



Driving on the Right Side of the Road Bicycle Safety



JUST THE FACTS

NATIONALLY:

- 857 bicyclists died in traffic crashes in 2018.¹
- 2018 bicyclist fatalities increased by 51, a 6.3-percent increase. The 2018 number of bicyclist fatalities is the highest since 1990 (859 fatalities). 52,000 bicyclists were injured in traffic crashes in 2010.²
- 63% of bicyclist fatalities occurred at non-intersections.³
- Slightly more pedalcyclist fatalities occurred in daylight crashes (48%) compared to when it was dark (47%); 3 percent of the fatalities occurred during dusk, and the remaining 2 percent during dawn light conditions.⁴
- Bicyclists under the age of 16 accounted for 7% of all cyclists killed.⁵
- Alcohol involvement was reported in more than 37% of all fatal bicyclist crashes in 2017.⁶

TEXAS:

- 68 cyclists died in traffic crashes in 2019 in Texas.⁷

HELMETS:

- Helmet use has been estimated to reduce the odds of head injury by 50 percent, and the odds of head, face or neck injury by 33 percent.⁸
- Although nearly 70% of all fatal bicycle crashes involve head injuries, only about 20-25% of all bicyclists wear bicycle helmets.⁹
- Universal bicycle helmet use by children would prevent 39,000 to 45,000 head injuries, and 18,000 to 55,000 scalp and face injuries per year.¹⁰

ENVIRONMENT:

- If every car commuter who bikes switches to biking, he or she can save 400 gallons of gas a year.¹¹
- Eight bicycles can be parked in the space required for just one car.¹²

IT'S THE LAW

- In general, a person riding a bike has the same rights and duties as someone driving a car.¹³ Bicyclists should obey traffic laws, including stopping for red lights and stop signs.
- A person operating a bicycle must only ride on a bicycle with a permanent and regular seat attached to it.¹⁴
- A person must not use a bicycle to carry more people than the bike is designed or equipped to carry.¹⁵
- While riding a bike, a person may not carry an object that prevents the person from operating the bicycle with at least one hand on the handlebars.¹⁶
- A person operating a bicycle may not hang onto or attach the bike to a streetcar or vehicle on the roadway.¹⁷
- If a person on a bicycle is moving slower than other traffic, they should ride as near as is practical to the right curb or edge of the road unless:
 - they are passing another vehicle moving in the same direction;
 - the person on the bike is preparing to turn left;

- something (such as an object, parked or moving vehicle, pedestrian, animal, or surface hazard) prevents the person from safely riding next to the right curb or edge of the roadway; or
- the person is operating a bicycle in an outside lane that is:
 - less than 14 feet in width and does not have a designated bicycle lane adjacent to that lane
 - too narrow for a bicycle and a motor vehicle to safely travel side-by-side.¹⁸
- A person riding a bicycle on a one-way roadway with at least two traffic lanes may ride as near as is practical to the left curb or edge of the roadway.¹⁹
- Two people riding bicycles may ride side-by-side. Two people riding side-by-side must stay in a single lane. If two people are riding side-by-side, they cannot impede the normal and reasonable flow of traffic on the roadway. More than two riders may not ride side-by-side unless they are riding on a part of a roadway set aside for the exclusive operation of bicycles.²⁰
- A person may not operate a bicycle unless the bicycle is equipped with a brake capable of making a braked wheel skid on dry, level, clean pavement.²¹
- A person may not ride a bicycle at night unless the bicycle is equipped with:
 - a lamp on the front of the bicycle that emits a white light visible from a distance of at least 500 feet; and
 - an approved red reflector on the back of the bicycle that is visible directly in front of car headlights at all distances between 50 and 300 feet or a red lamp that is visible from a distance of 500 feet to the rear of the bicycle.²²

KEEP IT SAFE

- Always ride with your hands on your handlebars.²³
- Although not required by state law, it is highly recommended that you wear an approved bicycle helmet. More children age 5 to 14 go to hospital emergency rooms for injuries associated with bicycles than with any other sport. Many of these injuries involve the head. Helmet laws ensure the safety of our children.²⁴
- Replace any helmet that has been involved in a crash or is damaged.²⁵
- Remove your helmet before using playground equipment or climbing a tree as there is a risk of strangulation.²⁶
- Stop and check for traffic in both directions before riding out into the street.²⁷
- Obey all stop signs, stop lights, and other traffic control devices.²⁸
- Don't ride too close to parked cars. Doors can open suddenly.²⁹
- Cross at intersection. When you pull out between parked cars, drivers can't see you coming.³⁰
- Reduce speed and exercise caution when near pedestrians.
- Move off the roadway to stop, park, or repair your bike.
- Wear highly visible clothing when cycling at dusk or night.
- Beware of wet surfaces as they are slick.
- Make sure your bike is in good working condition.

Selecting a Helmet: Measure around your head about one inch above the eyebrows. Select a helmet with a size range that includes your head size. The helmet should be worn straight and level, resting straight on top of the head, low on the forehead, just above the eyebrows with the rim level from front to back.

- Learn some hand signals. These are like turn signals and brake lights for bikers. It helps cars and trucks know what you will do next, so they don't run into you.
 - **Turn Left:** To signal that you are going to make a left-hand turn on your bike, all you have to do is stick your left arm straight out, parallel to the ground.



- **Turn Right:** Stick the upper part of your left arm straight out beside you, with your elbow bent at a right angle and your forearm (the part of your arm between your elbow and your wrist) vertical to the ground. Your hand is pointing straight up toward the sky. Basically, your left arm looks like the letter L.



- **Slow or Stop:** Let anyone who may be behind you know you're about to slow down or stop/hit the brakes by placing your upper left arm parallel to the ground and your forearm down toward the ground. Basically, it is the opposite of the right-turn signal.



What Other Safety Tips Can You Suggest?

ADDITIONAL RESOURCES:

- <http://www.nhtsa.gov/people/injury/pedbimot/bike/kidsandbikesafetyweb/index.htm>
- http://kidshealth.org/kid/watch/out/bike_safety.html
- http://fcs.tamu.edu/safety/passenger_safety/youth_traffic_safety.php
- <http://www.ibike.org/education/safety-kids.htm>
- <http://www.livestrong.com/article/65974-bike-safety-children/>
- <http://www.bhsi.org/child.htm>
- <http://safekids.org>
- <http://www.kidzworld.com/article/17102-bike-safe-use-hand-signals>

¹ National Highway Traffic Safety Administration, Traffic Safety Facts, 2018 Data, *Bicyclists and Other Cyclists*, DOT HS 812 765, <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812765>.

² *Id.*

³ *Id.*

⁴ *Id.*

⁵ *Id.*

⁶ *Id.*

⁷ Texas Motor Vehicle Traffic Crash Facts Calendar Year 2019, Texas Department of Transportation.

⁸ Publication bias and time-trend bias in meta-analysis of bicycle helmet efficacy: A re-analysis of Attewell, Glase and McFadden, 2001, <https://www.sciencedirect.com/science/article/pii/S0001457512004253>.

⁹ *Id.*

¹⁰ *Id.*

¹¹ National Highway Traffic Safety Administration, *Safe Routes to School*, <http://www.nhtsa.gov/people/injury/pedbimot/bike/Safe-Routes-2002/forms.html>.

¹² *Id.*

¹³ Tex. Transp. Code Ann. § 551.101(a).

¹⁴ *Id.*

¹⁵ Tex. Transp. Code Ann. § 551.102(b).

¹⁶ Tex. Transp. Code Ann. § 551.102(c).

¹⁷ Tex. Transp. Code Ann. § 511.102(d).

¹⁸ Tex. Transp. Code Ann. § 551.103(a).

¹⁹ Tex. Transp. Code Ann. §551.103(b).

²⁰ Tex. Transp. Code Ann. § 551.103(c).

²¹ Tex. Transp. Code Ann. § 551.104(a).

²² Tex. Transp. Code Ann. § 551.104(b)

²³ Kids Health, *Bike Safety*, http://kidshealth.org/kid/watch/out/bike_safety.html (hereinafter *Bike Safety*).

²⁴ National Highway Traffic Safety Administration. *Easy Steps to Properly Fit a Bicycle Helmet*, DOT HS 810 600, <http://www.nhtsa.gov/people/injury/pedbimot/bike/easystepsweb/index.htm>.

²⁵ National Highway Traffic Safety Administration. *Easy Steps to Properly Fit a Bicycle Helmet*, DOT HS 810 600, <http://www.nhtsa.gov/people/injury/pedbimot/bike/easystepsweb/index.htm>.

²⁶ Bicycle Helmet Safety Institute, *Playgrounds and Helmets Don't Mix!*, <http://www.bhsi.org/playgrou.htm>.

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*