

# **Helmet Safety**

## **Safety Helmet Identification and Emergency Lifesaving Data**

The S.H.I.E.L.D (Safety Helmet Identification and Emergency Lifesaving Data) Program from Fingerprint America stores potentially life-saving information in your child's bicycle or sports helmet. In the event of an accident, rescue workers have immediate access to your child's confidential, personal information. Medics can simply remove the helmet, detach the S.H.I.E.L.D ID Tag from inside, and are then better prepared to immediately give the child the best possible medical treatment. Suggested age use is anyone who could ride a bike, motor scooter, razor, skate board, inline skates, roller skates and any helmeted sports.

Each S.H.I.E.L.D ID Tag is completed by the parent or guardian, sealed in a plastic pouch, and attached inside the crown of the helmet. Privacy is assured, because no one can read the child's personal information without removing and opening the plastic pouch. The **S.H.I.E.L.D.** Logo and the Red Check Mark Are Nationally Recognized by Law Enforcement, Fire, and Other Emergency Personnel. The reason to have this in place is that children or adults don't just get hit or hurt right outside the house. Get the fastest care you can get for yourself or your child with this safety kit.

Thank you Fingerprint America for this potential life saving kit, this kit is only good if you fill it out completely and place it where it could be found. You can find Fingerprint America services on our web site at [www.caases.org](http://www.caases.org).

## **In-line Skates and Skateboard Safety**

Each year, more than 100,000 people are treated in hospital emergency departments for injuries related to in-line skating, and nearly 40,000 seek emergency treatment for skateboarding injuries. The majority of these patients are under age 25. Many injuries can be prevented if skaters wear proper safety gear and avoid risky skating behavior.

### **Injury Prevention Tips for In-line Skaters and Skateboarders**

To help your child avoid injuries while in-line skating and skateboarding, follow these safety tips from the American Academy of Pediatrics, the Centers for Disease Control and Prevention (CDC), the U.S. Consumer Product Safety Commission, and other sports and health organizations. (Note: Adult skaters should heed this advice, too.)

- Make sure your child wears all the required safety gear every time he or she skates. All skaters should wear a helmet, knee and elbow pads, and wrist guards. If your child does tricks or plays roller hockey, make sure he or she wears heavy-duty gear.
- Check your child's helmet for proper fit. The helmet should be worn flat on the head, with the bottom edge parallel to the ground. It should fit snugly and should not move around in any direction when your child shakes his or her head.
- Choose in-line skates or a skateboard that best suits your child's ability and skating style. If your child is a novice, choose in-line skates with three or four wheels.

Skates with five wheels are only for experienced skaters and people who skate long distances. Choose a skateboard designed for your child's type of riding-slalom, freestyle, or speed. Some boards are rated for the weight of the rider.

- Find a smooth skating surface for your child; good choices are skating trails and driveways without much slope (but be careful about children skating into traffic). Check for holes, bumps, and debris that could make your child fall. Novice in-line skaters should start out in a skating rink where the surface is smooth and flat and where speed is controlled.
- Don't let your child skate in areas with high pedestrian or vehicle traffic. Children should not skate in the street or on vehicle parking ramps.
- Tell your child never to skitch. Skitching is the practice of holding on to a moving vehicle in order to skate very fast. People have died while skitching.
- If your child is new to in-line skating, lessons from an instructor certified by the International In-line Skating Association may be helpful. These lessons show proper form and teach how to stop. Check with your local parks and recreation department to find a qualified instructor.
- If your child gets injured while skating, see your doctor. Follow all the doctor's instructions for your child's recovery, and get the doctor's OK before your child starts skating again.

### **Who Is Affected?**

Millions of people in the U.S.-the majority of them under age 25-take part in in-line skating and skateboarding as a form of recreation and exercise. But these sports can be dangerous, especially when safety precautions are ignored. Each year, more than 100,000 skaters are injured seriously enough to need medical care in hospital emergency departments, doctors' offices, clinics, and outpatient centers. Most of these injuries occur when skaters lose control, skate over an obstacle, skate too fast, or perform a trick.

While most skating injuries are minor or require only outpatient care, 36 fatalities have been reported since 1992. Thirty-one of those skating deaths were from collisions with motor vehicles. Among all age groups, 63 percent of skating injuries are fractures, dislocations, sprains, strains, and avulsions (tears). More than one-third of skating injuries are to the wrist area, with two-thirds of these injuries being fractures and dislocations. Approximately 5 percent are head injuries.

Safety gear has been shown to be highly effective in preventing injuries among skaters. Pads can reduce wrist and elbow injuries by about 85 percent and knee injuries by 32 percent. Although studies have not determined the degree to which helmets reduce head injuries among skaters, helmets have been shown to be highly protective among bicyclists.

Despite the proven safety benefits and relative low cost of helmets and pads, many skaters don't wear them. Nearly two-thirds of injured in-line skaters and skateboarders were not wearing safety gear when they crashed. One study found that one-third of skaters wear no safety gear, and another one-third use only some of the recommended safety equipment. Teens are least likely to wear all the safety gear. Nine out of ten beginning skaters wear all the safety gear, but studies have shown that many skaters shed the helmet and pads as they gain experience.

## **Football Injuries**

Each year, more than 150,000 football players under age 15 seek treatment for injuries in hospital emergency rooms. Football injuries, many of them serious, can be prevented if players use all safety gear properly and follow the rules of the game.

### **Tips for Preventing Football Injuries**

To help your child avoid injury while playing football, follow these safety tips from the American Academy of Pediatrics, the American Academy of Orthopedic Surgeons, the Centers for Disease Control and Prevention, and other sports and health organizations. (Note: Adults should heed this safety guidance, too.)

- Before your child starts a training program or plays competitive football, take him or her to the doctor for a physical exam. The doctor can help assess any special injury risks your child may have.
- Make sure your child wears all the required safety gear every time he or she plays and practices. All tackle football players must wear: a helmet; pads for the shoulders, hips, tailbone, and knees; thigh guards; and a mouth guard with a keeper strap. Talk to your child's coach to find out what kind of cleats are recommended or required in your child's league. If your child wears glasses, talk to your eye doctor about special eyewear for sports.
- Insist that your child warm up and stretch before playing.
- Teach your child not to play through pain. If your child gets injured, see your doctor. Follow all the doctor's orders for recovery, and get the doctor's OK before your child returns to play. This is especially important for brain injuries--getting a second brain injury before the first one has healed can be fatal.
- Make sure first aid is available at all games and practices.
- Talk to and watch your child's coach. Coaches should enforce all the rules of the game. They should never allow illegal blocking (pulling a player down by the knees or grabbing the face mask), tackling from behind, or "spearing" (using the top of the helmet to tackle). Coaches should also encourage safe play and understand the special injury risks that young players face.
- Above all, keep football fun. Putting too much focus on winning can make your child push too hard and risk injury.

Whether your child plays football on an organized team or with a few friends in the park, there are still injury risks. Unfortunately, few children who play in backyard football games follow the safety rules observed in league play. As a parent, set rules for informal play, including these:

- Wear helmets and pads.
- Play only with children of similar size and age.
- Play on grass, never in the street or in a parking lot.
- Stick to touch or flag football--they can be less dangerous than tackle.

You can help reinforce these rules by setting a good example. When you play football--or any other sport--always follow the rules and wear appropriate safety gear.

## **Who Is Affected?**

Studies have shown that 15 to 20 percent of players age 8 to 14 are injured during the football season. More than 150,000 football players under age 15 are treated in hospital emergency departments each year. Among tackle football players on high school teams, the injury rate has been reported as high as 64 percent.

Sprains and strains are the most frequent injuries among players of all age groups. For young children, injuries to the arms, hands, and shoulders are most common; older players most often injure the lower extremities. Knee injuries, which total approximately 92,000 each year, often lead to chronic knee pain.

Concussions make up about 5 percent of reported football injuries. A player who has sustained a concussion is four to six times more likely to sustain another one, and getting a second brain injury before the first one has healed can prove fatal. As seen in the boxing profession, repeated concussions sustained over a long period of time can lead to serious impairments.

All football leagues, from Pop Warner to professional, require safety equipment and prohibit tackling from behind and "spearing" (using the top of the helmet to tackle). Before these safety measures were in place, many more football players sustained disabling injuries. These measures have also reduced deaths among football players by more than 75 percent.

## **Ice Hockey Safety**

Ice hockey is a popular winter sport in the United States, with more than 500,000 registered amateur players. But injuries in this sport are common and can be severe. Many injuries can be prevented if players wear all their safety gear and avoid dangerous moves like body checking (using the hip and shoulder to slow or stop an opponent who has the puck).

### **Tips for Preventing Ice Hockey Injuries**

To help your child avoid injury while playing ice hockey, follow these safety tips from the American Academy of Pediatrics, the American Academy of Orthopedic Surgeons, USA Hockey, and other sports and health organizations. (Note: Adults should follow this guidance, too.)

- Before your child starts a training program or plays competitive ice hockey, take him or her to the doctor for a physical exam. The doctor can help assess any special injury risks your child may have.
- Make sure your child wears all the required safety gear every time he or she plays and practices. All youth, high school, and college ice hockey leagues require players to wear the following gear: a helmet with foam lining and full face mask; a mouth guard; pads for the shoulders, knees, elbows, and shins; and gloves. Some leagues recommend neck guards. All equipment should be certified by the HECC (Hockey Equipment Certification Council), the CSA (Canadian Standards Association), or the ASTM (American Society for Testing and Materials).
- Make sure your child's equipment fits properly. The helmet should fit snugly with a strap that gently cradles the chin when it's fastened.

- Insist that your child warm up and stretch before playing. Exercises that strengthen the neck and increase flexibility may help prevent injuries.
- Teach your child not to play through pain. If your child gets injured, see your doctor. Follow all the doctor's orders for recovery, and get the doctor's OK before your child returns to play.
- Make sure first aid is available at all games and practices.
- Talk to and watch your child's coach. Coaches should enforce all the rules of the game, encourage safe play, and understand the special injury risks that young players face. Coaches should limit body checking (some youth leagues prohibit it). Checking from behind should never be allowed. This move, which is an illegal play, has been associated with a high rate of injury.
- Teach your child to avoid head contact with the boards or other players. Serious head and neck injuries can occur from this kind of contact.
- Above all, keep ice hockey fun. Putting too much focus on winning can make your child push too hard and risk injury.

### **Who Is Affected?**

More than 500,000 amateur athletes in the U.S. play ice hockey, a game that carries significant risk of injury for players of all ages. Ice hockey is the second leading cause of winter sports injury among children.

The most common types of injuries are sprains and contusions (bruises) to the thigh, knee, and ankle. Lower extremity injuries account for about one-third of the injuries in ice hockey. A high rate of facial lacerations and head injuries (including concussions) is also associated with this sport. Cases of paralysis and death resulting from head and spinal cord injuries have been reported, but these catastrophic injuries are rare.

Body checking is the most commonly reported cause of injury and is associated with the more severe injuries. Many of the players injured by body checking collide with goal posts and the boards. Contact between opponents, usually in the form of body checking, is associated with 46 percent of all minor injuries and 75 percent of major injuries.

Safety gear and changes in the rules of play have significantly reduced both the number and severity of injuries related to ice hockey. Many head injuries have been prevented by the use of helmets and the elimination of body checking. A reduction in eye injuries has occurred through the addition of full face guards on helmets and the stricter enforcement of penalties for "high sticking." Neck guards have reduced the number of both soft tissue and spinal injuries. Currently, most youth leagues and some high school leagues require these safety measures. Other leagues recommend these measures, but are lax on enforcement. A much greater reduction in injuries could be achieved if all amateur-and professional-leagues mandated these safety practices.

### **Bicycle-Related Injuries**

In the United States, there are 67 million bicyclists who ride approximately 15 billion hours per year. Each year, approximately 750 persons die from injuries due to

bicycle crashes and over 500,000 persons are treated in emergency departments. While over 90% of deaths from bicycle-related injuries are caused by collisions with motor vehicles, these collisions cause less than 25% of non-fatal head injuries. Head injury is by far the greatest risk posed to bicyclists, comprising one-third of emergency department visits, two-thirds of hospital admissions, and three-fourths of deaths.

Unfortunately, the ubiquity of the bicycle lends the greatest risk of injury to children, who often do not practice proper riding habits or wear bicycle helmets. Consequently, 30 percent of bicyclist deaths occur in the 5-14 year old age group. At least 125 children die from bicycle -related brain injuries each year (NCHS 1998) Approximately one-fifth of the 100,000 children who sustain a non-fatal injury to the head or face while riding each year, sustain a traumatic brain injury (USCPSC 1999). While 90 percent of all deaths involve collisions with motor vehicles, most non-fatal injuries are a result of falls, which often go unreported. In this review, we evaluate these studies in the following areas of potential prevention strategies for bicycle injury.

### **Bicycle Fact Sheet**

The U.S. Consumer Product Safety Commission estimates that over 600,000 persons suffered bicycle-related injuries serious enough to require hospital emergency room treatment in 1994. Here are some typical cases:

"Karen applied her hand brakes and lost control of her bicycle. She went down an embankment into a creek, and fractured her shoulder."

"As Jimmy was riding his bicycle downhill, the front wheel of his bicycle suddenly became loose and twisted. Jimmy lost control, fracturing his knee."

"Bob was riding a bike without a chain guard when his foot caught between the pedal and chain. He fell, suffering a concussion and skull fracture."

"Michele was riding her bike alongside a friend's. As her friend moved his bike to the right, the two front wheels collided, causing Michele to fall. She suffered a concussion and fractured a wrist."

These case histories illustrate some major accident patterns associated with bicycles. They are:

- Collision with a car or another bicycle.
- Loss of Control -- This occurs because of a number of factors, including: difficulty in braking; riding too large a bike; riding too fast; riding double; stunting; striking a rut, bump, or obstacle; and riding on slippery surfaces.
- Mechanical and Structural Problems -- These include brake failure; wobbling or disengagement of the wheel or steering mechanism; difficulty in shifting gears; chain slippage; pedals falling off, or spoke breakage.
- Entanglement of a person's feet, hands, or clothing in the bicycle.
- Foot slippage from pedal.

To make bicycles safer, the U.S. Consumer Product Safety Commission developed a mandatory safety standard for bicycles to help eliminate injuries due to mechanical and structural failures.

The CPSC regulations establish strict performance and construction standards for the brakes, wheels, steering system and frame. They require reflectors on the front, back, sides and pedals to make bicycles visible at night; require elimination of uncovered sharp edges and jutting parts; and require brakes on bicycles with seat height of 22 inches or more. New bicycles are required to meet the standards.

The U.S. Consumer Product Safety Commission offers the following safety tips when shopping for a new bike or taking care of an old one:

### **Selecting the Bicycle**

- If you're buying a bicycle for a child, choose one to fit the child's size today, not one he or she will "grow into" later.
- A bicycle should suit the rider's ability and kind of riding.
- Check hand and foot brakes for fast, easy stops without instability or jamming.
- Avoid slippery plastic pedals. Look instead for rubber-treated pedals, or metal pedals with serrated rattrap edges or with firmly attached toeclips.

### **Using the Bicycle**

- Always wear a helmet to help prevent head injuries. CPSC is setting a new mandatory standard for bike helmets.
- Observe all traffic laws and signals, just as automobiles must do.
- Don't ride double or attempt stunts.
- Ride near the curb in the same direction as traffic.
- Find alternate routes, rather than ride through busy intersections and heavy or high-speed traffic.
- Walk -- don't ride -- your bicycle across busy intersections and left turn corners.
- Avoid riding in wet weather. When wet, handbrakes may require a long distance to stop.
- Avoid riding in the dark. If you do, be sure the bike is equipped with a headlight, a taillight and reflectors. Apply retro-reflective trim to clothing, or wear reflective vests and jackets.
- Avoid loose clothing or long coats that can catch in pedals or wheels. Leg clips or bands keep pants legs from tangling in the chain.
- Avoid crossing raised sewer grates.

## **Maintaining the Bicycle**

- Regular maintenance is essential for safe riding. Refer to the owner's manual for the manufacturer's maintenance recommendations. An experienced repair technician should do complicated work.
- Align (or "true") wobbly wheels for better control. Spokes also may need adjustment.
- Replace all missing, damaged, or worn parts; for example, brake pads, chainguards, chain links, spokes, screws and bolts, handlebar grips.
- Tighten and/or adjust loose parts.
- Periodically inspect frame, fork, spindles and other components for cracking.
- Parts should be adjusted to manufacturer's torque specifications.
- Inflate tires to recommended pressure, and replace worn tires.
- Lightly oil and clean moving parts. Keep oil off rubber.
- Keep bicycle indoors when not in use -- moisture may cause rust and weaken metal parts.

## **Bicycle Safety Tips**

Each year, there are about 900 bicycle-related deaths in the United States and another half a million bicycle-related injuries treated in hospital emergency rooms. To reduce injuries, riders of all ages should use helmets and adhere to the following tips:

- Buy a helmet that bears a label indicating that the product meets the American National Standards Institute (ANSI) standard Z90.40 1984; the Snell Memorial Foundation standard B 90, B 90S, N 94, or B 95; the American Society for Testing and Materials (ASTM) standard F 1447 93 or F 1447 94; or the Canadian Standards Association standard CAN/CSA D113.2 M89.
- Wear the helmet flat atop your head. Do not wear the helmet tilted back at an angle.
- Make sure the helmet fits snugly and does not obstruct your field of vision.
- Always wear the helmet with the chin strap firmly buckled. Make sure the chin strap fits securely and that the buckle stays fastened to provide impact protection. No combination of twisting or pulling should remove the helmet from the head or loosen the buckle on the strap.
- Do not use a helmet after it has been involved in an accident. Damage to the helmet may not be visible to an untrained eye. Even very small cracks in the helmet may greatly reduce a helmet's effectiveness in preventing injury. Either destroy the helmet and get a new one or have it inspected by the manufacturer. The manufacturer will tell you if the helmet needs to be replaced.

- Wear bright fluorescent colors during the day.
- Avoid biking at night. If riding at night, equip your bicycle with head and tail lights and wear reflective clothing.
- Stay alert...Keep a lookout for obstacles in your path.
- Go with the flow...Ride with traffic.
- Check for traffic...Be aware of traffic around you.
- Learn the rules of the road...Obey traffic laws.
- Assure bicycle readiness...Is your bicycle properly adjusted?
- Check brakes before riding.
- Check your wheels..."Quick release" wheels should be securely fastened.

### **Helmet Use**

Beginning February 1999, all bike helmets manufactured or imported for sale in the United States must meet the new federal safety standard set by Consumer Product Safety Commission. The new standard ensures that bike helmets will adequately protect the head and that chin straps will be strong enough to prevent the helmet from coming off in a crash, collision or fall. In addition, the new standard requires that helmets intended for children up to age five cover more of the head to provide added protection to the more fragile areas of a young child's skull.

Helmets meeting the new standard will carry a label stating that they meet CPSC's new safety standard. This will help eliminate confusion among consumers about which certification mark to look for when buying a helmet. Previously, helmets met various voluntary standards and were certified by a number of standard development groups.

Parents need to be informed about the potential seriousness of bicycle-related injuries, and encourage their children to wear helmets every time they ride a bike. Helmet use can reduce the risk of head injury by up to 85% in the event of a crash. Efforts to increase helmet use by teenagers is especially important, since this group is least likely to wear helmets. Communities can help increase the number of children who wear bike helmets by sponsoring bicycle safety awareness programs. Low-cost helmet programs should be encouraged as a way to get helmets into the hands of children from low-income households.

When a child gets off the bike, take off the helmet. There is a hidden hazard of strangulation if a child wears a helmet while playing on playground equipment.

### **Ten Smart Routes to Bicycle Safety**

## **1. Protect Your Head. Wear A Helmet.**

Never ride a bicycle without a helmet. The National Highway Traffic Safety Administration (NHTSA) and the U.S. Consumer Product Safety Commission (CPSC) recommend that bicyclists wear a helmet that complies with the CPSC standard.

Bicycle helmets can reduce head injuries by 85 percent. Select a helmet that fits snugly and sits flat on the head. For children, use the extra padding that comes with the helmet to ensure a proper fit. This padding can be removed as the child's head grows.

## **2. Assure Bicycle Readiness. Make Sure Your Bicycle is Adjusted Properly.**

Make sure you can stand over the top tube of your bicycle. Adjust your bicycle to fit you (see Owner's Manual). Before using your bicycle, check to make sure all parts are secure and working well. The handlebars should be firmly in place and turn easily. Your wheels must be straight and secure. Add a carrier to the back of your bicycle if you need to carry things.

## **3. Stop It. Always Check Brakes Before Riding.**

Always control your speed by using your brakes. If your bicycle has hand brakes, apply the rear brake slightly before the front brake. Always keep your brakes adjusted. If you cannot stop quickly, adjust your brakes. Consult your Bicycle Owner's Manual or have a bicycle shop adjust the brakes. When your hand brake levers are fully applied, they should not touch the handlebars. Each brake shoe pad should wear evenly and never be separated more than one eighth inch from the rim. Ride slowly in wet weather and apply your brakes earlier – it takes more distance to stop.

## **4. See and Be Seen.**

Wear clothes that make you more visible. Always wear neon, florescent, or other bright colors when riding a bicycle.

## **5. Avoid Biking at Night.**

It is far more dangerous to bicycle at night than during the day. Most bicycles are equipped for daylight use and need to be adapted for nighttime use. If you must ride at night, you should do the following:

- Ride with reflectors that meet CPSC's requirements. These should be permanently installed on bicycles for daytime use also. If a carrier is added, make sure the rear reflector remains visible.
- Add the brightest lights you can find to the front and rear of your bicycle.
- Wear retro-reflective clothing or material – not just white or florescent – especially on your ankles, wrists, back, and helmet.
- Only ride in areas familiar to you. Brightly lit streets are best. Always assume you are not seen by a driver.
- Young children should NOT ride at night.

## **6. Stay Alert. Always Keep A Lookout for Obstacles in Your Path.**

Stay alert at all times. Watch out for potholes, cracks, expansion joints, railroad

tracks, wet leaves, drainage grates, or anything that could make you fall. Before going around any object, scan ahead, and behind you for a gap in traffic. Plan your move, signal your intentions, and then do what you planned. If you are unsure, or lack the skill to handle an especially rough area, pull off to the right side of the road and walk your bicycle around the rough area.

Be especially careful in wet weather and when there could be ice or frost on your path.

- Cross all railroad tracks at a 90 degree angle and proceed slowly.
- Use special care on bridges.

### **7. Go With the Flow. The Safe Way is The RIGHT Way.**

Ride on the right side in a straight predictable path. Always go single file in the same direction as other vehicles. Riding against traffic puts you where motorists don't expect you. They may not see you, and may pull across your path, or turn into you. Young children, typically under the age of nine, are not able to identify and adjust to many dangerous traffic situations, and therefore, should not be allowed to ride in the street unsupervised. Children who are permitted to ride in the street without supervision should have the necessary skills to safely follow the "rules of the road."

### **8. Check for Traffic. Always Be Aware of The Traffic Around You.**

Over 70 percent of car-bicycle crashes occur at driveways or other intersections. Before you enter any street or intersection, check for traffic. Always look left-right-left, and walk your bicycle into the street to begin your ride. If already in the street, always look behind you for a break in traffic, then signal, before going left or right. Watch for left or right turning traffic.

### **9. Learn Rules of the Road. Obey Traffic Laws.**

Bicycles are considered vehicles. Bicyclists must obey the same rules as motorists. Read your State drivers' handbook, and learn and follow all the traffic signs, laws, and rules for operating a vehicle on the road. Always signal your moves. Be courteous to pedestrians and other vehicle operators. Never wear headphones while riding as they impair your ability to hear traffic. Become familiar with the accommodations that are available for bicyclists in your area. These include bicycle lanes and routes as well as off road paths. Take advantage of these whenever possible.

### **10. Don't Flip Over Your Bicycle. Wheels Should Be Securely Fastened.**

If your bicycle has quick release wheels, it is your responsibility to make sure they are firmly closed at all times and to use the safety retainer if there is one. Check your wheels before every ride, after any fall, or after transporting your bicycle. Read your Owner's Manual for instructions and follow them. If you are even slightly confused about what "firmly closed" means, talk to your bicycle dealer before you ride your bicycle.

## **Bicycling Tips for Kids Riding Bikes**

## Wear a Helmet

- Wearing a helmet is the best thing you can do to be safe when you ride a bike.
- Bicycle helmets save lives. Most bike deaths come from head injury. Bike helmets can prevent head injury.
- In some states, the law says you have to wear a bike helmet to ride your bike.
- Bike helmets should fit like this: 1) sits evenly between the ears 2) sits low on your forehead

## **See and Be Seen**

- Ride so cars can see you.
- Wear bright colors or clothes that reflect light at night so cars, buses, and trucks can see you.
- If you ride at night, get a headlight for the front of your bike and "reflectors" on the front and back of your bike.

## **Follow the Rules**

- Bikes have to follow the same traffic rules and signs as cars.
- You must ride in the same direction as the cars are going.
- Ride your bike single-file.
- Signal when you want to stop or turn.
- Look out for holes, wet leaves, or cracks in the street. They can make you crash your bike.
- Ride away from the curb in case a car pulls out or someone opens a car door suddenly.

## **Night Bike Riders at Risk**

To help reduce nighttime bicyclist fatalities, cyclists should always wear a good helmet, use front and rear lights and reflectors, and wear reflective clothing. Children should never ride at night, and cyclists should avoid riding on unlighted, narrow roadways.

Because of a sharp increase in the number of bicyclist fatalities resulting from car-bike collisions at night, the U.S. Consumer Product Safety Commission has issued a warning to bike riders to take necessary steps to make themselves and their bicycles more visible at night.

The number of bicyclists killed at night has increased from 304 to 372 per year. In 1975, the number of nighttime deaths accounted for 30% of the total number of bicyclists killed. By 1982 (the latest year for which complete data are available), nighttime deaths accounted for 42% of the total number of bicyclists killed. One factor contributing to fatal nighttime bicyclist accidents is that the bicycles and riders

are not readily visible to motorists. Motorists involved in car/bicycle collisions report that they hit bicyclists because the bicycles and riders were not visible. Cyclists' failure to wear protective helmets may have also contributed to the severity of head injuries suffered in car-bike collisions.

**Therefore, CPSC recommends the following actions to cyclists**

1. Be sure your bike has reflectors required on all new bicycles by the CPSC bicycle regulation. Each bike should have front and rear reflectors, pedal reflectors, and side rim or wheel reflectors. Use front and rear lights (as required in many States) to help make your bicycle more noticeable to cars at night. Small battery-operated lamps strapped to your legs also help.
2. Wear reflective clothing to make yourself more visible to automobile drivers. Wear a reflective vest, reflective bands on arms and legs, and reflectorized tape on helmet.
3. Always wear a good helmet with a rigid (but crushable) interior material which may help absorb the force of an impact. (This is important for daytime riding, too.)
4. Never allow children to ride at night.
5. Avoid riding on dark, narrow roadways where the posted speed limit is more than 35 mph.

**Estimated Hospital Emergency Treated Injuries for 1999,  
Overall & by Child Ages**

<b>Product Grouping</b>	<b>Estimated Injuries, 1999</b>	<b>Injuries, Age 0-4 years</b>	<b>% for Age Group</b>	<b>Injuries, Age 5-14 years</b>	<b>% for Age Group</b>
<b>Child Nursery Equipment</b>	79,922	65,217	81.6%	3,382	4.2%
<b>Toys (all types)</b>	146,529	69,227	47.2%	45,389	31.0%
<b>Sports &amp; Recreation</b>					
<i>Baseball, Softball</i>	339,775	8,496	2.5%	130,170	38.3%
<i>Basketball</i>	597,224	2,311	0.4%	193,453	32.4%
<i>Bicycles, Accessories</i>	614,594	37,805	6.2%	340,454	55.4%
<i>Football</i>	372,380	1,247	0.3%	172,117	46.2%
<i>In-line Skating</i>	95,129	955	1.0%	58,606	61.6%
<i>Playground Equipment</i>	248,301	65,916	26.5%	165,728	66.7%
<i>Skateboards</i>	59,964	1,000	1.7%	32,259	53.8%
<i>Soccer</i>	175,303	708	0.4%	80,958	46.2%
<i>Swimming, Pools, Equipment</i>	151,233	14,325	9.5%	60,825	40.2%
<i>Trampolines</i>	98,889	9,915	10.0%	67,977	68.7%
<b>Personal Items</b>					
<i>Clothing</i>	148,134	10,482	7.1%	26,824	18.1%
<i>Drug Poisonings (children under 5)</i>	46,468	46,468	100.0%		NA
<i>Grooming Devices</i>	28,260	10,561	37.4%	4,220	14.9%
<b>Home &amp; General Household</b>					
<i>Bathroom Structures &amp; Fixtures</i>	273,551	41,923	15.3%	27,929	10.2%
<i>Beds, Mattresses, Pillows</i>	472,012	141,468	30.0%	84,113	17.8%
<i>Cleaning Agents (excl. soaps)</i>	35,012	12,320	35.2%	3,322	9.5%
<i>Chairs, Sofas, Sofa Beds</i>	417,366	116,897	28.0%	57,119	13.7%
<i>Cooking: Ranges, Ovens</i>	42,803	11,692	27.3%	5,201	12.2%
<i>Irons, Clothes Steamers (not toys)</i>	15,869	10,044	63.3%	1,429	9.0%
<i>Stairs, Ramps, Landings, Floors</i>	2,052,256	262,467	12.8%	222,389	10.8%
<i>Window, Door Sills, Frames</i>	56,517	13,197	23.4%	8,448	14.9%

## **Outdoor Safety for Toddlers & Preschoolers**

### **Dangers for young children on the move:**

- darting out into traffic from the middle of the block;
- playing in or near the street;
- riding a tricycle or bike in a parking lot, driveway, or street.

### **Young children are NOT small adults!**

1. They move quickly and can run into the street without warning.
2. They don't know safety rules and expect adults to watch out for them.
3. They are small and hard for drivers to see.
4. They cannot judge speed or distance of vehicles moving toward them.

Children hit by cars can be hurt or killed, even when cars are moving slowly. Toddlers (one and two year olds) are most often hurt by a backing vehicle. If a child is playing in a driveway or parking area, a driver may not see him. Preschoolers (three and four year olds) are most often hit when dashing across a street near home. Falls from tricycles or other play vehicles can cause serious head and brain injury. These injuries to young children can be as serious as injuries to older children falling from bikes.

### **Take steps to safety**

1. Supervise, supervise, supervise - Parents and caregivers must watch toddlers and preschoolers closely when they are near parked or moving vehicles. To supervise properly, you must be near your child, not watching from a distance. Hold your child's hand when you walk together along the street.
2. Find safe places to play - Keep children away from traffic. Fenced yards, parks, or playgrounds are good places for your child to ride and play. Are there safe play places for children in your neighborhood? If not, talk with neighbors, local police, and community planners about ways to improve the area.
3. Set a safe example - Young children learn by watching adults. Show them safe ways to cross streets and always wear a helmet when you ride a bike.
4. Get them in the habit - When walking, talk to your child about street safety. Show him/her how to stop at the edge of the street and look for cars. Don't expect your young child to do this by herself. Start children wearing helmets with their first tricycles or play vehicles. When children begin helmet use early, they are more likely to keep the habit in later years.
5. Head out safely - Wearing a bike helmet is the most important way for your child to stay safe on a play vehicle, tricycle, or bike. A helmet can reduce the risk of head injury by 85 percent when worn correctly. Toddler helmets are lightweight, because a toddler's neck is not strong enough for a regular helmet. Also, these helmets come down low around the back of the head for more coverage. Choose a helmet that meets current safety standards. Look for a CPSC1, ASTM2, ANSI3, or Snell4 sticker inside the helmet. By 1999, every new helmet must meet the CPSC standard. Insist that your child wear a helmet whenever she rides. If your child's preschool uses tricycles, work with the school to make helmets available. Urge the school to have a policy requiring helmet use.

### **Bike Helmets: The right fit**

Make sure the helmet covers the upper part of the forehead and sits level on the head.

- Use the foam pads inside to fit the helmet snugly so it doesn't slip around.
- Adjust the chin strap tightly enough so the helmet pulls down when the child opens his mouth.

### **Carrying your child safely on a bike**

- Never carry a baby under age one on a bicycle. A baby does not have the neck strength to wear a helmet. Her back is not strong enough to sit straight with the motion of the bike.
- When a child is old enough to ride on an adult's bike, only a skilled rider should carry him. Ride only in safe areas like parks, bike paths, or quiet streets.
- Make sure both adult and child wear properly fitting helmets.
- Make sure the child carrier has a high back, a lap and shoulder harness, and foot guards to keep feet away from the spokes.
- Check that the carrier is fastened firmly to the bike.
- Buckle the harness snugly around the child.

### **Suggestion**

Prevention of bicycle injuries can be approached through the use of bicycle helmets, educational programs to improve riding behavior and safety, educational programs aimed at motor vehicle drivers, and environmental changes to decrease the likelihood of bicycle-motor vehicle collisions. An extensive review of educational programs and environmental changes is posted else where on our website.