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SAFETY

# BICYCLE SAFETY



# OUR MISSION

The mission of The USAA Educational Foundation is to help consumers make informed decisions by providing information on financial management, safety concerns and significant life events.



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## 2 WHAT YOU SHOULD KNOW

### **BICYCLING IS FUN, GOOD EXERCISE, AND GOOD FOR THE ENVIRONMENT.**

Bicycling is fun, good exercise, and good for the environment.

You and your family can enjoy many years of safe bicycle riding when you understand the risks involved and take steps to prevent accidents and injuries.

### **5 Keys To Safe Bicycling**

1. Wear a bicycle helmet.
2. Be visible.
3. Stay alert.
4. Know and obey traffic rules.
5. Be predictable.

### **Wear A Bicycle Helmet**

You should always wear a bicycle helmet. Do not assume you will be safe from injury just because you are going a short distance or riding on an unpaved surface. Many serious bicycle accidents occur on residential streets or bike paths and do not involve vehicles.

Always remove your helmet when you finish riding and instruct children to do the same. Children should never wear helmets while playing on playground equipment. Helmet straps could get caught on the equipment and cause injury.

### **What To Buy**

When purchasing a helmet, look for one with a CPSC sticker, indicating that the helmet meets safety standards set by the U.S. Consumer Product Safety Commission. Snell-certified helmets meet even higher safety standards. Effective bicycle helmets have the following features:

- A full-cover hard shell that is vented to prevent overheating.
- A stiff foam liner that absorbs shock while remaining snugly against your head.
- A strong, comfortable strap and fastener to keep the helmet on your head.

It is best to purchase a helmet specifically designed for bicycling. However, if you choose to purchase one made for multiple sports such as bicycling and skating, make sure it is certified for each sport.

## How Your Helmet Should Fit

To ensure a properly fitting helmet:

- Adjust the fitting pads or fitting ring so the inside of the helmet touches your head evenly all the way around.
- Make sure the helmet fits low on your forehead, with the brim just two finger-widths above your eyebrows. You should be able to see the edge of the brim.
- Adjust the rear straps and then the front straps until they come together just under your ears at the jawbone.
- Adjust the chin strap until it is comfortably snug.
- Adjust the rear stabilizer, if the helmet features one.
- Shake your head and push your helmet forward, then back. If you can move the helmet more than one inch in any direction, work with the straps and pads until it is snug.

You may need to repeat these steps several times to get the right fit. If no adjustment seems to work, find another helmet.

## When To Replace Your Helmet

You should replace your helmet if:

- You have a crash and hit your head, even if there is no visible damage to the helmet. After a crash, the helmet's internal structure may be compromised and its foam may not retain its cushioning ability.
- Your current helmet is more than 5 years old.
- The straps are broken or worn and cannot be replaced.
- The buckle is cracked or no longer works and cannot be replaced.

## 4 BUY THE CORRECT BICYCLE

Your bicycle can be a safety hazard if it is the wrong type or size, or if it is improperly equipped. A knowledgeable bicycle salesperson can help you find the proper bicycle for your needs. Before shopping, think about the following:

- How often will you ride — daily, weekly, monthly?
- Where will you ride — bike path, road, off-road?
- How will you use your bicycle — for fun, exercise, regular transportation?
- What is the difficulty level of likely routes — straight and level, slight inclines, steep inclines?

### Determine The Correct Type

Bicycles are designed for various types of riding and generally fall into these categories:

- Road bicycles tend to be fast, lightweight and aerodynamic.
- Off-road bicycles feature wide, knobby tires for better traction in dirt and on unpaved trails.
- Mountain bicycles have sturdier frames than other bicycles and are built for comfort when riding over uneven surfaces.
- Hybrid bicycles combine features of road and mountain bicycles, being faster on the road than most mountain bicycles and more comfortable than most road bicycles.
- Recumbent bicycles and tricycles are two- and three-wheel versions of hybrid bicycles that generally are more comfortable for older riders and riders with orthopedic problems. Tricycles are very stable but lower to the ground and require a warning flag.

### Get The Correct Size

Riding a bicycle that is too large or too small hinders your ability to control the bicycle. An experienced bicycle salesperson can help you determine the proper size bicycle for you. You will need to consider the following:

- Frame size.
- Seat height and size.
- Handlebar height (or stem length) and angle.

When purchasing a child's bicycle, The American Academy of Pediatrics (AAP) says it is essential to purchase one properly fitted for the child who will ride the bicycle. Oversized bicycles are dangerous to ride, so do not buy one for your child to grow into.

## Equip Your Bicycle

Make sure your bicycle is equipped with appropriate accessories:

- White headlamp and a red rear blinker/reflector for night riding.
- Rack over the rear wheel or a sturdy backpack to carry books, a briefcase or other items. Avoid using front baskets, which can interfere with steering.
- Basic tool kit with spare tubes, tire patch kit and tire pump.
- Child seat or trailer if you will carry a young child during your bicycle rides. Make sure the seat or trailer is properly mounted. Child seats should feature spoke guards to protect the child's feet.
- Water bottle holder to carry a drink during your bicycle rides. The holder should attach to the bicycle frame.
- Bell or horn to indicate your intention to pass.

## 6 BEFORE YOU RIDE

Take the following steps before riding your bicycle — especially if you will ride long distances or in hazardous conditions.

### Wear Proper Attire

When riding, you should always wear:

- Sunglasses or eyewear to protect your eyes from wind, insects, dust and road debris.
- Brightly colored clothing for daytime riding.
- Reflective, light-colored clothing for nighttime riding.
- Sunscreen rated SPF 15 or higher.

Also consider:

- Padded bike shorts for comfort.
- A jersey made of quick-drying fabric.
- Gloves to absorb shock, minimize numbness and protect hands from blisters or injury.
- Bicycle shoes with stiff soles to protect toes and improve pedaling efficiency.
- A rearview mirror mounted to your helmet or eyeglasses.

### Items To Carry

- Your driver's license or other form of identification.
- Cell phone.
- Money.
- A basic tool kit with spare tubes, a tire patch kit and tire pump.
- Plenty of water.
- Snack items.

## INSPECT YOUR BICYCLE

- Lift the bicycle by its seat and spin the rear wheel. It should spin freely without wobbling, slowing quickly, or touching the brake pads.
- Apply the rear brake smoothly to stop the wheel. The brake pads should touch the wheel rim evenly. When released, the brake should spring back into place.
- Lift your bicycle by the handlebars, and spin the front wheel. It should spin freely without wobbling or touching the brake pads.
- Apply the front brake smoothly to stop the wheel. The brake pads should touch the wheel rim evenly. When released, the brake should spring back into place.
- Inspect brake pads. Replace them if they become worn or cracked. They should be at equal distances from the wheel rim.
- Check the spokes on both wheels. Replace broken spokes before riding.
- Check the tire tread. There should be no worn patches.
- Make sure tires are properly inflated.
- Check your handlebars. Stand in front of your bicycle holding the wheel tightly between your knees and try to move the handlebars back and forth or up and down. They should not move.
- Lift the frame near the handlebars and turn the front wheel back and forth. It should swivel freely.
- Make sure brake levers are secure.
- Apply the brakes and try to move the bicycle forward and backward.
- Make sure the ends of the handlebars are protected.
- Make sure the seat is secure and does not move from side to side.
- Clean reflectors and headlight. Make sure they are securely attached.
- Lubricate the chain if needed.
- Take your bicycle for an annual tuneup and safety check to ensure it remains in good condition.

## 8 ON THE ROAD

When riding your bicycle on public streets, you are required by law to follow the same rules as any other vehicle driver. You also have the same rights as drivers of other vehicles.

### Rules Of The Road

- Be alert and pay attention.
- Ride with the traffic, on the right side of the road. It is dangerous and illegal to ride against traffic on the left side of the road.
- Obey traffic lights, signs and signals, as if you were driving a motor vehicle.
- Be cautious at intersections. Always make sure the way is clear before entering an intersection.
- Yield to pedestrians.
- Ride in bicycle lanes and in the street instead of the sidewalk.
- Ride to the right if you are traveling more slowly than other traffic unless you are turning left, passing another bicycle or vehicle, or avoiding a road hazard.
  - You have the right to use the full lane.
  - Stay about a car-door's width away from parked vehicles.
- Pass vehicles on the left side.
- Use extra caution in bad weather conditions, allowing extra time and space to stop.
- When using a crosswalk, walk your bicycle — do not ride.
- Never wear headphones while riding.
- Be aware of traffic around you and be prepared to brake quickly.
- Avoid riding in other vehicle drivers' blind spots.
- Do not follow a truck or other large vehicle too closely. Drivers traveling in the opposite direction cannot see you and could turn into you at an intersection.
- Never drink alcohol and ride.
- Avoid riding at dusk or after dark, when it is most difficult for motorists to see you. If you must ride at night, wear reflective, light-colored clothing, and use a white headlamp and a rear blinker/reflector on your bicycle.

## Be Predictable

- Use hand signals to communicate your intentions to other vehicle drivers and bicyclists.
  - Before turning right, hold your left arm out and bent up.
  - Before turning left, hold your left arm straight out.
  - Before slowing or stopping, hold your left arm out and bent down with your palm to the rear.
- Communicate verbally.
  - Warn other bicyclists and pedestrians of your presence or changes in direction or speed.
  - Say “passing on your left” to notify pedestrians or other bicyclists that you are moving around them. Avoid passing on the right.
- Ride in a straight line and avoid sudden swerves.

## Practice Group Safety

- Communicate clearly. Riders at the front of a group of bicyclists should:
  - Call out “left turn,” “slowing,” “stopping” or other instructions to inform bicyclists behind you of changes in direction or speed.
  - Point to road hazards and shout “hole,” “bump” or “gravel.”
- Ride in single file. Keep a safe distance between your bicycle and the bicycle ahead. Do not overlap your front wheel with another rider’s rear wheel.
- Watch for traffic behind you. Riders at the back of the group should say “car back” if a vehicle is approaching from the rear.
- Do not follow other bicyclists into an intersection without checking for yourself that it is safe to cross. Each rider should make sure the way is clear before entering an intersection.
- Move off the road when you stop. The lead rider should move well out of the way of traffic so other riders can pull off the road behind him without interfering with oncoming vehicles.
- Stay in pairs if the bicycling group becomes spread out or separated. The last two riders should stay together in the event either needs assistance.

### WHAT TO DO ABOUT AGGRESSIVE DRIVERS

If an aggressive driver confronts you, do not challenge the driver or respond in a confrontational manner. Note the vehicle’s make and model and license plate number and report the incident to the police.

## 10 TEACH CHILDREN BICYCLE SAFETY

### IS YOUR CHILD READY?

According to The American Academy of Pediatrics (AAP), most children are not ready to ride a two-wheeled bicycle until 5 or 6 years of age. Along with physical skills, your child must demonstrate the mental readiness and self-control for understanding and obeying safety rules.

Teach children about bicycle safety as soon as they begin learning to ride.

### Starting Out

- Purchase a bicycle with coaster brakes for young children. Avoid hand brakes.
- A bicycle that is too small or too large is a safety hazard. Refer to the “Buy The Correct Bicycle” section of this publication for more information.
- Adjust the bicycle seat and handlebars for your child, making sure pedals, handlebars and brakes may be comfortably reached.
- Buy a Consumer Product Safety Commission (CPSC)- or Snell-approved helmet that properly fits your child.
- Show your child how to use the brakes to stop the bicycle.
- Practice riding often with your child, reviewing safety rules as you go.

## Set Clear Rules

Children — and all bicycle riders — should always wear a helmet when riding. In addition, you should set age-appropriate limits on when, where, and how children may ride. Be prepared to take away children's riding privileges if they do not follow these rules.

### Young Children

Young children just learning to ride should follow these rules.

- No riding without adult supervision.
- No riding on busy streets.
- No riding at dusk or after dark.
- Always stop for stop signs and before entering a street or intersection to make sure it is safe to cross.
- Always walk your bicycle across the street, crossing only at the corner, not in the middle of the block.

### Older Children And Teens

As they get older, children should remember the following.

- Avoid riding at dusk or after dark. This is very risky for children and adults.
- Obey all traffic signs, signals and laws when riding in the street.
- Ride on the right side of the street, with the traffic.
- Use correct hand signals for stopping and turning.
- Keep at least one hand on the handlebars at all times. Carry books and other items in a backpack or rear-wheel basket.
- Keep the bicycle in good repair, checking the tires, seat, handlebars and brakes before riding.

## Be A Good Example

Practice what you teach about bicycle safety. Be diligent about wearing a helmet, stopping at stop signs and following other important safety rules. Your children will learn more from your example than from your words.

CHILDREN SHOULD	
Always	Never
<ul style="list-style-type: none"> <li>• Wear a helmet.</li> <li>• Ride to the right with traffic.</li> <li>• Look all ways and use hand signals before turning.</li> <li>• Stop for stop signs and before entering a street or intersection to make sure it is safe to cross.</li> </ul>	<ul style="list-style-type: none"> <li>• Ride at dusk or after dark.</li> <li>• Ride into a street or intersection without stopping and checking to make sure it is safe to cross.</li> <li>• Ride in the middle or to the left against traffic.</li> <li>• Turn without warning.</li> <li>• Follow other bicycle riders into an intersection without checking to make sure it is safe to cross.</li> </ul>

**WHEN A DOG CHASES YOU, IGNORE THE DOG OR FIRMLY YELL, “NO.” IF THE DOG CONTINUES CHASING YOU, STOP AND DISMOUNT, KEEPING THE BICYCLE BETWEEN YOU AND THE DOG.**

## Have Fun

Riding a bicycle is an enjoyable way to exercise and have fun. By taking steps to prevent accidents and avoid injury — and teaching children to do the same — you and your family can enjoy riding bicycles safely for many years to come.

## RESOURCES



The USAA Educational Foundation offers the following publications.

**MAKING YOUR HOME A SAFER PLACE (#531)**

**INSTALLING CHILD SAFETY SEATS (#544)**

**CHOOSING A HEALTHY LIFESTYLE (#546)**

**HELPING CHILDREN DEVELOP HEALTHY HABITS (#547)**

**PREPARING FOR PARENTHOOD (#563)**

**KEEPING EVERY YOUTH SAFE (K.E.Y.S.)**

- **BEHIND THE WHEEL (#565)**
- **ON THE ROAD (DVD) (#567)**
- **COST OF DRIVING (#568)**

**SAFE ON THE ROAD (#570)**

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