

# Safety Canada

THE MEMBER NEWSLETTER OF THE CANADA SAFETY COUNCIL

## Over the Limit

What we eat or drink can affect us in different ways at different times. It is hard to know how a certain amount of alcohol will affect you, even if it is the same amount you usually drink. A pint may hit you harder if you are tired, or if you drink it at lunchtime rather than after dinner. Your health and your mood also play a role in how alcohol affects the way you behave, what you see, and how quickly you react.

Even if they vary by degree, the effects of drinking almost always include your system slowing down – including the nerves that control your muscles. Regular drinkers often learn to hide some of the obvious signs of alcohol use. But while you can sometimes fool your friends and even yourself, you can't trick your body.

Far too often the newspaper reports that "The autopsy showed the driver had a blood alcohol concentration of .16, double the legal limit." Do you know what the number means?

As blood flows through the body, it releases alcohol into the lungs in proportion to its concentration in the blood. Police officers often use a breathalyzer to measure Blood Alcohol Concentration (BAC).

BAC refers to how much alcohol is in someone's blood. While under Canadian law, a driver is not over the legal limit until he or she has reached a BAC of more than 80 milligrams of alcohol per 100 millilitres of blood (commonly expressed as .08 mg or .08). You may be impaired at lower levels. Impaired means your ability to drive is significantly affected by drugs or alcohol.

As you drink, your BAC goes up. If you are caught driving impaired and/or over the legal limit, you will face many problems.

Most beers contain five per cent alcohol, while wines contain 11 to 12 per cent. Spirits, such as vodka or rye, contain 40 per cent or more.

As a rough guide, a 341mL (12 oz.) bottle of beer, a 148mL (5 oz.) glass of wine or a 44mL (1.5 oz.) shot of spirits usually contains the same amount of alcohol – about 13.5 grams. These amounts are often called "standard servings." However, it is easy to drink more than you realize.

How?

- If you are drinking draft beer rather than bottled beer, you may order a pint – which may be up to 50 per cent bigger than a standard serving.
- You may drink half a bottle of wine by refilling a large glass twice. If you do, you have had two-and-a-half standard servings.

*Continued on page 3*

### What is a "drink"?

Wine, beer and spirits each have different concentrations of alcohol.

## Inside

<b>Feature Story: Over the Limit.....</b>	<b>1</b>
<b>President's Perspective.....</b>	<b>2</b>
<b>Wheels in Motion: Winter Tires Save Lives and Money.....</b>	<b>4</b>
<b>Sport and Leisure: Motorcycle Safety Online.....</b>	<b>5</b>
<b>Seniors: Walking in a Winter Wonderland.....</b>	<b>5</b>
<b>Public Safety: Static Electricity at the Pump.....</b>	<b>6</b>
<b>Test Your Knowledge: BAC and You.....</b>	<b>7</b>
<b>Home Safe Home: Keep Your Sidewalks Safe this Winter.....</b>	<b>8</b>



## President's Perspective

With the start of a new year, many start to think about making New Year's resolutions to improve one's life in various ways. Becoming healthier is often at the top of people's lists. A great way to improve your health is to add activity into your day to day life. It's not always easy to incorporate physical activity into a busy schedule, but there are simple things you can do today to help start you off on the right track. Whether it's at work, at home or out running errands, work towards a healthier you.

Physical activity plays an important role in your health, well-being and quality of life. According to the Canadian Physical Activity Guidelines, adults should be active at least 2.5 hours a week to achieve health benefits.

### Here's how to add activity into your day:

#### At Work

- Walk or bike to work. If you ride the bus or the subway, get off a few blocks early or at an earlier stop than usual and walk the rest of the way. If you drive to work, park at the far end of the parking lot.
- Take the stairs instead of the elevator or escalator, when possible.
- Take regular "stretch" breaks.
- Look for opportunities to stand. You'll burn more calories standing than sitting. Stand while talking on the phone, or pace if you're on a wireless device. Instead of responding to a colleague's email online, respond in person by walking to their work area.
- If you must sit to do your job, identify times in your day where you can move. For example, go for a walk during your break, and find a co-worker to join you. If someone accompanies you, it's often easier to stay motivated and continue being active.
- Many consider trading a desk chair for a firmly inflated fitness or stability ball, as long as they are able to safely balance on the ball. It can improve balance and tone core muscles while sitting at a desk. The fitness ball can be used for wall squats or other workplace exercises during the day.
- Some employers provide free or reduced-cost memberships to health clubs. Take advantage of them.

#### At Home

- View everyday chores (cleaning, laundry, taking out the garbage) as a chance to be more active. Vacuum vigorously. Wash windows and walls. Scrub floors. Clean closets. Conquer dirt and clutter—and work up a sweat.
- Stretch or lift weights while watching television.
- Get up and move during commercial breaks instead of channel surfing.
- If you live in an apartment building, try taking the stairs



more often.

- Stand or walk while talking on the phone. You burn more calories standing than sitting and even more when you add movement.
- If your home has more than one level, use the bathroom on the floor above or below you to incorporate stair-climbing into your day. You can apply this rule anywhere you go.

#### While doing Errands

- If you have errands to run near your home, take the opportunity to walk instead of driving. You'll burn calories instead of gas money.
- Park a little further from the door than you normally would at the mall.
- Skip the drive-through at banks, restaurants, coffee shops, etc.
- Take the stairs instead of the elevator. You'll likely get places even faster when you don't have to wait for the elevator to arrive.

In addition to daily activity, there are other steps you can take to maintain a healthy lifestyle. Eating a well-balanced diet, getting enough sleep, and not smoking can all go a long way in maintaining your overall health. Consult your doctor before starting a new fitness routine, especially if you haven't exercised for some time and you have health concerns.

#### Safety, It's an Attitude

Jack Smith, President

Continued from page 1

- If you don't use a shot glass when making a mixed drink, you may drink more than you intend.
- Alcohol concentrations vary among brands and types of drinks. For instance, some light beers contain less than five per cent alcohol, while others may contain more.

As you can see, defining "a drink" is not simple.

### What happens to the alcohol?

No matter what size drink you have, your bloodstream will spread it throughout your whole body in 30 to 90 minutes.

The alcohol then moves to your liver, which breaks over 90 per cent of it down into carbon dioxide and water. The rest passes, unchanged, out of your body.

All of this takes about two hours for one standard serving. Any other alcohol you drink during that time will stay in your

blood until your liver can deal with it, so your BAC rises quickly to a peak. If you stop drinking, your BAC will slowly start to drop, but it will most likely take much longer to fall than it did to rise.

### You are special

Did you know that your body type affects how much blood you have? It is true. The lighter you are, the less blood you have. So if you weigh 68 kg (150 lb.) and you drink as much alcohol as someone of the same sex who weighs 80 kg (175 lb.), you will have a higher BAC.

It is also true that muscle tissue contains more blood while fatty tissue contains more water. So if you have a lot of body fat and you drink as much alcohol as someone of the same sex who is muscular, your BAC will be higher. Why? Because there is less blood for the alcohol to mix with, the ratio of alcohol to blood is higher.

Since women tend to be smaller than men and have more fatty tissue, a woman who drinks as much alcohol as

a man usually has a higher BAC – often much higher.

### Time is on your side

You may have heard that you can keep your BAC under the legal limit by drinking no more than one standard drink per hour. This rule only works for a couple of hours and mainly for men. A better plan is to have no more than two standard drinks in an evening.

Maybe you have heard that you can sober up faster by dancing, jogging, peeing, taking a shower or drinking water or black coffee. Don't believe it! The only thing that will really lower your BAC is time. If you are over the legal limit, it will take about six hours for your body to get rid of all the alcohol.

So, what's the bottom line? If you drink, don't drive.

Source: Excerpt from Transport Canada's Smashed: A Sober Look at Drinking and Driving

**Call for a ride home.**



## WHEELS IN MOTION

# Winter tires save lives and money

Feel that cold air? It won't be long now until we're all dealing with sub-zero temperatures and wind chill that takes your breath away. While we can all agree that the prospect of winter can be pretty miserable, being prepared and taking the necessary precautions in advance of the ice and snow is ideal. And one of the best ways of doing this is by switching to winter tires.

But according to recent Canadian Tire survey, a majority of drivers in Ontario, the Prairies and British Columbia choose not to install winter tires, mistakenly believing that all-season tires offer adequate safety.

The evidence says otherwise. In winter-condition tests, Transport Canada and the Rubber Association of Canada found that stopping was 30 to 40 per cent longer with all-season compared to winter tires. In cornering, vehicles with all-season tires went off the testing track at speeds of only 40 to 50 km/h, while the vehicles equipped with winter tires had no problem. The results were consistent with front-, rear- and all-wheel vehicles.

The experts from Desjardins General Insurance (DGI) agree that winter tires are designed to save lives. "What's interesting is that many people who live in snow-belt regions across the country recognize the need for them," said DGI spokesperson Joe Daly. "But some drivers in urban regions don't see the need to switch. The fact is we've all experienced those icy mornings when you're rushing to work or school and the salt trucks just haven't made it to your neighbourhood yet. These conditions are

much more dangerous than just plain snow and having the right tires can keep everyone safe."

The reason why these tires are the most effective at preventing accidents is because they have deeper, specially-designed treads and are made of innovative rubber compounds that are softer and more pliant. This allows them to perform better on ice, snow and slush, but also in both dry and wet conditions when the temperature dips below 7°C.

Daly also suggests that it's important to keep an eye on your tires' air pressure. "Overnight temperatures can drop from 5° to -15° and this rapid reduction can zap the air out of your tires by as much as four psi (pound per square inch). An under-inflated tire can be quite dangerous, so it's important to keep track of your tire pressure."

Having a safe winter is a great reason to equip your car with the best tires. Transport Canada suggests that "winter tires marked with the pictograph of a peaked mountain with a snowflake meet specific snow traction performance requirements, and have been designed specifically for use in winter conditions." Another incentive is that some insurance companies like DGI will reward their clients who use winter tires with a discount on their auto insurance.

For more information about winter driving safety, visit Desjardins General Insurance at [www.desjardinsgeneralinsurance.com](http://www.desjardinsgeneralinsurance.com).

[www.newscanada.com](http://www.newscanada.com)



## SPORTS AND LEISURE

# Motorcycle Safety Online

### **What you should know before you ride.**

Are you a new rider or has it been some time since you've been on a motorcycle? Motorcycle Safety Online offers an economical, professional way to assist riders – new or experienced – in improving their skills and knowledge to ride safely.

This program will be of value to those who are thinking about obtaining their motorcycle licence, are considering enrolling in a motorcycle safety course, and/or would like to know what is involved in the sport of motorcycling. It is also suitable for those who obtained their licence many years ago and want a refresher, or for those who plan on riding again after being

away from it for many years.

An overview of the items covered in this two hour program are:

- Introduction to Motorcycles
- Why take a Motorcycle Safety Course
- Motorcycle Controls, Features & Accessories
- Riding Gear – It's between you and the road
- Getting Ready to Ride
- Situational Riding Skills
- Safe Riding Techniques
- Lane Positioning
- Decision-Making Abilities

Motorcycle Safety Online uses first-rate,

best in class, multi-media sessions, and is created with custom graphics and real world videos designed to encourage interaction and increase knowledge retention. The main goal is to keep you, the rider, safe.

There are some hidden benefits to taking this online program BEFORE you ride, especially for new riders...

- Save money by buying the right gear the first time.
- Find out what motorcycle size and style best suit your needs.
- Learn about licensing and insurance requirements.

*Suit up, be safe and we look forward to seeing you on the road this summer!*

## SENIORS

# Walking in a Winter Wonderland

Winter can be a challenging time of year to get out and about. Freezing rain, icy surfaces and piles of hard-packed snow pose a hazard for pedestrians, especially seniors.

One bad fall can have long-term consequences. These include: chronic pain in the affected area; a disabling injury that may mean loss of independence; or fear of another fall, which discourages a healthy, active lifestyle.

A few simple measures can make it safer to walk outdoors in the winter. Removing snow and ice, putting sand or salt on areas where people walk, and wearing the right footwear all make a big difference.

### **Equip yourself with the necessary gear**

Choose a good pair of winter boots. For warmth and stability look for these features: well insulated and waterproof; thick, non-slip tread sole; wide, low heels; and light in weight.

Consider buying ice grippers to put on your footwear to help you walk on hard packed snow and ice. Be sure to remove them before walking indoors as they can become dangerously slippery on smooth surfaces such as stone, tile and ceramic. Make sure to sit down when you put on and remove the ice grippers from your footwear.

Use a cane to help with balance. Have it fitted to the right height for you. Speak to your doctor, pharmacist or local public health department about how to use your cane properly.

Attaching an ice pick to the end of your cane can improve your stability on icy surfaces even more. Although cane picks are helpful outdoors, they become slippery on hard surfaces so be sure to flip it back as soon as you get indoors. Picks are available at most drug stores.

If you need further support, talk to your doctor about using a walker.

Wearing a hip protector (a lightweight belt or pant with shields to guard the hips) could be an option for those who are apprehensive about venturing out into icy conditions. It can help protect the hips against fractures and gives the added confidence to maintain an active lifestyle.

Prevent heat loss by wearing a warm hat, scarf, and mittens or gloves. Dress in layers to help keep you warm. Wear bright colors or add retro-reflective material to clothing to help others see you more easily.

### **Take added precautions**

Keep your entranceways and sidewalks clear of ice and snow, or contact a local service for help with snow removal.

Carry a small bag of grit, sand or non-clumping cat litter in your jacket pocket or handbag, to sprinkle when you are confronted with icy sidewalks, steps, bus stops, etc.

If you approach a particularly icy surface, ask a passer-by to help you cross.

## PUBLIC SAFETY

**Static Electricity at the Pump**

Along with colder temperatures at this time of year, comes dryer air and a higher probability of your body producing static electricity. Getting a shock from a door knob or another metal surface isn't so bad, but when gas fumes enter into the mix, the outcome may be dangerous.

There are a couple common things that may cause static electricity fires at the pump, the first being when a person returns to their vehicle during refuelling and fails to discharge before touching the nozzle again – if the latch on the pump is held open by an object jammed in. When they return to the fill area and touch the nozzle to complete the fill-up, a static spark ignites the fumes, which causes a flash fire. The second being when a person touches a metal area around the gas cap without having discharged an electric shock first, and gas fumes are present around the cap.

There are several theories about why static fires at the pumps seem to be occurring. One of the theories is the almost universal switch to self-serve pumps, which require millions of people who are unfamiliar with the volatility of gasoline to handle it once or twice a week. Also, vehicles today have more electronics – CD players, GPS systems, satellite radios, cruise control, ABS, and on-board diagnostic. Those elements, plus fabric seat covers, could create more static and a greater potential for static buildup.

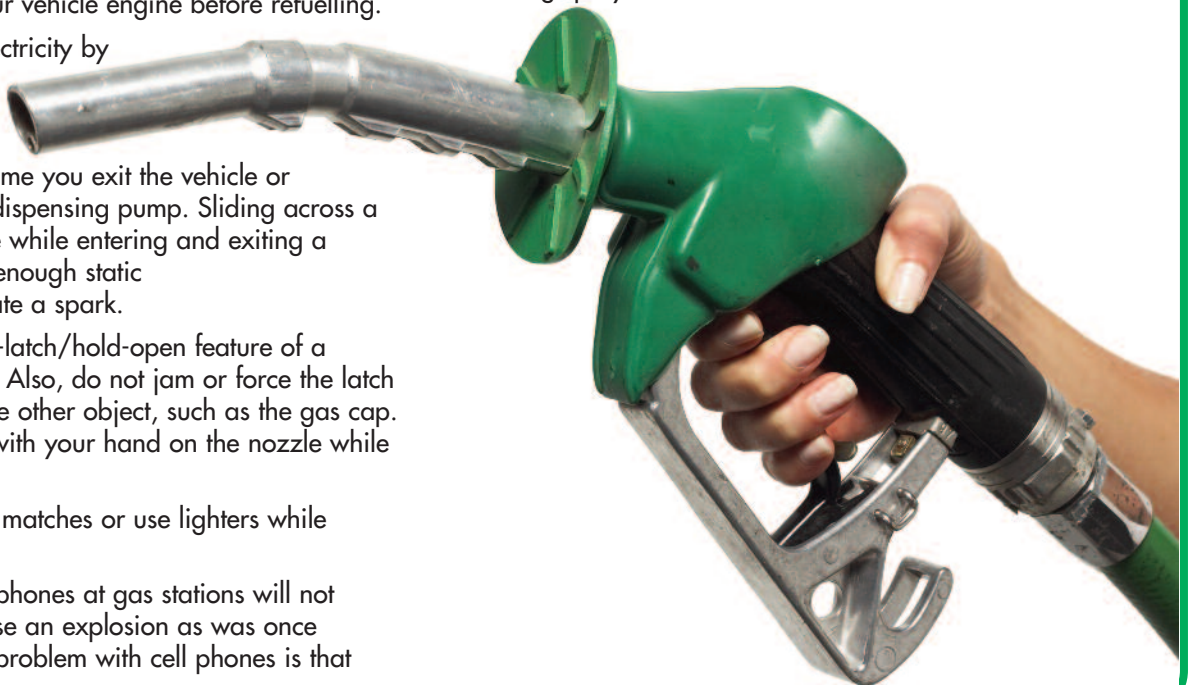
**Safety Guidelines when Refuelling**

- Always turn off your vehicle engine before refuelling.
- Discharge static electricity by touching the metal parts of the car away from the nozzle area each time you exit the vehicle or approach the fuel dispensing pump. Sliding across a vehicle seat surface while entering and exiting a vehicle can create enough static electricity to generate a spark.
- Never use the auto-latch/hold-open feature of a nozzle if available. Also, do not jam or force the latch open by using some other object, such as the gas cap. Always stay there with your hand on the nozzle while refuelling.
- Never smoke, light matches or use lighters while refuelling.
- The use of cellular phones at gas stations will not ignite a fire or cause an explosion as was once thought. The main problem with cell phones is that

they cause the person refuelling their vehicle or container to be less attentive to their surroundings. Cellular phones can be distracting when filling a vehicle with highly flammable gasoline. That is why some gas stations still have signs asking customers not to use these devices when refuelling. To be cautious, do not use a cell phone at the pump.

- To avoid gasoline spills, do not overfill or top off your tank. The fuel dispenser will shut off automatically when the tank is full.
- When dispensing gasoline into a portable gasoline can, use only an approved container. Always place the container on the ground and keep the pump nozzle in contact with the container when refuelling to avoid a static electricity ignition of fuel vapors.
- If a flash fire occurs during refuelling, do not pull the nozzle out. Robert Renkes of the Petroleum Equipment Institute (PEI) advises you to leave the nozzle in the vehicle fill pipe and back away from the vehicle. Notify the station attendant immediately so that all dispensing devices and pumps can be shut off with emergency controls.

Many of those killed or hurt during refuelling fires think that by pulling the nozzle out they will save themselves, their vehicle or those around them. Nothing is further from the truth. The inferno comes from the nozzle being pulled out of the vehicle or container and the gasoline being sprayed around the area.



## TEST YOUR KNOWLEDGE

# BAC and You

### Questions

- 1. What does BAC stand for?**

  - Body Alcohol Content
  - Blood Alcohol Concentration
  - Breath-Alcohol Collection
  - Blood Advisory Content
- 2. What is the criminal BAC in Canada?**

  - 80 mg of alcohol per 100 ml of blood (.08%).
  - 50 mg of alcohol per 100 ml of blood (.05%).
  - 100 mg of alcohol per 100 ml of blood (.1%).
  - 60 mg of alcohol per 100 ml of blood (.06%).
- 3. The police use a breathalyzer to determine a level of impairment by alcohol while you were driving.**

True      False
- 4. Which of the following are impaired by drugs and/or alcohol?**

  - Coordination
  - Attention span
  - Decision-making skills
  - All of the above
- 5. Which of the following are "standard servings" of alcohol (wine, beer, or spirits)?**

  - 6 oz. (177 ml) glass of wine, 20 oz. (591 ml) pint of beer or, 2 oz. (59 ml) of spirits
  - 5 oz. (148 ml) glass of wine, 18 oz. (532 ml) pint of beer or, 1.5 oz. (44 ml) of spirits
  - 5 oz. (148 ml) glass of wine, 12 oz. (355 ml) bottle of beer or, 1.5 oz. (44 ml) of spirits
  - 6 oz. (177 ml) glass of wine, 15 oz. (444 ml) bottle of beer or, 3 oz. (89 ml) of spirits
- 6. On average, it takes two hours for a standard serving of alcohol to break itself down.**

True      False
- 7. If you have a BAC of .09%, how long will it take on average for your BAC to reach 0%?**

  - 3 hours
  - 4 hours
  - 5 hours
  - 6 hours
- 8. A conviction for driving while impaired by drugs is the same as driving impaired by alcohol.**

True      False
- 9. Nearly 60,000 Canadians are charged with impaired driving offences every year.**

True      False
- 10. If you become a third time offender you could lose your licence for life.**

True      False

**Answers**

- B. BAC stands for Blood Alcohol Concentration.
- A. Criminal BAC in Canada is 80 milligrams of alcohol per 100 millilitres of blood.
- True: Police officers use a breathalyzer test to find out if your BAC is over the legal limit.
- D. All of the above. Among other things, alcohol impairs your coordination, attention span and decision-making skills.
- C. 5 oz. (148 ml) glass of wine, 12 oz. (355 ml) bottle of beer or, 1.5 oz. (44 ml) of spirits are considered as a standard serving of alcohol.
- True: On average, it takes two hours for a standard serving of alcohol to break itself down in the body.
- D. If your BAC reaches .09% it could take up to six hours to get back to zero.
- True: The penalties for drug impaired driving are the same as those for alcohol impaired driving.
- False: The numbers are higher. Roughly 80,000 people are charged with impaired driving each year.
- True: The likelihood of losing your licence for life if you are a third time offender is high.

*Source: Smashed: A Sober Look at Drinking and Driving, Transport Canada*

## HOME SAFE HOME

# Be neighbourly and keep your sidewalks safe this winter

As a homeowner, making snowy and icy sidewalks and front walkways safe for the public should always be a priority. This is important for two reasons: preventing anyone from injuring themselves in a fall; and protecting yourself from a fine, or worse, a lawsuit.

Municipalities have varying rules and regulations for the clearing of snow and ice, but homeowners should also be aware that they could be liable should an injury occur on or in front of their property.

"We see a number of insurance claims each year involving injuries resulting from falls on ice and snow," states Wayne Ross, insurance expert with Aviva Canada. "And while an insurance policy is there to protect you from such hardship, a few simple steps can prevent the stress of a lawsuit."

Ross recommends:

- Shovelling right away – when possible, start moving the snow soon after it has fallen. Even if it means having to shovel twice –

two lighter loads will be easier on your back and arms than tackling it all at once.

- Salt, salt, salt – It's cheap and can prevent hard to move ice from forming.
- More than a shovel – brooms for light snow and metal ice breakers for the harder accumulations can both come in handy over the winter.

"Do you know who shops for snow and ice removal equipment after the first big blast of winter? Everybody. So get to the store early this year to ensure you're not left moving snow with your kid's novelty shovel," Ross continued.

As a homeowner, the first consideration is the safety of those walking on your sidewalk, but it's also about protecting yourself from costly fines and lawsuits, something we all want to avoid. More information is available from your insurance broker or online at [avivacanada.com](http://avivacanada.com).

[www.newscanada.com](http://www.newscanada.com)



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