# Yukon Driver's Basic Handbook Cars and Light Trucks



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#### Statement of Limitation

Yukon has prepared the Yukon Driver's Basic Handbook: Cars and Light Trucks from material in the B.C. Learn to Drive Smart Book to help you study for a Yukon driver's licence. The Handbook is not intended to take the place of professional training. Government of Yukon does not claim that a person who studies the Yukon Driver's Basic Handbook will be successful in getting the desired licence. Government of Yukon is not responsible for any consequences that may result from the use of this handbook.

Throughout this guide, references are made to acts and regulations that govern driving in Yukon. These references are written in plain language to help you understand their impact on individual drivers. If there are differences between the material in this handbook and any of these acts or regulations, the acts and regulations apply.

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In keeping with Government of Yukon's goal to protect the environment, *Yukon Driver's Basic Handbook: Cars and Light Trucks* is printed on 100% post-consumer recycled paper.

# introduction

This guide is designed for new drivers and for experienced drivers who are new to Yukon, re-taking a test, or brushing up on their driving skills.

For both new and experienced drivers, this guide will help you develop and apply smart driving skills. It contains the basic information you need to know to help you drive safely. It will also help you prepare for the sign and knowledge tests and for the Class 5 road test.

# **New drivers**

As a new driver, you are part of a high-risk group. This guide provides driving strategies to help keep you, and others, safe.

# **Experienced drivers**

Use this guide to review Yukon's driving rules and regulations if you have been licensed to drive in another jurisdiction, if you are re-taking a test, or if you want to brush up on your skills. This guide also provides information on safe driving practices.

# Getting the most from this guide

This guide is divided into 10 chapters. Depending on what you need to know, and whether you are a new or experienced driver, you may decide to read and study all of it, or just parts of it.

On Yukon roads you may not see everything talked about in this guide. You need to learn some information, for example, particular road signs, what they mean and what they look like, for when you are driving in other parts of Canada.

### Organization

This guide is designed to help you quickly find the information you need. Check the index at the back to find specific topics. Each chapter provides you with useful information to help you become a safe, competent driver.

### Chapters 1 to 5: Developing your smart driving skills

The first five chapters cover the basics to help you develop your smart driving skills. Each chapter provides important information that will help keep you and others safe on the road.

- Chapter 1: common choices that every driver makes.
- Chapter 2: how your vehicle works and how to keep it running well.
- **Chapter 3**: signs, signals and road markings you'll see while driving.
- Chapter 4: rules of the road that you need to know to drive safely.
- **Chapter 5**: driving strategies to help you become a skilled driver and avoid problems on the road.

### Chapters 6 to 8: Applying your smart driving skills

These chapters will help you apply what you've learned.

- Chapter 6: how to safely share the road with all road users.
- **Chapter 7**: how to overcome negative influences that affect driving.
- **Chapter 8**: challenging driving conditions and dealing with emergencies.

### Chapters 9 and 10: Yukon references and resources

The last two chapters tell you how to get and keep your Yukon driver's licence, and where you can find more information. You will not be tested on this material.

- Chapter 9: how to get your driver's licence through the Graduated Driver's Licence program.
- Chapter 10: information about your Yukon driver's licence, including responsibilities and penalties.



- Be a thinking driver
- Be fit to drive
- Make good decisions
  - keep learning
  - plan your driving
  - predict the scene
  - think for yourself
- Take responsibility
  - you, the driver
  - your passengers
  - other road users

Driving gives you the freedom to get around but it also involves certain risks. When you're in the driver's seat, you need to be well rested and have a clear mind to focus on the task of driving, make good driving decisions and look out for the safety of others. This chapter will help you think about the choices you can make as a driver to help keep yourself and others safe.

# Be a thinking driver

### You in the driver's seat - part 1

You've had your driver's licence for some time now, and you've become a pretty good driver. This morning you need to take the car in by 9 a.m. for an oil change, and then pick up a friend who lives in the country. You both need to be back in town by noon. You're not sure if you have enough time.

As you were leaving the house, you had an argument with your roommate. Now you're feeling angry and pressed for time.

You have to make many choices as a driver. You have to choose the best route to get to your destination, and decide how much time you need to get there. You have to make decisions about the safety of your passengers, especially if you're caught in a dangerous situation. You have to decide how much risk to take. You also need to make sure you can focus on driving before you get behind the wheel.

A thinking driver puts safety first. Smart driving is about making choices that help keep you and others safe. The choices you make determine what kind of driver you will be.

A thinking driver chooses to:

- be fit to drive
- make good decisions
- take responsibility.

# Be fit to drive

### You in the driver's seat - part 2

It usually takes you 25 minutes to drive across town to the garage. When you leave home, it's 8:45 a.m. To make matters worse, the traffic is heavy, slowing you down even more. You find yourself swearing under your breath. You're also getting angrier about what your roommate said. You feel so frustrated that you notice you're having trouble concentrating on your driving.

### What choice would you make?



Focus on your driving? **or** Focus on the argument?



You need to be in good shape to drive: alert and able to focus. Feeling angry or frustrated can cloud your judgment and slow down your reaction time.

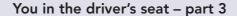
You also need to avoid driving if you have an injury or illness that makes it hard for you to think clearly or quickly. Never drive when you are overtired. Even if you don't fall asleep, it's hard to respond quickly when you feel tired.

A driver who is impaired by drugs or alcohol is one of the worst driving hazards. This is because drugs and alcohol cause mental confusion and slow reaction times. Impaired drivers are much more likely to cause crashes that lead to serious injury or death.

# Make good decisions

You have to make quick and accurate decisions when you drive. Will you be tempted to run a yellow light because you are in a hurry? Will you take a chance and drive after you've been drinking? Being a safe driver requires learning, planning, predicting and thinking for yourself.

# Keep learning



As you're driving, you spot a playground sign. You know you have to slow down, but you can't remember when the playground speed limits are in effect. The sign doesn't say. Is the playground speed limit in effect today as you are driving through the playground? You can't remember for certain.

### What choice would you make next time?



You're reading this guide to learn about driving. This is the first step in becoming a good driver. You'll also spend time practising your driving skills, and may even take driver training from a professional to enhance your learning.

It's important to keep on learning even after you have your licence. It will take time for you to gain driving experience. You'll continually learn how to handle new driving situations and conditions, and will need to keep informed about changing vehicle technology. You'll also need to learn about changes that are made to the rules and regulations of the road.

Your skills as a driver will also change. As you gain experience, your skills will increase, but you may become overconfident and too automatic in your driving. Health problems could affect your ability to drive safely. Throughout your driving years, it's important for you to be honest with yourself about your skills and your readiness to drive.

Remember that driver education courses are available for beginning and experienced drivers.

# Plan your driving

### You in the driver's seat - part 4

Now you're definitely going to be late. You start worrying about missing your appointment for the oil change and being late to pick up your friend. You think about going faster.

What choice would you make?

Take a chance and speed?



Keep to the speed limit and plan your time better in the future?

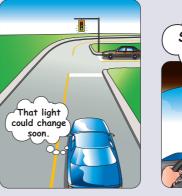
Part of good driving is planning ahead. This means planning enough time to get to your destination and knowing the shortest and safest route. It may mean equipping your vehicle for winter driving conditions. Can you think of other driving plans you may need to make?

### Predict the scene

### You in the driver's seat - part 5

You're driving too fast, and you forget to watch the traffic lights at the next intersection. Suddenly you find yourself coming up to the intersection and the light has already turned yellow.

### What choice would you make next time?





What you would do if a child Pre

suddenly ran in front of your car. Could you stop in time?

think about

Predict the scene well ahead?

**√or** ▶

Respond in a hurry?

As a driver, you need to be aware of cues in the driving environment: signs, signals and road markings. Paying attention to these cues helps you predict what could happen so you're prepared to respond.

It's also important to predict what other road users — pedestrians, other drivers, motorcycle riders and cyclists — might do. You can predict what might happen by carefully observing the driving scene around you. Being aware of what others around you are doing will help you to make better driving choices.

# Think for yourself

### You in the driver's seat - part 6

There's one more intersection before the garage. You have to turn left and there is no advance green arrow. You've sat through this light at other times because the traffic is always heavy here.

You become more frustrated as you wait to turn. Cars are lined up behind you with their left-turn signals flashing. The driver behind is starting to honk at you. You see a space but hesitate because you're not sure if the gap is big enough for you to make your turn.

### What choice would you make?



Wait until you feel there's a safe gap?



Turn just to please other drivers?

people honk their horn at you. What will you do if someone is tailgating you? Will you be tempted to

What you will do when

think about

Will you be tempted to speed just because other drivers around you are going faster then the speed limit?

Another part of making good choices is knowing yourself and understanding the influences that shape your driving.

**Influences from other drivers** — at times you will feel pressure from other drivers, and you'll have to decide what to do. Will you base your driving decisions on safety or will you allow other drivers to pressure you into doing something that might be unsafe?

Influences from the media — think of the images of cars and driving in ads and movies. Do these images generally promote safe driving?

Influences from peers — other people can influence your driving. Your friends may pressure you to drive faster or to race away from stoplights. You may think it will impress them if you turn up the volume on your car stereo system.

# Take responsibility

Becoming licensed to drive means you are taking on new responsibilities for yourself, your passengers and other road users.

### You, the driver

### You in the driver's seat – part 7

You've been to the garage and now you're on your way to your friend's place. You're relieved because it seems you have enough time after all. Then you notice a large truck ahead that's going pretty slowly.

You hate passing trucks, especially on a narrow road like this one.

What choice would you make?

Slow down and stay behind the truck?



Try to pass the truck even or though you don't feel comfortable doing so?

It's important to know and accept the limits of your driving abilities and your vehicle. You also need to take responsibility for developing your driving skills and ensuring your own safety.

# Your passengers

### crash fact

In 2007, more than one out of every three people killed in car crashes were not wearing a seatbelt.

Source: B.C. Traffic Collision Statistics, Policeattended injury and fatal collisions, 2007.

### You in the driver's seat - part 8

You greet your friend as he climbs into the car. You're happy to see him, but you're surprised when he doesn't put on his seatbelt.

### What choice would you make?



You're responsible for the safety of your passengers. Make sure they are all wearing seatbelts. Children need special care and attention. Are they properly restrained with the right safety devices for their size? Remember, when you speed or take a chance at an intersection, you are putting your passengers as well as yourself in danger.

# **Smoking**

It's now illegal to smoke in any vehicle when there are passengers under 18.

Children are especially vulnerable to second-hand smoke. Its harmful effects are greater in small enclosed places, such as vehicles, and can cause immediate and serious, long-lasting health problems.

### Other road users

### You in the driver's seat - part 9

You and your friend are almost back in town. As you approach an intersection, you notice a skateboarder heading along the sidewalk but near to a crosswalk.

What choice would you make?

Be cautious and slow down?



Take a chance and keep going?

You share the roadway with cars, trucks, trains, motorcyclists and cyclists. Pedestrians need to cross your driving path. Ambulances need you to move to the side of the road so they can respond to life-threatening situations. You never know when an animal may dart into your path.

Use the information in this guide to help you make responsible driving choices that can help prevent many dangerous situations.



- Adjust for safety
- Hand controls
- Foot pedals
- Control panel
- Pre-trip check
- Periodic check
- Driving and the environment

### crash fact

Each year, on average, just over 70 per cent of people injured in collisions report a soft tissue injury such as whiplash. Many also had other injuries. A study of seven Canadian provinces found that 53 per cent of the drivers observed had head restraints that were so poorly adjusted that they would not protect the occupant from injury in a rear-end collision.

Source: MSN: Autos: Head Restraints: Saving Your Neck In **chapter 1, you in the driver's seat**, you learned how important it is to make good choices when driving. It's also important to learn how your vehicle operates. Mastering the controls is one of the first steps to safe driving.

# Adjust for safety

To drive safely, you need to be able to comfortably reach your vehicle's controls and see clearly around you. Before you start the engine, always adjust your seat, head restraint and mirrors. Never adjust your seat or the steering wheel while the vehicle is moving.

### Seat

Your seat should be upright and in a position where you can:

- push the small of your back into the seat
- sit upright, never with a reclined seat
- with your right foot, reach the floor behind the brake pedal and still have a slight bend in your leg
- turn the steering wheel and keep your arms slightly bent
- reach all the controls
- keep your left foot comfortably on the space to the left of the brake pedal or clutch pedal.

You should also be at least 25 cm (10 in) away from the driver's airbag, which is located in the centre of the steering wheel.

### Head restraints

Head restraints can help prevent soft tissue injuries such as whiplash. Whiplash is an injury to the neck, head and or shoulders after a snapping motion. Adjust your head restraint so the top is at least level with the top of your ears. Higher is even better. Your head restraint should be as close as possible to the back of your head. Closer head restraints can be twice as effective in preventing injuries than if they're set too far back.

Make sure your head restraint is adjusted to the height that is right for you.



Injuries can result if you are in a crash and your head restraint is not properly adjusted.



### Seatbelts

There are two good reasons to wear your seatbelt:

- Wearing your seatbelt significantly reduces your chance of serious injury or death in a crash.
- It's the law in Yukon you will be fined for not wearing your seatbelt.

It's also your responsibility as a driver to make sure that all passengers are properly secured with seatbelts or child restraint systems.

Adjust your seatbelt so that it fits snugly over your chest and low over your hips. Do not wear the shoulder strap under your arm or behind your back or with a reclined seat because putting this belt over the wrong part of the body could cause serious internal injuries if you are in a collision. Pregnant women should make sure the lap belt is snug and below the baby.



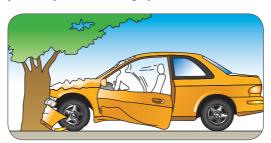
Even at low speeds, a crash forces a pressure of hundreds of kilograms against your body. If you are wearing a seatbelt, especially one with a lap belt and a shoulder strap, you're much less likely to be injured, knocked unconscious or ejected from the vehicle. Even if your vehicle catches fire or ends up in water, you have a better chance of getting out quickly if you stay conscious.

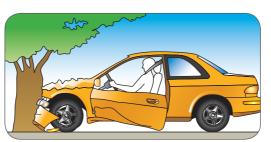
If you're not wearing a seat belt and your vehicle rolls over or if you're ejected, it's likely you'll

be seriously injured or killed. Wearing your seatbelt can help prevent you from being ejected from the vehicle.

When your car stops suddenly, your body will continue to move forward at the same speed as your car was travelling. Without a seatbelt, your body will not stop until you hit the dashboard, windshield or something outside of the car.







Buckle up even on short trips, since most injuries and deaths occur close to home.

### crash fact

Children are at risk of being in a collision every time they travel in a motor vehicle. Using child car seats and booster seats properly can reduce the risk of death by 71 per cent and the risk of injury by 67 per cent.





### Child car seat safety

Every year in Yukon, young passengers are injured or killed in motor vehicle crashes.

The correct use of a Canada Motor Vehicle Safety Standards (CMVSS) approved child restraint system or booster seat will ensure a child is properly restrained and significantly reduce their risk of serious injury or death in a crash.

### stage 1 — rear-facing

- Use from birth until **at least** one year old and 9 kgs (20 lbs).
- Place in the centre of the back seat.
- Never place a rear facing child restraint system in front of an active airbag.
- Keep rear-facing as long as possible.

### stage 2 — forward-facing with tether

- Child must be over one year old and over 9 kgs (20 lbs).
- Up to at least 22 kgs (48 lbs).
- Place in back seat.
- Child may remain rear-facing if allowed by manufacturer's weight limits.
- Always use with a tether strap installed following manufacturer's directions.

### stage 3 — booster seat

- Booster seats ensure proper seatbelt fit. They raise the child to correctly position the adult seatbelt across the bony structures of the chest and pelvis. It's safest if a child remains in a booster seat until they reach 145 cm (4'9") tall.
- Child must be over 22 kgs (48 lbs).
- Use until your child is 145 cm (4'9") tall and weighs at least 45kgs (100 lbs).
- Place in back seat and use with a lap/shoulder seatbelt.
- Position lap belt low over hip bones and shoulder belt over shoulder and in front of chest. Remember to properly adjust headrest.
- Do not use a booster seat with only a lap belt.

### stage 4 — seatbelt only

- It's recommended that you keep children in the back seat until 12 years of age.
- The lap belt should fit low over the pelvic bones.
- Shoulder belt should fit over the shoulder and snug across the chest.
- Never put the shoulder belt under the arm or behind the back. This could cause serious injury in a crash.
- Keep the seat in an upright position, not reclined. Seatbelts are designed for upright seating. A deeply reclined seat can cause a passenger to slide out from under the seatbelt in a crash.

# warning!

Do not place rear-facing infant or child restraint systems in a passenger seat equipped with an active frontal airbag. Children in these seats could be killed or seriously injured if the airbag inflates.

### Airbags

All new vehicles are equipped with airbags. They have been shown to reduce injuries and deaths in collisions. Airbags work by inflating and then deflating to reduce the shock of a collision. They do this very quickly; in less than a blink of an eye, an airbag inflates, and then begins to deflate again.

Airbags can be mounted in front of and beside the driver and front seat passenger. If your vehicle is equipped with airbags, you should position your seat so you're at least 25 cm (10") from the steering wheel. This allows room for the airbag to inflate and protects you from further injury.

Consult your owner's manual for safety precautions.

In a few instances, you may need to deactivate an airbag. You must contact Transport Canada to do this. For more information, call Transport Canada at 1-800-333-0371.

Airbags do not replace seatbelts. Always use your seatbelt even if your vehicle is equipped with airbags. Check your owner's manual for instructions about the airbags in your vehicle.



# warning!

Some cars have convex mirrors. They provide a wider field of view but make things look smaller and farther away than they actually are. Check to see how accurate your vehicle's mirrors are.

### **Mirrors**

Make sure you can see all around your vehicle when driving:

- Adjust the rear-view mirror so you can see as much as possible behind you.
- Adjust your side-view mirrors to reduce the blind spots as much as possible. (Blind spots are the areas beside the vehicle that you cannot see in the mirrors.) Usually this means that only a slight part of the side of your vehicle is visible.
   See chapter 5, see-think-do, for more information about blind spots.



# Hand controls

Now that your vehicle is adjusted to fit you, think about all the controls that your hands operate. Get to know how each control operates before you try to drive. Even when you are an experienced driver, you will need to get used to these controls each time you drive a different vehicle.



Make sure you know how to operate all the controls in each vehicle you drive. You may need to check the owner's manual.





# warning!

Don't turn your vehicle's ignition switch to the "lock" position while it is still in motion. This can cause the steering to lock if you try to turn the steering wheel and you could lose control.





# Steering wheel

The steering wheel controls the direction of the vehicle by turning the front wheels. If your steering wheel is adjustable, make sure it's in the right position for you before you begin to drive.

### Ignition switch

Get to know all the positions of the ignition switch in your vehicle. They may include:

- Lock steering is locked and ignition is off
- Off ignition is off but the steering is not locked
- Acc ignition is off but some electrical parts may be used (e.g., radio)
- On ignition is on
- **Start** turn to this position to start the engine, then release the switch so that it returns to the On position.

### Gearshift lever

The gearshift lever lets you control the vehicle's transmission. There are two types of transmissions: automatic and standard. Both control the connection between the engine and the wheels.

An automatic transmission chooses the most efficient gear for you. In a vehicle with a standard transmission, the driver chooses the best gear. Using the best gear keeps the engine from stalling and allows it to operate as efficiently as possible for fuel economy.

A standard transmission is always used with a clutch. The gearshift is generally mounted on the floor or on the steering column. Standard transmissions are built in three-, four-, five- or six-speed models. Check your owner's manual when learning to use your vehicle's gearshift.

# Comparing automatic and standard transmissions

Gear	Automatic*	Standard*
P – Park	Use when starting the vehicle and when parked. Locks the transmission.	
R – Reverse	Use when backing up. Turns on reverse (white) lights.	Use when backing up. Turns on reverse (white) lights.
N – Neutral	If vehicle stalls while moving, use to restart the engine.	Use when vehicle is stopped or when starting the engine.
D – Drive	Use for normal forward driving.	
1 – First gear	Use when pulling heavy loads, going slowly or when going up or down very steep hills.	The lowest gear. Use it from a stopped position to speeds of 10 to 15 km/h. Use when pulling heavy loads or when going up or down very steep hills.
2 – Second gear	Use when pulling heavy loads or when going up or down very steep hills.	Use from speeds of 15 to 30 km/h, for hills and when driving on snow or ice.
3 – Third gear		Use for speeds between 30 to 60 km/h.
4 – Fourth gear		Use for highway speeds on 4-speed models.
5 – Fifth gear		Use for highway cruising on 5-speed models.
6 – Sixth gear		Use for highway cruising on 6-speed models.
O – Overdrive	Use at speeds of over 40 km/h to save fuel.	

<sup>\*</sup> The speed guidelines are approximate and will depend on your vehicle.



# Parking brake

This brake keeps the vehicle from moving when it's parked. Depending on your vehicle, you may have a foot or hand-operated brake. Make sure you fully apply the parking brake when parking and fully release it before moving.

The parking brake is sometimes called an emergency brake because it can be used to slow the vehicle if the foot brake fails. See **chapter 8**, **emergency strategies**, for more information on these situations.



# Turn signal lever

This lever turns the left- and right-turn signals on and off. You use your turn signals to communicate to other road users that you want to change direction or position.

### driving tip

On Yukon highways, you must drive with the low beam headlights on during the day if your car does not have automatic daytime running lights.

### Lights

The first position of the light switch controls the tail lights, parking lights and side-marker lights, as well as the dashboard and licence plate lights. The second position controls the headlights.

Your vehicle will have another switch position or separate switch that controls the two brightness settings of the headlights: low beam and high beam. Use the high beam setting only on unlit roads at night when there aren't any vehicles approaching or in front of you.

Use the parking lights when you are stopped and want to make sure your vehicle is visible. Don't use these lights when your vehicle is moving; put the headlights on instead.

Vehicles made after 1991 have automatic daytime running lights, a safety feature that makes your vehicle easier for other drivers to see during daylight hours. Daytime running lights do not activate the tail lights. Do not use them for nighttime driving or for low visibility conditions. Use the low or high beam lights instead.



### Hazard light switch

The hazard light switch activates both turn signals at the same time. These flashing lights tell other road users to be careful near your vehicle because you may have stopped for an emergency.



### Cruise control

Cruise control lets you pre-set a speed that will stay the same. Use it only under ideal highway driving conditions. Never use the cruise control feature:

- on wet, slippery, snowy or icy surfaces
- in urban traffic
- when you are tired
- on winding roads.



# Wipers and washer control

Practise finding the different wiper speed settings. Make sure you know how to turn on the windshield washer. The wipers should always be in top working condition to give you a clear view during rainy and snowy weather conditions.



### Horn

Your horn is an important way to communicate warnings to other road users. Be sure to use it wisely.



# Heater, defroster and air conditioning controls

The panel of levers that control the defroster, incoming air and air conditioning are located within easy reach of the driver. Check your owner's manual to see how they work. Practise with them so you can easily turn on the defroster without looking at the controls.

# Foot pedals



You will operate two or three controls with your feet, depending on whether your vehicle has an automatic or a standard transmission.

Use your right foot to operate the brake and gas pedals, and your left foot to operate the clutch. Practise doing this until you can find each pedal easily. This will help you react quickly in an emergency.



### Accelerator

The gas pedal controls the amount of fuel going to the engine. The more fuel the engine gets, the faster the vehicle will go. You need to practise putting the right amount of pressure on the pedal so you keep control over the speed of your vehicle. Always operate the accelerator with your right foot.



### **Brake**

The brake pedal is located to the left of the accelerator and is used to slow down and stop the vehicle. Always use your right foot to operate the brake. You need to learn to apply the right amount of pressure on the brake so that you can stop the vehicle smoothly and precisely.

Be familiar with the braking system of your vehicle. Power brakes need less pressure than standard brakes.

# warning!

Always wear shoes when driving so you have good contact with the brake and the accelerator. Avoid driving in shoes that have high heels or platform soles.



Your vehicle may have an anti-lock braking system (ABS). Look for an indicator light on the dash. This electronic system keeps the wheels from locking.

Vehicles with anti-lock braking systems also have regular braking systems. The anti-lock braking system is activated only when you press heavily on the brake pedal, such as during an emergency stop. Read your owner's manual for more information about your vehicle's anti-lock braking system and how to use it properly. Also see **chapter 8**, **emergency strategies**, for more information on ABS braking.

If your ABS indicator light stays on after you start the vehicle, the system may be malfunctioning. Take the vehicle in for repair.



### Clutch

In a vehicle with a standard transmission, pressing the clutch pedal disconnects the engine from the transmission so you can shift gears. You use your left foot to press the pedal when changing gears. Do not keep the clutch pedal pressed part-way down, called "riding the clutch," when the vehicle is moving because this causes unnecessary wear to the clutch.

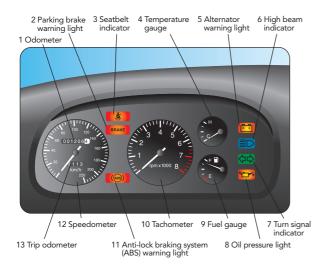
When you begin moving after a stop, release the clutch slowly and smoothly to avoid stalling the car. When you stop, use the brake first and then depress the clutch just before you stop. This will avoid coasting with the clutch in.

# driving tip

Coasting with the clutch in is a poor driving habit. Keep your vehicle in gear, and your foot off the cluth, in case you need to make a defensive manoevre.

# **Control** panel

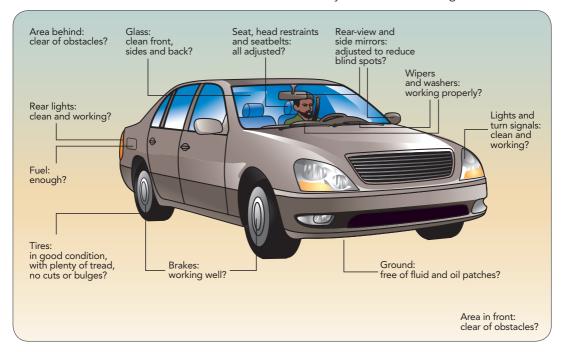
When you sit in the driver's seat, you'll see the control panel directly in front of you. On the next page, match the numbers in the chart to the numbers in the illustration to find out what each item does. Remember that control panels are different in each vehicle. Be sure you can find each item on vehicles you drive.



Number	Indicator/Gauge	Function
1	Odometer	Displays the number of kilometres/miles that the vehicle has travelled since manufacture.
2	Brake warning light	Reminds you to release the parking brake before moving. If the light comes on while using the foot brake, it means the brake system is not working properly. Have it checked by a mechanic.
3	Seatbelt indicator	Reminds you to fasten your seatbelt.
4	Temperature light/gauge	Shows the temperature of the engine coolant and whether the engine is overheating.
5	Alternator warning light/gauge	Shows whether the battery is charging.
6	High beam indicator	Usually a blue light that indicates the high beam headlights are on.
7	Turn signal indicator	Shows whether a turn signal is on. Both will flash when the hazard lights are on.
8	Oil pressure warning light/gauge	Indicates the oil pressure in the engine. It does not tell you how much oil is in the engine.
9	Fuel gauge	Indicates the amount of fuel in the gas tank.
10	Tachometer	Displays the engine speed in revolutions per minute (r.p.m.).
11	Anti-lock brake system warning light	Indicates if the anti-lock brake system is working properly. It will come on for a few seconds when you start the car, and when the anti-lock brake system is activated while stopping. If the light stays on after starting the car, it means the brake system may not be working properly. Have it checked by a mechanic.
12	Speedometer	Shows the speed the vehicle is travelling (in either kilometres or miles per hour).
13	Trip odometer	Shows the distance travelled since it was reset to zero.

# Pre-trip check

Even if you're in a hurry, you should always check your vehicle to make sure it's safe to drive. The pre-trip check doesn't take long, and will soon become a habit. It will help prevent a vehicle breakdown. Always check the following:



# driving tip

Just as you check the safety of your vehicle before starting out, check your trip planning:

- Do you know your route? Use a map if necessary.
- Do you have enough time? It pays to allow a few extra minutes.

# Periodic check

Your pre-trip check will help you feel confident that your vehicle is safe as you set out for your destination. To ensure good maintenance, you also need to do a more thorough check every few weeks. How often you do the periodic check will depend on how much you drive.

### Checklist

Use the following checklist to keep your vehicle in good running order:

- Is the engine oil at the proper level? Is it clean?
- ☐ Is the radiator coolant topped up?
- Do you have enough washer fluid?
- ☐ Is the brake fluid level okay?
- ☐ Is the power steering fluid level okay?

- ☐ Is the parking brake properly adjusted?
- ☐ Are the engine hoses cracked or leaking?
- ☐ Is the fan belt in good condition?
- Are all the lights working? (Remember to check both the brake and backup lights too.)
- ☐ Are the wipers in good condition?
- ☐ Do you have enough fuel?
- ☐ Are the tires properly inflated?
- □ Are the tires in good condition?

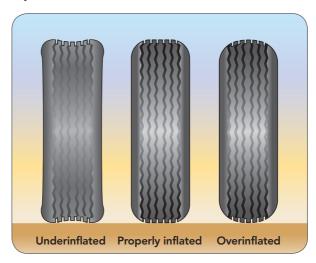
# driving tip

Check tire inflation when the tires are cold. Refer to the owner's manual or the sticker on the driver's door for the proper inflation level. Do not use the numbers on the side of the tire.

# Tire tips

Tires are key pieces of safety equipment, so remember to:

- Keep your tires inflated to the recommended pressure level.
- Must have at least 1.6mm (1/16") of tire tread.
- Replace any tires that show bumps, bulges, cuts, cracks or exposed belts.
- Use only tires that match the specifications for your vehicle.
- Make sure all four tires are similar so they work together.
- Keep the spare tire at the required air pressure. A space-saver spare tire has the correct air pressure marked on its side.
   When you use this type of spare tire, never drive faster than 80 km/h.
- Rotate tires regularly for even wear.
- Avoid sudden starts and stops as they reduce the life of your tires.



Properly inflated tires help keep you safe by increasing your vehicle's traction.

# Prepare for winter driving

In Yukon, we need to make sure we prepare our vehicles and ourselves for winter driving conditions.

### Prepare your vehicle:

- Make sure all vehicle lights are working.
- Replace vehicle fluids, such as oil, washer fluid and anti-freeze, with winter-grade products.
- Check brakes and battery.
- Tune up engine.
- Install with winter tires (check tire pressure and tread) to improve vehicle handling and control in slippery conditions.
- Inspect belts and hoses.
- Install windshield wiper blades made for winter use.
- Confirm heater and defrost are working properly.
- Check the exhaust system. Any leaks can be extremely dangerous because carbon monoxide can collect in vehicles when the windows and vents are closed.
- Carry an emergency winter driving kit.

### Adjust your driving habits:

- Allow more time to reach your destination.
- Increase following and stopping distance.
- Decrease travelling speed.
- Brake and accelerate slowly.
- Steer smoothly and gradually.
- Know your weather and road conditions.

### driving tip

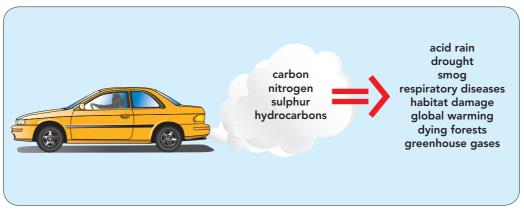
Using chains on icy roads is a good idea. Make sure you are familiar with how to mount chains on tires. Practise putting them on your vehicle before you need to use them.

# driving tip

In extremely bad conditions, it may be safer to park your vehicle than to continue driving.

# Driving and the environment

Cars and trucks use over half the world's annual oil supply. We know there is a limited supply of oil. Automobiles and light-duty trucks emit almost two-thirds of the common air pollutants.



One out of every two Canadians owns a car or light truck and drives about 19,800 kilometres per year, according to Environment Canada statistics. Exhaust emissions from cars and trucks are one of the leading causes of climate change, urban smog and acid rain. On average, each vehicle releases over four metric tonnes of air pollutants per year.

### driving tip

Safe driving habits can reduce your fuel consumption by as much as 30 per cent, save wear and tear on your car, and reduce emissions.

For more smart ways to be fuel-efficient, visit the Natural Resources Canada Office of Energy Efficiency website at <a href="https://www.oee.nrcan.gc.ca">www.oee.nrcan.gc.ca</a> or call 1-800-387-2000.

For more tips on how to drive smart and save money, go to www.drive smartsavegreen.com. Here are some things you can do to help protect the environment and save money, too:

### Use other forms of transportation

- Walk, cycle or take public transit whenever possible.
- Arrange carpools. Instead of driving children to school, walk or cycle with them.

### Reduce fuel consumption

Driving safely reduces fuel consumption and saves money, too.

- Drive smoothly and at a steady speed. Avoid "jackrabbit" starting and stopping.
- Slow down and save. Keep to posted speeds or below.
- Plan your route. Combine several errands into one trip, and plan the route so that you go to the destination that is farthest away first. This will allow your vehicle to warm up to its normal operating temperature which helps reduce fuel consumption.
- Avoid idling. Turn the motor off if stopped for more than 60 seconds, such as when stopped at the side of the road.



- Check tire pressure at least monthly. Under-inflated tires increase fuel consumption.
- Avoid excess weight. Remove any items in the car and trunk that you don't need.
- Roll down your windows. Refrain from using air conditioning under 50 km/h. Use your vehicle's flow-through ventilation rather than air conditioning on the highway.
- Remove roof racks and roof boxes to reduce drag.

### Reduce emissions

Choose a fuel-efficient vehicle.

- Keep your vehicle tuned up to reduce emissions.
- Change the oil regularly and use the right grade. Have any oil leaks fixed.
- Keep the air filter clean.
- Make sure your air conditioning system doesn't have any leaks.

Do not pour motor oil, gas, antifreeze or battery acid down drains. Take these fluids to recycling locations.



# signs, signals and road markings

# in this chapter

- Signs
  - regulatory signs
  - school,
     playground and
     crosswalk signs
  - lane use signs
  - turn control signs
  - parking signs
  - reserved lane signs
  - warning signs
  - object markers
  - construction signs
  - information and destination signs
  - railway signs
- Signals
  - lane control signals
  - traffic lights
- Road markings
  - yellow lines
  - white lines
  - reserved lane markings
  - other markings

In **chapter 2, you and your vehicle**, you learned about some of the controls in your vehicle. This chapter is a handy reference section for the most common signs, signals and road markings that keep traffic organized and flowing smoothly.

# Signs

There are three ways to read signs: by their shape, their colour and the messages printed on them. Understanding these three ways of reading signs will help you figure out the meaning of signs that are new to you.



Stop



Yield the right-of-way



Shows driving regulations



Explains lane use



School zone signs are fluorescent yellow-green



Tells about motorist services



Shows a permitted action



Shows an action that is not permitted



Warns of hazards



Warns of construction zones



Railway crossing



Shows distance and direction

### Regulatory signs

These signs tell you about driving laws and regulations. It is an offence under the Yukon *Motor Vehicle Act* to disregard them. Drivers who do not follow the instructions on these signs will receive penalties.



Stop completely, continue only when safe



Give the right-of-way to other vehicles and crossing pedestrians



The fastest you may drive in good conditions



Indicates a lower speed limit ahead



Do not enter

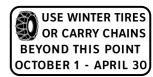


Do not go this way, usually mounted on exit ramps





One way, gives direction of traffic on cross street



Winter tires or chains must be used when sign is displayed



ROUTE
Stay off this r

Stay off this road during major disasters. Road may be used only by emergency vehicles.



Move into right lane if driving slower than regular traffic



Keep right unless passing



Do not pass



Two-way traffic, keep right unless passing



Keep right of the divider



No stopping between here and the next no-stopping sign



No stopping during posted times between here and the next sign



No bicycle riding beyond this point



No right turn on red light

# Crosswalk, school and playground signs

These signs tell you the rules to follow in areas where you need to be extra cautious.



Pedestrian-activated crosswalk, prepare to stop if the light is flashing.



Pedestrian crosswalk, yield to people crossing.



School crosswalk, yield to pedestrians. If there is a crossing guard, follow directions.



School zone, reduce speed when children are present.



Playground nearby, be prepared to slow down.



30 km/h

Playground zone. 30 km/h limit is in effect 24 hours a day, every day.



50km/h CHILDREN ON HIGHWAY

School zone. 50 km/h limit is in effect from 8 a.m. to 4:30 p.m. on school days when children are on the roadway or shoulder.



 $30\,\mathrm{km/h}$ 

School zone. If the tab underneath only indicates the speed limit, that limit is in effect from 8 a.m. to 4:30 p.m. on school days.



30 km/h 8 AM - 4:30 PI SCHOOL DAYS

School zone.
The tab underneath indicates the speed limit and the hours that it is in effect (in this case, the 30 km/h limit is in effect from 8 a.m. to 4:30 p.m. on school days).

# Lane use signs

Signs showing which lanes may be used to turn or go straight are mounted above the lane or at the side of the lane before the intersection. If you are in a lane controlled by a lane use sign, you must follow the direction indicated by the arrows. You may not move into or out of the lane while you are in an intersection.



Turn left only



Continue straight only



Go through or turn left



Go through or turn right



Vehicles from both directions must turn left, no through traffic allowed



Vehicles in both of these lanes must turn left

# Turn control signs

Turn control signs are mounted directly above the intersection. You must follow the direction of the arrow.



Left turn only



Go straight only, no turns



Turn right or left only



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No right turns during posted times

# Parking signs

Parking signs let you know where and when you are allowed to park. You may receive fines or your vehicle may be towed (or both) if you park illegally.



Time-limited parking during posted times



Do not park here



Parking is not allowed during posted times



Parking only for vehicles displaying the disabled parking sign and carrying a person with disabilities

# Reserved lane signs

A white diamond painted on the road surface marks reserved lanes. Reserved lane signs are also placed over or beside lanes that are reserved for certain vehicles such as buses or high occupancy vehicles (HOVs). Other HOV signs may give additional information on who may use the HOV lane.



Only buses in this lane



Only buses and HOVs in this lane: may show how many people must be in the HOV



Curb lane of cross street ahead is a reserved lane

# Warning signs

Most warning signs are yellow and diamond-shaped. They warn of possible hazards ahead.



Winding road ahead



Hidden side road ahead



30 km/h

Sharp curve ahead, slow to suggested speed



Curve ahead, slow down



Merging traffic ahead



Right lane ends ahead



Divided highway ends ahead, keep right



Two-way traffic ahead



Road narrows ahead



Narrow structure ahead, often a bridge



Bump or rough road ahead



Road may be slippery ahead



Steep hill ahead, slow down



Stop sign ahead



Roundabout ahead



Signal lights ahead



Signal lights ahead, prepare to stop when lights are flashing



Pedestrian crosswalk ahead



School crosswalk ahead. This sign is fluorescent yellow-green.



School bus stop ahead



Cyclists may be on roadway



Underpass ahead clearance



Truck crossing ahead



Recommended exit speed. Drive slower in poor conditions.



Pavement ends ahead



Hazard or danger ahead, turn right or left



Watch for deer ahead



Opening bridge ahead



Watch for rocks on the road ahead

# Object markers

Pay special attention to object markers — they are mounted on obstructions.



Obstruction, keep right or left



Obstruction, keep right



Obstruction, keep left

### Construction signs

These signs warn of construction and maintenance work. You must pay attention to the warnings and obey the instructions on these signs. Obey traffic-control persons, travel within the posted speed, stay well back from all equipment and pass only when it is safe.



Detour ahead



Soft shoulder ahead, stay off



Construction ahead



Traffic-control person ahead



Crew working. Obey posted speed limit.



Survey crew. Obey posted speed limit.



End of construction zone speed limit



Follow the lighted arrow



Blasting ahead. Follow instructions on sign.

# Information and destination signs

These signs give information about destinations, route numbers and facilities, such as:



Hospital nearby



Gas available ahead



Accommodation ahead



Wildlife viewing with interpretive panel



Alaska Highway route marker



Directional sign



Trans-Canada Highway route marker

# Railway signs

Public railway and highway crossings are indicated with signs or pavement markings and may also have mechanical or electrical warning devices for your protection. Watch for them and remember you must always yield to trains.



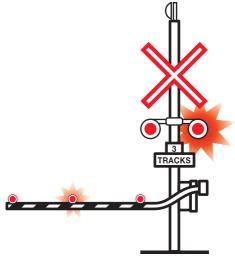
Railway crossing ahead. Be prepared to stop



Railway crossing on side road ahead. Be prepared to stop



Railway crossing. Stop, then proceed when it is safe



Railway crossing. Stay stopped until the gate is fully raised

# **Signals**

Lighted signals are a way of controlling traffic flow.

# Lane control signals

Lane control signals are placed over lanes to indicate which ones are open for driving.



Do not drive in this lane



Move out of this lane and into a lane with a green arrow. If the lane control signals over all of the lanes are flashing yellow, slow down and proceed with caution.



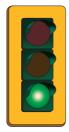
Drive in this lane

# Traffic lights

Traffic lights are used to help organize the flow of traffic. A red light means "stop," a yellow light means "caution" and a green light means "go." These signals can have slightly different meanings if they are flashing or if they are shaped as arrows rather than circles. In some places green arrows may flash; in others they may not.



Steady red. Stop, then after coming to a full stop, you may turn right.



Steady green. Continue if the intersection is clear.



Steady yellow. Slow down and stop before the intersection unless you can't safely stop in time.



Flashing red. Stop, then continue only when it is safe.



Flashing green. Pedestrian-controlled light, go only if the intersection is clear.



Flashing yellow. Slow down and proceed with caution.



Green arrow. Turn in the direction of the arrow.



Green arrow. No turn permitted; go straight through only.



Flashing green arrow with a steady green light. You may turn in the direction of the arrow or proceed.



Flashing green arrow with a steady red light. Left turn allowed; through traffic must stop for red light.



Yellow arrow. Advance left turn signal is about to change, slow down and stop before the intersection unless you can't safely stop in time.



Transit priority signal, steady white rectangular light. Only buses may go on this signal.

# Road markings

Road markings give you warnings or direction. They are painted on the roadway, curbs or other surfaces. It is illegal to drive over freshly painted, wet pavement markings.

### Yellow lines

Yellow lines divide traffic moving in opposite directions. If there is a yellow line to your left, there will be traffic coming towards you on the other side of that yellow line.



Broken line. Passing is allowed when safe.



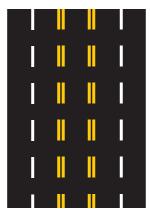
Broken line and solid line. You may pass only when it is safe and the broken line is on your side.



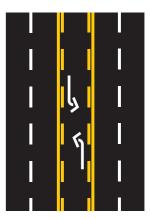
Double solid line. No passing allowed.



Single yellow line. Passing is allowed in some circumstances.



Double broken yellow line. Lane is reversible. Lane control signal will show whether you may use this



Two-way left-turn lane.
Drivers travelling in opposite directions share this lane for left turns; markings may be reversed (solid lines inside the broken lines).

# White lines

White lines are used to separate lanes of traffic moving in the same direction. White lines also mark crosswalks, stopping positions and the right shoulders of highways.



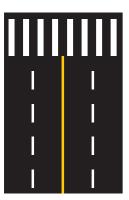
Solid line. Do not change lanes.



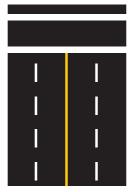
Broken line. Lane changing is allowed when safe.



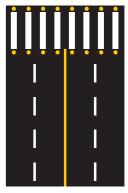
Stop line. Stop before this line.



Pedestrian crosswalk. Stop for pedestrians in the crosswalk.



Pedestrian crosswalk. Stop for pedestrians in the crosswalk.



Pedestrian-activated crosswalk with illuminating lights in pavement. Stop for pedestrians in the crosswalk.

# Reserved lane markings

These markings set off lanes for high occupancy vehicles, buses and bicycles. High occupancy vehicle lanes are marked with thick solid or broken lines and white diamond symbols.



Reserved lane. Additional signs or markings state which vehicles are allowed.



Bicycle lane, for cyclists only. Cyclists must travel in the same direction as the traffic beside them. The lane is marked with an outline of a bicycle and sometimes with a diamond.

# Other markings



Vehicles in this lane must turn left.



Vehicles in this lane must go straight or turn left.



Painted island. Keep to the right and do not drive on or over.

# in this chapter

- Understanding intersections
  - signalling
  - types of intersections
  - stopping at intersections
  - right-of-way at intersections
- Using lanes correctly
  - which lane should you use
  - lane tracking
  - turning lanes
  - reserved lanes
  - pulling into a lane
  - passing
  - merging
  - highway, freeway entrances/exits
  - cul-de-sacs
  - turning around
- Parking tips and rules

# driving tip

Treat an unmarked T-intersection the same way as any other uncontrolled intersection. Chapter 3, signs, signals and road markings, gave you some information about the most common signs, signals and road markings you will see when driving. This chapter gives you the information you'll need to help you drive safely at intersections, use lanes correctly and park legally.

# **Understanding intersections**

Intersections are places where a number of road users cross paths. There is often a lot of activity in intersections, so it's important to be alert. Remember that other road users may be in a hurry, and may want to move into the same space where you are planning on moving.

# Signalling

Signals are important. They let other traffic know what you are intending to do. You should signal when you're preparing to:

- turn left or right
- change lanes
- park
- move toward, or away from, the side of the road.

# Types of intersections

### Controlled intersections

A controlled intersection is one that has signs or traffic lights telling you what to do. To drive safely in these intersections, you need to know what the signals and signs mean, and also the right-of-way rules. Always be cautious. Other drivers may not be paying attention to the signs and signals.

### Uncontrolled intersections

Uncontrolled intersections have no signs or traffic lights. They are usually found in areas where there isn't much traffic. They can be dangerous places because drivers might not be expecting cross traffic or pedestrians.

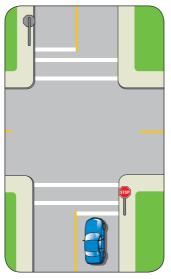
As you approach, slow down and look out for other road users. Scan the intersection from left to right. If another vehicle has arrived at the intersection before you, slow down and yield. If two vehicles arrive at the same time, the vehicle on the left must yield to the vehicle on the right.

# driving tip

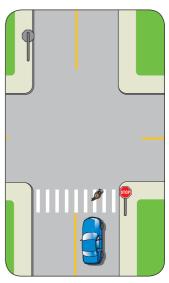
If a traffic control person is directing traffic, you must follow that person's directions. Be careful when you want to turn left where other traffic is approaching from the opposite direction. Yield to traffic that is in or near the intersection. If you intend to go straight through and a vehicle is already in the intersection turning left, you should yield.

# Stopping at intersections

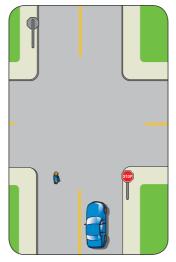
There are rules about where you position your vehicle when you have to stop at an intersection.



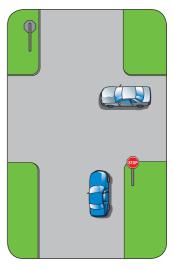
If there is a stop line, stop just before the line.



If there is a crosswalk but no stop line, stop just before the crosswalk.



If there is an unmarked crosswalk, stop where you would if there were a marked crosswalk.



Where there is no stop line, no crosswalk and no sidewalk, stop just before you enter the intersection.

# Right-of-way at intersections

Right-of-way rules determine who should yield when more than one road user wants to move into the same space. It's important to know these rules because they keep traffic moving in an orderly way. Remember that you can't always count on the other person to follow the rules. Even if you have the right-of-way, it's still your responsibility to do all you can to avoid a crash.

For information on right-of-way rules for crosswalks and railway crossings, see **chapter 6**, **sharing the road**.

# driving tip

Sometimes traffic lights stop working properly. The lights can go out, or all four lights can start flashing. Treat the intersection like a four-way stop if this happens.

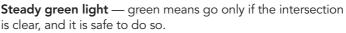


### Intersections controlled by traffic lights

Most people know who has the right-of-way at intersections controlled by traffic lights, but they may not understand how to correctly respond to these lights. Here are some pointers that will help you stay safe at intersections.

**Steady red light** — a red light means that you must come to a complete stop. You must wait for the light to turn green before you go straight ahead.

After you have stopped and made sure the intersection is clear of all vehicles, cyclists and pedestrians, you may turn right or turn left onto a one-way street. Watch for signs prohibiting you from making these turns on a red light.





additional clues:

- Stale green light a stale green light is one that has been green for a long time, and is about to turn yellow. If you
  - are there a lot of cars lined up on the cross street waiting for the light to change?

didn't see the light turn green, then it may be stale. Look for

- in many areas, the crosswalk signal will change from a
  white figure to an orange hand just before the light turns
  yellow, or will show how many seconds are left before the
  traffic light will change.
- Point of no return as you approach a stale green light taking into consideration your speed, the road conditions and the traffic behind you decide on a point where you will no longer be able to stop safely. This is sometimes called the point of no return. When you reach this point, keep on going even if the light changes to yellow. You need to judge accurately so you won't be in the intersection when the light turns red.
- Fresh green light a fresh green light is one that has just turned green. Don't move forward until you've scanned the intersection to make sure it's clear.

# driving tip

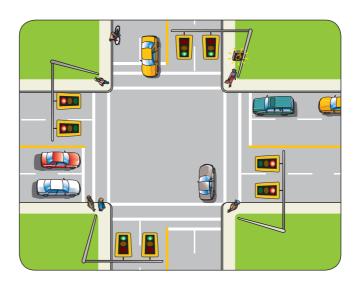
If you didn't see the light turn green, then it may be stale. You should be prepared to stop.

# driving tip

It is illegal to back up into an intersection or over a crosswalk.  Making a left turn on a steady green light — when you are making a left turn, you must yield to oncoming traffic and wait for a safe gap before you turn.

**Steady yellow light** — yellow means that the signal is about to turn red. You must stop before entering the intersection unless you can't safely stop in time.

Sometimes drivers panic if they are in an intersection waiting to make a left turn and the light turns yellow. In this situation, remember that you are legally allowed to complete your turn. But watch carefully for other vehicles, especially oncoming drivers trying to beat the red light.



Flashing green light — watch for pedestrians, who may activate the pedestrian traffic light to change to yellow and then to red. Even if the pedestrian traffic light is not activated, traffic on the side street is facing a stop sign, and may be waiting to move into the intersection when it is clear and safe to do so.

### Left-turn signals

Some intersections have turn signals with green arrows, or designated lanes controlled by their own set of traffic lights, to allow you to turn left. These are called protected turns. As long as the green arrow is shown, you are protected from through traffic — they are facing a red light.

Separate left signal — some intersections have designated left-turn lanes controlled by their own set of traffic lights. A green arrow at the bottom of a separate set of traffic lights will tell you when to turn left. Traffic in the straight-through and right-turn lanes will be stopped by a red light on a different set of lights.



# driving tip

To be safe turning left at an intersection with a solid green traffic light follow these steps.

- Slow to an appropriate speed as you approach
- Signal left before entering the intersection
- Scan the intersection for danger
- Take possession of the intersection
- Keep your wheels straight
- Wait for a safe gap in the traffic
- Shoulder check left for pedestrians
- Complete your turn if all is clear

What are the clues that tell you the green light is stale?





Once the green arrow has turned yellow, you must stop and wait for the next green arrow before turning.



**Left signal on regular traffic lights** — other intersections have left-turn lanes that are not controlled by a separate set of traffic lights. Here the advance green arrow is located on the bottom of the regular traffic lights.

The flashing green arrow allows you to turn left. Through traffic is facing a red light.

Once the green arrow has turned off, and only the regular green traffic light is on, you may still turn left, but you must yield the right-of-way to pedestrians and oncoming traffic.

Sometimes these advance green arrows operate only during peak traffic hours.



**Flashing red lights** — a flashing red light means that you must come to a complete stop. After you stop, you may move into the intersection when it is clear and safe to do so.

### Intersections controlled by stop signs

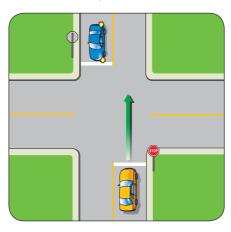
A stop sign always means that you must come to a complete stop. Once you've stopped, check the intersection carefully. Whether you go or wait depends on the type of intersection and the other traffic around you.



**Two-way stops** — if two streets intersect and only one of the streets has stop signs, then the other street is a through street. Traffic on the through street has the right-of-way. If you are stopped at one of these types of intersections, wait until there is a safe gap before going through or turning.

If two vehicles are stopped at a two-way stop and one of the drivers wants to turn left, this driver should yield the right-of-way to the other vehicle. The only exception is if the left-turning vehicle is already in the intersection and has started to make the turn. In this case, the other vehicle must yield.





# driving tip

If there is any doubt about who has the right-of-way, or if there is any chance of a crash, it's always better to yield the right-of-way to the other person.







You must turn right to enter a traffic circle and right again to leave it. Yield to vehicles that are already in the traffic circle. If another vehicle arrives at the traffic circle at the same time as you do, yield to the vehicle on your right.

Four-way stops — when there are stop signs at all corners:

- The first vehicle to arrive at the intersection and come to a complete stop should go first.
- If two vehicles arrive at the same time, the one on the right should go first.
- If two vehicles are facing each other and have arrived at the intersection at about the same time, the one making a left turn should yield to the one going straight through.

# Intersections controlled by yield signs

A yield sign means that you must let the traffic on the through road have the right-of-way. You may enter the intersection without stopping if there are no pedestrians, cyclists or vehicles on the through road. But you must slow down (and stop if necessary) and wait for a safe gap if there is traffic on the through road.

### Traffic circles and roundabouts

These are found in some areas to help traffic get through an intersection safely without necessarily stopping the flow of the traffic.

### Traffic circles

Traffic circles usually have only one lane.

When you're using a traffic circle:

- Slow down as you approach the circle.
- Obey any posted traffic control signs, such as "Yield" or "Stop" signs. If there are no traffic control signs, treat it as an uncontrolled intersection.
- Yield to any traffic in the traffic circle. If another vehicle arrives at the traffic circle at the same time as you do, yield to the vehicle on your right.

• Go around the traffic circle to the right (that is, in a counter-

clockwise direction).

• Use your signal to indicate when you are going to exit.



# driving tip

Emergency vehicles displaying flashing lights and sirens always have the right-of-way. If an emergency vehicle is approaching, avoid blocking a traffic circle or roundabout. Stop for the emergency vehicle before entering, or exit the traffic circle or roundabout and then stop to allow the emergency vehicle to pass.

### **Roundabouts**

Roundabouts are usually larger than traffic circles and may have more than one lane. Lane use signs and markings may be displayed at the approaches to show where you can go in each lane when you are in the roundabout. Make sure you know where you want to go, and are in the proper lane to get there, before you enter a roundabout.

Roundabouts often have a truck apron around the central island to help large vehicles get through the roundabout.

When you use a roundabout:

- Know where you want to go before you enter a roundabout, and enter the correct lane. Lane use signs or road markings will show you which lane you need to use.
   If you want to turn left, make sure you are in the left lane.
   If you want to turn right, use the right lane. If you want to go straight, you may use either the left or right lane.
- Slow down as you approach the roundabout.
- Yield to pedestrians who may be crossing or about to cross in the crosswalk located in advance of the roundabout.
- Yield to any traffic already in the roundabout.
- Go around the roundabout in a counter-clockwise direction. Do not change lanes in a roundabout.
- Don't ride alongside large vehicles such as trucks and buses in roundabouts. They may need more than their lane to go through the roundabout.
- If you entered the roundabout in the left lane, stay in that lane. You may either go straight or turn left from that lane.
- Signal "right" before you exit.

When you leave the roundabout, be prepared to yield to pedestrians who may be in the crosswalk where you are exiting.



Slow down when approaching a roundabout and yield to traffic already in it. Stay in the same lane in which you approached the roundabout.

In the example above, the red car has entered the roundabout from the south in the right lane after yielding to vehicles in the roundabout. The driver may either turn right at the east exit or continue straight and take the north exit.

The blue car entered from the south in the left lane, and has merged into the left lane in the roundabout. Because the blue car entered from the left lane, the driver can't immediately turn right at the first exit (east), but can take either the north or west exit.

The tractor-trailer combination entered the roundabout from the east in the left lane and the driver is going to take the south exit. Note that because of the length of the combination, the trailer is partly in the right lane, and the combination will be exiting in the right lane.

The driver of the green car must yield to the tractor-trailer that's already in the roundabout.

# Entering a roadway

When you are pulling out of a driveway, alley or parking lot onto a road, stop before the sidewalk or area where pedestrians may be walking. Then pull out carefully, yielding to traffic on the road and waiting for a safe gap.

This sign warns you to keep away from large vehicles such as trucks and buses in a roundabout.



# Using lanes correctly

In the last chapter, you learned about the signs, signals and pavement markings that identify which lanes you can drive in. This section tells you more about which lanes to use and how to use them.

# Which lane should you use?

Choose the lane that gives you the best vision and allows you to go where you want to go. On a multi-lane highway, you should travel in one of the right-hand lanes. This is especially important if you are driving more slowly than other vehicles or if signs direct you to keep out of the left lane.

Just because you are driving at the speed limit does not mean you should continually drive in the left lane. This may cause other drivers to try to pass on the right, which may not be as safe as passing on the left.

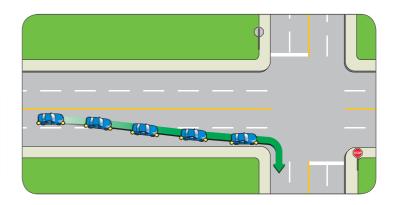
When you are on a freeway with more than two lanes in each direction, you should drive in the centre lane or a right-hand lane. This leaves the left lane for higher-speed traffic and passing vehicles.

# Lane tracking

Before you make a turn, you need to get your vehicle into the correct lane. You also need to end up in the correct lane when you complete your turn. This is sometimes called lane tracking.

### Right turns

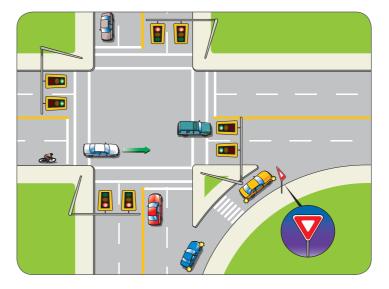
These illustrations show lane tracking when you're making a right turn.





SLOWER TRAFFIC KEEP RIGHT

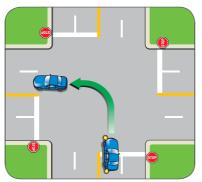
To turn right, move your car to the right lane and turn into the right lane of the cross street. In some intersections, road markings allow you to turn right from a centre lane.



Some intersections have special yield lanes for vehicles turning right. To make a right turn, move into this lane. Wait until there is a break in the traffic and then complete your turn.

### Left turns

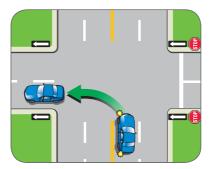
For left turns, it's sometimes harder to figure out which lane to turn into. These illustrations show you the correct lane tracking for different types of roads.



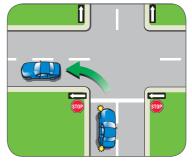
Turning left from a two-way road onto a two-way road: move your vehicle into the centre lane and drive in a smooth arc into the centre lane of the cross street.



Turning left from a one-way onto a two-way road: turn from the left lane into the centre lane.



Turning left from a two-way onto a one-way road: turn from the centre lane into the left lane.

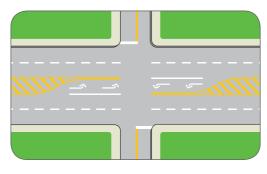


Turning left from a one-way onto a one-way road: turn from the left lane into the left lane.

# Turning lanes

Some roads have special lanes for turning. As you approach an intersection, always check the signs and pavement markings to make sure you are in the correct lane to turn or to go straight through.

Turning lanes let you wait for a safe gap without holding up vehicles that are travelling straight through. Use the lane with the arrows only if you are turning left.



# Multiple turning lanes



In large, complex intersections, there may be more than one right- or left-turn lane. Look carefully at the pavement markings, lane-use signs and signals. They will tell you what to do.

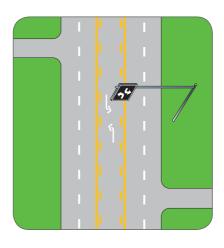
For example, the sign shown in the left column tells you that both the far-left lane and the lane next to it are used for left turns. If you are turning from the far-left lane, turn into the far-left lane. If you are turning from the lane next to it, turn into the lane next to the far-left lane.

# Two-way left-turn lanes



Two-way left-turn lanes give left-turning vehicles coming from either direction a chance to turn without holding up traffic. They can be handy for turning left in the middle of a block, such as turning into a driveway. When you see one of these lanes, remember that vehicles coming from the other direction also use this lane to turn left.

Drivers from both directions share this centre lane when they want to turn left. Make sure there is enough space before you enter this lane. Remember to watch for vehicles coming from the opposite direction.



### Turns in the middle of a block

Most drivers expect other vehicles to turn at an intersection. Sometimes you might want to turn left in the middle of a block, for example, into a driveway. You may turn left, even over a single solid line, **if** you do this carefully and safely, don't hold up other traffic, and there are no signs prohibiting such turns.

### **U-turns**



If you find you are going in the wrong direction, you may be tempted to make a U-turn. U-turns are often risky. They are illegal:

- if they interfere with other traffic
- on a curve
- on or near the crest of a hill, where you cannot be seen by other traffic within 150 metres
- where a sign prohibits U-turns
- at an intersection where there is a traffic light
- in a business district, except at an intersection where there is no traffic light
- where a municipal by-law prohibits making a U-turn.

When you are deciding whether to make a U-turn, think about some alternatives, like driving around the block or continuing on to a side road where you can turn more safely.

### Reserved lanes



In some areas, traffic lanes are reserved for different types of vehicles. High occupancy vehicle (HOV) lanes and bus lanes help move more people in fewer vehicles. Bicycle lanes are reserved for cyclists.

### High occupancy vehicle (HOV) lanes

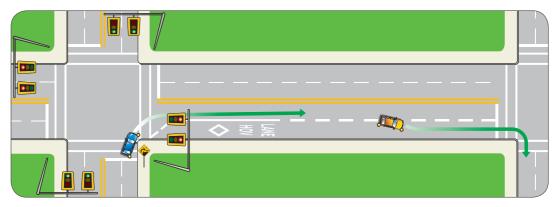
HOV lanes are reserved for buses and carpool vehicles. Motorcycles, bicycles and taxis may also use these lanes on some roads. On freeways and main highways, HOV lanes are beside either the median or the shoulder of the roadway. On city streets, HOV lanes are usually directly beside the curb.

Most HOV lanes operate 24 hours a day, but some are only in operation at peak traffic times. Check the traffic signs carefully. They will tell you where the lanes begin and end, when they are in operation, and the minimum number of people that must be in the vehicle.

If your vehicle is carrying enough people to travel in the HOV lane, or if you need to cross an HOV lane to turn, enter the lane

with care. Traffic in these lanes sometimes travels faster than the regular traffic. Make sure there is enough room for you to enter safely. Enter and exit where there are broken lines to indicate a crossing point.

### **Bus lanes**



The driver of the blue car has seen the warning sign indicating that there is a reserved lane on the street the driver wishes to turn onto. The driver should turn into the lane next to the reserved lane, unless they are entitled to drive in the reserved lane and wish to drive in it. To turn right off of a street with a reserved lane, change lanes into the reserved lane where permitted and when safe.



In some jurisdictions, you will recognize a bus lane by a sign that has a diamond symbol and a picture of a bus. Only buses and sometimes cyclists are allowed to travel in lanes marked with this sign.

### Bicycle lanes

Bicycle lanes are reserved for cyclists. Sometimes you will need to cross a bicycle lane to turn right, or to pull to the side of the road. Take extra care when you do this. The rules for bicycle lanes are:

- don't drive, stop or park in a bicycle lane.
- you may only cross a bicycle lane if the white line is broken or to turn into or out of a driveway.

# Pulling into a lane

Whenever you enter a lane, whether you're pulling into traffic or changing lanes, the vehicles in the lane you're moving into have the right-of-way. When you pull away from the roadside into a lane of traffic, you need to make sure you are not cutting anyone off. Watch carefully for smaller traffic, such as bicycles and motorcycles, that may be approaching faster than you think.

The same rule applies when you're planning to change lanes. Make sure there is a large enough gap so that when you pull in

# driving tip

Be sure to signal well ahead and yield to all cyclists whenever you must cross a bicycle lane.

# driving tip

Don't change lanes at an intersection. You could confuse other drivers and cause a crash.

driving tip

someone is trying to pass you: it's illegal. Help the

other driver get back into

your lane by slowing down and making room.

Don't speed up as

front of another vehicle, that driver doesn't have to slow down to avoid crashing into you. Legally, you must signal when you change lanes.

# **Passing**

Passing requires moving into another lane, sometimes a lane of approaching traffic, and then back into your original lane. Remember, if you move into another vehicle's lane, that vehicle has the right-of-way. It doesn't matter if it's a car, a motorcycle or a bicycle. Other traffic shouldn't have to change direction or slow down for you.

If you're planning to pass, make sure you can do it safely and legally.

- Pass on the right only when there is a designated lane for doing so, or if a driver ahead is turning left. Do not use the shoulder to pass.
- Pass on the left only when it is safe to do so and lane markings allow it.
- Keep within the speed limit when passing.
- Make sure you know whether the pavement markings allow you to pass. See chapter 3, signs, signals and road markings, for more information.

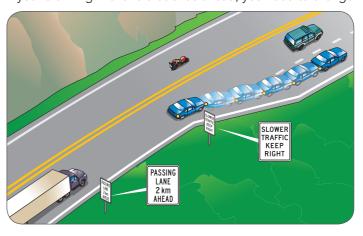
### **Passing lanes**

Some highways have special passing lanes. These lanes let slower vehicles move into the right lane so faster vehicles can pass safely in the left lane.

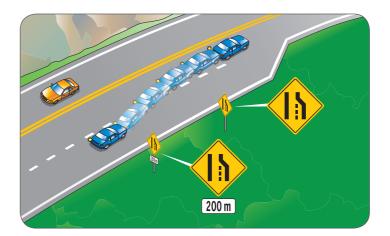
# Merging

This sign tells you the right lane will end soon.

If you're driving in a lane that ends ahead, you need to change



A sign will tell you how far it is to the next passing lane. Keep right unless you are passing.



A sign will tell you when the passing lane is about to end. Vehicles in the right lane and the passing lane must merge before the passing lane ends.

lanes. Adjust your speed, keeping within the speed limit, and wait for a safe gap in the other lane.

If you are driving next to a lane that ends ahead, help the merging traffic by adjusting your speed or changing lanes.

# Highway or freeway entrances and exits

These lanes are designed to help you safely enter and exit the freeway.

### **Entrance**

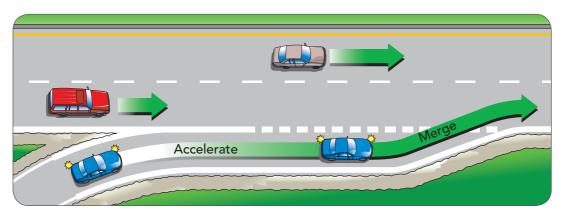
The entrance consists of an entrance ramp, an acceleration lane and a merging area. Some freeway entrances have ramp meters: a traffic light that controls traffic entering the freeway by restricting the number of vehicles that may proceed along the entrance ramp.

- While you're on the entrance ramp, scan the freeway traffic for a safe gap.
- The acceleration lane is divided from the rest of the roadway by a solid white line. Use this lane to match your speed to the speed of traffic on the freeway.
- The merging area is divided from the freeway by a broken white line. Use this area to find a safe gap to merge with freeway traffic. Be aware that cycling is permitted on some freeways, so be careful not to cut in front of a cyclist.



# warning!

Avoid stopping in the acceleration lane or merging area. You could risk being rear-ended.

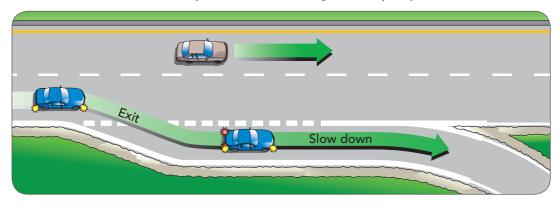


A highway entrance gives you a short distance to match your speed to the vehicles already on the highway. Observe the freeway traffic, make sure you have a space that is safe to move into, signal your intention and then move into traffic.

### **Exit**

The exit lane allows you to move off the freeway and reduce your speed.

Most freeway exits are numbered. Before you start your trip, check a map to see which exit you will need to take. That way you can move to the right lane in plenty of time for the exit.



Signal your intention to turn off the highway, maintaining your speed until you enter the exit lane. Then slow down gradually as you prepare to enter roads with lower speed limits.

### Strategies: Freeway courtesy

When you are driving in the right lane of a freeway, other drivers may try to merge from an entrance lane. It's not always easy for them to find a safe gap. Use these pointers to help them merge safely.

- Pull over into the left lane (if it's safe) to give them room to merge onto the freeway
- Adjust your speed to allow a large enough gap for them to move into safely.

### Cul-de-sacs

A cul-de-sac is a street that's closed at one end. Most cul-de-sacs are designed so that you can turn your car around without needing to back up. Slow down and keep to the right. Most cul-de-sacs are in residential areas, so watch carefully for children playing, vehicles coming out of driveways and other hazards.

# think about

Why parking is limited in residential cul-de-sacs.



# Turning around

Sometimes you can turn around by doing a series of turns at intersections or by turning in a cul-de-sac. You may also be able to do a U-turn, a two-point turn or a three-point turn.

A two-point turn is done by stopping near the side of the road, backing into a driveway and then turning into the street to proceed in the opposite direction.

A three-point turn is done by making a sharp turn to the left in the middle of a block, and stopping just before the curb. To complete the three-point turn, back up to your right and then proceed to drive down the street in the opposite direction.

For both two- and three-point turns, you need to make sure it's clear and safe and that there is no other traffic nearby.

# driving tip

When parking in a stall, it's usually safest to back in so you won't have to back out. Better still, if there are two empty facing stalls with no barrier between them, drive through one into the next so your vehicle is facing forward.

# Parking tips and rules

Park where it's safe and legal. Signs, curb markings and common sense will tell you if you are allowed to park. You should park where you are not blocking traffic and where others can clearly see you. If you park where you shouldn't, you could be a hazard to others, you could be fined or your vehicle could be towed.

It's illegal to park:

- on a sidewalk or boulevard
- across the entrance to any driveway, back lane or intersection
- within five metres of a fire hydrant (measured from the point at the curb beside the hydrant)
- within six metres of a crosswalk or intersection
- within six metres of a stop sign or traffic light
- within 15 metres of the nearest rail of a railway crossing
- in a bicycle lane
- on a bridge or in a highway tunnel
- where your vehicle obstructs the visibility of a traffic sign
- where a traffic sign prohibits parking, or where the curb is painted yellow or red
- in a space for people with disabilities unless you display a disabled person parking permit in your windshield and your vehicle is carrying a person with a disability.

Park parallel to and within 30 centimetres (one foot) of the curb. If you're parked on a hill, turn the wheels to keep your vehicle from rolling into traffic. Turn the wheels:

- to the right when parking uphill without a curb or when parking downhill with or without a curb
- to the left when parking uphill with a curb.

Set the parking brake and leave the vehicle in gear:

- leave an automatic transmission in "park" gear
- with a standard transmission, place the vehicle in "reverse" if facing downhill, and "first" gear if facing uphill or if on a level surface.

# in this chapter

- See
  - observation
  - hazard perception
- Think
  - assess the risk
  - choose a solution
- Do
  - speed control
  - steering
  - space margins
  - communication
- Using see-think-do

In the previous four chapters, you began developing your smart driving skills by learning the basics of driving:

- being a thinking driver
- maintaining a safe vehicle
- understanding signs, signals and road markings
- knowing the rules of the road.

This chapter will bring all of these concepts together and describe how to use them as part of **see-think-do**: a driving strategy that helps you to be a safe and competent driver.

**see** — scan for hazards. Pay attention to other road users and the areas where hazards could occur.

**think** — decide which hazards are the most dangerous. Think quickly about possible solutions. Decide on the safest solution.

**do** — do manoeuvres to keep yourself and others safe.

# see-think-do

Whenever you drive, your eyes should be scanning the area around you to gather information. Good observation means knowing how to look and where to look. The next step is hazard perception — knowing what to look for.



### Observation

Good observation involves looking ahead, beside and behind.

# You in the driver's seat

You're driving along a city street, scanning well ahead. You check your mirrors. The car behind is keeping well back. There is an intersection ahead. You carefully scan the intersection to see if it's clear before you proceed.

# Strategies: The observation cycle

Always keep your eyes moving while you're driving.

- Look well ahead
- Scan from one side of the road to the other, checking for potential hazards
- Glance in your rear- and side-view mirrors to keep track of what is happening behind you.

Then start all over again. You should complete the whole cycle every five to eight seconds.

# warning!

Don't overdrive your ability to see. You should always be able to stop within the distance you can see.

# Observing ahead

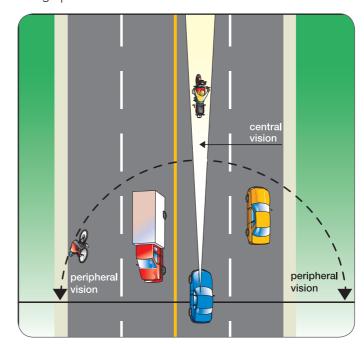
Research shows that new drivers spend so much time looking at the road just in front of their vehicle that they often miss hazards further ahead. Make sure you know what's coming up by scanning at least 12 seconds ahead. This means look one to two blocks ahead in city driving and half a kilometre ahead on the highway. This will give you time to prepare for a potential hazard instead of being taken by surprise.

As you look ahead, scan to the left and right so you can see what's happening along the sides of the road. If you see cars parked by the side of the road, be careful. A child may be walking out from between them, or a door might be about to swing open.

# driving tip

By looking ahead, you can avoid sudden stops, which increase your fuel consumption.

It's easiest to see things that are directly in front of you, in your central vision. It's important to also pay attention to things outside your central vision. Peripheral vision allows you to see more than what is directly in front of you.



### Observing behind

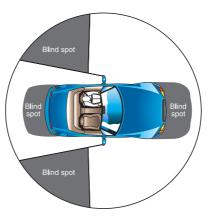
Your side- and rear-view mirrors let you know what is happening behind you. Adjust them to get the best possible view. Look in each mirror about every five to eight seconds and pay attention to what you see.

**Rear-view mirrors** — look in the rear-view mirror before you slow down or stop. Will the cars behind you have space to stop? If not, you may need to take action.

**Side-view mirrors** — use your side-view mirrors whenever you are planning to change your road position or direction. When you're pulling away from the right side of the road, you need to check your left mirror to make sure there are no cars coming from behind. If you're making a lane change to the right, check your right mirror to make sure there's enough space to move into.

**Blind spots** — even when your mirrors are properly adjusted, there are large areas that you can't see in your mirrors. These are called blind spots. The most dangerous blind spots are to the side. There are also blind spots below your field of vision to the front, rear and both sides of your vehicle.

Each vehicle has smaller blind spots at the front and at the back, as well as the two large blind spots on the sides. Their size depends on the shape and size of your vehicle.



**Blind spot detectors, cameras** — Some vehicles are equipped with blind spot detectors and/or back-up cameras. While these can help you to detect hazards in blind spots or behind the vehicle, they do not replace the need to turn your head to do a shoulder check or look behind.

**Shoulder checks** — whenever you plan to change your direction or road position, do a shoulder check to make sure the blind spot on that side is clear.

When you're going to turn right, for example, quickly check to the right just to make sure no one is in that space. And don't forget to do a mirror check and shoulder check before you open your door to get out of your vehicle. A cyclist or other vehicle could be coming up beside you.

# driving tip

Try sitting in your vehicle and finding the areas you can't see even when you use your mirrors. Do a shoulder check to be certain your blind spot is clear before you move your vehicle into another lane or in a different direction. Look at least 45 degrees over your shoulder in the direction you plan to move. If you are going to move to the right, check over your right shoulder. If you are going to move to the left, check over your left shoulder.



# Strategies: Making your move

Check your mirrors and do a shoulder check whenever you plan to:

- pull out from the side of the road
- pull over to the side of the road
- change lanes
- turn left or turn right.

# driving tip

Before you start to back up, give a quick warning tap on your horn if visibility is limited.

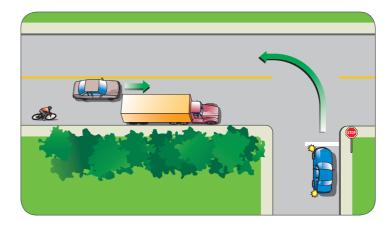
# crash fact

More than 40 per cent of all collisions that result in injuries or fatalities happen at intersections. Backing up — before you back up, make sure you do a 360 degree vision check. Look all around the vehicle using shoulder checks and mirror checks, and then turn your body to look out the rear window while backing up. Be especially careful when you're backing out of a driveway. It's easy to miss seeing children, pets, pedestrians, cyclists and people in wheelchairs. If you've been stopped for some time, walk around the back of your vehicle to check that your path is clear. Better yet, try to back into driveways and parking spots so you can drive out facing forward.

### Observing at intersections

Look well ahead as you approach an intersection. Check for signs, signals and other clues about whether you will need to stop.

As you're approaching an intersection, scan the road you are crossing. Look left, centre, right, then glance left again. If an oncoming vehicle is turning left, take extra care; the driver may not see you. And check crosswalks you intend to cross to make sure they are clear.



Bushes and large vehicles are two of the many things that could block your view of an intersection and oncoming traffic.

# think about

What other things might block your view of an intersection?

**Stopping and starting up again** — as you slow down to stop, check your mirrors for traffic behind you. Then make sure you have a clear view of the intersection. If your view is blocked, you may need to move slowly into the intersection so you can see clearly before going ahead.

**Turning** — shoulder check to make sure a cyclist or other road user hasn't come up beside you. Then scan the intersection just as you begin to move forward. Make sure that your eyes are looking in the direction you want to go once you begin your turn.



# Hazard perception

### You in the driver's seat

You're driving in the rain, using your eyes to gather information ahead, to the sides and in your mirrors. Just ahead there's a cyclist. Further on, a bus has stopped to let passengers out. Behind you is a driver who seems to be moving up too close behind you. Suddenly, the door of a parked car swings open right in front of the cyclist. Will the cyclist swerve or fall? You take your foot off the accelerator to slow down, and get ready to put your foot on the brake.

Driving safely means looking out for hazards. A hazard is anything in the driving environment that could harm you or other road users. Hazard perception is the skill of identifying these risks. To share the road safely, train yourself to look for other road users and all objects or road surfaces that might cause problems for you or for others in the driving environment. As you drive, think about where hazards could occur.



The driving environment includes everything around you, including other road users, road conditions, weather conditions and all activities at the side of the road that might affect you.

### **Space conflicts**

A space conflict happens when two road users try to move into the same space at the same time. To drive safely, you need to keep areas of space, called space margins, around your vehicle. If you need to stop suddenly, a driver too close behind you could cause a space conflict. Some other space conflicts are:

- a vehicle pulling into your path
- a pedestrian stepping onto the road in front of your vehicle
- a vehicle backing out of a driveway.

### **Surprises**

Anything unpredictable is a hazard. A car door opening suddenly could be a surprise for a cyclist. If the cyclist swerves to avoid it or falls in front of you, you could be surprised as well. To avoid surprises, think well ahead and ask yourself what could possibly happen in the driving environment. Some other surprises are:

- a driver weaving back and forth
- a poorly loaded pickup truck: something might fall
- a skateboarder who might suddenly dart onto the road.

# think about

You are about to pull away from the side of the road into traffic. Where should you look? What should you look for?

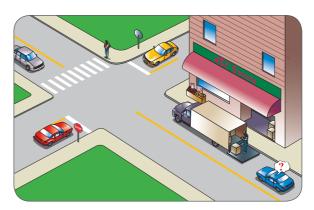
### Vision blocks

Having your vision blocked is a hazard. Some examples of vision blocks are:

- a bus that blocks your view of people about to cross the street
- a curve or hill that doesn't let you see what's ahead
- a large truck in the next lane
- fog, rain or snow.

Be very careful when you can't see the whole driving scene.

Be extra cautious when anything blocks your view. What could the driver of the blue car miss?



Never pass when you are approaching the top of a hill. You don't know what hazards may be on the other side of the hill.



### Poor road conditions

Poor road surfaces are a hazard because they can affect your traction and steering. Loose gravel, ice or rain can cause you to lose control unless you're prepared. Some other poor road conditions are:

- a paved road that suddenly changes into a gravel one
- wet or icy patches
- large puddles after a rainstorm.

# see-think-do

Whenever you drive, you will see hazards. To make good driving decisions, follow this two-step process:

- 1. Assess the risk.
- 2. Choose the best solution.

# Assess the risk

# You in the driver's seat - part 1

You are driving down a two-lane highway, and are just starting into a sharp curve. You can't see very far ahead.

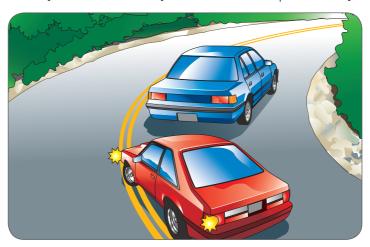
In this scene, the risk is moderate. You can't see well ahead, so you need to slow down a little and be cautious.

# You in the driver's seat - part 2

As you go into the curve, a driver in a red car behind you pulls out to pass, even though the highway is divided by a solid double yellow line.

Now the risk increases. This is not a good time for that driver to pass because there may be all kinds of hazards just around the curve.

To assess just how risky this situation is, ask yourself what could happen. What if the driver in the red car finds an unexpected obstacle just around the curve? That driver may have to slow down and stop suddenly or pull back into your lane. That means you need to be ready to slow down or stop if necessary.



If you are the driver of the blue car, what are the possible risks in this situation?

# You in the driver's seat - part 3

As you come around the curve, you see a large truck in the approaching lane. The car that is passing you may cut in front of you, trying to get out of the way of the truck. To make matters worse, you see a fallen branch on the road ahead.

When you find yourself in a situation with more than one hazard, what do you do? You need to figure out which hazard is the most dangerous.



What is the most dangerous hazard in this scene?

# Choose a solution

# You in the driver's seat - part 4

Here you are, with a car trying to squeeze in front of you. What solutions can you think of? You could:

- slow down
- steer out of the way
- honk your horn.

All these solutions involve speed control, steering, space margins and communication.

As you think of possible solutions, try to predict the possible outcomes of each one. Here's a slowed-down version of what your thinking process might look like.

# Speed control

- Can I slow down quickly, or is the road too slippery? Will I skid?
- Can my vehicle stop that quickly? Are my brakes and tire tread good enough?

### Steering

• If I steer onto the right shoulder, can I keep control of the car?

### Space margins

- Do I have space to stop safely? Is there space ahead? Space behind? Is there a car behind that might crash into me if I stop suddenly?
- Do I have enough space to steer onto the shoulder?

### Communication

• If I honk the horn, will it help to alert the driver?

Usually, the solution you choose depends on where the space is. Is there enough space in front? To the side? Space will allow you to get out of the situation safely.

Some decisions have to be made in seconds. This means you need lots of practice in assessing risk and choosing the best solution. Practise by thinking ahead about what you would do in emergency situations.

# think about

You are passing an elementary school. A soccer ball rolls onto the road about half a block ahead. Assess the risk: what is the major risk? Choose the best solution: what would you do?

# see-think-do

Once you've assessed the risk and have chosen a solution, you need to use your driving skills to perform the manoeuvre. The "do" step of see-think-do involves:

- speed control
- steering
- space margins
- communication.

All of your driving manoeuvres will combine these four skills, whether you are driving straight, turning at an intersection or swerving to avoid a hazard.



### You in the driver's seat

You're driving along a rural road at 80 km/h. A yellow sign warns there's a sharp curve ahead. You take your foot off the accelerator and apply the brake to slow down to 30 km/h before the curve. At the midpoint of the curve, you accelerate slightly, and speed up once more on a straight stretch. Then you notice something up ahead that looks like a road construction sign. You take your foot off the accelerator to slow down.

# crash fact

Speeding kills and injures people on Yukon roads every year.

driving tip

Driving at a steady speed saves fuel. Suddenly changing your speed or driving over the speed limit will increase your fuel consumption.

Prepare yourself when you see a hazard ahead. Take your foot off the accelerator and cover the brake by resting your foot lightly on the brake pedal without activating the brake. Your vehicle will slow slightly and you will be able to respond more quickly if you must stop.

# Speed control

You are using the tools of speed control: the accelerator and the brake. If you drive a vehicle with a standard transmission, you'll also use the gears to help you control your speed. Good speed control means maintaining appropriate and steady speeds based on the driving conditions.

# Appropriate speeds

Speeding is risky, but the safest speed isn't always the slowest speed. If you drive much slower than surrounding traffic, other drivers might get frustrated and try to pass you.

Aim for a speed that's appropriate for the driving conditions. The posted speed is the maximum for ideal conditions only. Choose a slower speed if the conditions are not ideal, for instance, if the roads are slippery or visibility is limited.

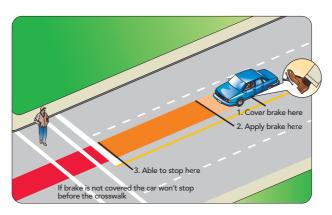
Unless a sign tells you otherwise, speed limits are:

- 50 km/h within cities and towns
- 80 km/h outside cities and towns.

# Steady speeds

To keep a steady speed, use your brake and accelerator smoothly. For instance, driving up to a stop sign quickly and then hitting the brake isn't good for your passengers or your vehicle. It can also cause the driver behind to crash into the rear of your vehicle.

To keep your driving speed smooth and steady, you need to anticipate. When you see a stop sign, start to slow down. Scan for hazards ahead, and use your brakes to gradually slow your vehicle.



### Physics and driving

You need to pay attention to the laws of physics when you drive.

**Traction** — this is the grip your tires have on the road. Slippery or sandy road surfaces, worn tires, and under- or over-inflated tires that don't grab the road will reduce traction. Slow down if you are on a poor road surface.

Inertia — this is the tendency for moving objects, in this case, you and your vehicle, to keep moving forward in a straight line. When you brake, inertia tries to keep your vehicle moving. When you go around a curve, inertia tries to keep you going in a straight line. The faster you are going, the greater the force of inertia.

**Gravity** — this is the force that pulls everything towards earth. It's the reason your vehicle slows down going up a hill and speeds up coming down. It's important to remember this when you're going downhill because your vehicle will need a longer distance to stop.

**Centre of gravity** — this is the point around which all of an object's weight is balanced. The centre of gravity for any object can change. For example, a tightrope walker may carry a pole to lower the body's centre of gravity and make it easier to balance.

Most vehicles are built on the same principle: low enough to the ground so they balance well on hills, curves and uneven road surfaces. Some vehicles, for example, some sports utility vehicles, pickup trucks and camper vans, have a higher centre of gravity. Whenever the height of a vehicle or its load rises, the centre of gravity also rises. A vehicle with a higher centre of gravity is less stable on uneven road surfaces and is more likely to tip over on a curve taken at higher speeds.

You need to remember this if you are driving one of these types of vehicles.









think about

What you would do to help prevent a roll-over when driving a vehicle with a higher centre of gravity (or a heavy car top carrier).

The blue car has a low centre of gravity. On a curve, the weight shifts to one side but the car remains stable. The truck, with its large wheels, has a much higher centre of gravity. On a flat surface it is stable, but when the weight shifts on a curve, the truck becomes unstable and may roll.

### Handling curves

When you go around a curve, inertia tries to keep your vehicle going in a straight line, while traction tries to keep your tires sticking to the curved pavement. The faster you travel, the more pressure is exerted on the outside front tire. If you are going too fast, inertia will cause your vehicle to go off the road. If you brake, your vehicle may skid. The problem is increased if the road is slippery or uneven. The best practice is to slow down before the curve and avoid braking in it.

If you do start to lose traction in a curve, don't brake. Ease off the accelerator and re-apply gently when you regain traction.

Before you enter a curve, slow down to a speed that will allow you to go through the curve without using your brakes. When you reach the middle of the curve, begin to straighten your wheels and accelerate to help you leave the curve.



# warning!

It is illegal to coast downhill in neutral or with the clutch in. You need to be in gear to safely control your vehicle.

### Gear use

If you're driving a vehicle with a standard transmission, you need to be able to choose the appropriate gear and shift smoothly. You need practice to coordinate the clutch, accelerator and gearshift.

# Steering



### You in the driver's seat

You are about to make a left turn at a major intersection. You're a bit nervous because you haven't been driving long. You see a gap in the oncoming traffic, so you let your eyes guide you as you steer in a smooth arc, ending up in the correct lane.

Steering, like any skill, takes practice. Practice will help you coordinate your hands and your eyes so that you can drive in a straight line or a smooth arc. The two main principles of good steering are controlling the wheel and maintaining good road position.

# warning!

Loading up your vehicle with extra weight can cause it to steer very differently, especially on curves. Don't overload your vehicle. Check your owner's manual for weight limit information.

# driving tip

In a vehicle equipped with an air bag in the steering wheel, the 9 and 3 position, or even the 8 and 4 position, may be the best choices. If the airbag went off when your hands were in the 10 and 2 position, your hands could hit your face.

# driving tip

When you stop behind another vehicle at an intersection, leave about one car length between your vehicle and the vehicle ahead. This way, you will have room to move if you need it. Allow more space when stopped directly behind a large vehicle so you can see more around it.

### Controlling the wheel

Keep both hands on the outside of the steering wheel. If you drive with your hands inside the wheel, your hands could be injured in a crash. You may sometimes have to steer with only one hand when you are changing gears or using a dashboard control, but try to use both hands when possible. This gives you better control, and also shortens your response time when you see a hazard.

Where should you put your hands? Imagine that your steering wheel is a clock. Put your hands at an equal height at the 9 and 3 position, or the 10 and 2 position, whichever is most comfortable.

### Keeping good road position

Steer the vehicle in a smooth line so there is little side-to-side movement when you're driving. The best way to do this is to look well ahead in the direction you want to go. Your peripheral vision will help you centre your vehicle and keep you moving in a straight line. When you turn, look well ahead in the direction you are turning. This will help you turn in a smooth arc.

# Space margins

### You in the driver's seat

You are driving behind someone who is travelling at 30 km/h in a 50 km/h zone. You wouldn't mind so much, but you're already late for an appointment. There's no chance to pass on this residential street. You think it might be a good idea to pull up closer behind the driver to get him to hurry up.

Tailgating, which is following too closely behind the vehicle in front, is a major cause of crashes. If you tailgate, the vehicle in front can block your view of hazards ahead. Worse, if the vehicle stops suddenly, you have no time to slow down and stop safely. If you rear-end the other driver, you will be held responsible for the crash.

### Stopping

Stopping your vehicle is more than just pressing on the brake pedal.



When you see a problem ahead while you're driving, it will take you about three-quarters of a second to **see-think** and another three-quarters of a second of **do**. Only then will your vehicle begin to slow down.

This is why it is so important to allow enough space in front.

see — a hazard

think — decide to stop

**do** — place your foot on the brake pedal until you stop.

### Space in front — the three-second rule

Always leave a safe following distance between your vehicle and the vehicle in front. You need at least three seconds of space in front in good weather and road conditions. Increase your following distance to three seconds on high-speed roads and to four seconds in bad weather conditions or on uneven or slippery roads.

Allow at least four seconds following distance when you're behind a large vehicle that could block your vision, or a motorcycle that could stop very quickly. It's also a good idea to keep at least a four-second following distance if a vehicle is following close behind you, or when you are following another vehicle on an unpaved road where dust or gravel may obscure vision and hide hazards



On a highway, measure a three-second space by picking an object ahead that will not move.



If you reach the object as you say "three" you are keeping a three-second following distance.



When the vehicle in front of you passes that object, begin your count: one thousand and one, one thousand and two, one thousand and three.

Total stopping distance is the distance your vehicle will travel from the moment you notice a hazard until the moment your vehicle stops. You need time to see, think and do before your brakes even begin to slow your vehicle. Braking distance depends on your speed, your vehicle and road conditions. Always allow enough following distance.

# Driver sees the tree fall Total stopping distance "See-Think" "Do" Braking distance Car stops here

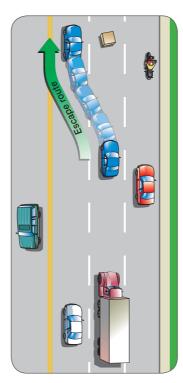
### Space behind

What do you do when someone is tailgating you? You can't control the space behind you in the same way as the space in front. What you can do is slow down slightly to increase your space in front. This way, if you have to stop, you can stop more gradually and there will be less chance of the person behind crashing into you. Other options are to move into another lane or to pull over to the side and let the tailgater pass.

# Space beside

Keep at least one metre of clear space on each side of your vehicle while you're driving. When you're passing pedestrians, cyclists or other vehicles, allow as much room as possible, at least one metre, and more if you are going at a faster speed. Increase your side space margins even more when visibility or road conditions are poor.

### Lane position



When you're deciding where to position your vehicle in the lane, there are several things to consider.

- On a two-lane road, stay fairly close to the centre line so other vehicles do not move into your lane space
- In the curb lane, stay well away from hazards on the side, such as car doors that might open
- In most lanes, drive near the centre of the lane
- Avoid driving in other drivers' blind spots.

On a multi-lane road, the right lane is often the safest one to choose. It keeps you away from oncoming traffic and it's less likely that another driver will tailgate you.

# warning!

If you are turning left off a highway onto a driveway or side road, watch your mirrors and make sure you have plenty of space behind you. The cars behind may not be prepared to slow down for you.

# driving tip

By looking ahead, keeping good space margins and anticipating road hazards, you can avoid sudden stops and changes in speed. These safe driving habits also save fuel.

Try to leave yourself an escape route when you are driving on a multilane highway. Then, if something happens in front, you can pull into another lane to avoid trouble.

# driving tip

Did you know that, in ideal conditions, it takes most vehicles stopped at an intersection about:

- two seconds per lane to go straight across
- five seconds to turn right and get up to 50 km/h
- seven seconds to turn left and get up to 50 km/h (allow extra time if you need to cross several lanes).

Remember to add an extra two seconds for safety.

# You in the driver's seat

You're waiting at a stop sign. The traffic seems endless. Just when you think it's safe to cross the intersection, another car comes into view.

What would you do?

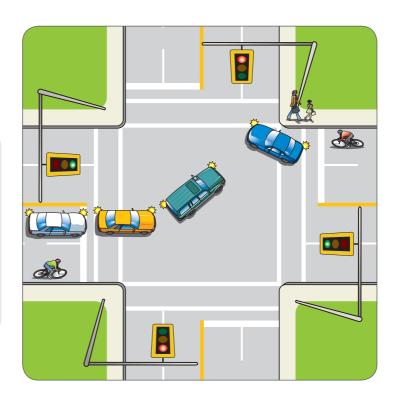
# Choosing a safe gap

The space you need to get across an intersection safely or to merge into a line of traffic is called a gap. Deciding whether a gap is big enough to be safe isn't always easy. You need to consider several things:

- the speed of the traffic
- the time it will take to do your manoeuvre
- the time it will take your vehicle to get up to the speed of the traffic flow.

Be careful not to underestimate the speed of approaching motorcycles or bicycles. They are often travelling much faster than they appear to be.

The driver of the blue car and the driver of the station wagon may have a problem if either of them moves out of correct lane position when they are turning. In this situation, time your turn so you won't have a space conflict with the other driver. If there's any doubt about who should go first, the driver making the left turn should yield.

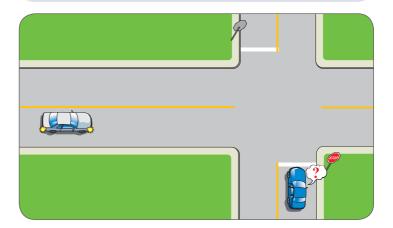




# You in the driver's seat

Your car is at a stop sign and you're waiting to cross the intersection. The intersection is clear except for a car approaching from the left. Its right turn signal is on. If this car turns right before it reaches you, you can safely cross the intersection right now. But the driver isn't slowing down, and she's not pulling over to the right.

What would you do?



Is the driver of the grey car really going to turn right?

# Communication

In this scene, the other driver is confusing you by giving mixed messages. Her turn signal shows that she's planning to turn, but the lane position and speed of her vehicle suggest she's planning on going straight. In this situation, it is better to wait and see what she does before crossing the intersection.

Sharing the road safely means understanding the tools of communication and using them effectively.

### Turn signals

Your primary communication tools are your turn signals. Always use your turn signal to let people know you are planning to turn, change lanes, pull out or pull over.

When you use your turn signal:

- **be timely** signal well ahead to give other road users plenty of warning.
- be clear don't apply your turn signal too soon and confuse other people. If you plan to turn right at the next intersection and there are a number of driveways and lanes before you reach the intersection, wait until you are close enough that people can see exactly where you are planning to turn.

mean what you say — your turn signal is designed to switch
off after you have made a turn, but sometimes it doesn't.
Make sure that your signal has cancelled after you turn so it
doesn't give the wrong message.

There are times when an automatic turn signal is hard to see, for example, if you're pulling out from a line of parked vehicles. In these situations, use a hand signal in addition to the turn signal.

Signalling a left turn.



Signalling a right turn. Cyclists may use either of these hand signals.









Signalling a stop.

# driving tip

Watch for backup lights when you are driving in a parking lot. Not only do they warn you that you need to slow down, they also tell you where you might find a parking space.

# Lights

Your vehicle has different types of lights to help you see and be seen. The lights that you use most for communication are brake lights, backup lights and hazard lights.

**Brake lights** — these are visible when the brake is applied. When you see these lights on the car ahead, you know the driver is slowing down and perhaps planning to stop. Let others know you intend to slow down or stop by tapping lightly on your brake. This will activate the brake lights.

**Backup lights** — these show that the vehicle is in reverse, and the driver is backing up or intends to back up.

**Hazard lights** — these let people know you have stopped for an emergency. Truck drivers also use them to warn that they are travelling well below the speed limit.

### Horn

The horn is a useful communication tool if it's used properly. For example, if you see someone start to pull out of a driveway without looking, a light tap on the horn will let the other driver know you're there. Only use the horn when it gives a useful signal to other drivers and helps prevent a crash.

### Eye contact

You can often communicate with other road users just by using your eyes. When you stop for pedestrians, make eye contact so pedestrians know you have seen them and it is safe for them to cross. Do the same for other drivers, motorcycle riders and cyclists when you are stopped at an intersection.

### **Body language**

Waving your hand to let another driver proceed, or a pedestrian cross in front of you, is generally not a good idea. The other driver or pedestrian may face hazards you can't see.

# Vehicle language

You can tell a lot about what a driver is going to do by watching "vehicle language." If a vehicle moves over in the lane, the driver may be planning to change lanes or turn. If the vehicle slows down when approaching a corner, the driver may be planning to turn. When you see a parked vehicle with its wheels turned out, the driver may be planning to pull out into traffic.

# Using see-think-do

Research shows that new drivers often panic and even freeze in an emergency. You can avoid this by giving yourself plenty of time and space to react, and practise using the **see-think-do** strategy. If you are driving at a safe speed, looking well ahead, and keeping alert and focused, you should have time to see problems coming up, think of possible solutions and take actions that will help keep you safe.

# driving tip

When you carry a load that extends behind your vehicle, attach a red flag to the end of the load as a warning to other drivers.

# think about

A parked car starts to pull out just in front of you. How can you use your "do" skills: speed control, steering, space margins and communication?