

Tips for Preteens & Teens

Prevent Bicycle Crashes



Drive Your Bike Responsibly.

Yes, drive your bike. Many State laws define a bicycle on the road as a vehicle, and a bicyclist as the driver of a vehicle. For many, your bike is your first vehicle. While learning to ride a bike is common as a “kid,” as a preteen/teen, you are more likely to be riding independently and to be exposed to traffic. All States require bicyclists on the roadway to follow the same rules and responsibilities as motorists. Driving as a part of traffic is complex: it takes motor skills (pedaling, balancing, stop/starting, and steering/turning); cognitive skills (learning and reasoning); and maturity (applying the rules of road to what’s happening on the road)—all while maintaining balance and control of your bike!

This resource is for those of you in your pre-driving or early driving years. Biking builds on the same critical skills as walking around traffic, and shares many of the same skills as driving a car! This resource will prepare you for some of the risks of riding in traffic and how to reduce them. **Here’s what you can do:**

- **Learn to Drive Your First Vehicle (your bike) Safely.** Consider it experience and practice towards driving a car and keeping a vehicle safe by taking care of it.
- **Prevent Common Crashes.** There are two main types of crashes: the most common (falls), and the most serious (the ones with cars). Regardless of the reason for the crash, prevention is the name of the game; there are things you can do to decrease your risk of a crash.

Decrease Your Bike Crash Risk From Falls or Traffic.

- **Be Prepared Before Heading Out.**
 - Drive a bike that fits you—if it’s too big, it’s harder to control the bike.

- Drive a bike that works—it really doesn’t matter how well you drive if the brakes don’t work.
- Wear equipment to protect you and make you more visible to others, like a bike helmet, bright clothing (during the day), reflective gear, and a white front light and red rear light and reflectors on your bike (at night, or when visibility is poor).
- Plan your route—if driving as a vehicle on the road, choose routes with less traffic and slower speeds. Your safest route may be away from traffic altogether, in a bike lane or on a bike path.

■ Improve Your Riding Skills.

- Practice. No one learns to drive a vehicle safely without practice and experience; safely driving your bike in traffic requires the same preparation. Start by driving your bike in a safe environment away from traffic (a park, path, or empty parking lot).
- Take an on-bike class through your school, recreation department, local bike shop or bike advocacy group. Confidence in traffic comes with learning how to navigate and communicate with other drivers, bicyclists, and pedestrians. Review and practice as a safe pedestrian or bicyclist is great preparation for safe driving.

■ Ride Smart.

- Be serious; don’t mess around in traffic. While biking is fun, driving around traffic isn’t a game, and your bike isn’t a toy.
- Ride one per seat, with both hands on the handlebars, unless signaling a turn. Carry all items in a backpack or strapped to the back of the bike.
- Tuck and tie your shoe laces and pant legs so they don’t get caught in your bike chain.
- Use your eyes and ears, staying focused (see drive defensively).



Ride With Cars in Mind

■ Know the Rules.

- Be aware of others using the road. Discuss with an adult the dos and don'ts of roadway behavior.
- Look before entering traffic. Look left-right-left for traffic before entering a roadway. This includes coming out of a residential driveway, a commercial driveway (store or parking lot), alleyway, or when continuing in traffic from a stop sign or light.
- Learn and follow the rules on the road for your own safety, and the safety of others:
 1. Drive with the flow, in the same direction as traffic.
 2. Obey street signs, signals, and road markings, just like a car.
 3. Wear reflective material on your body and bike, and use white front lights and red rear lights/reflectors as required by law, if you ride at night or at dusk, dawn, fog, or rain.

■ Drive Defensively — Focused and Alert.

Be focused and alert to the road and all traffic around you; anticipate what others may do, before they do it. This is **defensive driving**—the quicker you notice a potential conflict, the quicker you can act to avoid a potential crash:

- Assume the other person doesn't see you; look ahead for hazards or situations to avoid that may cause you to fall, like toys, pebbles, potholes, grates, train tracks.
- No texting, listening to music or using anything that distracts you by taking your eyes and ears or your mind off the road and traffic.

■ Drive Predictably.

By driving predictably, motorists get a sense of what you intend to do and can react to avoid a crash:

- Drive where you are expected to be seen, travel in the same direction as traffic; drive

in a straight line, not in and out of traffic, and signal and look over your shoulder before changing lane position or turning.

- Avoid or minimize sidewalk riding—it is not predictable behavior. Cars don't expect to see moving traffic on a sidewalk and don't look for you when backing out of a driveway or turning. Sidewalks sometimes end unexpectedly, forcing the bicyclist into a road when a car isn't expecting to look for a bicyclist.
- If you must ride on the sidewalk remember to:
 1. Check your law to make sure sidewalk riding is legal;
 2. Watch for pedestrians;
 3. Pass pedestrians with care by first announcing "on your left" or "passing on your left" or use a bell;
 4. Ride in the same direction as traffic. This way, if sidewalk ends, you are already riding with the flow of traffic. If crossing a street, motorists will look left, right, left for traffic. When you are to the driver's left, the driver is more likely to see you;
 5. Slow and look for traffic (left-right-left and behind) when crossing a street from a sidewalk; be prepared to stop and follow the pedestrian signals; and
 6. Slow down and look for cars backing out of driveways or turning.

■ Know the Causes of Bike-Car Crashes.

Learn the common types of crashes with cars and ways to avoid them.

- Most bike-car crashes can be prevented.
- Understanding the causes of crashes helps you adjust your riding and driving behaviors to avoid a bicycle crash.
- **Click here to learn more about types of crashes between bikes and cars and what you can do to avoid them.**



Common Types of Crashes Between Bikes and Cars:

While 36 unique crash types have been identified, some are more likely to involve children and adolescents than adults (Ellis 2012). Research has identified these common crash types (Cross, Fischer, Hunter, Stutts, 1995).

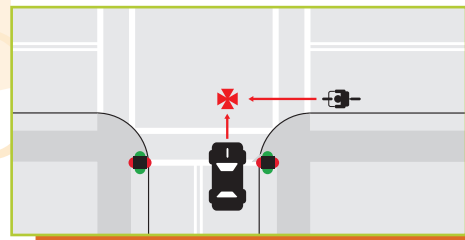
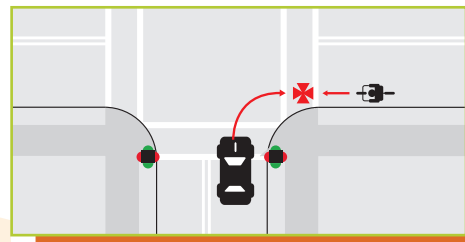
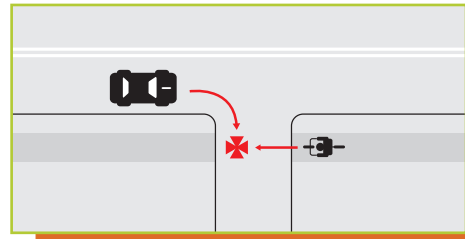
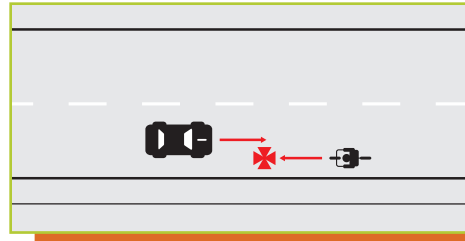
Note: Distraction on the part of all road users (motorists, bicyclists and pedestrians) can be an underlying cause or influencing factor in almost all of the crashes included. Distracted driving, bicycling and walking is an ongoing threat to everyone's safety. The simple solution is to always stay focused and alert to traffic and the roadway.

What Happens

Wrong Way Riding. A bicyclist is driving on the road or sidewalk against the flow of traffic as a motorist approaches head-on. A motorist does not expect traffic to be approaching from the wrong direction. This increases the risk for one of the most deadly crashes between vehicles, the head-on collision. This is the main reason it is unlawful to drive facing traffic.

A bicyclist riding the wrong way on a sidewalk increases their risk of being hit by a car coming from a side street, driveway or alley.

What It Looks Like



What Bicyclists Should Do

- Go with the flow; drive in the same direction as traffic.
- Be a predictable part of traffic.
- Use extra care if you are legally permitted to ride on the sidewalk, motorists do not look for or expect to see faster moving traffic on a sidewalk.

What Motorists Should Do

- Drive focused, using your eyes and your ears for all traffic (cars, bicyclists, and pedestrians).
- Scan both the roadway and the sidewalk to the left and right, before proceeding.

What Happens

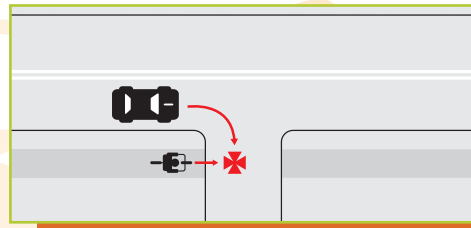
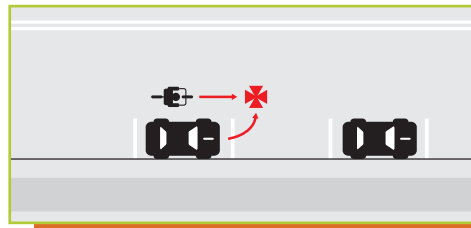
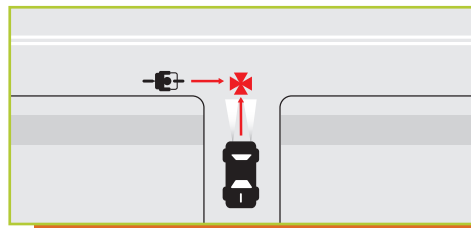
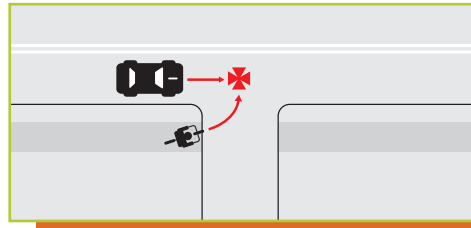
Bicyclist Enters Road From a Driveway, Alley, Curb or Sidewalk. (Bicycle Ride-Out)

A bicyclist enters the roadway from a residential or commercial driveway (store or parking lot), alley, curb, or sidewalk, without slowing, stopping or looking for traffic.

When a bicyclist enters a roadway suddenly or from where they are not expected, the motorist doesn't have enough time to see you, react, and stop to avoid a crash.

Motorist Enters Road from a Driveway or Alley. (Motorist Ride-Out)

Reverse the scenario; this time it is the motorist who fails to stop and look before entering the roadway. This scenario includes a motorist backing from a driveway or pulling out from parking space.



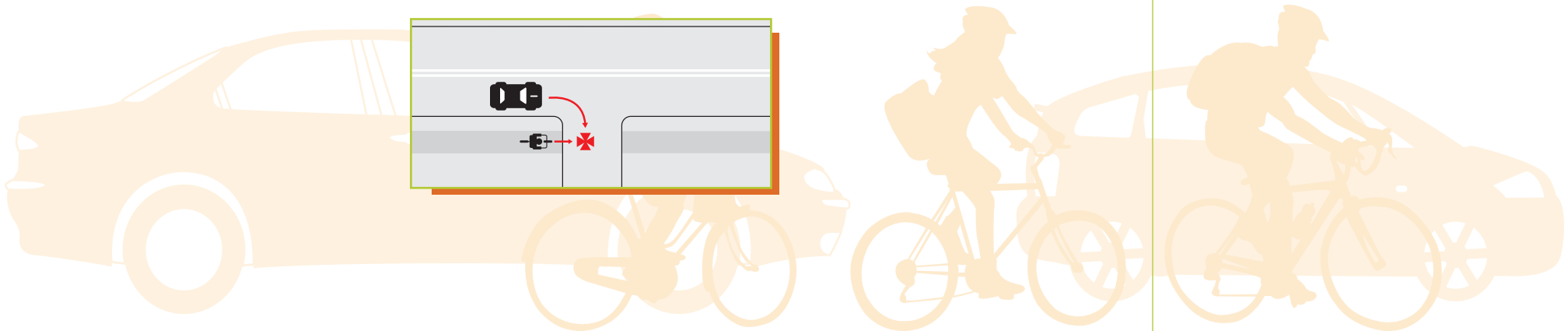
What It Looks Like

What Bicyclists Should Do

- Stop and look left-right-left for traffic before entering a roadway.
- Enter traffic only when clear.
- Drive focused, using both your eyes and your ears to look and listen for traffic (do not listen to music or use electronic devices while operating your vehicle).
- Drive defensively: look for motorists in vehicles in driveways or parked on the street and be prepared to avoid them if they don't see you.
- Learn and practice skill techniques taught in on-bike classes to avoid obstacles ("quick" or "snap" dodge techniques.)

What Motorists Should Do

- Drive focused when pulling out of driveways, around parked cars, alleys, or parking lots; look for all road users, including pedestrians and bicyclists.
- Obey marked speed limits, especially in residential neighborhoods and in school zones where children are more likely to be walking and bicycling.
- Be prepared to slow down and stop suddenly.



What Happens

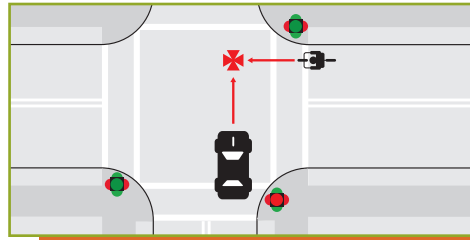
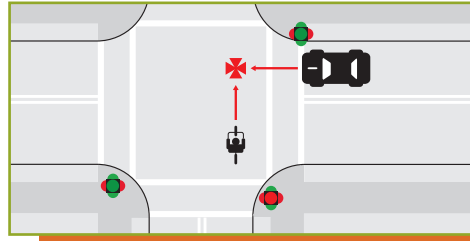
Bicyclist Rides Through Stop Sign or Red Light. The bicyclist fails to follow the rules of the road including obeying all signs and signals.

Motorist Rides Through Stop Sign or Red Light. Reverse scenario. This time it is the motorist who fails to obey the signs and signals.

Note: Failure to obey signs and signals is dangerous and can result in a crash between the two vehicles, or could cause the bicyclist to crash while quickly trying to avoid a crash.

Bicyclist Trapped. The bicyclist does not clear the intersection before the traffic signal turns green for cross traffic. A motorist fails to yield to the bicyclist already in the intersection – the bicyclist is “trapped” in the intersection.

What It Looks Like

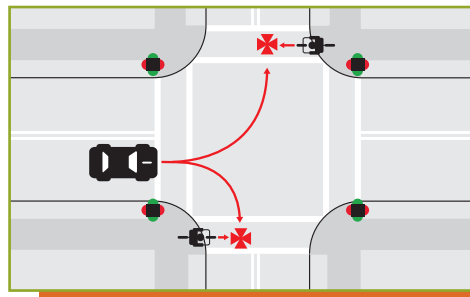
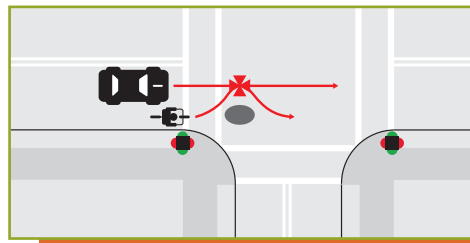


Bicyclist Turns Left or Swerves Suddenly Into Traffic. A bicyclist swerves left to either turn, change lane position, or to avoid an obstacle in the road (pothole, road debris, drain grate, or car door).

Motorist Turns Left into Bicycle. A motorist turns left and hits a bicyclist crossing in a crosswalk on the opposite side of the street.

A motorist fails to yield to an oncoming bicyclist on the opposite side of the street as the motorist makes a left turn, or the motorist fails to yield to a bicyclist on the same side of the street as the motorist makes a right turn.

A motorist fails to yield to the bicyclist already in the intersection – the bicyclist is “trapped” in the intersection. Also see: Trapped.



What Bicyclists Should Do

- Follow the same rules of the road as cars: obey all traffic signs and signals. Remember: green light means go, but only when clear.
- Communicate with drivers; use eye contact, wave or verbal, before entering an intersection or roadway.
- Ride defensively – watch for others who ignore signs and signals. Slow and scan for cross traffic at intersections; prepare to stop or quickly turn if a motorist doesn't stop.
- Learn quick evasive actions to avoid crashes.

What Motorists Should Do

- Obey all signs and signals, stopping or yielding to bicyclists as you would other vehicles on the roadway. Remember green light means go, but only when clear.
- Look for approaching bicyclists and pedestrians and yield to crossing traffic.
- Drive defensively – watch for others who ignore signs and signals.
- Be prepared to stop quickly to avoid traffic that may not see you.
- Drive alert: do not text or use handheld devices while driving. Follow your State or local laws regarding distracted driving.

- Be predictable; drive in a straight line, not in and out of cars.
- Stay alert; look ahead for potholes, debris or other hazards you need to avoid.
- When preparing to go around a hazard, scan over your left shoulder for traffic, use left turn signal, and scan again before changing your position. Be prepared to stop if moving your position isn't possible because of another vehicle.
- Learn and practice skills taught in on-bike classes to avoid obstacles (“quick” or “snap” dodge techniques.)
- Stay alert for obstacles motorists may need to avoid.
- Ride predictably where faster moving traffic is expected to be seen
- Ride to the left of the “door zone,” the width of an opened car door.
- Communicate with the driver, i.e. eye contact, head nod, hand motion, and verbal.

- Stay alert: bicyclists may need to suddenly swerve to avoid potholes, road debris, or other hazards which a car may otherwise just ride over.
- If parked on a street, look for traffic (bicyclists and vehicles) before opening car door. This type of crash, which bicyclists call “dooring” can be harmful to a bicyclist, especially when riding at full speed.
- Slow down and pass bicyclists with care. Follow any State or local laws for safe passing distance.
- When preparing to make a turn, be sure to look in all directions for traffic including bicyclists in the road or pedestrians and bicyclists attempting to cross the street.
- Don't underestimate the speed that some bicyclists can ride; yield as you would to a car when turning.
- Stay alert and look ahead for obstacles in the road. Be prepared to stop if moving your position isn't possible because of another vehicle.
- Where right turn on red is allowed, make a complete stop and look for other road users, including bicyclists and pedestrians before proceeding.

What Happens

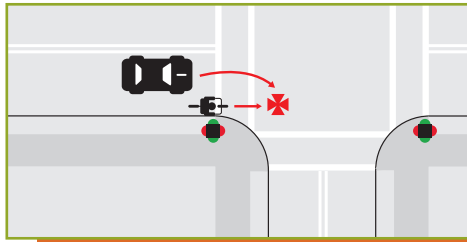
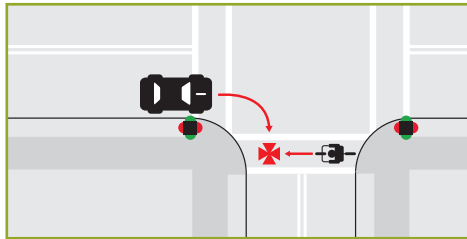
Motorist Turns Right Into Bicyclist (or Motorist Fails to Yield Before Turning Right).

The motorist fails to yield to an oncoming bicyclist (traveling straight) on the same side of the street as the motorist makes a right turn.

The motorist fails to yield to a bicyclist on the same side of the street as the motorist makes a right turn.

Also see: Wrong-way riding.

What It Looks Like



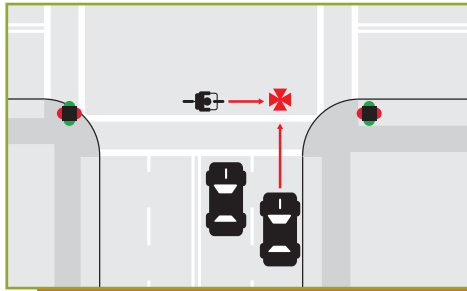
What Bicyclists Should Do

- Watch for motorists preparing to turn; attempt to make your presence known to motorist.
- Ride predictably: in the same direction as traffic, in a straight line, and where faster moving traffic is expected to be seen.
- Be seen: wear bright colors and reflective gear and lights at night.
- Be alert; scan for vehicles at all times. Communicate with drivers, i.e. eye contact, head nod, hand motion, or verbal.
- Be prepared to make an emergency turn or stop if necessary, even if you have the right of way. These skills can be learned and practiced in an on-bike class.

What Motorists Should Do

- Look in all directions for traffic, including bicyclists on the road and pedestrians on the sidewalks attempting to cross the street, before turning.
- Don't underestimate the speed of some bicyclists; yield to them as you would a car before turning.
- Make a complete stop where right turn on red is allowed. Look for other road users (right, left, and behind you) before going.

Multiple Threat. A bicyclist fails to clear the intersection before the light turns green for cross traffic, and the motorists' view of the bicyclist is obstructed by a vehicle to his/her side.



- Yield to each lane of traffic (stop at the second edge) to make sure each motorist sees you.

- Slow and prepare to stop when motorist in the next lane is stopped; the motorist may be stopped to allow another vehicle (car or bicycle) or pedestrian to cross.

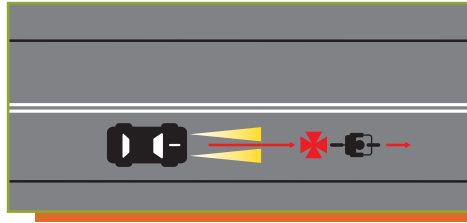
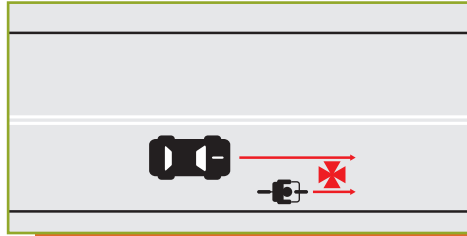
What Happens

Motorist Passes a Bicyclist.

A motorist fails to see and react to the bicyclist until it is too late to avoid a collision. This crash happens frequently on roads that are narrow, rural or often involves driver inattention (cell phone, texting, music, and/or impaired driving).

These crashes also occur at night when the bicyclist is not as easily visible as during the day.

What It Looks Like



What Bicyclists Should Do

- Be seen: wear brightly colored clothing during daytime hours.
- Avoid riding at night, if possible.
- Avoid dark conditions, narrow roads, roads with highway speeds over 35 mph, or roads with no shoulder.
- Increase your visibility if you must ride at night or darker conditions; use white front lights, red rear reflectors or lights, as required by law, and reflective materials on your bicycle and clothing.

What Motorists Should Do

- Be alert at all times for bicyclists, pedestrians, animals, debris, or other hazards.
- Reduce your speed at night to allow more time to react to the unexpected.
- Slow down and allow 3-5 feet passing distance between you and bicyclists for two reasons:
 1. Bicyclists may need to swerve around obstacles; and
 2. Some State or local areas have safe-passing laws. Rule of thumb: the higher your speed, the greater distance is needed between you and the bicyclist to increase their safety.
- Know the passing laws in your State or jurisdiction.
- Pass bicyclists only when it is safe to do so; wait until oncoming traffic passes or you're beyond a curve in the road.

