

Preventing Injuries In Sport

McKenzie Pediatrics

Playing sports is a big part of growing up and going to school for many children. But the pursuit of victory in any activity carries with it risks and responsibilities.

Kids can be particularly susceptible to sports injuries for a variety of reasons. Kids, particularly those younger than 8 years old, are less coordinated and have slower reaction times than adults because they are still growing and developing.

In addition, kids mature at different rates. Often there's a substantial difference in height and weight between kids of the same age. And when kids of varying sizes play sports together, there may be an increased risk of injury.

As kids grow bigger and stronger, the potential for injury increases, largely because of the amount of force involved. For example, a collision between two 8-year-old Pee-Wee football players who weigh 65 or 70 pounds each does not produce as much force as that produced by two 16-year-old high school football players who may each weigh up to 200 pounds.

Also, kids may not assess the risks of certain activities as fully as adults might. So they might unknowingly take risks that can result in injuries.

Managing the risks to a child's health and safety is a duty shared by coaches, parents, and the student-athletes themselves. That's why it's important that everyone is clear on what those risks and responsibilities are. By knowing the causes of sports injuries and how to prevent them, you can help make athletics a positive experience for your child.

Along with the obvious concerns over sports-related injuries, there are three general risks that parents of young athletes should be aware of: overuse injuries, overtraining, and burnout.

Overuse Injuries

Overuse is by far the most common type of sports injury, accounting for as many as half of the total in the United States. An overuse injury is chronic damage to bones, muscles, or tendons that results from the body being worked too hard. This type of injury causes stress to these tissues that takes time to heal. Child athletes are prone to overuse injuries caused by stresses placed on growing bones.

But too often competitive pressures, practice and game schedules, and a sense of duty to the team compel many young athletes to ignore or deny symptoms of overuse injuries. Failing to allow these to heal only adds further stress to the painful areas, risking long-term damage.

Also, the "no pain, no gain" and "play through the pain" approach to ignoring the aches and pains of sports can discourage the healing process. A young person's body is still growing. Bones simply cannot tolerate the high levels of stress common to competitive sports if healing isn't allowed to happen. In more severe cases, continuing to exercise the overuse-injured area can have serious long-term health effects.

Parents should be alert to these common symptoms of overuse injury:

- Pain in the muscle, tendon, or bone after practice or a game
- Pain while playing or during practice (even if the child remains able to play)
- Pain during play that affects the child's ability to perform
- Constant or chronic pain, even when not playing

Overtraining

The drive to succeed — along with the sheer joy many youngsters feel as a result of developing their sports talents — can lead to long hours of practice. That can reach the point of overtraining, and, eventually, overuse injuries.

The best way for parents to address this problem before it occurs is to stay on top of their child's training schedule. Pay attention to the amount of time, energy, and interest the child applies to training for his or her sport.

Some good rules of thumb for keeping training in line include:

- Limit your child to a single sport or team activity per season, and the training schedule to no more than five days per week.
- Be mindful of the weather during summer and winter training seasons. Insist that your child make changes to the schedule if the weather is extreme.
- Encourage your child to vary training exercises from day to day, if possible. For example, she could alternate formal track-and-field training with swimming.

Burnout

Enthusiasm is just as vital as physical skills in keeping children healthy during athletic seasons. Yet the very things that make sports participation so rewarding can also become overwhelming. When that happens, your child can lose interest in the sport that once gave so much pleasure. This is burnout.

Families need to be open in their communications about athletics. Parents should understand what the child's goals are — and make sure the activity is driven by the child's, not the parents', goals.

On a day-to-day level, burnout can produce moodiness, a loss of interest that spreads to other activities, such as academics, and a drop in performance in the sport. But there are physical consequences to burnout as well. These can include:

- Constant or chronic muscle and joint pain
- Fatigue
- Increased resting heart rate

Preventing Children's Sports Injuries

Use of Proper Equipment

It's important for kids to use proper equipment and safety gear that is the correct size and fits well. For example, kids should wear helmets for baseball, softball, bicycle riding, and hockey. They also should wear helmets while they're inline skating or riding scooters and skateboards.

For racquet sports and basketball, ask about any protective eyewear, like shatterproof goggles. Ask your child's coach about the appropriate helmets, shoes, mouth guards, athletic cups and supporters, and padding.

Protective equipment should be approved by the organizations that govern each of the sports. Hockey facemasks, for example, should be approved by the Hockey Equipment Certification Council (HECC) or the Canadian Standards Association (CSA). Bicycle helmets should have a safety certification sticker from the Consumer Product Safety Commission (CPSC).

Also, all equipment should be properly maintained to ensure its effectiveness. In the United States, the National Operating Committee on Standards for Athletic Equipment (NOCSAE) sets many of the standards for helmets,

facemasks, and shin guards. In addition to meeting the NOSCAE standards, all equipment should be properly maintained to ensure its effectiveness over time.

Maintenance and Appropriateness of Playing Surfaces

Check that playing fields are not full of holes and ruts that might cause kids to fall or trip. Kids doing high-impact sports, like basketball and running, should do them on surfaces like tracks and wooden basketball courts, which can be more forgiving than surfaces like concrete.

Adequate Adult Supervision and Commitment to Safety

Any team sport or activity that kids participate in should be supervised by qualified adults. Select leagues and teams that have the same commitment to safety and injury prevention that you do.

The team coach should have training in first aid and CPR, and the coach's philosophy should promote players' well-being. A coach with a win-at-all-costs attitude may encourage kids to play through injury and may not foster good sportsmanship. Be sure that the coach enforces playing rules and requires that safety equipment be used at all times.

Additionally, make sure your kids are matched for sports according to their skill level, size, and physical and emotional maturity.

Proper Preparation

Just as you wouldn't send a child who can't swim to a swimming pool, it's important not to send kids to play a sport that they're unprepared to play. Make sure that your child knows how to play the sport before going out on the field.

Your child should be adequately prepared with warm-ups and training sessions before practices as well as before games. This will help ensure that your child has fun and reduce the chances of an injury.

For a terrific injury prevention warm-up program, we urge parents and coaches to check out the Santa Monica Sports Medicine Research Foundation PEP Program (Prevent Injury and Enhance Performance). The website is : <http://smsmf.org/pep-program>

In addition, your child should drink plenty of fluids and be allowed to rest during practices and games.