

# Safety Canada

THE MEMBER NEWSLETTER OF THE CANADA SAFETY COUNCIL

## New car seat regulations

In May 2010, the Government of Canada announced new regulations (effective December 31, 2011) that will make Canada's testing standards for child car seats unprecedented and world leading. The regulations are part of the Government of Canada's commitment to ensure Canadian product safety standards are second to none.

Parents should be aware that they are still able to use their current car seats after the new regulations take effect. However, it must be replaced if it was damaged or stressed in a vehicle involved in a collision. Also, parents should check the expiry date of the seat and be sure to replace it when it reaches that date. If the shell or materials on the seat are torn or damaged, the seat should be replaced.

The changes are driven by the fact that children have become heavier over the past two decades.

The new regulations are part of a regular process of reviewing and

updating child safety standards while using the most up-to-date technology available for testing. In addition, these regulations were rewritten to harmonize some elements with the U.S. and to incorporate new and unique Canadian testing requirements. The major issues being addressed are:

- a new testing requirement using a three-point seat belt to secure car seats in vehicles;
- changes to dynamic testing of car seats to adopt most of the U.S. testing parameters, including using the U.S. acceleration corridor and performance criteria;
- an increase in the maximum allowable weight limit of infant seats (rear-facing seats) from 10 kg to 20 kg;
- an increase in the maximum allowable weight limit of child seats (forward-facing seats) from 22 kg to 30 kg;
- the introduction of dynamic testing requirements for booster seats; and

- the allowance of harnesses to be used on school buses for special needs children.

### Car Time Stages

The best protection for your children is to make sure they are always buckled-up properly while in the car, even for short trips. Use the chart to help you figure out what stage your child belongs in, (on page 3). Read your car owner's manual and child seat user guide to learn how to install each seat properly.

**Stage 1: Rear-facing seats** are placed at a 45-degree angle so that your baby's head is supported. This makes it easier for them to breathe. A snug harness will keep your baby safe in a sudden stop or crash. It is okay if your child's legs touch the back of your vehicle seat, as long as your child is still below the manufacturer's weight and height limits.

*Continued on page 3*



## Inside

Feature Story: New Car Seat Regulations .....	1
President's Perspective.....	2
2010 National Police Awards .....	3
On the Job: Workplace Violence Takes a Toll on Employers.....	4
Wheels in Motion: Is There a Need For Seat Belts on School Buses?....	5
Public Safety : Continuous Chest Compression CPR.....	6
Kwiz Korner: Safe Snow Removal.....	7
Canada's Distracted Driving Laws .....	8

## President's Perspective

Many favourite outdoor activities take place on or near ice surfaces during Canadian winters. Ice usually appears on our lakes in mid to late fall and can remain well into the spring. As much as we love to skate, toboggan, snowmobile, and fish, ice over bodies of water can pose some serious, life threatening dangers.

Over a ten-year period there were 150 ice immersion deaths from falling through the ice during non-motorized activities on the ice, 246 immersion deaths involving snowmobiles, and 41 immersion deaths involving other vehicles on ice. Snowmobiles accounted for over half of all ice immersion fatalities, and alcohol was a factor in 59 per cent of these cases.

When going out on to ice surfaces it is best to avoid alcohol or any other substance that may impair your judgment, especially when snowmobiling. Alcohol may also speed up the development of hypothermia. Avoid travelling at night when it is very difficult to see open holes in the ice. This is a frequent cause of snowmobile drownings.

It is best to use designated ice surfaces. These designated areas should be maintained by knowledgeable personnel and regularly tested to ensure that the ice is thick enough and strong enough for recreational use. Local conditions such as currents and water depths can affect ice thickness. Staying off river ice is advisable, as river currents can quickly change ice thickness over night or between different parts of the river. Consult knowledgeable local individuals before going out on any ice surface.

The colour of ice may be an indication of its strength. Clear blue ice is strongest. White opaque or snow ice is half as strong as blue ice. Opaque ice is formed by wet snow freezing on the ice. Grey ice is unsafe. The grayness indicates the presence of water.

### Minimum ice thickness for new clear hard ice:

- 3" (7cm) or less STAY OFF
- 4" (10cm) ice fishing, walking, cross country skiing
- 5" (12cm) one snowmobile or ATV
- 8"-12" (20-30cm) one car or small pickup truck
- 12"-15" (30-38cm) one medium truck (pickup or van)

When snowmobiling, wear a lifejacket or PFD (personal flotation device) over your clothes to increase your chances of survival if you fall through the ice. Also take safety equipment with you, including ice picks, rope, a pocketknife, a compass, a whistle, a fire starter kit and a cell phone. Travelling with another person is a good idea. A friend may be able to rescue you or go for help if you run into difficulties. Have an emergency plan in place, so you know what to do if someone falls through the ice. Before you leave, make sure to tell someone where you are going and when you should be expected back.

If you drive on ice, turn on your lights and have an escape plan. Open your windows and unlock your doors to allow you to quickly escape from your vehicle.

Ensure that children are always supervised when playing on or near ice. Insist that they wear a lifejacket/PFD or thermal protection buoyant suit.

Remember that if you are not absolutely sure the ice surface is safe to go on, keep off. For more information visit the Lifesaving Society website.

### Safety, It's an Attitude



Jack Smith, President



Continued from page 1

**Stage 2: Forward-facing seats** have harness straps that are narrower than a vehicle seat belt and fits children's small shoulders. As long your child is still in the weight/height range of the seat itself, you can still safely use the child seat.

**Stage 3: Booster seats** are designed to allow children to use seat belts who no longer need forward-facing seats. The booster seat positions a child properly so that the seat belt is correctly located on the lap and shoulder.

Make sure the shoulder belt rests on your child's shoulder, and never on their neck

or arm, or under their arm. The lap belt should be snug against your child's hips and not on their stomach. There are different ways to install a booster seat. Read your car owner's manual and booster seat user guide to learn how.

**Stage 4: Seat belts** are used when children are tall enough to use a seat belt that is properly positioned over their lap and shoulder without needing a booster seat. Your child must be able to sit up straight, with their back against the back of your vehicle's seat. Also, feet should touch the floor without having to slouch. Slouching makes the lap belt move up over their stomach when it should be over their hips.

Don't rush to move your child up from one stage to the next. As long they are still in the right weight/height range of the seat itself, they are safest in that seat.

Source: Transport Canada.

Stage 1 - Rear-facing seats	Use until your child outgrows the car seat's weight/height limit					
Stage 2 - Forward-facing seats	Use until your child outgrows the car seat's weight/height limits					
Stage 3 - Booster seats	Use until your child outgrows the booster seat's weight/height limits					
Stage 4 - Seat belts	Always use a seat belt					
	Birth	10 kg (22 lbs)	14 kg (30 lbs)	20 kg (45 lbs)	30 kg (65 lbs)	36 kg (80 lbs)
	Weight					

## 2010 National Police Awards

The National Police Award for Traffic Safety (NPATS) and the Transport Canada Director General's Road Safety Lifetime Achievement Award (RSLAA) were presented on Monday, October 25, 2010 at the 2010 CACP Traffic Symposium in Niagara Falls, Ontario.

The NPATS and the RSLAA have been joint initiatives of Transport Canada, the Canada Safety Council, and the Canadian Association of Chiefs of Police

(CACP) since 1991. The awards were created to recognize outstanding achievements made by Canada's police community in the promotion of road safety. In doing so, we are raising the profile of traffic policing as a police career.

The 2010 National Police Award for Traffic Safety was awarded to the Middlesex Ontario Provincial Police for their Middlesex Collision Reduction

Strategy. The strategy involved a combination of education, enforcement, engineering and environment to reduce fatal motor vehicle collisions.

The recipient of the 2010 Transport Canada Director General's Road Safety Lifetime Achievement Award is Sergeant Evan Graham of the Ottawa, Ontario RCMP National Traffic Services for his prominent role in many initiatives, improvements and accomplishments in traffic safety.



Insp. John Stephens (left) accepts National Police Award on behalf of the Middlesex OPP, presented by Norm Gaumont.



Transport Canada's Kash Ram (right) presents Sgt. Evan Graham with Lifetime Achievement Award.



## ON THE JOB :

# Workplace Violence Takes a Toll on Employers

### Six Actions Can Help Reduce Organizational Risk

The costs of workplace violence and harassment are high, both to the victims and to their employers. A Conference Board of Canada study identifies six actions that organizations can take to significantly reduce the human, financial and reputational costs of workplace violence and harassment incidents.

"The scope of workplace violence has broadened beyond extreme acts of physical violence to include psychologically harmful behaviours," said Karla Thorpe, Associate Director, Compensation and Industrial Relations. "Addressing harassment is important for several reasons. Harassment incidents occur more frequently than acts of violence. Harassment often precedes violence, and serves as an early warning that violence can result if workplace issues are not addressed."

Four provinces — Quebec, Saskatchewan, Manitoba and Ontario — now legally distinguish between workplace violence (physical actions) and workplace harassment (psychologically harmful behaviours). Quebec and Ontario laws have legislated requirements for employers to prepare, post, implement and review written policies

with respect to both workplace violence and workplace harassment.

The risk of workplace violence and harassment comes from individuals both within and outside the organization. They include:

- Co-workers: Fellow employees or former employees;
- Clients: Those who receive products or services from an organization, such as health care facility or a social services provider;
- Individuals who have or had a relationship with an employee of the organization: these include a current or former spouse, relative, friend or acquaintance.
- Criminals: Individuals who target and enter workplace to commit a criminal act such as robbery;

According to a 2004 report by Statistics Canada, incidents of violence are more likely to occur in social service, health care and educational settings than in other Canadian workplaces.

Employers can comply with recent legislative requirements and significantly reduce the risks by undertaking six key actions. Organizations should:

- Conduct periodic risk assessments;
- Heed early warning signs of

potentially violent individuals and work situations — management and employees at all levels of an organization must be able to spot the signs of potentially violent individuals and work situations;

- Make targeted use of professional assistance service options, such as employee assistance programs — these specialists identify and manage workplace violence and harassment, provide expert consultation services that identify risks, and suggest elimination or mitigation strategies;
- Have appropriate policies and resources to respond when needed — workplace policies that include violence and harassment provisions should have in place clear expectations and consequences for individual conduct. Other options include regulating physical access to workplaces (such as "layered levels" of access in health-care settings) and redesigning jobs and schedules to ensure that individuals do not work alone;
- Review prevention and response plans continually; and
- Provide effective crisis leadership and response in the event of violence or harassment — key actions include acknowledging the incident, communicating with both compassion and competence, and outlining the steps that are being taken to bring the organization back to normal and make it more resilient.

The publication, *Managing the Risks of Workplace Violence and Harassment*, is based on research conducted by the Conference Board's Council on Emergency Management and Council of Industrial Relations Executives.

Source: *The Conference Board of Canada*



## WHEELS IN MOTION :

# Is there a need for seat belts on school buses?

On the rare occasion that there is a collision involving a school bus, the question is always raised as to whether there is a need for seat belts in school buses.

School buses have an enviable safety record. They are already one of the safest methods of transportation. It is 16 times safer than travelling in a family car per passenger/kilometre of travel.

Safety experts, including the Canada Safety Council, do not believe seat belts on school buses would improve safety. There is no scientific evidence that lives would be saved. Transport Canada has applied approximately 40 safety standards to the design and construction of school buses made in and imported into Canada. These include specialized brake systems, lighting, emergency exits, escape hatches in the roof, and high padded seatbacks that cushion the impact of a crash.

School buses are not passenger vehicles. They are built to rely on safety not on seat belts, and are designed and constructed differently from passenger cars. They are bigger, heavier, and higher so they have a body-on-frame design. Newer systems, such as an anti-lock braking system would be more beneficial.

School buses protect passengers through “compartmentalization,” a design that includes:

- Seats with high backs;
- Seats filled with energy-absorbing material;
- Seats placed close together to form compartments;
- Strong seat anchorages.

Research has shown that lap belts could actually increase the risk of head injuries in a head-on collision (the most common type of bus collision). By holding the child’s pelvis firmly in place, the torso would whip forward; with the head striking the back of the seat in front of them with greater force than if the whole body had hit the seat. This could result in serious head and neck injuries.

Combination lap and shoulder belts would require stiffer seats, which could increase injury to students who are not buckled up. The driver cannot ensure that every child has their seat belt on; some buses can carry up to 70 children. Moreover, the shoulder belts can lead to abdominal injuries because of “submarining” – when children slip down, risking injuries to organs covered by the lap belts.

Beyond certain engineering problems, someone would need to ensure the seat belts are used, adjusted properly between uses by smaller children and larger children and repaired when damaged. In an emergency, seatbelts could hinder evacuation. Young children should not be placed in a situation where they are responsible for their safety.

Although school buses have an excellent safety record, mishaps can happen. These mishaps can happen on the bus, however, it is more common for injuries to be sustained once outside the bus, including being hit by their own school bus or other vehicles.

Children who walk to school or use other forms of transportation are exposed to higher risk than travelling on the school bus.



## PUBLIC SAFETY :

**Continuous Chest Compression CPR**

As a result of recently released CPR (cardiopulmonary resuscitation) guidelines, saving a life just became a whole lot easier. These new guidelines relate to compression only CPR, also called Continuous Chest Compression CPR. This is a hands-only CPR method that doubles a person's chance of surviving cardiac arrest. This easy technique involves pressing on the chest of a person in cardiac arrest without having to provide mouth-to-mouth ventilations, making it more likely bystanders will try to help.

Sarver Heart Center at the University of Arizona College of Medicine pioneered Continuous Chest Compression CPR. Their researchers discovered years ago that overwhelming numbers of people will not perform CPR on a stranger because they do not want to do mouth-to-mouth breathing. It will certainly result in more individuals initiating bystander rescue efforts since they do not have to perform mouth-to-mouth breathing.

Doctors from the Sarver Heart Center recommend following these steps if you witness someone collapse:

1. Shake the person and shout, "Are you OK?" If the person is unresponsive and not breathing, or breathing abnormally (struggling to breathe, gasping for air or snoring), direct someone to call 9-1-1 or make the call yourself.
2. Position the person with the back on the floor. Place the heel of one hand on the center of the chest (between the nipples) and the heel of the other hand on top of the first. Lock your elbows, position your shoulders over your hands and use your upper-body weight to "fall" downward. Lift your hands slightly each time to allow the chest wall to recoil. Try to compress at 100 beats per minute and about two inches (five centimetres) deep until emergency help arrives.
3. If an automated external defibrillator (AED) is available, turn the unit on and follow the voice instructions. If no AED is available, perform continuous chest compressions until the paramedics arrive.

Continuous chest compressions can be physically tiring so if someone else is available, take turns doing 100 chest compressions each, then switch.

Do not perform Continuous Chest Compression CPR on infants, children and in cases where the cardiac arrest was not witnessed or was due to special circumstances such as near-drowning. You should, however, perform the complete CPR technique, which includes both chest compression and rescue breathing in the above special cases.

St. John Ambulance supports the compression only CPR but reminds Canadians that it is not a replacement for the complete CPR technique. They still recommend for Canadians to become certified in the complete CPR technique.

Les Johnson, Director of Training for St. John Ambulance Canada, recommends compression-only CPR for individuals who are confronted with a cardiac arrest that have not been trained, or are unsure of their ability to perform CPR, or are reluctant to perform mouth-to-mouth resuscitation. "Close to 80 per cent of cardiac arrests occur in a residential setting," says Johnson. "Odds are it will be on someone you know. This way you can react immediately to help save a loved one, whether you are certified or not."

St. John Ambulance will continue to teach all CPR components in their classes, including an emphasis on the early use of the defibrillator. Johnson adds that if you have had CPR training, the skills you were taught are still okay to use. Beginning CPR immediately is the key component. Whether you are performing the complete CPR technique or Continuous Chest Compression CPR, you can make a valuable difference in helping to save a life.

For more information and to watch a video on Continuous Chest Compression CPR visit [www.heart.arizona.edu/publiced/lifesaver.htm](http://www.heart.arizona.edu/publiced/lifesaver.htm).





**KWIZ KORNER :**

# Safe Snow Removal

**Questions:**

1. When shovelling snow, you need to warm up first, practice safe techniques and drink lots of water.  
True or False
2. It's better to push the snow to the side rather than to lift and throw it.  
True or False
3. You should treat shovelling snow just as you would when picking up a heavy object.  
True or False
4. When you fuel a snow blower, only fill the gas tank when the engine is:
  - a. hot, so that the fuel will heat quickly and prevent stalling.
  - b. cool and not running.
  - c. running.
5. The best way to manoeuvre a snow blower is by:
  - a. pushing or pulling, depending on your preference.
  - b. pushing through deep snow, pulling through light snow.
  - c. pushing it only.
6. What ground clearance should you give your snow blower when clearing snow from an area on or close to gravel or small stones?
  - a. 2.5 cm above ground level.
  - b. The machine should be clearing at ground level so pedestrians can walk safely on the exposed gravel.
  - c. It doesn't matter since snow blowers seek their own level of clearance.
7. When the ejection chute of a snow blower is blocked, you should:
  - a. use your hand to remove the blockage.
  - b. shut off the engine and use a solid object to remove the blockage.
  - c. lean the snow blower on its side and melt the blockage with a pail of warm water.
  - d. continue to use the snow blower, since the blockage will break up as new snow is forced in behind it.

8. What article of clothing should you avoid wearing while snow blowing?
  - a. snow pants
  - b. steel-toed boots
  - c. a long scarf
  - d. a toque

- Answers:**
1. True. Do back and side bends before you go out, lift properly, and drink water before and after. If you're a bit out of shape, don't over-exert yourself.
  2. True. Try to push the snow rather than throw it. If you have to throw the snow, take only as much as you can easily lift with your shovel and turn your feet in the direction you are tossing the snow. Never twist at the waist to throw a load, and never throw snow over your shoulder!
  3. True. As with any heavy object, bend your knees when lifting, and keep the shovel as close to you as possible. Remember that the wetter the snow is, the heavier it will be. Don't let the snow pile up. Shovel frequently, removing smaller amounts at a time to reduce the need for heavy lifting.
  4. B. Never add fuel to the gas tank when the engine is running or hot, add it before you start the machine.
  5. C. Always push a snow blower. If you stumble while pulling it, the machine could land on you.
  6. A. Since gravel or small stones (from the edge of a walkway) become dangerous projectiles when fired from a snow blower's exhaust chute, as a safeguard leave a 2.5 cm ground clearance.
  7. B. When heavy, wet snow or other debris clogs the blower, shut off the machine then disengage the clutch. Never attempt to clear the ejection chute while the machine is running. Wait five seconds to allow the blades to stop rotating, and then use a solid object, such as a stick or a broom handle, to remove the obstruction. Never use your hand to unblock a jam. Most snow blower injuries are caused by reaching into the discharge chute or the auger to remove a clog. Even after the snow blower engine is turned off, an auger can rotate unexpectedly when the cause of the jam is removed, taking your hand with it. The injuries can range from severe cuts, to crushed or broken bones, to finger amputations (two-thirds of injuries involve fingers).
  8. C. A long scarf and other loose-fitting clothes can get caught in a snow blower's machinery and cause injury. Also, it's good safety precaution to wear steel-toed boots when using a snow blower.



# Canada's Distracted Driving Laws

Province/ Territory	Prohibitions on hand-held devices	Effective Date	Prohibitions on hands-free devices	Fine
British Columbia	All hand-held electronic equipment is banned.	January 2010	Novice drivers are not allowed to use hands-free electronic equipment.	\$167 and 3 demerit points if texting or e-mailing
Alberta	Legislation has been introduced in the legislature. May also include personal grooming and reading.	By mid-2011	Legislation has been introduced in the legislature.	Proposed fine of \$172
Saskatchewan	All hand-held communication devices are banned.	January 2010	Novice drivers are not allowed to use hands-free communication equipment.	\$280 and 4 demerit points
Manitoba	All hand-held communication devices are banned.	July 2010		\$200
Ontario	All hand-held electronic devices are banned.	October 2009	None.	\$155
Quebec	All hand-held devices that include a telephone function are banned.	April 2008	Hands-free devices that include a telephone function are permitted.	\$115 - \$154 and 3 demerit points
New Brunswick	Legislation has been introduced in the legislature. All hand-held electronic devices will be banned.	Early 2011	Legislation has been introduced in the legislature.	Proposed fine of \$172.50 and 3 demerit points
Nova Scotia	All hand-held cellular phones and text messaging devices are banned.	April 2008. In the process of making amendments.	None.	\$50 - \$200. Proposed amendments \$225 - \$570 and 4 demerit points
Prince Edward Island	All hand-held wireless communication devices are banned.	January 2010	None.	\$250 - \$400 and 3 demerit points
Newfoundland & Labrador	All hand-held electronic devices are banned, including GPS.	April 2003 Updated October 2010	None.	\$100 - \$400 and 4 demerit points
Yukon	All hand-held electronic devices are banned.	April 2011	None.	To be determined.
Northwest Territories	None.			
Nunavut	None.			

# Safety Canada

Safety Canada is the member newsletter of the Canada Safety Council, an independent, national, not-for-profit safety organization. It is also published online. While strenuous efforts are made to ensure the content represents the best current research and opinions, no guarantee, warranty or representation is made by CSC as to the absolute correctness or sufficiency of all information, and CSC assumes no responsibility therewith. Articles may be printed with credit, except those copyrighted to other organizations.

ISSN: 0048-8968

Canada Safety Council

1020 Thomas Spratt Place, Ottawa, ON K1G 5L5

Telephone: 613-739-1535 Fax: 613-739-1566

President: Jack Smith Editor: Valerie Powell (ext. 228)

Website: [www.safety-council.org](http://www.safety-council.org)

Charitable BN: 11882 8565 RR 0001