slightly exceeded cycling-related admissions.
- A parent was supervising in only eight of the 80 cases.
- At least one other child was jumping on the mat in two-thirds of the cases.
- Two-thirds of the injuries occurred on the mat itself.
- Half of the injuries occurred at a neighbour's home.
- Three-quarters of the injuries involved fractures, mostly to the forearm, humerus and elbow. The most serious case was an eight-year-old boy who was paralyzed.

Data from the Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP) show that trampoline-related injuries almost quadrupled between 1990 and 1998. Almost 80 per cent of those injured were children in the 5 to 14 age range. Most incidents were in the home environment, either the child's own home or another home. An alarming 80 per cent of cases were unsupervised by a parent.

Parents who buy a trampoline for their children often overlook the hazards.

Kwiz Korner

What do you know about bike safety?

1. Children have fewer bicycle fatalities than adults. True / False
2. Road regulations for cyclists are different from those for drivers of motor vehicles. True / False
3. A bicycle helmet could save your life. True / False
4. Most bicycle injuries involve motor vehicles. True / False
5. A bike that is too big or too small is a safety hazard. True / False
6. Cycling at night requires special skills and equipment. True / False

Answers on page 6.

The US Consumer Product Safety Commission (CPSC) has observed a similar trend. Trampoline injuries treated in hospital emergency rooms tripled during the 1990s, and there were 11 trampoline-related deaths.

The main causes of injuries are:

- colliding with another jumper;
- landing improperly while jumping or doing stunts;
- falling or jumping off of the trampoline; and
- falling onto the trampoline springs or frame and while attempting somersaults or other stunts.

Safety precautions

In 1999, a new CPSC standard for trampolines came into effect in the US. The standard specified that trampolines must have padding covering the frame, hooks and all springs, and must not come with ladders (to prevent access by young children). They must carry a label telling consumers not to let more than one person jump at a time, and warning that somersaults can cause paralysis and death. In addition, a label on the box must state that trampolines over 20 inches high are not recommended for children under six years of age. Older trampolines may not have these features.

Backyard trampolining can be an enjoyable and healthy activity for children if parents establish the rules, enforce them and take the necessary precautions. First, ensure the equipment is safe.

- Shock-absorbing pads must completely cover the springs, hooks and frame.

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PFDs, from page 1.

inflatable, and come in vest or suspender-type styles. You can find PFDs tailor-made for specific activities such as canoeing and kayaking, water skiing, and fishing. PFDs come in a wide range of trendy and attractive colours. There are PFDs with hypothermia protection, a valuable feature in Canada's cold waters. Children's PFDs come in a variety of sizes.

Life-jackets must be approved by Transport Canada, PFDs by the Canadian Coast Guard, Department of Fisheries and Oceans.

Education and Regulation

The new, attractive PFDs are expected to increase wear rates. In addition, public education is needed. However, past campaigns have had only minimal impact on wear rates. The Coast Guard is using its research as the basis for a more effective communications strategy to persuade Canadian boaters to wear their PFDs.

Pleasure boaters are already subject to regulation. Small Vessel Regulations include the safety equipment that must be on board and safety precautions to be taken before and during the boat trip, and impose penalties for careless operation of a vessel. Collision Regulations require the operator to proceed at a safe speed, maintain a constant lookout, and use every available means to avoid a collision. Operator competency requirements came into effect in 1999; all operators will require proof of competency by 2009.

Irresponsible boaters can be charged under the *Criminal Code of Canada* for such offences as operating a vessel dangerously, operating a vessel when impaired, towing waterskiers improperly, failing to stop at the scene of an accident, and operating an unseaworthy vessel.

Some suggest that educational efforts will succeed in increasing PFD use only if they are combined with mandatory wear legislation. Others think the best results will come from investing in training and education to achieve voluntary compliance, combined with countermeasures targeting non-compliant groups. □

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Typical Victim Profile

An adult male is fishing from a small motorboat on a lake and wearing no flotation device or hypothermia protection garment. Strong winds, large waves, cold water and approaching darkness are often present. Capsized, falling overboard or swamped, the victim finds himself struggling in the water.

He is unable to retrieve his personal flotation device from the boat. Even if he does find it in the chaos and panic of a capsize, hypothermia and other adverse circumstances make it too difficult to put on and fasten up. As the muscles of the victim's hands weaken from the effects of hypothermia, he loses his grip on the submerged boat and sinks beneath the surface.

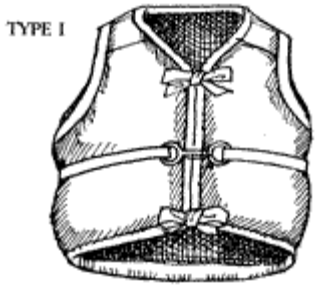
Canadian Red Cross. *Drownings and other water-related injuries in Canada 1991-2000*

The 2000 Statistics

- There were 472 water-related deaths in Canada, of which 147 (31 per cent) were in boating activities.
- Over three-quarters of all fatal boating incidents were recreational. Over half (53 per cent) occurred on lakes.
- The highest number of boating fatalities were during powerboating (33 per cent of boating deaths), sport fishing (27 per cent) and canoeing (13 per cent).
- Boating deaths while hunting or sailing have been on the increase over the past five years. Almost all boating victims were male (91 per cent).
- Half (48 per cent) were 35 to 64 years of age, and one-third (33 per cent) were 18 to 34 years of age.

Lifesaving Society, *National Boating Fatalities in Canada 2003*

A life jacket is designed to turn an unconscious person from a face-down position to a vertical or slightly backward position.



Trampolines, from page 5.

- Do not allow a ladder or other device that would provide access by small children.
- Place the trampoline away from structures, trees or other play areas.

Then, set two non-negotiable rules for the kids when they use the trampoline:

- One person at a time.
- No flips or somersaults.

Finally, make sure an adult is always present to supervise. □

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Answers to Bike Safety Quiz (p. 5)

1. *True.* In 2001, there were 60 bicycle fatalities — 36 per cent age 19 and under, and 64 per cent over 19. Lower helmet use among adults is a key factor.
2. *False.* Even child cyclists must obey the same rules of the road as adult drivers.
3. *True.* Ninety per cent of all cyclist fatalities are *not* wearing a helmet.
4. *False.* But 90 per cent of cyclist deaths *do* involve motor vehicles.
5. *True.* You should be able to straddle the bike with both feet on the ground.
6. *True.* Don't let young children ride in dark or dusk conditions.

On the Job

Federal Fleets Combine Safety with Fuel Efficiency

Defensive driving reduces fuel consumption and prevents collisions. That is why the federal government is offering the Canada Safety Council's *Defensive Driving Course* (DDC) to many of its fleets. Employees who drive as part of their job may enroll in either the classroom course or the online version of the new "Green" DDC, which combines fuel efficiency with road safety.

The training started this year as a Natural Resources Canada initiative to bring the government's fleet operations into line with Canada's commitments under the Kyoto Protocol. Exhaust emissions from vehicles are a leading cause of climate change, urban smog and acid rain.

Environmentally friendly driving is also safer driving.

By improving their drivers' skills, government fleets will reduce fuel consumption as well as collisions. That is because environmentally friendly driving is also safer driving. For example, fast starts and hard braking not only show poor driving technique but also waste fuel.

The collision rate for the general population provides a baseline measure for fleet safety performance. One in every 25 Canadian drivers (four per cent) is involved in a collision of some kind every year.

DDC is available as a classroom course or online.

Outside the NRCan purview, the Department of National Defence has offered DDC since 1968. In 2002-03 DND had a collision rate of only 1.1 per cent. In other words, the average Canadian driver is four times more likely to have a collision than a trained DND driver! Thanks to the NRCan program, many government fleets are aiming to achieve or surpass that record.

Any business whose employees drive company vehicles should take note. A fleet whose collision rate is over four per cent has a definite safety problem, especially if over half are at-fault. A poor safety record is expensive. Cost leakages (possibly hidden) result from repairs, insurance, injuries and high fuel consumption.

Safe driving is an important occupational safety concern. In 2001, motor vehicle collisions accounted for 31 per cent of work-related traumatic injury fatalities, plus 10,000 time loss injuries.* Public and private sector fleets will benefit from a well thought-out fleet safety program that includes DDC. □

* *Work Injuries and Diseases: Canada 1999-2001*, National Work Injuries Statistics Program, Association of Workers' Compensation Boards of Canada.

EDRs, from page 2.

paramedics cannot yet take advantage of the information, which could help them make lifesaving decisions.

Looking into the future, CSC hopes emergency responders will someday be able to access such data. This would help them determine the most suitable treatment based on the actual severity of impact, potentially saving even more lives and reducing the long-term damage from serious injuries. Currently, GM's OnStar reads crash severity and enables EMS personnel to respond with appropriate priority.

Ownership and Privacy Issues

Questions must also be resolved about who owns EDR data, who can access it and for what purposes. There are also concerns about privacy and admissibility in court. The legal community in Canada has expressed the opinion that the data in EDRs are the property of the vehicle owner and cannot be accessed without the owner's consent or unless ordered by a court.

Legislators will need to address these issues in the near future. Reliable, objective crash data from EDRs are critical to further advancement in the science of traffic safety. □

Council News

Much of the Canada Safety Council's work in the cause of safety takes place behind the scenes. For example, CSC staff participate on committees dealing with issues and initiatives that involve safety, such as these.

Road Salts

Road salt is an essential, cost-effective tool for maintaining safe winter road conditions. However, excessive use can have negative impacts on the environment. That is why road salt was listed as a priority substance in the Canadian Environmental Protection Act of 1999.

Since then, the Canada Safety Council has been a key contributor to the deliberations of Environment Canada's Road Salts Working Group. The consultation process resulted in a *Code of Practice for the Environmental Management of Road Salts*, which will be published in Spring 2004.

Government Portal Sites

CSC is a partner in two portal sites of the federal government.

Health Canada's *Canadian Health Network* (CHN) supports Canadians in making informed choices about their health. It aims to provide access to multiple sources of credible and practical e-health information. The network of health information providers includes CSC and other national and provincial/territorial non-profit organizations, as well as universities, hospitals, libraries and community organizations. Visit www.canadian-health-network.ca.

The *Canadian Consumer Information Gateway* offers a single, central gateway to the trustworthy information and services offered by government departments and NGOs. Spearheaded by Industry Canada's Office of Consumer Affairs, the Gateway allows Canadians to quickly and confidently search for consumer information and services on the Web. Visit http://consumerinformation.ca.

Interlock, from page 3.

authority of the courts. Some are mandatory, while others are discretionary. Duration, eligibility, and requirements for reporting and monitoring all vary from jurisdiction to jurisdiction.

The administrative-mandatory model is the most widespread and appears to be the most effective. In this model, offenders must participate in order to have their licence reinstated. In Ontario, for example, after serving provincial sanctions, those eligible to have their licence reinstated must have an ignition interlock device installed on their vehicle for at least one year. After the required period, the driver must apply to the Ministry of Transportation to have the licence condition removed.

Participation in voluntary ignition interlock programs tends to be low. According to the Traffic Injury Research Foundation (TIRF), less than 10 per cent of impaired driving offenders volunteer to participate if the program is not mandatory. One reason may be the cost, which is about $100 a month. Participants must pay for installation and maintenance of the ignition interlock device in addition to their higher insurance rates, fines, licence reinstatement and rehabilitation fees.

Safety experts recommend the use of interlock programs as an incentive to keep offenders within the legal licensing system.

To increase participation in voluntary programs, the ignition interlock needs to be positioned as a beneficial alternative. In the mind of the drinking driver, it should be seen as an incentive rather than a punishment. One way to improve acceptance may be to reduce the length of licence suspension for offenders who install the device.

It is estimated that up to 75 per cent of those convicted of impaired driving disregard their licence suspension. These individuals continue to take the wheel (often impaired) after their licence has been suspended. Some choose not to apply for reinstatement, either because they do not plan to drive at all — or because they find driving without a licence is easy and think they will never be caught. Lengthy suspensions have been found to increase the risk of the latter.

An offender under the control of an interlock program is less dangerous than one who is under suspension and drives anyway. Safety experts recommend more flexibility in sentencing, and the use of interlock programs as an incentive to keep offenders within the legal licensing system. In Quebec, a driver whose licence has been suspended may apply for a restricted licence before the end of the suspension period, provided they meet certain criteria and install an ignition interlock in their vehicle.

While ignition interlocks offer significant benefits, they are not a panacea. The factors that help them achieve their potential are known. Their success as a tool to reduce impaired driving will depend on informed implementation, supported by appropriate legislation and treatment programs. □

References

D.J. Beirness and H.J. Simpson, Traffic Injury Research Foundation. September 2003. *Alcohol interlocks as a condition of licence reinstatement.* Download from www.trafficinjuryresearch.com.

4th Annual Ignition Interlock Symposium 2003 Presentations. November 3, 2003. Published by Traffic Injury Prevention, copyright Taylor & Francis.

Société de l'assurance automobile Québec. 2002. *A Tougher Law to Discourage Repeat Offenders.*

Did you know?

A Texas study of 98 children injured in falls from buildings identified two key factors in the falls: balcony rails more than 10 cm (4 inches) apart, and windows positioned low to the floor. Three-quarters of the falls involved apartments. Most occurred around noon or evening meal times. Among apartment falls, half fell from windows, and most of the remainder from balconies. For more than two-thirds of balcony related falls, the child fell from between the balcony rails. On-site measurement showed the rails were an average of 20 cm (7.5 inches) apart; all of these apartments were built before 1984. For more than two-thirds of window related falls, the window was situated within 60 cm (2 feet) of the floor.
Istre GR, McCoy MA, Stowe M, Davies K, Zane D, Anderson RJ, Wiebe R. *Injury Prevention* 2003; 9(4): 349-352.

Despite the fact that the proportion of adults involved in serious bicycle accidents has increased in the last two decades, most bicycle safety efforts target child riders. Massachusetts's state-wide injury data reveals a 30 per cent increase in hospital charges between 1994 and 1999 for adults following bicycle falls and collisions while there was no significant change for children. In the years 1993-2000, 60 per cent of patients requiring inpatient care at the Study Center for Bicycle Related Injuries were over 16 years of age. Three-quarters of patients suffering a closed head injury were not helmeted.
Rosenkranz KM, Sheridan RL. *Injury* 2003; 34(11): 825-829.

In the late 1990s, Kentucky and Louisiana repealed their universal motorcycle helmet laws. Statewide observational surveys showed that helmet use decreased from nearly full compliance to the 50 per cent range without the laws. The rate of motorcyclist fatalities per 10,000 registered motorcycles increased by 37 per cent in Kentucky and 75 per cent in Louisiana. Injuries also increased. The experience in Kentucky and Louisiana reflects the experience in Arkansas and Texas, the other states that have repealed universal laws in recent years, leaving little doubt that such repeals have demonstrable negative safety consequences.
US National Highway Traffic Safety Administration. *Evaluation of the repeal of the motorcycle helmet laws in Louisiana and Kentucky.* Published online October 28, 2003. www.nhtsa.dot.gov

2004 Public Awareness Campaigns

National Farm Safety Week (March 14 to 20)

National Summer Safety Week (May 1 to 7)

National Road Safety Week (May 21 to 27)

National School Safety Week (October 17 to 23)

National Community Safety and Crime Prevention Campaign (November)

National Seniors' Safety Week (November 6 to 12)

National Home Fire Safety Week (November 24 to 30)

National Safe Driving Week (December 1 to 7)