

CYCLING SKILLS

Ontario's Guide to Safe Cycling



INTRODUCTION

Cycling can be enjoyed safely when you understand the rules of the road and practise proper safety and handling techniques. This is your guide to cycling safety. Whether you're new to cycling or you are an experienced cyclist, this guide contains important information, tips and techniques to make you a safe, confident rider.

You may want to take a cycling course to help boost your skills, safety and cycling pleasure. To find out more or search for cycling training opportunities in your area, please see the links provided on page 54.

Cycling is a fun, healthy activity and an inexpensive way to get around.

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...be equipped

...know the rules

...watch for hazards

...ride responsibly



SAFETY

SIZING YOUR BIKE

There is a variety of bicycles on the market. Whether you're choosing a touring, sport, mountain or hybrid bicycle, it should fit properly, making it easy to control and comfortable to ride. Check these important fitting points on your bicycle.

FRAME SIZE

Frame size varies by type of bicycle, but as a general rule, you should be able to stand flat-footed over your bike's frame (top tube) with two to five centimetres of space. For a woman's frame bike, when sitting on the seat, the base of the seat should be at least five centimetres above the seat tube when the tips of both feet touch the ground.

SEAT AND HANDLEBAR HEIGHT ADJUSTMENT

Seat – Positioning your seat properly will help make your pedalling more efficient and reduce strain on your knees. To ensure your seat is at the correct height, sit on the seat with the balls of your feet on the pedals. At the bottom of the pedal stroke, your legs should be almost straight with your knees slightly bent.

Handlebars – Ensure that your handlebar is set at the right height. In a normal riding position, your weight should be evenly balanced, allowing you to rest your hands lightly on the handlebars. You can adjust the tilt of your seat and the height of your handlebars to achieve a good balance of weight. Your handlebar stem and seat post should be fastened tightly and must be at least five centimetres into the frame. Both usually have a mark indicating the maximum extension point. Longer seat posts and stems are available if you need them.

SAFETY CHECK

Every cyclist needs to know how to tell when their bicycle is unsafe to ride and needs repair. This section includes a basic bicycle safety and tune-up checklist.





BASIC BICYCLE SAFETY CHECKLIST

A well-maintained bike is key to a safe ride. Before each ride, conduct a basic safety check of your bicycle.

Tire and Wheels

Inflate tires to the recommended pressure as shown on the tire. Check for and replace loose, bent or broken spokes. Make sure wheels are centred in the forks and check for side-to-side wobbles and up and down hops by watching the wheel spin past the brakes or frame.

Chain and Gears:

Make sure the chain does not slip and that your chain stays on the sprockets.

Brake Levers and Pads

Squeeze your brakes to ensure levers stop at least 2.5 centimetres from the handlebars when fully applied and to ensure your cables are not frayed or stretched. Check the brake pads in the front and back to be sure they are hitting only the rims and not the tires.

Lights and Reflectors

Make sure that all mandatory lights and reflectors are in good and working condition.

Keep Your Bike Secure

Always carry a quality bicycle lock when riding and always lock your bike and quick release items, like your wheels and seat, to something solid.



TUNE-UP CHECKLIST

- ✓ **Bolts/Quick Release Levers** – Check that bolts and/or quick release levers on the seat, seat post, handlebar stem and axles are tight.
- ✓ **Headset** – Check that it turns freely and doesn't rattle.
- ✓ **Brakes** – Check that the nuts on the brakes are tight. Brake pads should not touch the rims unless you are squeezing the brakes. Brake levers should stop at least 2.5 centimetres from the handlebars when the brakes are fully applied.
- ✓ **Axles** – Check bearings for looseness by shaking the wheel side to side. Make sure quick release levers are clamped tight.
- ✓ **Shift Levers** – Derailleur levers should move easily only when shifting. A screw, butterfly nut, or similar device lets you adjust the movement of some types of shifter levers.
- ✓ **Derailleur Movement** – On derailleur bikes, try shifting through all your gears and make sure your derailleur does not throw the chain off the sprockets.
- ✓ **Tires** – Inflate to the recommended tire pressure as shown on the tire.
- ✓ **Spokes** – Check for and replace loose, bent or broken spokes.
- ✓ **Wheels** – Make sure wheels are centred in the forks and not touching the brake blocks. Check the rim for side-to-side wobbles and up and down hops by watching the wheel spin past the brakes or frame. More than half a centimetre of wobble is cause for concern.
- ✓ **Coaster Brakes** – Check that the bolt holding the brake arm to the frame clip is tight.

REQUIRED SAFETY EQUIPMENT

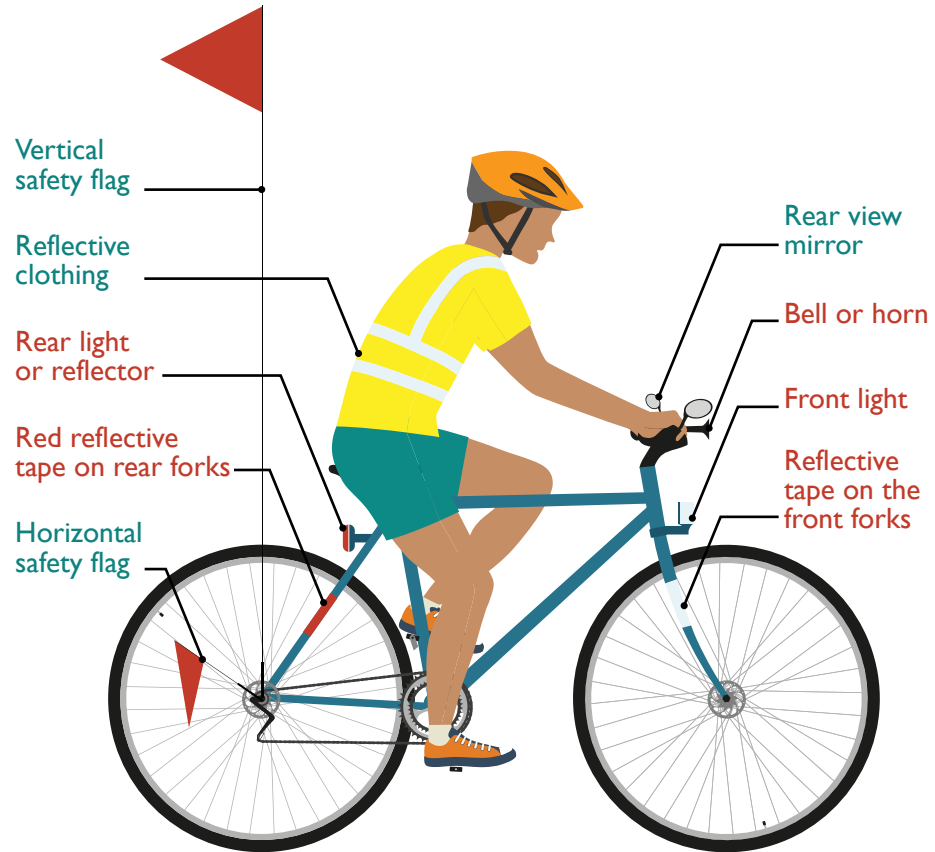
It's important for cyclists to be seen and heard by other road users.

The **law requires** that you equip your bike with:

- ✓ A **bell or horn** in good working order
- ✓ A **white front light** and a **red rear light or reflector** if you ride between 1/2 hour before sunset and 1/2 hour after sunrise
- ✓ **White reflective tape** on the front forks and **red reflective tape** on rear forks

You may consider **optional equipment** such as:

- ✓ A **horizontal safety flag** encourages motorists to pass at a safe distance (one metre)
- ✓ A **vertical safety flag** makes you more visible
- ✓ A **rear view mirror** lets you see what is approaching from behind and makes it easier to check traffic before passing
- ✓ **Reflective clothing** helps you to be seen by other vehicles on the road.



Be Alert

Avoid wearing earphones, texting and talking on the phone while riding your bike. These distractions put your safety at risk as they prevent you from being fully aware of what is going on around you.

Be Heard

Bicycles are very quiet vehicles, so it is important to warn other cyclists, pedestrians and motorists of your approach and intentions. Use your bell, horn, hand signals or voice to communicate that you are passing, approaching or are close by.

Always Ride Sober

Impairment caused by alcohol or drugs can increase your risk of collision and injury. Some prescription and over-the-counter medications can impair your ability to ride safely.





BE PROTECTED, WEAR A HELMET

In Ontario, 63 per cent of cyclists who died between 2010 and 2014, as the result of a cycling collision, were not wearing a helmet.

An approved bicycle helmet can greatly reduce the risk of permanent injury or death in the event of a fall or collision.

If a helmet has been in a collision, it should be replaced, even if there is no visible damage.

Look for a safety standards sticker that meets the approval of safety organizations such as: Snell, ANSI, ASTM, BSI, SAA, CPSC.

The Proper Fit

The best helmet is one that fits properly, is worn correctly and has been manufactured to meet strict safety standards.

To provide maximum protection, the helmet should fit level and square on your head. It should fit snugly and not slip when you move your head.

- » There should be two finger widths between your eyebrows and the helmet.
- » The straps should be flat against the face.
- » The side straps should meet just below the ear making a V-shape under your ear lobe.
- » The chin strap should be fastened snugly with enough room to fit one finger between your chin and the strap.
- » Use the dial at the back or the sizing pads provided with the helmet to adjust the fit.



It's the law! In Ontario, every cyclist under the age of 18 must wear an approved bicycle helmet. But wearing a helmet is best practice for every cyclist.



✓ correct fit



✗ incorrect fit



✗ incorrect fit



HANDLING SKILLS

SELECTING AND SHIFTING GEARS

Handling skills are easier to learn in a low easy gear when you can quickly and easily pedal providing better balance, less fatigue and more speed. It also reduces knee strain.

The basic rules for gear use are:

- » Shift into a low, easy gear before you stop.
- » Use low, easy gears when going up hills. Shift into lower gears before you begin to work too hard.
- » Use higher, harder gears when you begin to bounce on the seat from pedalling too fast.
- » On level ground, use a gear that gives you fast, easy leg spin – about 70 to 100 rpm.
- » Avoid pedalling slowly and pushing hard in your highest gears.

STRAIGHT-LINE RIDING

Riding in a straight line is the key to riding safely in traffic. Practise by following a painted line in an empty parking lot. Try not to move your upper body as you pedal – let your legs do the work.

SHOULDER CHECKING

Shoulder checking involves looking back over your shoulder to see what the traffic behind you is doing. This manoeuvre is vital for making safe turns in traffic. It is also difficult to do without wandering from a straight path. Practice riding in a straight line while checking behind you over both shoulders.

SIGNALLING

Just like drivers, cyclists must signal their intentions, to turn or change lanes, to other motorists. Signaling requires being able to ride with only one hand on the handlebars. Because it is very easy to go off course when riding one-handed, practise signalling while riding along a straight line. Keep both hands on the handlebars while actually turning.





Left Turn



Right Turn



Stop



Alternative Right Turn

Make sure to hold your hand signals long enough for drivers to see your signals and react accordingly and **always shoulder check before signalling to make a turn and, again, just before making the turn.**

EMERGENCY-HANDLING SKILLS

The first step in collision prevention is to scan the road ahead for potential hazards. Steer clear of debris and holes in the pavement and learn to anticipate errors by motorists, pedestrians and other cyclists. Don't assume they see you. No matter how skilled or careful a rider you are, you will encounter hazards that leave you little time to react.

BRAKING

Quick stops can be crucial in an emergency. Caution is required when braking quickly to ensure you don't flip over your handlebars. Keep a cushion of space around your bike to ensure you have time to react and stop safely. In wet weather, it takes longer to stop, so be sure to leave more room.





WHERE TO RIDE?

The Ontario Highway Traffic Act (HTA) defines a bicycle as a vehicle that belongs on the road. Riding on the road means riding with other traffic. This is only safe when all road users follow the same rules of the road.

When everyone follows the same rules, actions become more predictable. Drivers can anticipate your moves and plan accordingly. Likewise, you too can anticipate and deal safely with the actions of others.

It is important to note that bicycles are prohibited on certain provincial controlled access highways, such as the 400 series, the Queen Elizabeth Way, Ottawa Queensway, the Kitchener-Waterloo Expressway and on roads where “No Bicycle” signs are posted.

CYCLING FACILITIES

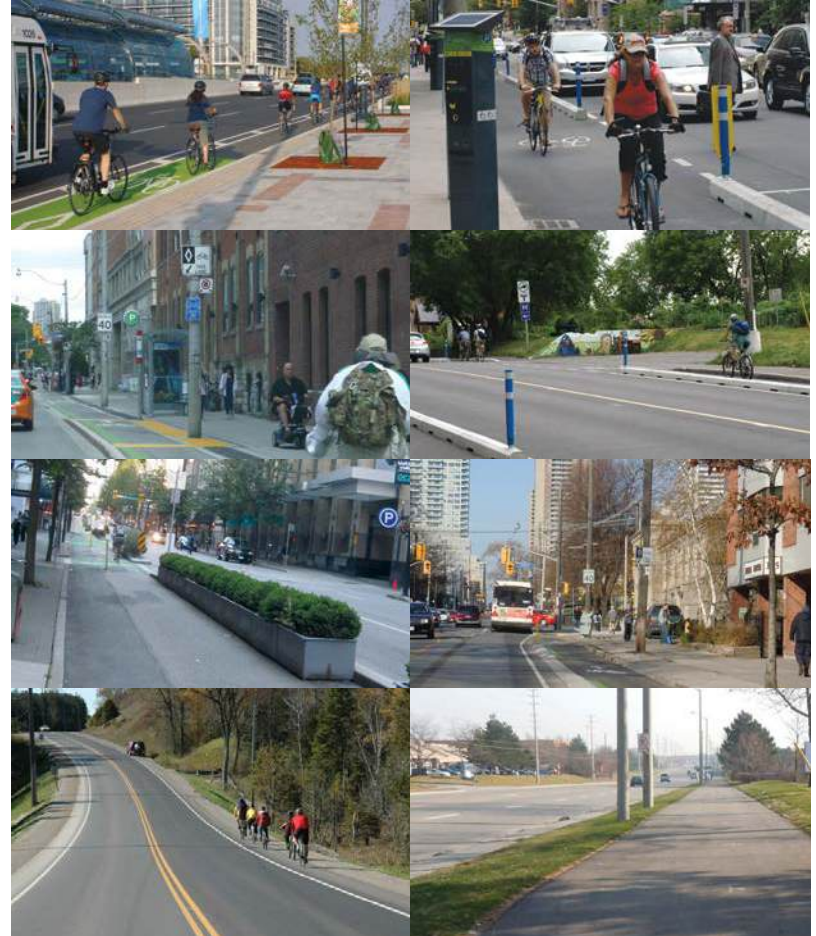
Many municipalities in Ontario offer bicycle facilities specially designed with cyclists in mind. The different types of facilities can be organized into two categories: on-road and in-boulevard bicycle facilities.

On-Road Bicycle Facilities

- » Shared Roadway and Signed Only Bicycle Route
- » Signed Bicycle Route with Paved Shoulder
- » Conventional Bicycle Lane
- » Separated Bicycle Lane
- » Raised Cycle Track
- » Bicycle Priority Streets

In-Boulevard Bicycle Facilities

- » Active Transportation / Multi Use Path
- » Raised Cycle Track



RIDING IN TRAFFIC

Because bicycles usually travel at a lower speed, there are two rules of the road to which cyclists must pay special attention:

1. Slower traffic stays right
2. Slower traffic must give way to faster traffic when safe and practical.

Accordingly, any vehicle moving slower than the normal traffic speed should travel in the right-hand lane, or as close as practicable to the right edge of the road except when preparing to turn left, when passing another vehicle, when going faster than other vehicles or if the lane is too narrow to share.

GOING STRAIGHT AHEAD

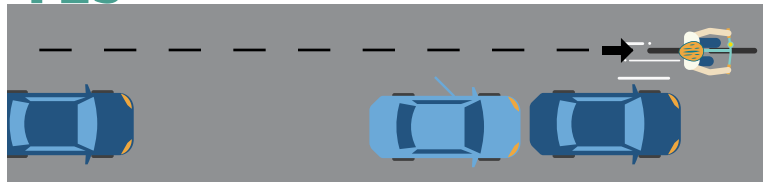
When going straight ahead, use the right-hand through lane. Stay as close as practicable, about one metre, from the right curb of the roadway to avoid curbside hazards. Remember to be predictable and ride in a straight line.

RIDING AROUND PARKED VEHICLES

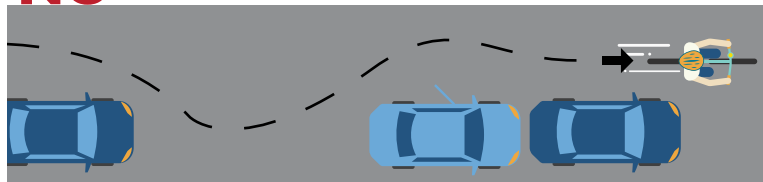
Ride in a straight line at least one metre away from parked vehicles. Even if the cars are parked far apart from one another, don't swerve or zig zag. Keep riding in a straight line.

When riding around parked vehicles, watch for parked vehicles' doors opening and for cars entering or exiting from driveways or laneways.

YES



NO



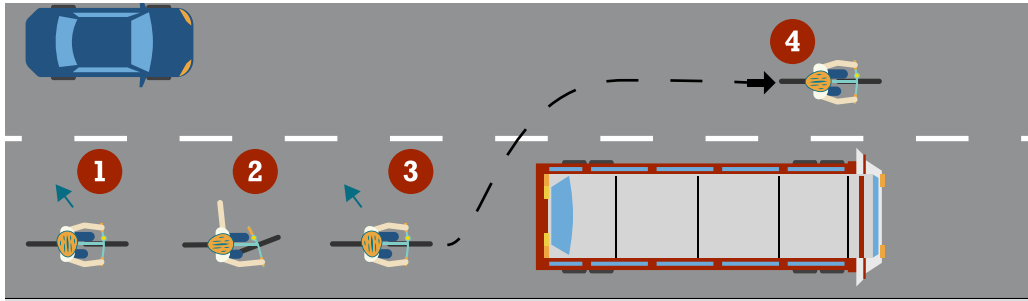
TAKING A LANE

The lane you take depends on your speed relative to other traffic. Slower traffic stays to the right in the curb lane. Cyclists must ride far enough out from the curb to maintain a straight line, clear of sewer grates, debris, potholes, and parked cars. When your safety warrants it, it is legal for a cyclist to take the whole lane by riding in the centre of the lane. Never compromise your safety for the convenience of a motorist behind you.

LANE CHANGING TECHNIQUES

Mastering the proper techniques for turning and changing lanes makes it safer for cyclists to share the road with other vehicles.

Vehicles travelling in the other lane have the right-of-way. Wait until you have enough space to merge between motor vehicles safely.



1. Shoulder check 2. Signal lane change 3. Shoulder check again 4. Change lane

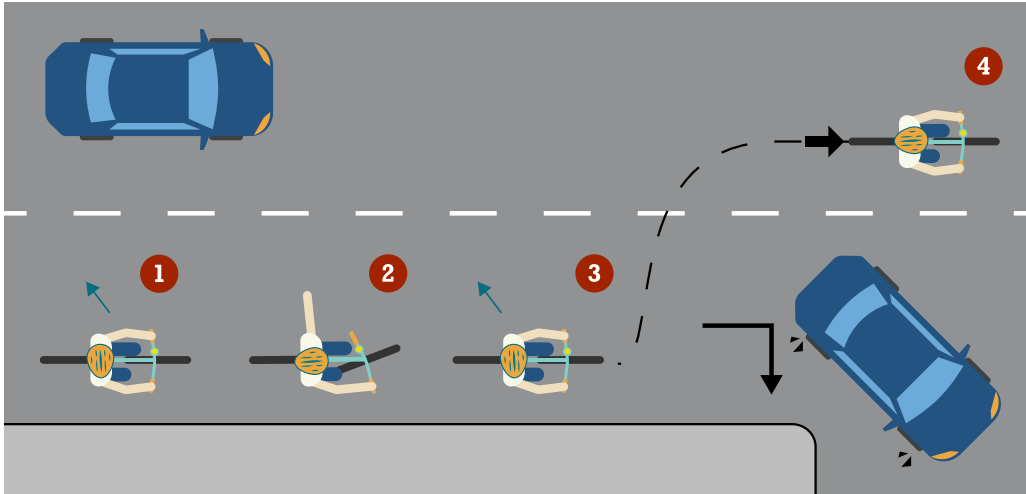


**It is not safe to
take a lane on
high-speed roads.**

TRAFFIC TURNING RIGHT

When turning right, motorists do not always check to see whether there are cyclists. Be extra careful.

- » Maintain a **safe distance of at least one metre** from the curb.
- » If a vehicle is turning right:
 - Stay behind it, or
 - Pass it on the left if you can perform the manoeuvre safely.



1. Shoulder check 2. Signal lane change 3. Shoulder check again 4. Pass on the left when it is safe to do so

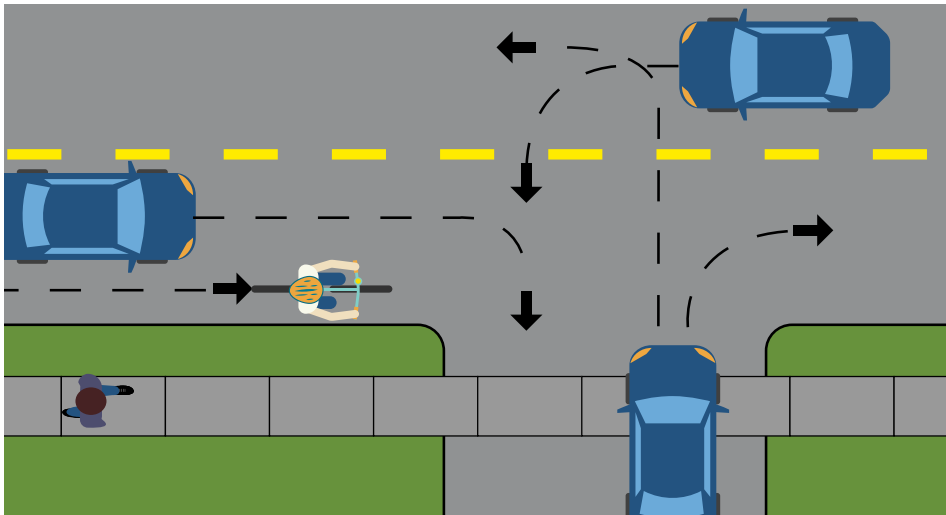
Cars may move to the right side of your lane prior to making a right-hand turn.

Cyclists should stay behind OR pass on the left if you can perform the manoeuvre safely. **NEVER** pass a right-turning vehicle on the right.

GOING THROUGH INTERSECTIONS

Intersections are where many collisions occur, so stay alert. Any point where the paths of two vehicles can cross is an intersection. Often residential areas contain many mini-intersections where driveways and alleys enter streets. Stay at least one metre from curbs in residential areas so that drivers about to enter the road can see you and you can see them.

At intersections, it is usually better to move into the lane before the intersection so that motorists turning right stay behind you.



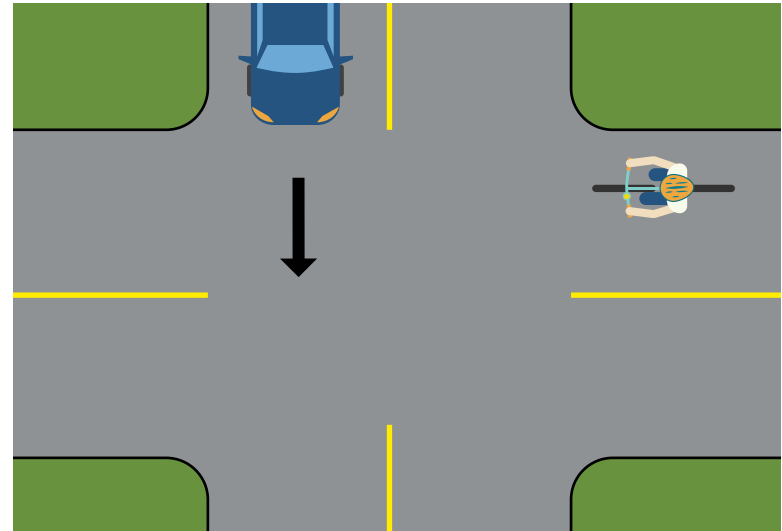
In residential areas, cyclists must watch for cars entering and exiting driveways and alleys.

RIGHT-OF-WAY

Right-of-way determines who goes through an intersection first. It is important to be cautious before proceeding into an intersection. Make sure to give way to pedestrians and vehicles already in the intersection or approaching the intersection so closely that you would not have enough time to proceed safely ahead of them. The following outlines the right-of-way at intersections with and without traffic controls.

WITHOUT TRAFFIC CONTROLS

When you approach an intersection without traffic control signals, stop signs or yield signs at the same time as another vehicle, you must yield the right-of-way to the vehicle approaching from the right.



Cyclist must yield the right-of-way to the car approaching on the right.

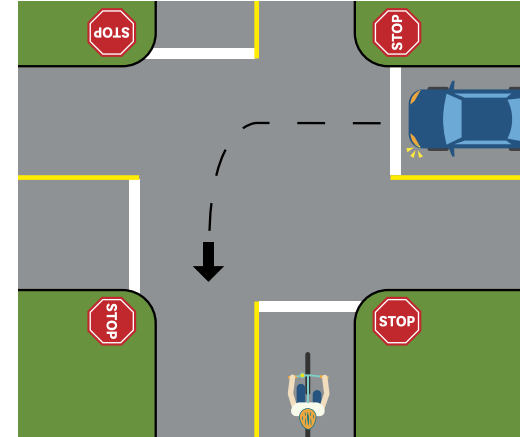
ALL-WAY STOP

The first to come to a complete stop has the right-of-way regardless of whether it is a cyclist, motorcyclist, motorist or the driver of a heavy vehicle. If two vehicles arrive at an intersection at the same time, the vehicle on the right has the right-of-way.

- » If another vehicle has the right-of-way, the cyclist can indicate that the other vehicle has the right-of-way by a hand signal or by putting a foot on the ground.
- » If the cyclist has the right-of-way, before entering the intersection, the cyclist should make visual contact with the driver to ensure that he or she will yield the right-of-way.
- » If a pedestrian enters the intersection, the cyclist must stop and let the pedestrian go by.

TRAFFIC SIGNAL INTERSECTIONS

- » Watch out for traffic signal changes and get ready to stop, unless you are already in the intersection.
- » Watch out for vehicles turning across your path or that are passing and be prepared to avoid them.



At an all-way stop, the vehicle that arrives first has the right-of-way.

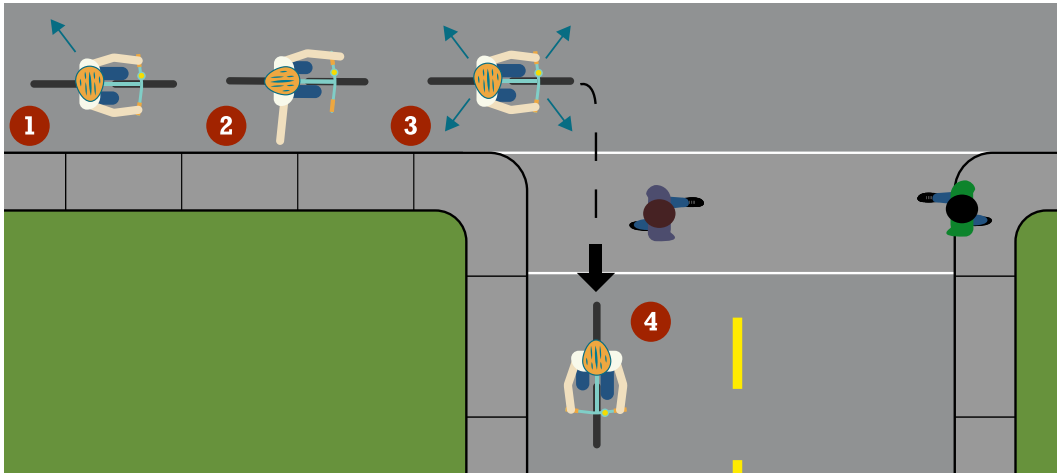
RIGHT TURNS

Keep to the far right of the road before and after you turn.

Watch out for pedestrians because they have the right-of-way and wait for them to clear your path, before turning.

Stop for red lights and stop signs before turning.

At pedestrian crossovers, cyclists must wait for pedestrians to cross the street and safely reach the sidewalk before turning. Refer to page 33 for more information about cyclists' responsibilities at pedestrian crossovers.



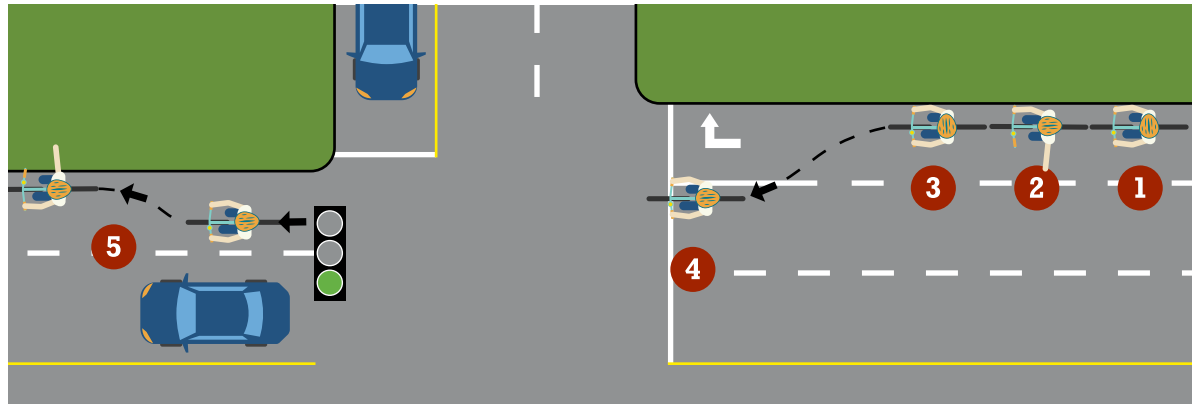
1. Shoulder check 2. Signal to turn right 3. Shoulder check again 4. Turn right when the way is clear

DESIGNATED RIGHT TURN LANES

If you wish to continue straight ahead at a multiple-lane intersection with a designated lane for right turns:

- » Signal your intention to move to the left lane
- » Position yourself between the lane reserved for right turns and the one for vehicles continuing straight ahead
- » Return to the far right side of the lane after going through the intersection

By placing yourself between both lanes, you will be able to proceed straight across the street once the light turns green, reducing any potential conflicts with vehicles that are turning right or proceeding straight.

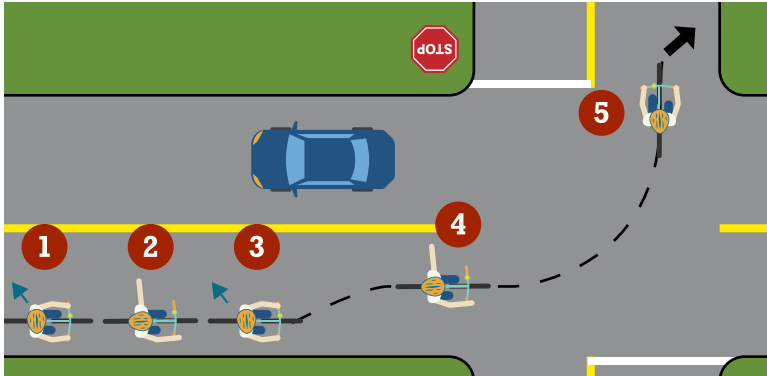


1. Shoulder check 2. Signal 3. Shoulder check again 4. Change lane to right side of the lane at the front of the queue 5. When the light is green, go through the intersection and return to the right-hand side of the road

LEFT TURNS

There are two ways to turn left at an intersection depending on your cycling skills and the volume and speed of traffic:

- **Pedestrian-type turn (L-turn)** – Walk the bike across the pedestrian crosswalk.
- **Vehicle-type turn** – This is the most practical way of turning left, except when traffic is heavy. Vehicle-type turns can be relatively simple on quiet residential streets but require greater skill on multiple-lane roads.



Vehicle-Type Left Turn

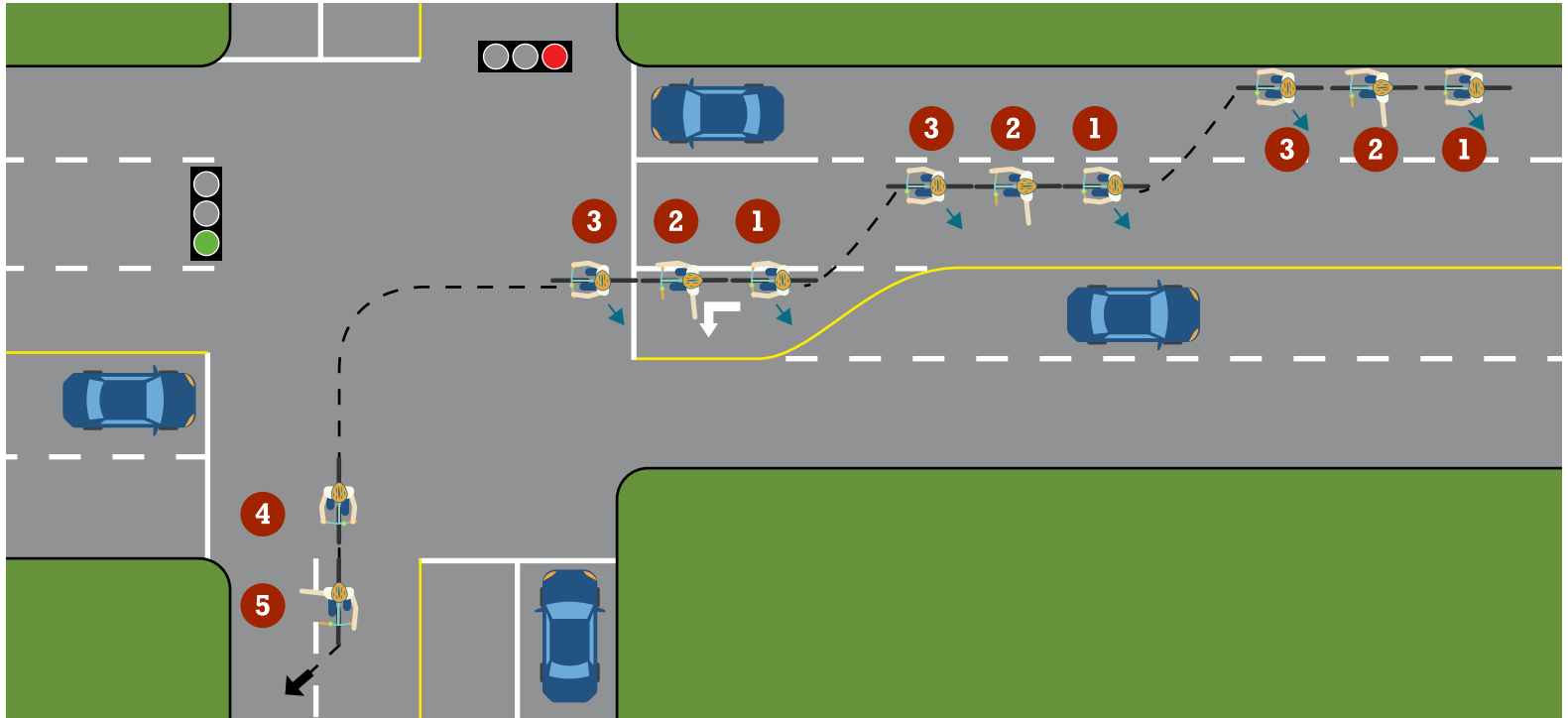
1. Shoulder check 2. Signal 3. Shoulder check again 4. Take the lane when the way is clear 5. Signal, shoulder check once more, and complete your turn. Return to right side of the road

MULTI-LANE LEFT TURNS

These manoeuvres are quite complex and require sufficient skill to safely move from one lane to the next until you are in a good position to turn. A cyclist must be able to shoulder check without swerving, judge gaps in traffic, signal intentions to motorists, shoulder check and move decisively and quickly when safe to do so. You can develop these skills by practising on quiet streets first. As you gain confidence and skill, you will find it easier to turn left on busier streets.

- » To turn left on a multi-lane road, you should use the lane changing technique until you are in the left-turn lane.
- » Remain on the right-hand side of the turning lane and wait for the traffic signal.
- » Remember, it is legal for a cyclist to take the whole lane by riding in the centre.
- » Turn only when the way is clear of vehicles, cyclists or pedestrians and the light is green.
- » Once you have completed your turn, use your lane-changing skills to move back, lane-by-lane, as close to the curb as is appropriate for the road conditions.

Always complete your turn into the equivalent of the lane from which you turned. Once the turn is complete, use your lane-changing skills to move over lane-by-lane to the right, as close to the curb as is appropriate for the road conditions.



1. Shoulder check 2. Signal 3. Shoulder check again 4. Complete your turn when the way is clear 5. Return to the right-hand side of the road

ROUNDBABOUTS

A cyclist has two choices at a roundabout. Your choice will depend on your degree of comfort riding in traffic.

For less confident cyclists

- » Dismount and walk your bicycle at the pedestrian crossing

For experienced cyclists:

- » Adjust your speed and prepare to yield to pedestrians and to traffic in all lanes of the roundabout
- » Choose your exit and identify the appropriate travel lane
- » Use your lane changing skills to merge into the appropriate travel lane before the bike lane or shoulder ends
- » Ride in the centre of your lane; don't hug the curb

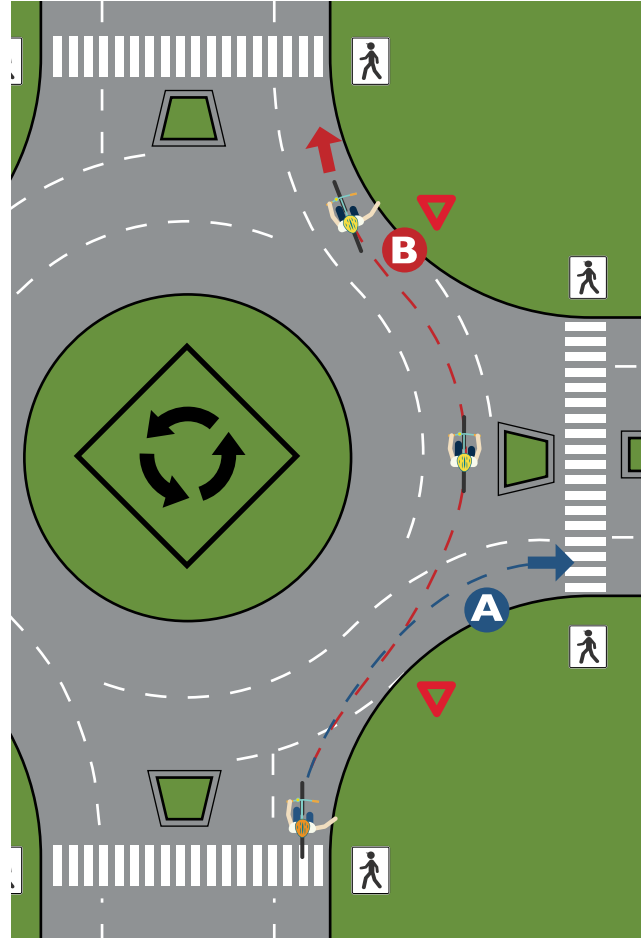
- » Wait for a break in traffic to enter the roundabout; DO NOT enter beside a driver that is already in the roundabout

Turning Right (Bike A)

- » Signal right as you approach the roundabout
- » Maintain your signal through the roundabout
- » Maintain your signal as you exit

Going Straight (Bike B)

- » Do not signal as you approach the roundabout
- » Signal right prior to your exit only



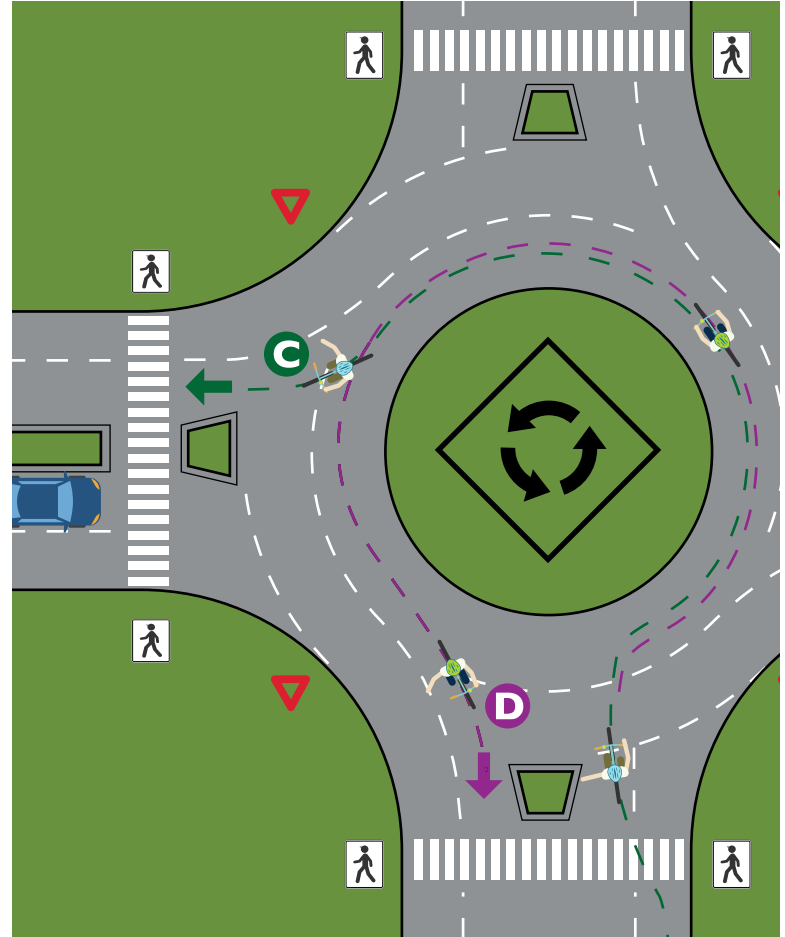
Turning Left (Bike C)

- » Signal left as you approach the roundabout
- » Maintain your signal through the roundabout
- » Signal right prior to your exit

Going full circle (U-turn) (Bike D)

- » Signal left as you approach the roundabout
- » Maintain your signal through the roundabout
- » Signal right prior to your exit
- » Watch out for drivers' blind spots

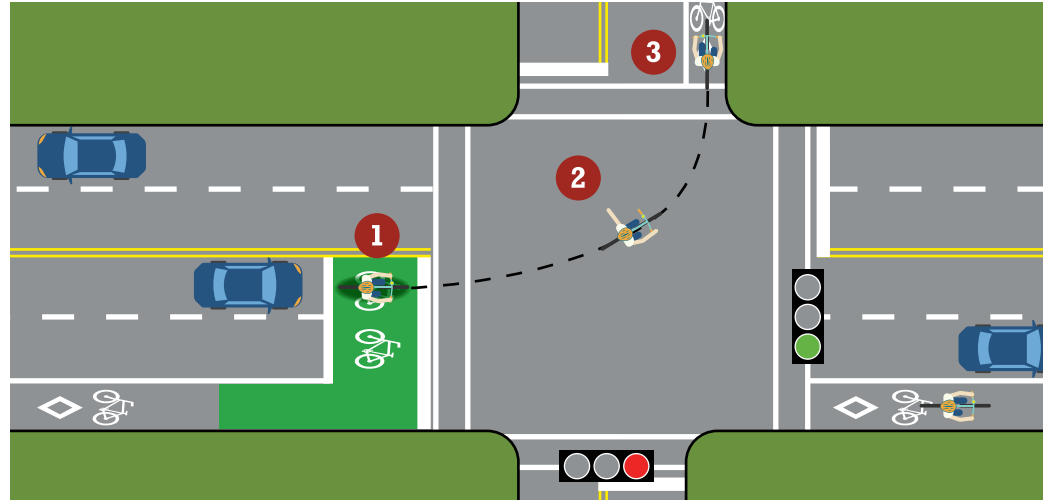
Be cautious. Vehicles may be in the wrong lane or may not signal correctly for their intention to exit.



Bike Boxes

Green-painted bike boxes are used to make cyclists easier to see and make drivers more aware of their presence. Bike boxes are located at signalized intersections between the crosswalk and the stop bar for motorized traffic allowing cyclists to wait ahead of queuing traffic at a traffic light.

When the bike box extends across the entire intersection, cyclists can move from the right side of the road towards the left, when the light is red, to make a left turn. Cyclists should signal their intention to turn left.



Turning left from a bike box

- When the light is red:
 1. Move to left side of the green area
 2. Signal
 3. Turn when the light turns green.
- When the light is green:

Use the multi-lane left turn technique([page26](#)) to complete your left turn.



Jug Handles

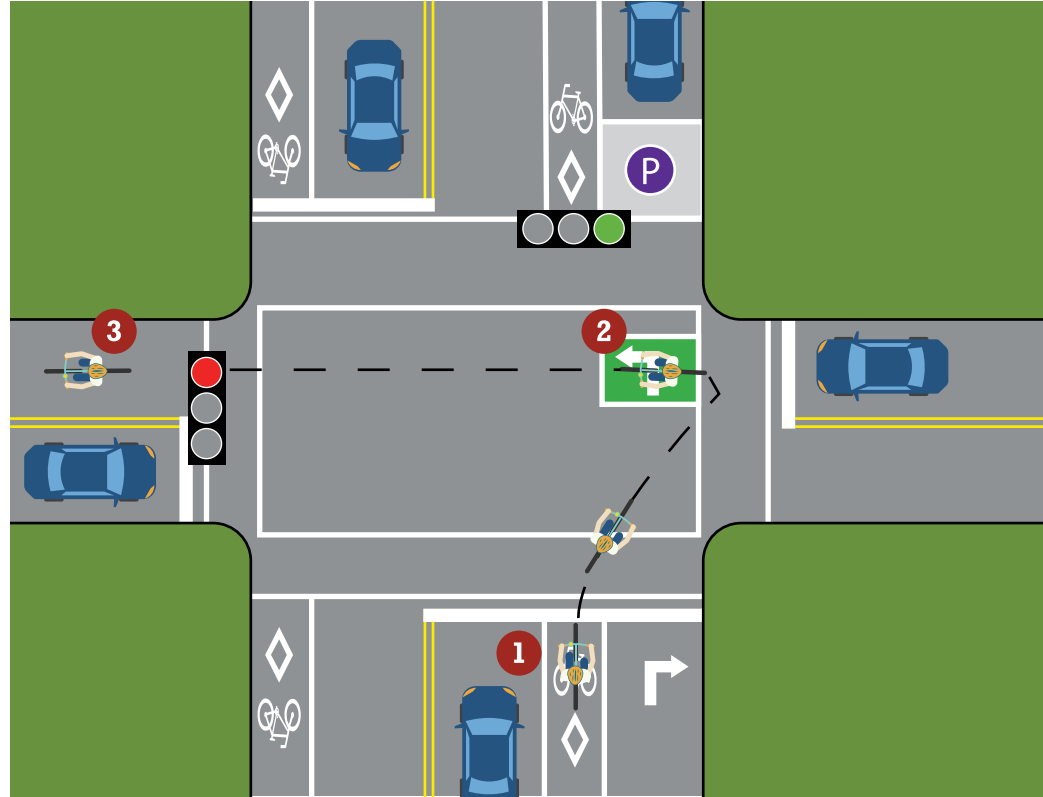
At T-intersections, jug handles allow cyclists to reorient their bike before crossing the road. Use the jug handle like you would use a two-stage left turn queue box in a four-way intersection.

- » On the green signal, move out of your travel lane and proceed into the jug handle
- » Position your bike in the direction you plan to go and wait for a green signal
- » When the light changes to green, proceed through the intersection into the bike lane in front of the jug handle

Two-Stage Left Turn Queue Box

Two-stage left turn queue boxes are provided at signalized intersections to allow cyclists to wait ahead of traffic before turning left. The boxes are green with a white rectangular or square box and a turn arrow pointing in the direction cyclists are turning.

- » On the green signal, move out of your travel lane and proceed into the two-stage left turn queue box. If the box is located behind the crosswalk, yield to pedestrians.
- » Position your bike in the direction you plan to go and wait for a green signal.
- » When the light changes to green, proceed through the intersection into the bike lane in front of the box.



1. On green signal, signal and move out of your travel lane to the queue box.
2. Position your bike in the direction you plan to go and wait for green signal
3. Proceed through intersection when the light turns green

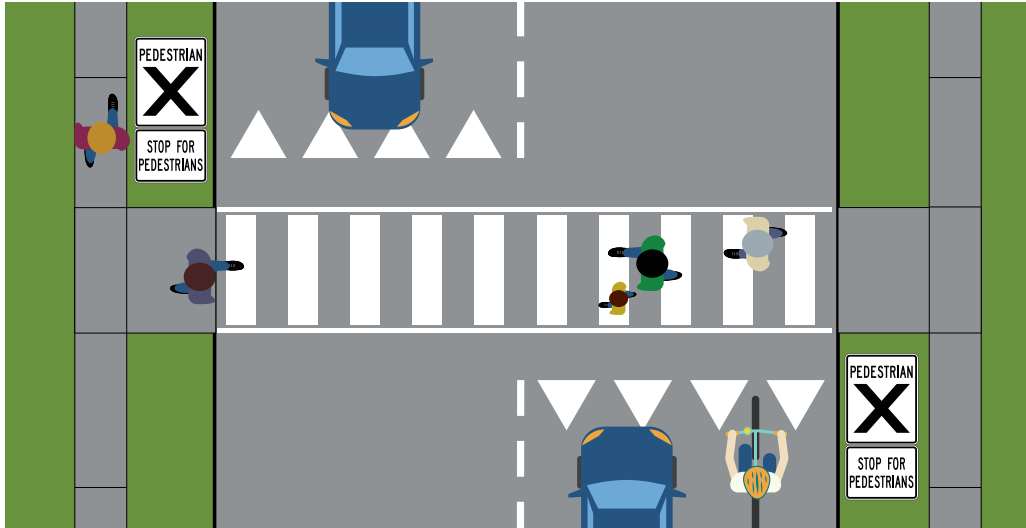
PEDESTRIAN CROSSOVERS

At a crossover, cyclists on the road need to:

- » Be prepared to stop for pedestrians
- » Not pass another bicycle or vehicle within 30 metres of the crossover
- » Stop behind the yield line
- » Wait until pedestrians have completely crossed the road before proceeding

When crossing with pedestrians:

- » Dismount your bike
- » Wait for traffic to stop
- » Make eye contact to ensure motorists see you
- » Walk your bike across the road



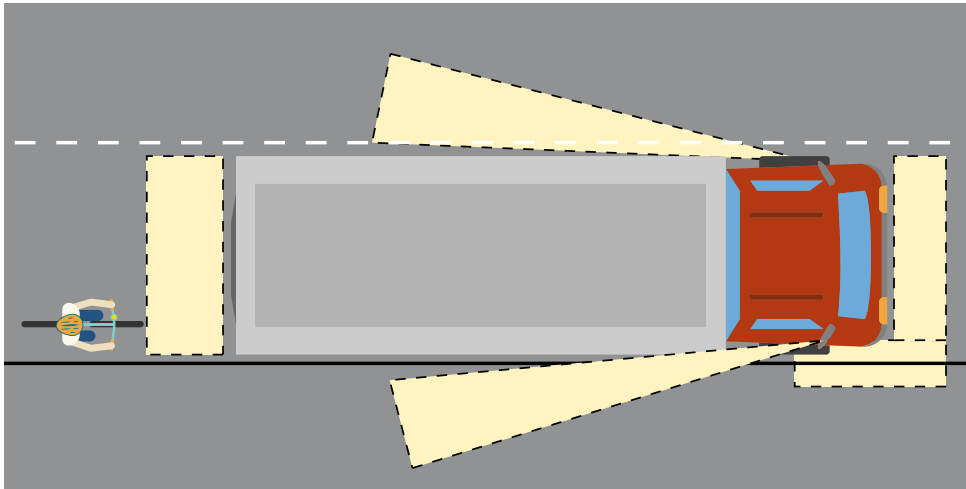


SHARING THE ROAD WITH LARGE VEHICLES

Bus and truck drivers have large blind spots where they are unable to see passing vehicles, particularly bicycles. It is extremely important to stay out of their blind spots.

Trucks and buses are wider than most passenger vehicles and occupy more space on the road, meaning cyclists should never share a lane with them. Always watch for trucks and buses that may make a right-hand turn in front of you.

If you can see the eyes of the driver in their mirror, they can see you. Try to catch the driver's attention, or stay well ahead of, or well behind, their vehicle.



Truck driver's blind spots

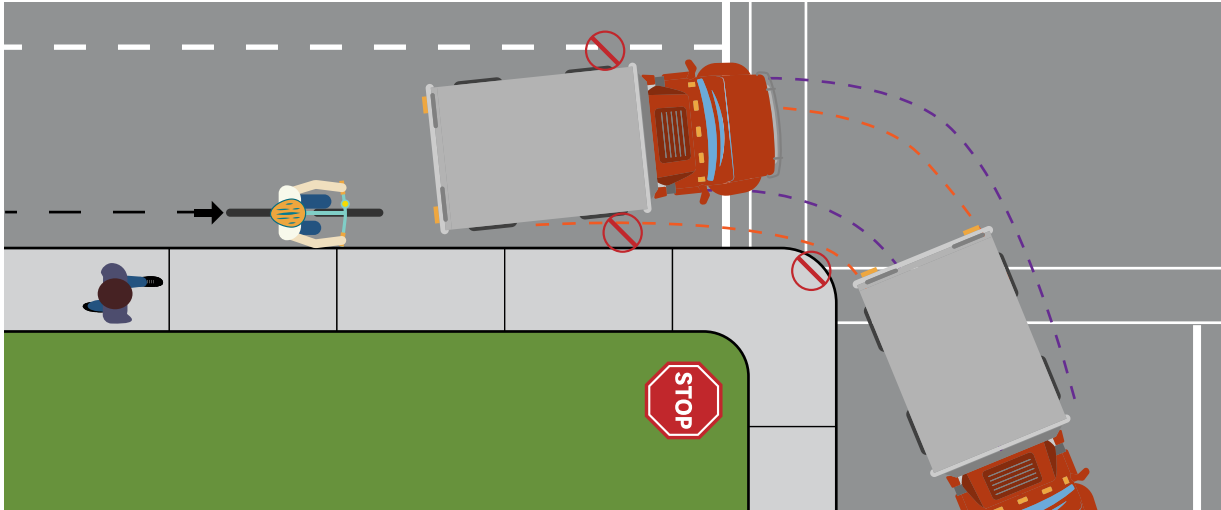
TRUCKS

Cyclists need to take extra care when entering intersections with trucks. Trucks have large blind spots and may not be able to spot cyclists when making right-hand turns. An experienced truck driver will use lane closure (crowd the curb) to shut down the lane to bikes and small vehicles before making a right turn. Truck drivers then must swing out away from the curb to allow the truck's rear wheels to complete the turn. Not all truck

drivers practice this technique, so always take extra care and watch for right-turning trucks.

Position yourself in front or behind a truck near intersections.

The experienced cyclist may choose to pass on the left in the passing lane. If you sit between the curb and a truck at an intersection, you lose the space needed to get out of the way if the truck starts to turn.



SAFETY TIPS FOR CYCLING AROUND TRUCKS

- » Leave extra room when stopped behind a truck to prevent a “roll-back” collision. When a truck driver takes their foot off the brake to release the clutch, a heavy load can cause the truck to roll back.
- » Trucks require a lot of space to stop. Always ensure there is a large distance between your bike and a truck before you pull in front.
- » The length of a truck affects the driver’s visibility. If you’re riding behind a truck, stay far enough back so that the driver is better able to see you in the side-view mirror.
- » Ride on the inside section of a bike lane when a truck is near you. If you’re sharing the road, ride far enough behind the truck so that you appear in its mirrors.
- » At low speed and when starting from a stop, bikes tend to wobble, which can contribute to your handlebars knocking into the vehicle beside you. Cyclists should gear down at stops to reduce the wobble effect at start-up.
- » Do not rely on your bell, horn or voice to alert the truck driver of your presence. Respect the driver’s limitations and keep a safe distance away.
- » Trucks passing cyclists can create a gust of wind powerful enough to throw a cyclist off balance. When you can anticipate a truck coming up on your side, stop pedalling and concentrate on keeping your front wheel straight.

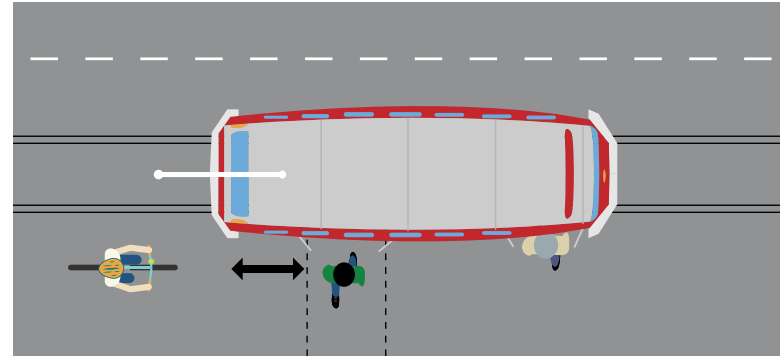
SCHOOL BUSES

When the upper red lights of a stopped school bus are flashing and the flashing stop arm is extended, traffic in both directions must stop. If you are coming from behind the bus, stop at least 20 metres away, and a safe distance when approaching from the opposite direction. The only exception is if you are on a road divided by a median strip. In this case, only vehicles approaching a school bus from behind must stop.

You may not proceed until the bus resumes motion or the red signal lights have stopped flashing and the stop arm is retracted. Failing to stop for a school bus is against the law and, if charged, you could be subject to a fine of \$400 to \$2,000. This law applies on all roads and to all drivers, including bicyclists.

STREETCARS

By law, you must pass streetcars on the right. When they stop to pick up or let off passengers, you must stop two metres behind the rear door until all passengers have boarded and disembarked on the sidewalk.



TRAVELLING IN GROUPS

There are a few safety tips to keep in mind when travelling in groups.

- » Ride in single file on two-lane roads or when traffic is heavy on multi-lane roads.
- » Keep at least one metre apart from other cyclists in the group and keep several lengths apart when going downhill at high speed.

If you are travelling in a large group, break up into smaller groups of about four to six. Keep about one kilometre between groups to allow traffic to pass.



RIDING ON SIDEWALKS AND SHARED PATHS

Cycling on sidewalks can be dangerous. Many collisions between cyclists and motor vehicles occur where sidewalks, driveways and parking lot entrance/exits become unexpected intersections. Make sure you know and obey your local by-laws concerning sidewalk riding.

When riding on shared bike/walking paths, cyclists should:

- » Ride at a slow speed
- » Use a bell or horn to signal your presence when approaching pedestrians from behind
- » Be ready to stop and allow pedestrians to go first
- » Stop before every intersection and look all ways for motor vehicles
- » Watch for motor vehicles entering or exiting from driveways/laneways
- » Walk your bike across a crosswalk (it is illegal to ride across a crosswalk)

When walking your bike on a roadway where there are no sidewalks, you are considered a pedestrian and you should walk on the left-hand side of the road facing traffic. If it is not safe for you to cross the road to face traffic, you may walk your bike on the right-hand side of the road.

Always check for local regulations that affect where you may cycle in your municipality.



RIDING WITH CHILDREN

Use care and caution when cycling with young children who are too young to ride by themselves. Keep in mind that a child bike seat mounted behind the bicycle seat alters your centre of gravity while riding and may increase the risk of losing balance.

Take extra caution when placing and removing the child from the carrier. Never leave your bike unattended when a child is in the carrier. An alternative way to carry children is to use a child bicycle trailer towed behind your bicycle. Bike trailers are stable and not prone to tipping. Most trailers are attached either directly to the bike frame or the seat post by means of a u-joint.



It's the law! In Ontario, every cyclist under the age of 18 must wear an approved bicycle helmet. Children are required to wear an approved bicycle helmet when riding in a child carrier or a bicycle trailer.



OBSTACLES AND OTHER HAZARDS

Surface hazards exist on every street but they are most common close to the curb, where much of your riding is done.

Cyclists must always watch for:

- » **Holes and depressions or raised surfaces** that can buckle wheels or throw the rider. Avoid them with gradual course changes and go through them slowly.
- » **Loose or slippery surfaces** that can cause you to lose control. Go over them slowly and corner carefully, keeping the bicycle as upright as possible.
- » **Sharp objects** can cut or puncture tires, sometimes causing blowouts that result in spills or crashes. Watch for nails, tacks, glass, staples, wire, pins, sharp rocks and sharp pieces of metal.

If you get a flat tire, slow down gently to a stop and walk your bike to avoid ruining the tires and rims.

If an obstacle forces you to move to the left:

1. Signal your intentions in advance.
2. Look over your left shoulder to see whether the way is clear.
3. Maintain a trajectory that is as straight as possible.
4. Return to the right-hand side of the road (initial position) as soon as you pass the obstacle.



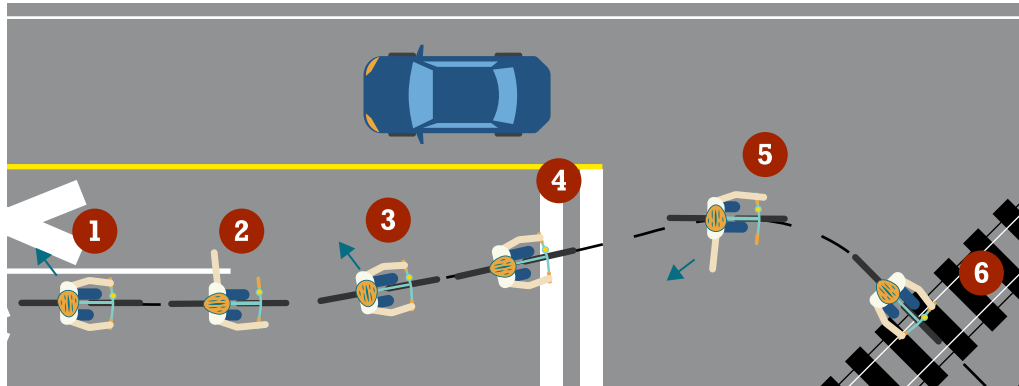


RAILWAY AND STREETCAR TRACKS

Railway and streetcar tracks are very dangerous. Crossing at the wrong angle could cause you to fall or damage your bicycle wheels. Remember, tracks are slippery when wet.

Always cross the tracks at right angles. If the tracks are at an angle to the road, you may need a full lane. Use hand signals to position yourself in the lane where you have enough room to cross the tracks at a 90 degree angle. Go slowly and stand on the pedals when crossing over particularly bumpy tracks.

If it is too difficult to cross the tracks safely, dismount and walk your bike across instead.



1. Shoulder check
2. Signal
3. Shoulder check
4. Move left
5. Shoulder check, signal, shoulder check
6. Cross at right angle

WEATHER HAZARDS

Wet weather makes roads slippery and cyclists need to take extra caution when riding in wet conditions.

Braking – Most bicycle brakes work poorly in the rain. If steel rims, ride slowly and allow extra time for braking. Brake hard only after your brakes start to grab. Aluminium and alloy rims work best in wet weather.

Puddles – Avoid puddles, if possible, or go through them slowly.

Metal, paint and wood – Metal plates, service covers, tracks and painted lines are all very slippery when wet. Slow down and corner carefully on all such surfaces.

Cornering – You have less traction on wet roads, so corner slowly with little leaning.

Visibility – Visibility can be poor in wet weather. Wear bright and reflective outerwear garments so that drivers can see you better.





POWER-ASSISTED BICYCLES

(ELECTRIC BIKES/e-BIKES)

Power-assisted bicycles (e-bikes) are motorized bicycles that assist the rider in pedalling and increase the amount of power to the wheel.

WHAT IS AN e-BIKE?

E-bikes in Ontario must have:

- » steering handlebars
- » working pedals
- » an electric motor not exceeding 500 Watts
- » a maximum speed of 32 km/h
- » a maximum weight of 120 kg
- » a permanent label from the manufacturer in both English and French stating that your e-bike conforms to the federal definition of a power-assisted bicycle



It is illegal to modify your e-bike's motor to make it more powerful or to increase the speed of your e-bike.

WHAT DO e-BIKE RIDERS NEED?

You **don't** need a driver's licence, vehicle permit, licence plate or motor vehicle insurance to ride an e-bike, but you do need to:

- » Be 16 years of age or older
- » Wear an approved bicycle or motorcycle helmet
- » Keep your e-bike in good working order



Traffic laws that apply to bicycles also apply to e-bikes, so you must follow the same rules of the road as regular cyclists.

ADVICE FOR e-BIKES RIDERS



1. Get familiar with your electric bicycle, including the extra power and weight, in a calm and safe environment before you go out in traffic.
2. Remember that the engine may continue its pull a few seconds after you have stopped pedaling.
3. Be aware of your surroundings. Your higher speed may surprise other road users.
4. Adjust your speed to road and traffic conditions.
5. Make yourself as visible as possible in traffic.
6. Don't use the front brake alone. Be extra cautious when braking at sharp corners and when the road is wet or slippery.
7. Make sure to have your full attention focused on traffic – mobile/music devices take away your focus.
8. Always wear your helmet (it's the law!).
9. When not signaling, always keep both hands on the handlebars.
10. Make sure that your bicycle is well maintained.

WHERE CAN e-BICYCLISTS RIDE?

You can ride your bike or e-bike on most roads and highways where conventional bikes are permitted, with some exceptions. You CANNOT ride your e-bike:

- » On certain provincial controlled access highways, such as the 400 series, the Queen Elizabeth Way, the Ottawa Queensway or the Kitchener-Waterloo Expressway
- » On municipal roads, including sidewalks, where bicycles are banned under municipal by-laws
- » On municipal roads, sidewalks, bike paths, bike trails or bike lanes where e-bikes are prohibited

The following are not bicycles and are subject to different rules for use in Ontario.

- » Limited-speed motorcycles
- » Mopeds (motor-assisted bicycles)
- » Low-speed vehicles
- » Electric and motorized scooters
- » Pocket bikes
- » Segways

Visit [Ontario.ca/transportation](https://www.ontario.ca/transportation) for more information.



ROAD SIGNS AND TRAFFIC SIGNALS

TRAFFIC SIGNS FOR CYCLISTS



Bicycles are permitted on this road.



No bicycles allowed on this road.



Cyclist are required to dismount and walk their bikes.



Diamond signs indicate lanes for specific types of vehicles, either all the time or during certain hours. They can include: buses, taxis, bicycles and vehicles with three or more people.

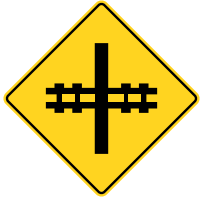


Stop and wait until the way is clear before entering the intersection.



Yield to traffic in the intersection or close to it. Stop if necessary and go only when the way is clear.





Railway crossing ahead. The sign also shows the angle at which the railway tracks cross the road.



Cyclists are expected to share the space on the path with pedestrians.



Roadwork ahead. The speed limit and lanes may be reduced.



Directs pedestrians, cyclists and other users to a specific lane of the path.



Cyclists are required to yield to pedestrians.



One-way road. Travel in direction of arrow.

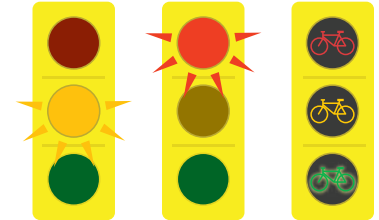
TRAFFIC SIGNALS

A flashing green light or left-pointing green arrow with a green light permits you to turn left, go straight ahead or turn right from the proper lane. Oncoming traffic still faces a red light.

Flashing yellow light: Slow down and proceed with caution through intersection.

Flashing red light: Stop and move through the intersection when it is safe to do so.

Similar to regular traffic signal lights, bicycle traffic signal lights direct cycling traffic at intersections. If both a bicycle traffic signal and a regular traffic signal apply to the same lane, cyclists in that lane must obey the bicycle traffic signal.



Remember, during a power failure, intersection traffic lights will not work. Treat the intersection as an all-way stop. Yield the right-of-way and use caution.



THE LAW AND CYCLISTS

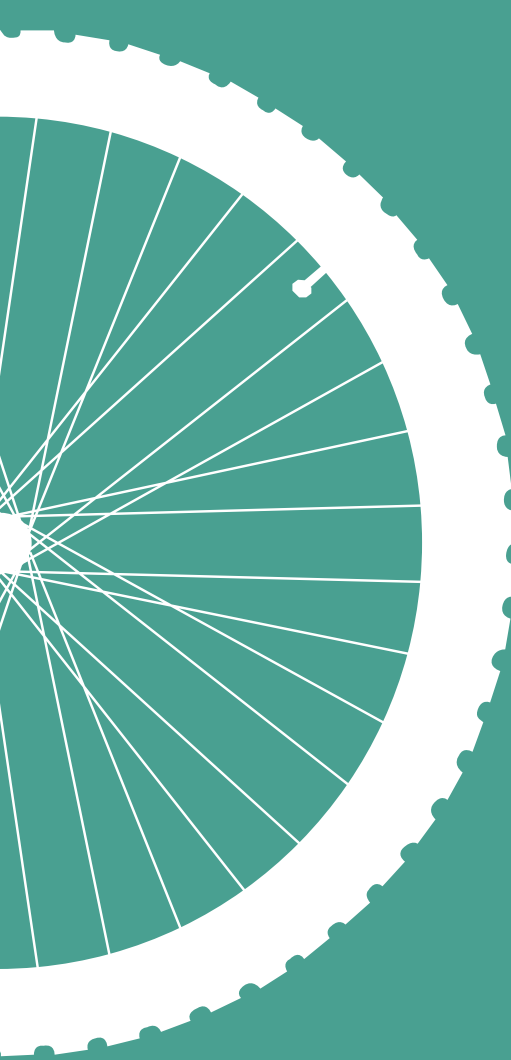
A bicycle is considered a vehicle under the Ontario Highway Traffic Act (HTA). This means that cyclists have the same rights and responsibilities to obey all traffic laws as other road users and they can be charged for disobeying traffic laws. The following are key sections of the HTA relating to cyclists:

(HTA section)	Offence	Set Fine
HTA 62(17)	Improper lighting	\$ 85.00
HTA 64(3)	Improper brakes	\$ 85.00
HTA 75(5)	No or defective bell/horn	\$ 85.00
HTA 104	Fail to wear proper helmet	\$ 60.00
HTA 140(1)(a) (b) (c)	Fail to yield to pedestrian	\$ 150.00*
HTA 140(6) / 144(29)	Cyclist - ride in a crossover or crosswalk	\$ 85.00
HTA 142	Fail to signal a turn	\$ 85.00*

(HTA section)	Offence	Set Fine
HTA 144/136	Traffic signals and signs	\$ 85.00*
HTA 144(10)	Fail to obey bicycle traffic control signal	\$ 85.00*
HTA 144(18)	Fail to stop at a red light	\$ 260.00*
HTA 147	Slow moving traffic travel on right side	\$ 85.00*
HTA 148(6)	Bicycle fail to turn out to right when overtaken	\$ 85.00*
HTA 153	Drive wrong way - one way street	\$ 85.00*
HTA 166	Fail to stop two metres behind streetcar doors and yield to passengers	\$ 85.00*
HTA 175(12)	Fail to stop for stopped school buses	\$ 400.00
HTA 178(1)	Attaching to a vehicle	\$ 85.00
HTA 178(2)	Passengers not allowed on bicycle built for one	\$ 85.00
HTA 218	Cyclist - fail to stop or to identify self	\$ 85.00
HTA Reg 630	Riding on expressways	\$ 85.00

For complete information on Ontario's Highway Traffic Act and the laws and regulations pertaining to cycling, visit [ontario.ca/laws](https://www.ontario.ca/laws)

* increased fines when committed in a community safety zone



FOR MORE INFORMATION ON SAFE CYCLING AND CYCLING ACTIVITIES, VISIT:

Cycling in Ontario

ontario.ca/cycling

Cycling in Toronto

toronto.ca/cycling

Ontario Cycling Association

ontariocycling.org

Citizens for Safe Cycling

safecycling.ca

Cycling Canada

canbikecanada.ca

CAA Bike Safety

bikesafety.caa.ca

Share the Road Cycling Coalition

sharetheroad.ca



**ROAD SAFETY.
IT STARTS WITH YOU.**

For more information about cycling safety, contact:

MTO Info General Inquiry:

1-800-268-4686 or (416) 235-4686 in GTA

TTY Users:

1-866-471-8929 or (905) 704-2426 in Niagara

Website: ontario.ca/transportation

For more information on the Highway Traffic Act, Statutes and Regulations of Ontario, visit ontario.ca/laws

