

Bicycle Safety

Safe Bicycling Starts Early

Learning to ride a bike is a developmental milestone in the life of a child. It is a source of pride and a symbol of independence and freedom. However, many children are seriously injured or even killed when they fail to follow basic bicycle safety rules. When a child receives his or her first tricycle or bicycle, a lifelong pattern of vehicle operation is begun. A bike is more than a toy; it is a vehicle that is a speedy means of transportation, subject to the same laws as motor vehicles. Riding a bike is fun if it's done safely.

The following information, based on American Academy of Pediatrics Guidelines, will help your children learn about safe bike riding.

Establish the helmet habit early

A bicycle helmet protects your child from serious injury and should always be worn. Have your children wear helmets as soon as they start to ride tricycles and when they are passengers on the back of an adult's bike. If the helmet is worn from day one it helps children develop the helmet habit. A helmet should be worn on every bike ride, no matter how short or how close to home. Many accidents occur in driveways, on sidewalks and on bike paths, and most bike crashes happen near home. Children learn best by example, so wear a helmet yourself. Reward them with praise or special treats or privileges when they wear their helmets without having to be told, and encourage their friends to wear helmets.

Explain to your children why they must wear helmets: you love and value them and want to protect them; they can permanently hurt their brains or even die of head injuries. Explain that most athletes use helmets in other sports, and riding a bike is no different.

Be consistent. Don't let children ride bikes without helmets. If you allow them to ride occasionally without a helmet they won't believe that helmet use is really important.

Choosing a Bicycle Helmet

Bike helmets are very protective in head-first falls at fairly high speeds. They are light and well ventilated for comfort. They are available at bicycle shops and at some discount department stores and toy stores in toddler, child and adult sizes. A bicycle helmet is made specifically to protect the head in any fall that may occur while biking. Other helmets, such as football helmets or hard hats are made to protect the head from other types of injury. Only a multi-sport helmet certified by the Consumer Product Safety Commission for bicycle use is an acceptable alternative to a bicycle helmet.

- To be sure a bicycle helmet will keep your child safe, buy only a helmet that meets the safety standards of the Consumer Product Safety Commission (CPSC). These helmets are labeled-check the inside.
- A multi-sport helmet certified to meet the CPSC standard for bicycle helmets also is acceptable.
- Each type of helmet is designed for protection in specific conditions and may not offer enough protection in bike accidents or falls.
- It is mandatory that all helmets manufactured after March 1999 comply with a safety standard issued by the CPSC. In addition, older helmets certified by the American Society for Testing and Materials (ASTM) or the Snell Memorial Foundation may continue to be used.
- Do not resell, donate or buy a used bike helmet because it may be too old to provide protection or may have been in a crash.

- Let your child help in choosing the helmet. He will let you know if it is comfortable, and if he likes the design he is more likely to wear it.
- There are two types of helmets, hard shell and soft shell. Both types meet the CPSC standards; the main difference is style and comfort. The essential part of the helmet for impact protection is a thick layer of firm polystyrene (plastic foam) that crushes on impact, absorbing the force of the blow. All helmets require a chin strap to keep them in place in a crash.
 - ✓ Hard-shell helmets also have a hard outer shell of plastic or fiberglass that provides a shield against penetration by sharp objects and holds the polystyrene together if it cracks in a fall or crash. These helmets are sturdier, but tend to be heavier and warmer than the soft-shell models.
 - ✓ Soft-shell helmets have no hard outer shell but are made of an extra-thick layer of polystyrene covered under a cloth cover or surface coating. The cloth cover is an essential part of many soft-shell helmets and holds the helmet together if the polystyrene cracks on impact. These helmets are lighter than the hard-shell versions but may be less durable.
- A helmet should be worn squarely on top of the head, covering the top of the forehead. If it is tipped back it will not protect the forehead. The helmet fits well if it doesn't move around on the head or slide down over the wearer's eyes when pushed or pulled. The chin strap should be adjusted to fit snugly.
- An infant's or child's helmet should fit for several years. Most models have removable fitting pads that can be replaced with thinner ones as the child's head grows.

Choosing a bike for your child

The American Academy of Pediatrics recommends the following guidelines when choosing a bike for your child:

- ✓ Do not push your child to ride a 2-wheeled bike until he or she is ready, usually at about age 5 or 6. Consider the child's coordination and desire to learn to ride. Stick with coaster brakes until your child is older and more experienced.
- ✓ Take your child with you when you shop for the bike so that he or she can try it out. The value of a properly fitting bike far outweighs the value of surprising your child with a new bike.
- ✓ Buy a bike that is the right size, not one that your child can "grow into". Oversized bikes are especially dangerous because your child does not have the skills and coordination needed to handle a bigger bike and may lose control.
- ✓ A child should be able to sit on the seat with both hands on the handlebars and with the balls of both feet on the ground. Straddling the center bar, your child should be able to stand with both feet flat on the ground with about a 1-inch clearance between the crotch and the bar.
- ✓ The first bike should also be equipped with footbrakes because a young child's hand muscles and coordination are not mature enough to control hand brakes. When buying a bike with hand brakes for an older child, the child should be able to comfortably grasp the brakes and apply sufficient pressure to stop the bike.

Set limits on where and when your children may ride, depending on their age and maturity. Young children should ride only with adult supervision and off the street. The decision to allow older children to ride in the street should depend on traffic patterns, individual maturity and an adequate knowledge and ability to follow the "Rules of the Road". The most important Rules of the Road are:

- ✓ Stop and look both ways before entering the street.
- ✓ Ride with traffic. Riding against traffic confuses or surprises drivers. Almost 1/4th of bicycle-car collisions result from bicyclists riding against traffic.

- ✓ Stop at intersections, marked and unmarked.
- ✓ Before turning, use hand signals and look all ways. Hand signals should be taught to all children before they begin to ride in the street. Any child who does not have the skills necessary to use hand signals without falling or swerving shouldn't be riding in the street. Many crashes involving older children occur when they fail to signal motorists as to their intended actions.
- ✓ Never ride at dusk or in the dark, even with bike reflectors. Night riding requires special skills and special equipment. Few youngsters are equipped with either. Your child should be told to call home for a ride rather than ride a bike at dusk or after dark.
- ✓ Keep bikes in good repair, with parents checking the tires, brakes, and seat and handlebar heights regularly.

The child as passenger on an adult's bicycle

A young passenger on an adult's bike makes the bike unstable and increases the braking time. A mishap at any speed could cause significant injury to the child. Following these guidelines decreases, but does not eliminate, the risk of injury.

- Preferably, children should ride in a bicycle-towed child trailer.
- Only adult cyclists should carry young passengers.
- Preferably ride with passengers in parks, on bike paths, or on quiet streets. Avoid busy thoroughfares and bad weather, and ride with maximum caution and at a reduced speed.
- Infants younger than 12 months are too young to sit in a rear bike seat and should not be carried on a bicycle. Do not carry infants in backpacks or front packs on a bike.
- Children who are old enough (12 months to 4 years) to sit well unsupported and whose necks are strong enough to support a lightweight helmet may be carried in a child-trailer or rear-mounted seat.
- A rear-mounted seat must
 - ✓ Be securely attached over the rear wheel
 - ✓ Have spoke guards to prevent feet and hands from being caught in the wheels
 - ✓ Have a high back and a sturdy shoulder harness and lap belt that will support a sleeping child
- A lightweight infant bike helmet should always be worn by a young passenger to prevent or minimize head injury. Many infant-sized helmets are of the soft-shell variety. They are light, an important consideration for small children whose necks may not be strong enough to comfortably hold a hard-shell helmet. Small Styrofoam helmets that meet Consumer Product Safety Commission (CPSC) standards are available.
- The child must be strapped into the bike seat with a sturdy harness.
- Remember, the risk of serious injury still exists when you carry a young child on your bicycle.

