

## 5. SAFE DRIVING

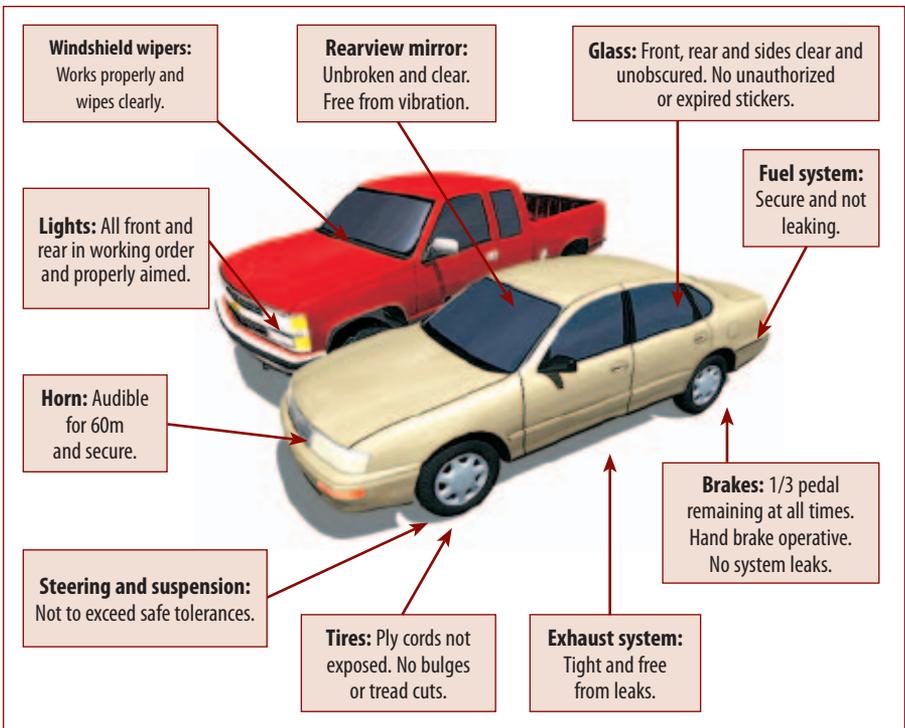
### 5.1 The Vehicle

Your vehicle must be maintained in good mechanical condition to be operated safely. The parts indicated in the diagram particularly affect the safe operation of the vehicle and should be checked regularly by qualified mechanics.

Regular check-ups and careful maintenance will prolong the life of your car.

**Checkups may also prolong your life.**

**Remember that you cannot drive safely in an unfit car.**



**5.2 Check Your Vehicle**

- | <b>Yes</b>               | <b>No</b>                |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <i>Brakes</i> – Do they hold promptly and evenly? Will parking brake hold the car?   |
| <input type="checkbox"/> | <input type="checkbox"/> | <i>Head Lights</i> – Do dimming switch and both upper and lower beams work? Are lights aimed to avoid glare? Is the glass clean? |
| <input type="checkbox"/> | <input type="checkbox"/> | <i>Rear and Stop Lights</i> – Do bulbs work? Do brakes operate stop lights? Is the glass clean and do they show a red light?     |
| <input type="checkbox"/> | <input type="checkbox"/> | <i>Tires</i> – Are they properly inflated? Do you check regularly for worn treads, cuts and breaks?                              |
| <input type="checkbox"/> | <input type="checkbox"/> | <i>Windshield Wipers</i> – Do they always operate and wipe glass clean?  |
| <input type="checkbox"/> | <input type="checkbox"/> | <i>Muffler and Exhaust System</i> – Is it free of worn spots, tight and quiet?   |
| <input type="checkbox"/> | <input type="checkbox"/> | <i>Steering</i> – Is steering wheel free of excess play? Wheel bearings tight? Wheels properly aligned and balanced?             |
| <input type="checkbox"/> | <input type="checkbox"/> | <i>Glass</i> – Is it clear and clean? Is it free from cracks, discoloration or stickers to obscure your vision?                  |
| <input type="checkbox"/> | <input type="checkbox"/> | <i>Horn</i> – Does it work?  |
| <input type="checkbox"/> | <input type="checkbox"/> | <i>Rear View Mirror</i> – Does it give you a clear view of the road behind? Is it free from cracks and discoloration?            |

### 5.3 Seat Belts Save Lives

All passengers that occupy a position within a vehicle must wear a seatbelt. The numbers of passengers are limited to the number of operating seatbelts. Violations for not limiting the number of passengers to the number of operating seatbelts will result in a fine.

Drivers must ensure that passengers under 16 years of age use seat belts if available. Passengers age 16 years and older are responsible for buckling up themselves if seat belts are available.



Children must be buckled into proper child safety seats which are fastened to the vehicle by a seat belt and any other straps specified by the manufacturer until they reach one of the following; age of nine, weight of 36 kg (79 lbs) or height of 145 cm (57 inches). Taxis, emergency vehicles and buses are exempt from these provisions.

In vehicles equipped with a passenger front air bag caution should be used in securing a child restraint system in that location. Most vehicle manufacturers advise not to use this location and stress using the rear seating positions. Consult the vehicle Owner's Manual.

Shoulder belts should never be worn without a regular lap belt. Seat belts should be worn and properly adjusted as specified in the manufacturer's Owners Manual.



All new vehicles are equipped with seat belts that must be worn by the drivers and passengers. Many cars are also equipped with air bags. Air bags give additional protection from serious injury in head-on collisions where the driver and front seat passenger may strike the steering wheel, dashboard or windshield. Seat belts must be used in conjunction with air bags.

---

### **5.4 Penalties for Seat Belt Infractions**

Police officers throughout New Brunswick may check at any time for seat belt usage by drivers and passengers. Drivers are not assessed points for other passengers but they will be charged for those under 16 who are not wearing a seat belt. Passengers over the age of 16 are charged for the offence with no loss of points

If a driver is convicted of not wearing a seat belt, they must pay a fine and will be assigned a loss of two points on their driving record. While it is an offence for a passenger to not wear a seat belt, there is no assessment of points against a passenger's licence or the driver should a passenger not be wearing a seat belt.

---

**Transport Canada recommends that children 12 years and under should be properly restrained in the back seat, especially if the vehicle is equipped with side air bags.**



### ***5.5 Preparing Your Vehicle for Winter Driving***

**Winterize your car and your driving habits. Have these items carefully checked and repaired if necessary.**

#### **Radiator**

Check for leaks and proper level of anti-freeze.

#### **Battery**

Cold weather starts add an extra strain on battery life. Check the charge and the water level in the battery.

#### **Brakes**

Have them adjusted or serviced if necessary. Be sure all four brakes are engaging equally. On icy roads, poorly adjusted brakes can cause your car to dangerously skid.

#### **Muffler**

Have it checked for leaks. A leaking muffler or exhaust system can create a carbon monoxide hazard, particularly if you are stalled in traffic or a blizzard. Never start your car in a closed garage. If you start to yawn, have a headache, feel dizzy, weary or nauseated while driving or parked, turn off the motor, get out of the car and walk around. Open your window to let fresh air into your vehicle.

#### **Tires**

Check them and replace any damaged or bald tires. Verify condition to ensure sufficient tread to make the vehicle safe in various ice and snow conditions. Winter driving is safer with snow tires or studded tires. However, the use of studded tires may cause more of a skid in an emergency stop than rubber tires, depending on road conditions.

## **Distracted Driving**

This law prohibits the use of hand-held electronic devices while operating a motor vehicle.

This includes hand-held cellular telephones, texting devices, portable global positioning systems (GPS) and entertainment devices such as video game players and mp3 players.

The bill also prohibits the manual programming or adjusting of any GPS unit while driving. In addition, television style display screens, monitors, DVD players, and computer screens are not permitted within the visual range of the driver unless they are part of a GPS unit or provide information to the driver on the vehicle's various operating systems.

To ensure that you have the latest information on distracted driving it is recommended that you visit the website at [www.gnb.ca/0276/vehicle](http://www.gnb.ca/0276/vehicle).

For added traction and steering control you should mount snow tires on all four wheels. A good compromise would be all season radials with sufficient tread depth to self clean in snow and slush conditions. Do not mix radials with non radial snow tires. Consult your Owner's Manual.

Tire chains may also be carried in the vehicle for use in ice and snow conditions. The use of chains may also cause more of a skid in an emergency stop.

## **Windshield Wipers and Heater/Defroster**

Be sure your wiper blades are in good working condition. Ensure rubber is not broken or worn. Check your heater/defroster unit to be sure it is in proper working order.

---

## **5.6 The Driver**

Most highway crashes are caused by some fault of the driver. In order of frequency, the most common causes of highway crashes in New Brunswick are:

1. Inattention
2. Operating too fast for conditions
3. Failure to grant right of way.
4. Alcohol
5. Driver distraction
6. View obstructed
7. Following too closely
8. Improper use of lanes

Safe driving – meaning the avoidance of crashes – is the result of a combination of attitude and skill on the part of the individual driver. Skill is acquired largely through proper instruction and careful practice. In addition, if you strictly observe the law and develop an attitude of consideration for others you can help eliminate most highway crashes. Remember, you should adjust your speed according to the conditions of the road.

## Speed

Speed too fast for conditions is one of the greatest causes of crashes.

Speed limits indicate the maximum speed at which it is safe to drive under ideal conditions and other conditions mentioned below can only be met safely by a reduction in speed.

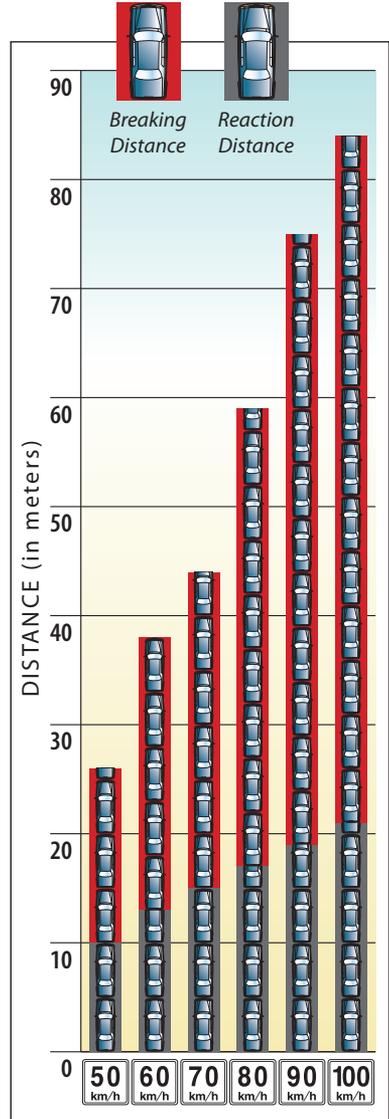
1. Poor visibility.
2. Wet or slippery highway.
3. Pedestrians (adults and children) and/or animals on or near the highway.
4. Heavy traffic.
5. Illness, tiredness or nervous tension on the part of the driver could even be reasons not to drive at all.

The higher the speed, the longer it takes to stop a vehicle and the greater the force of impact in the event of collision. When the speed is doubled, the impact on striking an object is four times as great.

## Stopping

Stopping a vehicle is a complex operation which is performed in two stages:

1. The driver must see a reason for stopping. To see the reason for an emergency stop calls for continual close attention to the road and traffic conditions when driving.
2. As the driver, you must react quickly. You must take your foot off the gas pedal and apply the brakes. The time required for this varies slightly with individual drivers. Under normal conditions, the average reaction time is about three quarters (3/4) of a second. In 3/4 of a second your car travelling at 50 km/h will go 10 metres (about 2 car lengths) before you can even start to apply the brakes.



**Note:** Data based in tests of cars having brakes in first class condition and on dry level asphalt surfaces. Reaction distance is based on average reaction time of three-quarters of a second.



## Driving Posture

Proper handling and control of a vehicle only happens when the driver keeps a good erect posture.

- *Adjusting the seat:* The seat can be moved backward and forward to fit the leg length of each driver (some cars with power seats can also be moved up and down). The seat should be adjusted to allow the driver to sit comfortably in a relaxed position and to reach all the pedals and controls easily.
- *Adjusting the mirrors:* It is essential that all mirrors be adjusted so the driver has good visibility to see traffic behind and cover as many blind spots as possible.
- *Adjust seat belts:* Seat belts should be adjusted properly and not worn loosely. Injuries could result if not worn properly.
- *Headrest:* Ensure that the headrest is properly adjusted
- *Controls:* Become familiar with and locate all interior controls before starting (i.e. wipers, horn, heater, lights, etc.)
- *Foot Controls:* Always use your right foot to operate the accelerator and brake pedal. Your right heel should rest on the floor at the base of the accelerator pedal so that it can easily be moved to the brake pedal, when necessary. Use left foot for clutch in standard gear shift vehicles.
- *Steering Wheel:* Keep both hands on the steering wheel, usually at the 10 and 2 o'clock positions.



## Following

Following too closely or tailgating is a frequent cause of highway collisions. To drive safely you must leave sufficient space between your vehicle and the vehicle ahead so that you can stop in the event of an emergency.

The *Two-Second Interval* is a good way to learn to recognize safe following distance. Just watch the vehicle ahead of you pass some definite point on the highway, such as a sign post. Then count to yourself “one thousand and one, one thousand and two”. If you pass that same spot before you finish the count, you are following too closely. This holds true at any speed. This rule applies to favourable driving conditions. Unfavourable conditions call for lower speed and a longer count.

Another equally valid system is to allow at least one car length for each 20 km of speed.

### Defensive Driving

Defensive driving means driving in anticipation of possible collision situations and being prepared to avoid them.

Many collisions cannot be avoided once they have begun to develop but they might have been avoided if the driver had anticipated and guarded against them. Watch for signs of possible hazards. A ball bouncing on the street may mean a child or animal running out into the roadway; exhaust smoke coming from a vehicle could indicate a driver ready to pull out; a vehicle approaching a stop sign or red light at an obviously fast rate of speed may not stop; brake lights flashing in a line of traffic means you should be prepared to stop. Always watch for any other indication of what a driver or pedestrian might do.

The essence of defensive driving is to reduce your own driving mistakes and to anticipate the mistakes of others (drivers and pedestrians) and guard against them.

### Animals on the Highway

Animal crossing signs warn drivers where there is a known danger of large animals, such as moose and deer crossing the roads.

- Drivers should use caution especially at dawn and dusk



- Animals are unpredictable so reduce your speed
- Stay alert and scan both sides of the road, not just the pavement in front of you

At 30 km/h the impact is the same as if your car fell from the top of a one storey building.

At 60 km/h (double the speed) the impact is the same as if your car fell from the top of a four storey building (four times the force of impact).

## 5.7 White Cane

By law, the use of the white cane is restricted to people with visual impairment. When you see a pedestrian with a white cane you should exercise extreme caution.

*Remember, you can see them but they cannot see you.*

## 5.8 Crash

Some day you may be driving along a highway and come upon a serious collision. Very likely your first instinct will be to run to the car involved and start removing people. Both medical and collision records show that efforts of untrained rescuers often aggravate the injuries caused by the collision. Use the following information as a guide.

### If You Arrive First at a Collision

Prevent a Second Crash - Pull completely off the road far enough away from the crash scene to protect the vehicles from further collisions with other cars.

*Reduce Fire Hazard* – Turn off the ignition of the damaged vehicles. Keep smokers away. In case of fire, try to put it out with a fire extinguisher, dirt or a heavy fire retardant blanket. Caution must be used when approaching a burning vehicle.

*Attend first* – To anyone who is not breathing or who is bleeding severely. To stop the bleeding put the cleanest available pad directly on the wound and apply pressure. Use cloth, handkerchief, clothing or your bare hand if necessary. If the pad becomes blood-soaked, leave it on, put another on top of it. Maintain pressure until professional help arrives.

*Do Not Move the Injured* – Unless they are in a burning car or other immediate danger, leave them in the car until trained help arrives. Do not twist or turn them. Unnecessary moving often complicates injuries. If a driver is trapped by a steering wheel, the pressure can be eased by releasing the seat catch and pulling the seat back. If you are **not** trained in first aid, you can help the injured by:

- a) covering them with blankets or coats to keep them warm;
- b) loosening collars, ties and belts. This helps the injured to breathe more easily; and
- c) calming them by talking to them and telling them that help is on the way.

*Get Help* – Ask the next person who stops to phone for police and/ or ambulance. Ask others to warn approaching traffic.

### **Artificial Respiration**

In a real emergency, to help a person start breathing:

1. Remove anything in the person's mouth that might block air. Tilt the head back, pull chin upward so tongue does not fall back to block airway.
2. Pinch nose shut. Seal mouth with yours. Blow into mouth. Give a full breath for an adult, and a gentle breath for an infant.
3. Remove mouth, take deep breath, blow in air again – every 5 seconds for an adult, every 3 seconds for an infant.
4. If chest fails to rise and you hear no exhaling, recheck mouth for possible blockage, again tilt head back, pull chin up and start the technique again.
5. If you cannot obtain a tight seal over the person's mouth, close mouth and breathe into nose. For an infant, breathe into both mouth and nose.
6. Continue effort until professional help is on hand or until the injured person is breathing.

Otherwise, unless you are trained and know how to perform first aid properly, you should leave it up to someone who does know.



---

**5.9 Alcohol and Driving**

Alcohol induced impairment is the greatest contributing factor in many motor vehicle fatalities. The basic rule underlying all safe driving is to “keep your vehicle under control at all times”.

Drivers who have consumed alcohol do not have complete control over themselves and therefore cannot be in control of a vehicle. They are a danger to their own lives and the lives of others.

**What Alcohol Does**

Alcohol is not a stimulant. From the first drink it depresses the central nervous system and the feeling of stimulation that comes is the result of the impairment of the higher functions of the brain, including social restraints and judgement.

When alcohol enters the stomach, it does not have to be digested. It is absorbed through the walls of the stomach and the small intestine into the bloodstream, which carries it throughout the body.

In the brain, alcohol first depresses the area of higher function. Next it attacks the simple motor functions, reaction time and vision. Balance, co-ordination and sensory perception are the next faculties to be impaired. Concentrated drinking will eventually lead to stupor, coma and even, if continued steadily, death.

The most important factors contributing to alcoholic impairment are the amount of alcohol absorbed into the blood and the amount of time allowed for the elimination of this alcohol. This rate is affected by such other factors as body weight, the quantity and type of food in the stomach and the type of alcoholic beverage consumed.

## How the Body Handles Alcohol

Some people seem to be able to “hold their liquor” better than others and this excuse is often quoted by those who do not want to believe that a few drinks can seriously impair driving ability. Because of body weight, fatigue, emotional condition or a number of other reasons, individuals may show differing effects from drinking the same amount of alcohol. However, they may be equally impaired.

Another danger develops when the alcohol starts to “wear off”. You can easily convince yourself that you no longer feel the effects and are perfectly sober. This state of mind is a delusion. You are comparing your peak feeling of impairment with the declining impairment that you feel as your body eliminates the alcohol from the blood. But you are not sober. You are only making a dangerous comparison.

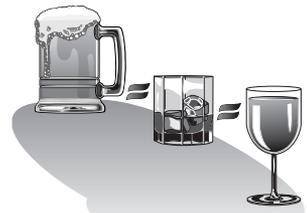
## Fallacies/Remedy

Most of us have tried them at one time or another – black coffee, cold showers, taking a jog around the block. But we must recognize them for what they are – ineffective. There is only one thing that can sober a person: *Time*.

## Drug and/or Medication

While alcohol is the most common cause of driver impairment, there are some other problems that can create a safety hazard. There are a wide range of illegal drugs that cause problems; many of these drugs are extremely dangerous to use especially when driving.

If you have a medical problem and are taking medication, either prescription or over the counter drugs, some of these medications are known to cause inattention and drowsiness – take great care not to drive while taking these drugs.



### DIFFERENT, BUT EQUAL

**These standard servings of beer, spirits and wine all contain an equal amount of alcohol.**

***So don't be misled by appearances. And never mix drinking with driving.***

Here are some examples of prescription drugs that may affect driving skills:

*Analgesics*

- Codeine
- Other narcotics

*Antidepressants*

- Tricyclic Antidepressants

*Antiemetic Agents*

*Antihistamines*

*Antipsychotic Drugs*

- Haloperidol
- Major Tranquillizers
- Phenothiazines  
(e.g. chlorpromazine)

*Ophthalmic Preparations*

*Sedatives and Anxiolytics*

- Barbiturates
- Benzodiazepines

*Skeletal Muscle Relaxants*

*Other*

- Antihypertensive Drugs
- Antineoplastic Agents
- Chemotherapeutic Agents
- Immunosuppressants
- Steroids

**Source:**

*Determining Medical Fitness to Drive  
— A Guide for Physicians*

**The Lethal Cocktail**

A person may have a minor medical problem (i.e. sinus congestion, influenza, chest cold, etc.) and is taking a type of “over the counter” or prescription medication.

Only one or two drinks along with the medication can cause impairment and create serious problems.

Remember: As a driver you have responsibility to yourself, your passengers and other road users. The passengers in your car are usually your family and friends.

**Alcohol and the Law**

All motorists in New Brunswick under the age of 21 must maintain a 0% Blood Alcohol Content while driving. Even if you are well below the 0.08% level of alcohol in the blood accepted as the legal level in law, you can still be impaired. Being apprehended at above 0.08% blood alcohol in the bloodstream, in itself, is a criminal offence. But you can be impaired on one drink.

Drivers in New Brunswick who are found to have a blood alcohol concentration (BAC) between 0.05% and 0.08% milligrams are subject to a 7 day suspension of their driver’s licence. With a blood alcohol concentration exceeding 0.08%, a driver will be served with a 90 day administrative licence suspension. Failure to provide a sample will result in a 90 day suspension of your licence.

**Failure or Refusal to Provide a Sample**

A breath test for blood alcohol is compulsory under the Criminal Code of Canada. The courts may also convict a person who, without a reasonable excuse, fails or refuses to comply with the demand made by the peace officer to provide a sample of their breath or blood.

## Criminal Code of Canada

The Criminal Code of Canada states that a person is committing an offence when operating or in care and control of a motor vehicle while impaired by alcohol or drugs even though the blood alcohol level is less than 80 milligrams of alcohol in 100 millilitres of blood (.08 percent penalties can include fines, imprisonment or both and a prohibition of driving). Convictions have resulted in the loss of insurance, higher insurance rates and loss of employment.

A peace officer, under the *Motor Vehicle Act*, is including but not limited to the RCMP and municipal/regional forces. New amendments to the *Motor Vehicle Act* give peace officers certain authorities:

- **Stop vehicles** for the purposes of determining whether there is evidence to justify the demand for a breath sample under section 254 of the *Criminal Code*.
- **Demand documentation from drivers** such as drivers licence, proof of insurance, and registration. Other documents may include mechanic's report for motor vehicle inspection, carrier safety fitness certificate, or a bill of lading for commercial drivers.
- **Demand submission to Standard Field Sobriety Testing.** This procedure includes: a) horizontal gaze nystagmus test, b) walk-and-turn test and c) one-leg stand test. This demand occurs when a peace officer has reasonable grounds to believe that a driver is impaired by alcohol/drugs. Refusal to submit to a Standard Field Sobriety Test would lead to a demand to take a breathalyzer test.

If a peace officer has "reasonable and probable grounds" to suspect the presence of alcohol, the driver of a vehicle may be demanded to supply a sample of breath into an approved screening device or to accompany the peace officer to provide a breath sample for analysis (breathalyser). If the person is unable to provide a breath sample, the peace officer may demand a sample of blood be taken by a qualified medical practitioner for analysis. It is an offence to refuse to provide these samples.

A breath test for blood alcohol is compulsory under the Criminal Code of Canada and it is an offence to refuse to take the test.

Penalties under the different sections can range from \$600 to \$2,000 or up to 5 years in jail or both, and suspension of driving privileges.

Amendments to the *Motor Vehicle Act* have established an *Alcohol Ignition Interlock Program* for persons convicted of impaired driving related offences under the *Criminal Code*. These drivers would be prohibited from operating a motor vehicle during a minimum prohibition period imposed by the court. For the remainder of the suspension period, however, the convicted driver could be authorized to operate a vehicle provided that the person was participating in the *Alcohol Ignition Interlock Program* and operating only those vehicles equipped with an interlock device. In order to participate in the program, the person would first be required to complete a drinking driver re-education course as specified under the *Motor Vehicle Act*. The aim of the Alcohol Ignition Interlock Device Program is to modify the behaviour of individuals who frequently drink and drive with a high blood-alcohol content. The length of time that the convicted driver would be required to spend in the program would depend on whether the conviction was the driver's first, second, third (or subsequent) alcohol-related offence as shown in the following table:

Offence	Suspension Period (New Brunswick)	Minimum Prohibition Before Qualifying for Interlock Program (Federal)	Maximum Time in Interlock Program
First	1 year	3 months	9 months
Second	3 years	6 months	30 months
Third (or more)	5 years	12 months	48 months

---

### **5.10 Some Rules for Safe Driving**

Courteous drivers seldom cause crashes. Use courtesy and common sense while driving. Follow these safe driving rules to reduce crashes.

1. You must not assume that you will be given the right of way. The other person may not think that he/she should grant it.
2. Slow moving vehicles must drive to the extreme right and must not impede traffic.
3. Do not pass on a hill or curve at any time.
4. When stopping is necessary, see that you and your vehicle are clear of the paved surface or close to the curb. Always exit the vehicle from the curb side. Never park on the left side of the roadway facing traffic.
5. Know and obey all traffic signs and signals.
6. Line markings on the pavement are for your guidance and protection. Where the road is marked with double lines, a solid line on your side prohibits passing. A broken line on your side indicates you may overtake and pass if conditions so warrant. Do not ride the line.
7. When approaching an intersection slow down and check in all directions for hazards.
8. Except when driving in two or more marked lanes going in the same direction, never pass on the approach to an intersection, a bridge or a railroad crossing.
9. When leaving a parked position check oncoming traffic and signal, check your blind spot as well as your mirrors. Pull out only when way is clear, both behind and in front.
10. A driver must yield the right of way to a pedestrian in a crosswalk or in an unmarked crosswalk at the end of a block.
11. Year after year "speed too fast for conditions" is a major cause of collisions in which the driver is held responsible. The remedy is simple - observe road and weather conditions and adjust your speed accordingly.

12. When passing, check for other traffic, ahead and behind. Signal before changing lanes and sound your horn for the driver you are passing. On a two lane highway, do not try to pass more than one car at a time. Don't follow another car that is passing, allow that driver to complete the pass before you attempt to pass. If you are being passed, give way to the other driver.
13. Be extra careful when there are bicyclists and/or motorcyclists on the road. Do not tailgate. Watch for them in your mirror. They may be riding in your "blind spot".
14. Good drivers do more than comply with the law. Be considerate of the other driver. The life you save may be your own.

**Check Your Driving Habits**

Yes

No

**Traffic Laws:** Do you know and drive by the rules?**Signs, Signals, Markings:** Do you read and heed these “Signs of Life” that point the way to safety?**Stop and Turning Signals:** Do you let other drivers know your intentions, knowing that the proper signal is a good turn for everyone?**Traffic Lanes:** Do you always drive in and turn from the proper lane?**Speed:** Do you slow down here to show up there? Do you keep in mind that speed limits are for your protection? Do you glance at your speedometer frequently so that you may keep within limits?**Bad Weather Conditions:** Do you always keep an eye on the weather and adjust your driving accordingly? Rain, sleet, snow, ice and fog automatically mean slow!**Nighttime:** Do you slow down at sundown?**Pedestrians:** Are you a driver who gives pedestrians a break -- and the right of way?**Children:** When it comes to traffic, do you always expect the unexpected from children . . . especially in school zones, near playgrounds and in residential sections?**One For The Road:** Do you refuse to drive after drinking?

**An important safety device in any car –  
A driver with safe driving habits!**

---

### **5.11 The Environment – Highway, Weather and Visibility Conditions**

#### **Friction**

The only contact your car has with the highway is through the tires and it is the friction between the tires and the highway that enables you to start, stop and control the car. This contact is about equal to the length of the palm of your hand. On a wet or slippery road, this friction is greatly reduced and it becomes correspondingly more difficult to stop or control a vehicle.

#### **Stopping on Ice**

If you apply your brakes suddenly on an icy road your car will go into a skid. If you have to stop on a slippery surface, it is advisable to pump the brake pedal – in and out – gradually slowing the vehicle without locking the wheels. (Note: if your vehicle is equipped with ABS, you should **not** pump the pedal. Rather, apply steady pressure.) The use of studded tires decreases stopping distance on ice but can also increase the distance in extreme cold temperatures.

#### **Rain**

Many drivers do not realize that roads are likely to be especially slick just after it begins to rain or drizzle. The first few drops loosen the grease and dirt accumulated on the surface of the road. The loosened grease and dirt mix with the raindrops and the road is quickly covered with a slippery film that makes it extremely dangerous. The first few drops of rain are danger signals telling you to slow down and use extra caution.

#### **Hydroplaning – “Water Skiing on the Highway”**

Hydroplaning takes place on wet roads. As speed increases, your tires start to ride up on a film of water. In a passenger car, partial hydroplaning starts at about 55 km/h and increases with speed to about 85 km/h at which point the tires may be totally up on the water. In a severe rainstorm, for example, the tires lose all contact with the road at 85 km/h. When this is the case, there is no friction available to brake, accelerate or corner. A gust of wind, a change

of road angle or a slight turn can create an unpredictable and uncontrollable skid.

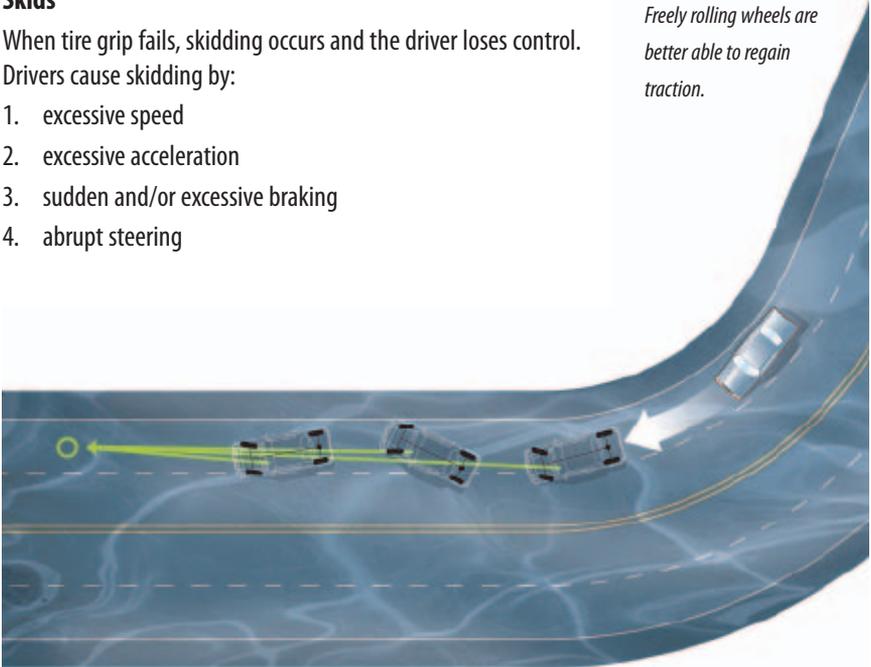
The best thing to do is to take your foot off the accelerator and let the car slow down. If you skid while your car is only partially hydroplaning, you should be able to control by correcting for the particular type of skid that occurs. On the other hand, if you are totally hydroplaning, follow your natural impulse and steer to keep the car going in its original direction but be careful – DO NOT OVERSTEER. When you feel the car regaining traction start to straighten your wheels but be prepared to handle a skid in the opposite direction.

To prevent hydroplaning it is most helpful to have good tires with deep treads. The treads allow the water to escape from under the tires and tend to prevent complete hydroplaning at normal highway speeds. However, when the depth of the water exceeds the depth of the treads, complete hydroplaning can be expected.

### Skids

When tire grip fails, skidding occurs and the driver loses control. Drivers cause skidding by:

1. excessive speed
2. excessive acceleration
3. sudden and/or excessive braking
4. abrupt steering



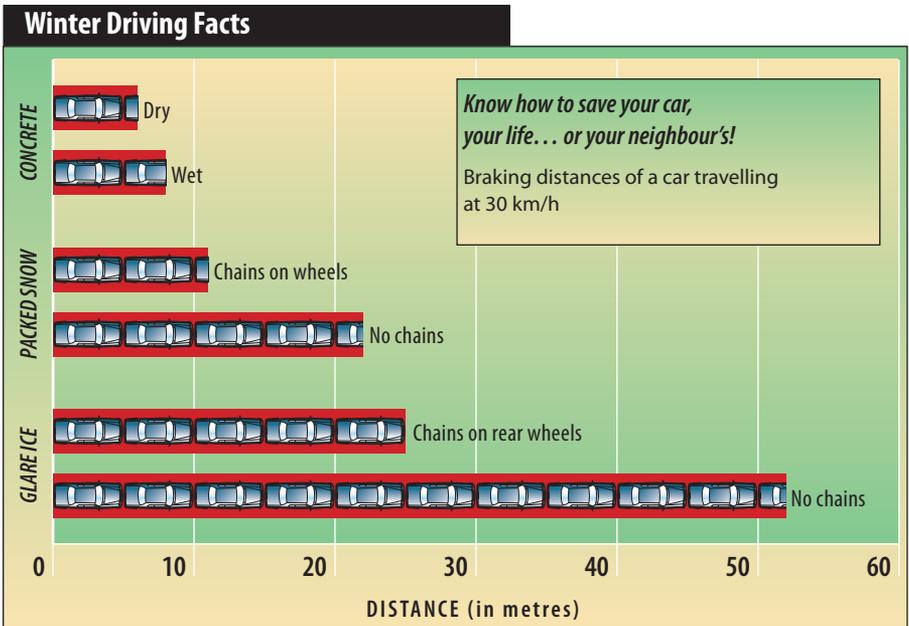
*To correct a rear-wheel skid, remove your feet from the pedals and steer in the direction of the skid. To correct a four-wheel skid, release the brake. Reapply it gently and increase pressure slowly to avoid locking the wheels again.*

*Experienced front wheel drive vehicle drivers may find that gentle acceleration will help the vehicle pull out of a rear wheel skid. If the front wheels skid, take your foot off the accelerator. The engine braking effect may slow the car to the point where front end traction is regained. If the skid continues, depress the clutch or select neutral. Freely rolling wheels are better able to regain traction.*

For added traction and steering control you should mount snow tires on all four wheels. A good compromise would be all season radials with sufficient tread depth to self clean in snow and slush conditions. Do not mix radials with non radial snow tires. Consult your owner's manual.

**Rules For Winter Driving**

1. *Accept your responsibility* to do all in your power to drive without collisions. Do not blame the weather for a crash. Be prepared to meet any situation.
2. *Adjust your speed to conditions* – Slow down on wet, snow covered or icy roads so that you can stop in time if you have to. Watch for ice patches, especially in shaded areas, on bridges and on overpasses.
3. *Get the “feel” of the road* – Try brakes occasionally while driving slowly and if away from traffic. Find out just how slippery the road is and adjust your speed to road and weather conditions. Remember, you cannot stop on a dime. Never make sudden moves like slamming on brakes or accelerator. Downshift the gears to slow down for a stop.



4. *Keep the windshield clear* of snow, ice and condensation. Be sure headlights, windshield wiper blades and defrosters are in top working condition. You have to see danger to avoid it.
5. *Use snow tires, tire chains or studded tires* on snow and ice. They cut stopping distances and give more starting and climbing traction ability. However, even with the help of chains or studs slower than normal speeds are a “must” on snow and ice.
6. *Pump your brakes* to slow down or stop. Slamming on the brakes can lock the wheels and cause a dangerous skid. In vehicles without ABS brakes use the threshold braking technique: Keep heel on the floor between the brake and the accelerator. Use toes to press brake to the point of the brakes locking up. Ease off the brake to the “threshold” where the brakes stop locking up.
7. *Follow at a safe distance* – Keep well back of the vehicle ahead of you in order to give yourself room to stop. Remember, without tire chains, it takes up to 12 times the distance to stop on snow and ice as on dry concrete.
8. *Remember* condensation on the pavement of bridges and overpasses freezes before the rest of the roadway.

---

### **5.12 Intersections**

Due to the fact that a great many collisions occur at intersections, drivers should exercise extra caution when approaching any cross street or road. Always reduce your speed before entering the intersection and check for oncoming traffic, first to the left and then to the right, to make sure the way is clear before proceeding.

---

### **5.13 Tire Blow-out**

If a tire blows out do not apply the brake. Let up on the accelerator. Keep the clutch engaged, make sure you have a firm grip on the steering wheel with both hands and slow down gradually until you have come to a stop. One protection against blow-outs is careful tire maintenance and frequent inspection of inside of casing.

---

### **5.14 Running Off the Pavement**

If a wheel runs off the pavement onto the shoulder of the road, remove your foot from the accelerator and steer straight ahead. When the way is clear behind you, turn wheels to the left and drive slowly back onto the pavement. If you jerk the car back on the road by a quick turn, it may go out of control and swerve into the path of oncoming traffic or overturn.

---

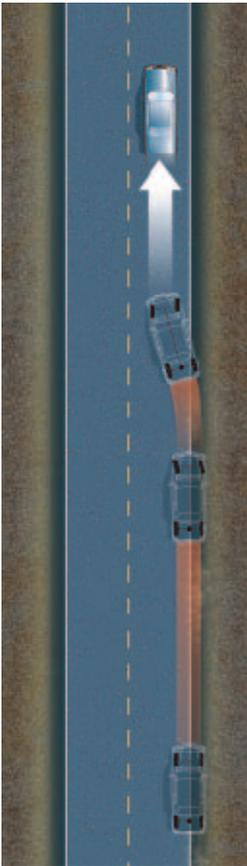
### **5.15 Curves**

To drive around a curve safely:

1. reduce speed when approaching and
2. gradually accelerate after entering the curve.

Collisions occur when drivers enter at top speed and then attempt to slow down in the curve. If the road is slippery, a slight force would be enough to push the car off the road. If there is an advisory speed posted, slow down to the speed. Never stop, park or make a U-turn in a curve.

Since curves (and hills) obstruct the view of the road, do not pass or back up in these areas.



---

### 5.16 Driving at Night

Night driving calls for special care because of reduced visibility. It is particularly important not to overdrive your headlights - that is, to drive at so fast a speed that you cannot stop the car within the distance in which your headlights will reveal objects on the highway. Unless you immediately reduce your speed when deflecting headlight beams, you are driving into a blind area.

---

### 5.17 Driving in Fog

Fog is one of the most dangerous driving conditions the driver can encounter. Most drivers recognize the hazards of driving in fog but are unaware of what should be done to increase safety and minimize hazards.

Follow these tips:

1. The very first thing to do when fog is encountered is gradually reduce speed. Avoid sudden stops. Remember that other vehicles - especially trucks - need a greater distance in which to slow down.
2. In dense fog, creep. Most collisions in fog are caused by overdriving visibility distance - in other words, travelling too fast.
3. Drive using low-beam headlights which throw light down onto the road rather than into the fog. Lighted headlights provide an additional safety factor by helping other drivers to see your vehicle. Do not use parking lights under these conditions.
4. When stopping because of poor visibility in fog, be certain to get as far off the road as possible. It's a good idea, especially if traffic is heavy, to get out of the car and move far off the road. Moving off the highway and waiting for the fog to lift is by far the safest thing to do.

It is wise to use the above practices in conditions of densely falling or blowing snow.

---

**SEE AND BE SEEN!**

**Turn on your headlights!**



### **5.18 Limited Access Highway**

#### **Two Lane Highway with Climbing Lane**

Slow traffic lanes are designed to allow faster moving traffic to pass slower moving vehicles.

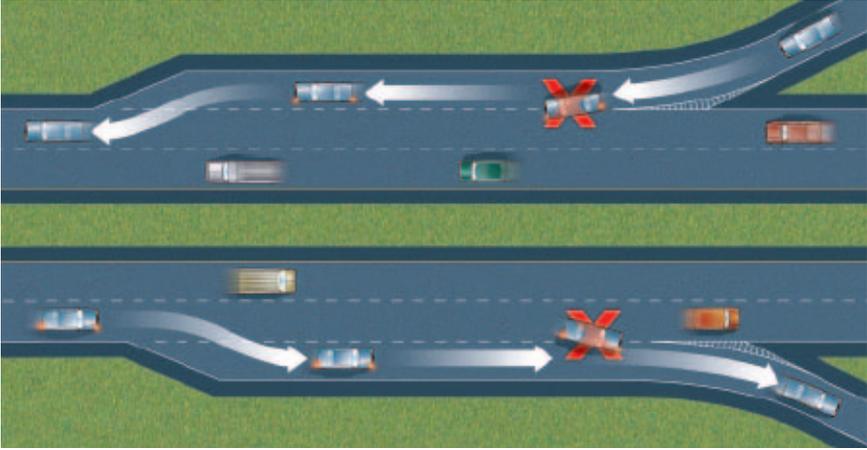
Where a traffic control device directs traffic to use a designated lane, drive in that lane.

In the situation of either a climbing lane or slow traffic lane, at the end the driver in the right hand lane must yield to the driver in the left lane.

#### **Entrance and Exit Ramps**

Limited access roads and other multi-lane highways in the city or country are designed for more convenient and safer driving. However, they are safe only when motorists know and practice the following rules:

1. Plan your route before you use these roads. Follow your guide signs.
2. When approaching exits and interchanges, keep alert - read and obey the signs. Use the proper lanes for leaving or continuing on these highways. If changing lanes, make sure it is safe to do so and give the proper signal.
3. When entering the highway use acceleration lane to increase speed when merging into through traffic. The driver on the road should be prepared to change to the left lane if it is safe to do so or slow down to allow traffic to enter the highway.
4. Use deceleration lanes to lower speed when exiting highway.
5. Drive within the minimum and maximum limits unless the traffic or weather conditions make these limits unsafe. Remember, keep a safe following distance. Leave enough space for an emergency stop.
6. Never stop on the travelled portion of the roadway even if you miss an exit.
7. If you pass your exit, drive to the next one. Never back up on a highway.



### Continuity Lines

Continuity lines are painted on the highway at entry and exit ramps. They indicate the separation between the through lane and the entry/exit ramps. They are wider than the regular lane separation lines and are shown in the sketch.

### Intersections

Modern interchanges involving roads which cross each other at different levels may be designed in a number of ways. For example, at a diamond interchange all exits from the main road are to the right. All turning movements are made at the intersections with the minor road.