

# Handling Hazards

**Railroad Tracks:** Be sure to cross railroad tracks at a 90-degree angle; otherwise, the tracks may trap the front wheel, causing a fall.

**Potholes:** Hitting a pothole can cause a fall and injury or, at a minimum, damage wheel rims, spokes and forks. A wide swerve around a pothole can send you into the path of an overtaking car. Use the "rock dodge" maneuver to avoid potholes.

**Grates:** Tires may fall through sewer and drainage grates. Scan for traffic and move further into the lane to go around.

**Rain:** Watch out for slippery surfaces, especially leaves, motor oil and paint strips. Corner slowly, avoid puddles and brake early.

**Sand, Gravel, Leaves:** Steer around these when possible. If you must ride over them, steer a straight line and never brake or turn sharply.

Provisions of Tennessee's Bicycle Laws are presented as a public service in the interest of improved highway safety by:

**The Auto Club Group**  
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# Bicycles Are Vehicles



## Tennessee Bicycle Laws and Safety Tips

# Traffic Laws

In Tennessee, the bicycle is legally defined as a vehicle. Bicyclists have the same rights to the roadways and must obey the same traffic laws as the operators of other vehicles. The laws include: stopping at stop signs and red lights, riding with the flow of traffic, using lights at night, and yielding the right-of-way to other traffic when entering a roadway or changing course.

Below is a summary of the sections of code pertaining to bicycles.

### Bicycle Regulations 55-8-171—177

- The parent of any child and the guardian of any ward shall not authorize or knowingly permit any such child or ward to violate any of the provisions of this chapter and chapter 10, parts 1-5 of this title.
- A person propelling a bicycle shall not ride other than upon or astride a permanent and regular seat attached thereto, except for a certified police cyclist who is performing duties that require riding in a side dismounting position.
- No bicycle shall be used to carry more persons at one (1) time than the number for which it is designed or equipped.
- No person operating a bicycle shall carry any package, bundle or article which prevents the driver from keeping at least one (1) hand upon the handlebars.
- Every bicycle shall be equipped with a brake or brakes which will enable its driver to stop the bicycle within twenty-five feet (25') from a speed of ten miles per hour (10 mph) on dry, level, clean pavement.

### Wearing Helmet 55-52-104

- In order to reduce the incidence of disability and death resulting from injuries incurred in bicycling accidents, the state of Tennessee requires that, while riding on a bicycle on state highways, streets and sidewalks, all bicycle operators and passengers under sixteen (16) years of age wear approved protective bicycle helmets.

### Lighting 55-8-177

- Every bicycle when in use at nighttime shall be equipped with a lamp on the front, which shall emit a white light visible from a distance of at least five hundred feet (500') to the front and with a red reflector on the rear of a type approved by the department of safety which shall be visible from all distances from fifty feet (50') to three hundred feet (300') to the rear when directly in front of lawful upper beams of head lamps on a motor vehicle. A lamp emitting a

red light visible from a distance of five hundred feet (500') to the rear may be used in addition to the red reflector.

### Roadway Position 55-8-175

Any person operating a bicycle upon a roadway at less than the normal speed of traffic at the time and place and under the conditions then existing shall ride as close as practicable to the right-hand curb or edge of the roadway, except under any of the following situations:

- When overtaking and passing another vehicle proceeding in the same direction;
- When preparing for a left turn at an intersection or into a private road or driveway; or
- When reasonably necessary to avoid conditions including, but not limited to, fixed or moving objects, parked or moving vehicles, pedestrians, animals, surface hazards, or substandard width lanes that make it unsafe to continue along the right-hand curb or edge. For purposes of this section, "substandard width lane" means a lane that is too narrow for a bicycle and another vehicle to travel safely side by side within the lane.
- Persons riding bicycles upon a roadway shall not ride more than two (2) abreast except on paths or parts of roadways set aside for the exclusive use of bicycles. Persons riding two (2) abreast shall not impede the normal and reasonable movement of traffic and, on a laned roadway, shall ride within a single lane.

### Motor Vehicles 55-8-174

- No person riding upon any bicycle, roller skates, sled or toy vehicle shall attach such bicycle, roller skates, sled or toy vehicle, or such person's own body, to any streetcar or vehicle upon a roadway.



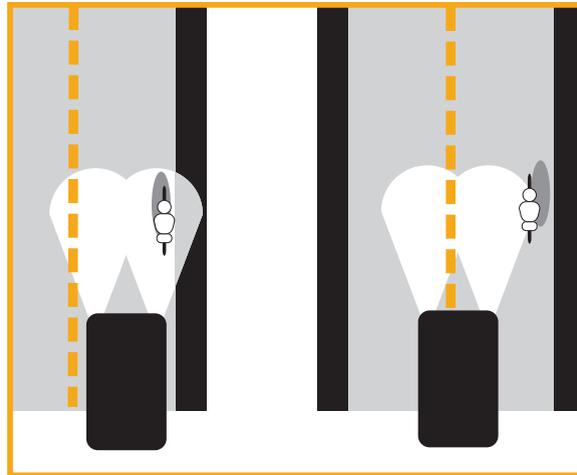
# Avoiding Crashes

## Night Riding

A significant percentage of all adult fatal bicycle accidents in Tennessee occur during twilight and night hours. Many factors compound the danger of riding at night such as:

- Motorists driving under the influence of alcohol.
- Motorists' ability to see what is ahead is limited to the area illuminated by headlights. Visibility is further reduced by the glare from lights of oncoming cars.
- Roadways with motor vehicle speeds above 40 mph pose extreme risk at night.
- At night, a motorist may not immediately recognize that a red reflector on the rear of a bicycle is attached to something on or near the roadway. A tail light and additional reflective gear on the bike or on the cyclist can help a driver recognize a bicycle ahead more easily (see "Safety Equipment" section).

For those who must ride at night, use of additional lighting and reflectors is strongly encouraged. The use of leg lamps or any other lights that create motion should be considered. Battery-powered and generator-type systems are readily available and a small investment when it comes to staying alive. Reflective tape on the bicycle and reflective clothes are additional insurance.

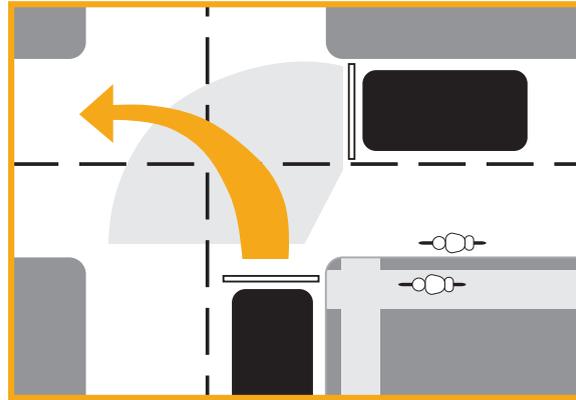


TIP

When a car approaches from the rear at night, watch your shadow as it is cast by the headlights. If it moves to the right as the car nears, the driver has moved to the left to pass. If it is stationary, the driver has not detected you. *Get out of the way!*

## Failure to Yield

A crash may be caused by failure on the part of the bicyclist or motorist to yield the right-of-way at driveways and intersections. A cyclist should watch vehicle movement. Bicyclists can help prevent crashes by yielding the right-of-way when required to, stopping for red lights and stop signs, and scanning to make sure the way is clear before turning left.



TIP

Even safety-conscious motorists seldom scan 90° to the right before making a left turn because vehicles will not be approaching from that direction in the lane—unless they are moving *against the flow of traffic*.

## Wrong-Way Riding

Another cause of bicycle/car crashes is bicyclists riding against traffic. By riding against traffic, bicyclists remove themselves from the normal scanning pattern of other vehicle operators, making them more likely to be hit. In addition, the reaction time of both the motorist and bicyclist approaching one another is cut dramatically. Riding on the right, as required by law, can help prevent this crash from happening.

## Opening Car Doors/Parked Cars

Some crashes are the result of a motorist opening the door of a parked car in front of an overtaking bike. Avoid this by riding no closer than three feet to a parked car. Also, be sure to watch for signs that a motorist wants to move into traffic. Be prepared to use the "panic stop."

## Overtaking Cars

Statistically, this is not a big problem during daylight hours. In urban areas, it typically involves a motorist who misjudged passing space in a lane that both the motorist and the cyclist

were attempting to share. Many bicyclists worry about what is behind them (this is why some ride against traffic). Becoming proficient at scanning (see Scanning Tips) to occasionally check traffic to the rear will ease worries about involvement in this type of accident.

## Communicating With Motorists

Always signal your intentions and needs, and exercise courtesy where applicable. A simple wave of the hand as a "thank you" gesture can let motorists know you appreciate their attention to your safety needs.

## Scanning Tips

Like most riding skills, scanning to the rear takes practice. If you have trouble looking over your shoulder without swerving, try the following:

- Get a friend to hold your handlebars while you sit on the bike. Look over your left shoulder, keeping both hands on the handlebars, and notice what your hands, arms and shoulders are doing. Your left side is probably pulling back on the handlebar.
- After a little practice at moving only your head, find an empty parking lot and try it while riding in a straight line. Then try dropping your left hand and resting it on your thigh while looking over your left shoulder and coasting for a while.

# Safety Equipment

**Helmets:** Nearly 75 percent of all bicycle-related deaths are the result of head injuries. The use of helmets would prevent many of these deaths.



A bicycle shop is a good place to buy a helmet. A knowledgeable professional should assist you with selection and proper fit.

**Gloves:** Gloves provide protection for hands in case of a fall and cushion them from handlebar vibration.

**Mirror:** Use a rearview mirror to keep track of traffic approaching from behind. Mirrors that attach to glasses or a helmet allow for scanning by turning your head from side to side. Some attach on the handlebars but may only give a view of your leg or hip. Shop with care.

**Lights and Reflective Gear:** Important for any after-dark riding, inexpensive LED headlights and taillights for bicycles can now run for many hours on alkaline or rechargeable batteries. In addition to the rear reflector required after sunset, reflective elements on ankle straps, backpacks, and other gear can also help a cyclist stand out at night.

**Rear Carrier:** Bicycle riding requires concentration. Do not add to distractions by trying to carry things in your hands. Use a carrier.

# Emergency Maneuvers

**Note:** There is an element of risk in practicing these emergency maneuvers. You may fall, so wear long pants, long sleeves, gloves and a helmet. Start slowly, then work up to normal speed.

**Rock Dodge:** A wide swerve around a pothole or rock can send you into the path of an overtaking auto. A "rock dodge" allows you to avoid these hazards without swerving.

For practice, toss a sponge into a clear area in an empty parking lot. Slowly pedal toward the sponge, and at the last second, turn your handlebars left to avoid it. Quickly turn back to the right to prevent a fall. Then straighten out. Hitting the object with your rear wheel is not serious, since the front wheel steers the bicycle.

**Emergency Turns:** If a car suddenly turns into your path, what do you do? Hopefully, you anticipate the problem and can stop in time. If you can't stop, then turn with the car. To do this, turn the front wheel to the left toward the car, forcing your body to lean to the right. Now quickly turn to the right at a sharp angle to follow alongside the car. Most times, you will avoid the collision.

Practice this technique in the parking lot. It will probably feel uncomfortable at first.

**Panic Stop:** Stopping fast requires a harder use of the front brake than of the rear brake. However, this can cause you to catapult. To counteract this, practice the following in an empty parking lot wearing a helmet: Ride slowly; then, at a predetermined point, apply both brakes evenly while moving back on the saddle and lowering your chest horizontally. As you move back and down, apply greater pressure to the front brake until it is about three times the pressure on the rear brake.

Continue practicing at gradually faster speeds, but remember, if you feel the rear wheel beginning to skid, let off the front brake a bit.