



Bicycling Injuries

“It’s as easy as riding a bike” — as long as you’re not injured! Kids usually get their first taste of freedom when they learn to ride a bicycle. But ill-fitting equipment and traffic put riders at risk for falls, sprains, strains, and more serious injuries. Simple adjustments to their bike and helmet, plus learning the rules of the road, can keep your young rider peddling safely.

Heading for Serious Injury

Did you know?

- 70 percent of children ages 5 to 14 ride bikes regularly?
- This group rides 50 percent more than adults?
- This group makes up 50 percent of all biking-related injuries?

Estimates show that young riders use bicycle helmets just 15 to 25 percent of the time. Almost half of the young people hospitalized from bike-related accidents suffer traumatic brain injuries. This risk can be reduced by 85 percent simply by wearing a bike helmet. Choosing not to wear a helmet also makes a rider 14 times more likely than one with a helmet to be involved in a fatal crash.

In addition, incorrect size or adjustment of a bike may cause the rider to suffer a repetitive or overuse injury. Knees and ankles can be strained because the bike is too high or too low. Common biking injuries include tendonitis of the knee and calf muscles.

Preventing Injuries

In order to prevent head injuries, a helmet must fit properly. What’s the right fit? Follow the eyes, ears, and mouth rule:

- **Eyes:** Position the helmet on your child’s head. When the child looks up, he/she should see the bottom rim of the helmet. The rim should be one to two finger-widths above the eyebrows.
- **Ears:** Make sure that the straps, when buckled, form a “V” under the ears. The straps should be snug but comfortable.
- **Mouth:** Have your young rider open his/her mouth as wide as possible. Can they feel the helmet “hugging” their head? If not, tighten the straps and be sure the buckle is flat against the skin.

Proper fit doesn’t stop there. The bike must fit the rider, too. One of the more common mistakes is buying a bike a child can “grow into.” It may be economical, but it’s not safe. The young rider will have a tough time controlling a bike that’s too large.

There should be one to two inches of clearance between the rider’s crotch and the bicycle’s top tube when the rider is straddling the bike flat-footed. For a girl’s bike, imagine that there is a top tube extending horizontally from the front of the bike and measure from there.

In addition to having properly fitting equipment, all bikers can benefit from hip, thigh, and calf strengthening to prevent wear and tear on muscles, tendons, and ligaments.

Safety Rules

These rules will help you ensure the safety of your young bike rider.

Always model and teach proper behavior. Learn the rules of the road and obey traffic laws.

- Ride on the right side of the road with traffic, not against it. Stay as far to the right as possible.
- Use proper hand signals.
- Obey traffic signals, stopping at all stop signs and traffic lights.
- Stop and look left, right, and then left again before entering a street or crossing an intersection. Prior to turning left, look back and yield to traffic coming from behind.

Supervise your child's riding until you're sure your child has good traffic skills and judgment.

- Restrict children to off-road cycling (sidewalks and paths) until age 10.
- Don't allow your child to ride in traffic until he/she displays riding skill and understands the rules of the road.

Don't allow your child to ride after dark, in fog, or in other low-visibility conditions.

- Those who must ride at dusk, dawn, or in the evening should have reflectors and a light on their bikes.
- Be sure clothes and accessories have reflective materials added to make riders more visible to motorists.

What is the Young Athlete Program?

UPMC Sports Medicine's Young Athlete Program brings together a network of specialists that provides individualized attention for injury prevention and management.

Our physicians and physical therapists use cutting-edge, science-based techniques to help speed recovery, and quickly and safely prepare the athlete to return to the field of play. Athletic trainers, sports performance coaches, and other experts focus on injury prevention, nutrition, conditioning, and activity-specific training.

Regardless of age or sport, the Young Athlete Program has the expertise, technology, and services to make a difference for your athlete. For more information or to make an appointment, call **412-432-3700** or visit UPMC.com/SportsMedicine.

Our partner, Centers for Rehab Services, offers your young athlete physical therapy services at more than 40 convenient locations. To find an office near you, or to make an appointment, call **412-432-3700**.