

Bicycle Safety



The Statistics

In 2001, the most recent statistics for Texas, 985 children, age 0-14, were injured in crashes with motor vehicles. For that same period of time and age range, 9 children died and 66 percent of those deaths were males.

Source: Texas Department of Public Safety, 2004.


Nationally, nearly 288,900 children 14 and under were treated in hospital emergency rooms for bicycle-related injuries in 2002. Nearly half of children 14 and under hospitalized for bicycle-related injuries are diagnosed with a traumatic brain injury. Bicycle helmets have been shown to reduce the risk of head injury by as much as 85 percent and risk of brain injury by as much as 88 percent.


Source: National SAFE KIDS Campaign, 2004.

GET THE FACTS



Short rides close to home can be the most dangerous:

 More than 60 percent of childhood bicycle-related fatalities occur on small neighborhood roads.

 The typical bike crash occurs within a single mile of home.

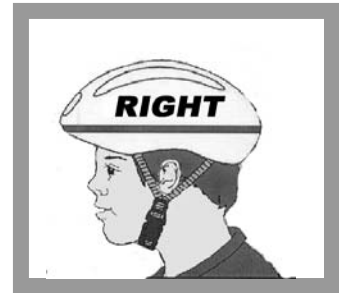
Source: National SAFE KIDS Campaign, 2004.

Tips for Parents

- Children under age 10 should not ride in the street. Help children find a safe place to ride, such as a neighborhood sidewalk, park or playground. Preschool-age children should always be supervised.
- A bicycle is a vehicle. Bicyclists must obey traffic laws and rules, such as riding on the right side of the road, obeying traffic signs, etc. A child needs to be prepared for riding in the street by teaching him/her riding skills and the rules of the road.
- Get the right size bicycle for a child. A child should be able to sit on the seat of the bicycle and touch the ground with both feet.
- Maintain the bicycle in good-working condition.

- Make sure children always wear a helmet when riding. If a parent or care giver rides, set a good example and wear a helmet, too. Even a moderate blow to an unprotected head can cause a permanent brain injury.
- Don't allow a child to ride a bicycle at dusk or after it becomes dark.
- Consider enrolling every family member in a bicycle safety class. Classes are often offered by local bicycle shops. Bicycle rodeos are often sponsored by law enforcement and other community groups.
- Replace any bike helmet when someone crashes in it. Impact crushes some of the foam. The helmet is less protective although the damage may not be readily visible. Helmets soften impact, so the child may not even be aware that his/her head hit until the helmet is examined for damage.
- Replace the buckle if it cracks or if any piece breaks off.

Wear it Right!



WARNING! NO HELMETS ON PLAYGROUNDS!

In February, 1999, the first strangulation incident in the US involving a bike helmet on playground equipment occurred. Be sure to teach children to remove the helmet before using playground equipment or climbing trees!

Source: The Bicycle Helmet Safety Institute, 2000, <http://www.bhsi.org>

Safety Rules

Following these safety rules can protect your child.

1. Never ride out into a street without stopping first.

Nearly a third of car-bike crashes involving a young child occur when a child rides a bicycle down a driveway or from a sidewalk into the street and in front of a car. Children must learn to stop, look left, look right, look left again and listen to be sure no cars are coming before entering a street. Look left that second time because cars coming from the left are on the child's side of the street and are closer. Use a drive-

WARNING! No Helmets on Playgrounds



way or sidewalk to demonstrate this way to enter a street. Have children practice the entry, looking left, looking right and looking left again. Make sure that they understand that because they see a car does not mean the driver sees them. They must always assume that the driver has not seen them.

2. Obey stop signs.

Nearly a third of the car-bike crashes with a young child occur when a child rides through a stop sign or red light without yielding to crossing traffic. Children must learn to stop, look left, look right, then look left again at all stop signs, stop lights and intersections before crossing. Make sure they know the basics about stop signs and stop lights. A trip to a controlled intersection to practice crossing safely will let parent and child know if more practice is needed. Explain that when riding in a group, each bicyclist must stop and make sure it is clear before crossing. Teach young children to walk their bikes through busy intersections. Remind them that it is the law to obey traffic signals even when no one appears to be coming. Don't forget to explain one-way streets to children too.

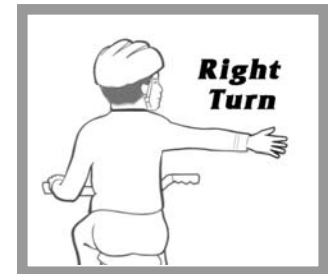
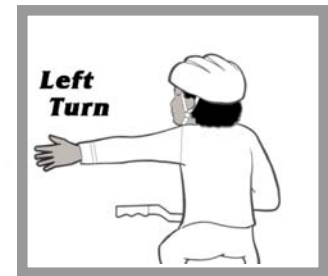
3. Check behind before swerving, turning or changing lanes.

Nearly a third of the car-bike crashes involving children occur when a child turns suddenly into the path of faster moving traffic. Children must learn to look behind them, signal and look behind again before swerving, turning or changing lanes. The best place to practice this is in a quiet parking lot or playground. Stand behind the child while he/she rides along a straight painted line. Hold up numbered cards and have them practice looking back over their shoulder and telling you the number on the card – without swerving off the painted line. Children should not be allowed to ride their bikes on the street alone until they have mastered this skill.

4. Never follow another rider without applying the rules.

Many fatalities occur when the first rider violates one of the three rules above and the second one just blindly follows. The statistic shows one of the three rules above caused the crash, but the real reason was following another rider. Running stop signs or red

Use Hand Signals



lights, riding out of driveways or zipping across lanes all seem natural to the second child because he/she is more focused on following the other rider than on the rules. This will not be an easy lesson to learn!

5. Before you get on your bike, wear a helmet!

Every year over 800 people die in the U.S. from bicycle crashes. Most of them die from head injuries. Many more have their brains scrambled and live for a long time or for the rest of their lives with a brain that doesn't function right. Brain damage can cause learning disabilities, personality changes and rob one of the ability to think clearly. Hospital emergency room studies show that a helmet can prevent brain damage about 85 per cent of the time. Don't let any child ride a bike without a helmet, even on the neighborhood block, on the sidewalk or on a bike trail. The fall is from the same height wherever they ride!

Things to Remember

Now The Fun Part: Time to Ride and Practice the Rules.

Gear: Start with a helmet, gloves to protect the skin on their hands and perhaps even skaters' knee and elbow pads for the first rides. Adjust the bicycle to fit the child and be sure he/she can reach pedals, bars and brakes comfortably.

Brakes first! Show the young beginner how to stop the bike. Hold them up and gently move them forward as they use the brakes to stop until they know how.

Balance: Run alongside the bike, holding it up by the seat with one hand on the handlebars to show how to turn to keep the bike upright.

Riding: Nobody learns without practice. Riding with a child is probably the best way to practice the rules. Go over the rules, then ride, stopping occasionally to review what they have just done and praise their good performance. Notice that if the child is riding behind, the rule about not following automatically will be severely challenged, even if you ride through a red light or directly into the path of a car! As with almost any other skill, practice is required to ingrain techniques. More than one session will be needed. But the result is worth your time.

Source: The Bicycle Helmet Safety Institute, 2000, <http://www.bhsi.org/>

FACTS

The human skull can be shattered by an impact at 4-6 mph. Children's skulls are more vulnerable than those of adults.

A fall from 2 feet can cause permanent brain damage; a fall at a speed of 12 mph can result in death.

Source: Canadian Bike Helmet Coalition, 2000.

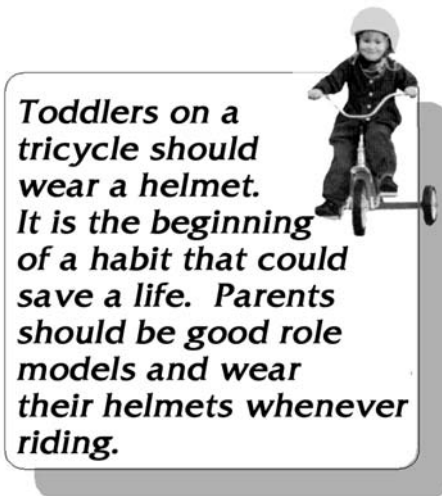
Always Ride on the Right



Bicycle Checklist

Make sure the bike is in good working order. The following check list will help:

- Check if the tires are inflated to the correct pressure.
- Check the chain and cranks to make sure that they are well-oiled and rotate smoothly without any hesitations or skips.
- Check if all safety reflectors are mounted and visible.
- Make sure the seat and handlebars are at the right adjustments for a comfortable ride.
- Once the bike has been checked and is in good working order, make sure everyone is wearing a bike helmet correctly. A bike helmet is the single most effective safety device for reducing head injury from biking mishaps.



Source: <http://www.bikehelmet.org/>

THE U.S. LAW - CPSC STANDARD

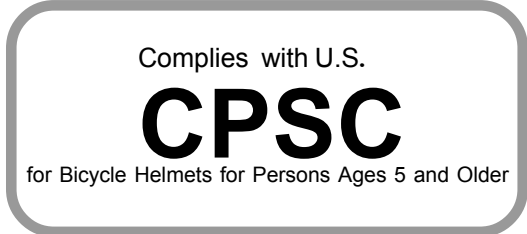
The Consumer Product Safety Commission was tasked by Congress with the development of a U.S. Government standard for bicycle helmets, and began to do so in 1994. After two drafts for public comment and working with an ASTM task group, the third and final draft was approved in February of 1998, and the final version of the standard was published. It became law one year after publication in the Federal Register, which occurred on March 10, 1998, marking the effective date as March 10, 1999. At that point it immediately became the most-used standard in the U.S. market. It covers only those helmets produced after March 10, 1999.

ANSI and Snell are not the current standard, so look for the CPSC logo. Make sure the helmet fits, has a rounded, smooth exterior and has no more vents than needed.

Look for the CPSC Label

Selecting & Fitting a Helmet

Choose a safety-certified bicycle helmet. Remember to check for the CPSC logo. Helmets made prior to that time should meet one or more of the following voluntary standards: ASTM, Snell or ANSI.



Measure for a proper fit. Using a measuring tape, measure around the hat-line of the head, about 1 inch above the eyebrows. Write down the

size, which will usually range from 19" to 24". Select a helmet with a size range that includes that measurement. The helmet may still need the adjustable pads that come with each new helmet to obtain a proper fit.

Wear a helmet straight and level on the head. The helmet must rest straight on the top of the head. The rim of the helmet should be level from front to back. It should be worn low on the forehead, just above the eyebrows. If the helmet is tipped back, it will not protect the front of the head.

Adjust the helmet for a snug fit. To be effective, a helmet should fit snugly. New helmets include extra pads of different thickness that can be used to adjust the size. With the helmet correctly positioned on the head, gently rotate the helmet from left to right and from front to back. If the skin of the brow moves with the helmet, then the fit is correct. If the skin of the brow does not move when the helmet is rotated, the fit is too loose.

Always buckle the strap under the chin. The chin straps should be buckled on every ride. It should be snug but not uncomfortably tight. One should feel the strap tugging on the chin when the mouth is opened.

Replace a helmet after a crash. Crash impacts will cause the foam of the helmet to crush. Even though the damage may not be visible, the helmet should be replaced.

Source: <http://www.tdh.state.tx.us/injury/index.htm>

Additional Resources

Passenger Safety

<http://passengersafety.tamu.edu>

National Highway Traffic Safety Administration

<http://www.nhtsa.dot.gov/people/injury/pedbimot/bike/children.htm>

Bicycle Helmet Safety Institute

<http://www.bhsi.org/child.htm>

National SAFE KIDS Campaign

<http://safekids.org>



Bicycle Safety Tips

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- Never follow another rider without applying the rules of the road.
- Before you get on your bike, wear a helmet.

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