

Children and Sports Injuries

If you are a parent, it is likely that your child will sustain an injury playing in an organized, community sport. Four million children under the age of 15 are hurt every year, some playing on the playground and some on sports teams from Little League baseball to intramural school events (Pappas, "Children and Sports," *Sports Health: The Complete Book of Athletic Injuries*, 1981).

While there is a certain amount of risk involved in participatory sports, parents, coaches, and program supervisors share the ultimate responsibility for providing maximum safety in a healthy playing climate. A balanced, well-managed sports environment provides a fertile ground for the child's natural growth and development, physically, emotionally, and socially.

But even in the safest of settings, accidents happen and children may get hurt. Knowing the types of injuries commonly sustained, as well as why and how children get hurt, will enlighten parents, coaches and other responsible parties to seek preventive safety measures, and help reduce the incidence of injury.

What are the most common sports injuries to children?

Sprains, strains, contusions, abrasions, and lacerations make up 60 percent of all sports injuries to children (Pappas). Surprisingly, fractures account for less than 15 percent of injuries.

As a general rule, the younger the child, the less severe the injury. However, it is also true that the more rapidly children grow, the more susceptible they are to injury at bone growth sites (knee, heel, shoulder, elbow, hip and back).

Growth occurs at the upper and lower end of the long bones of the skeleton. One-half to one inch below the end of the bone is the growth center, where cartilage-like cells will harden and eventually make up bone mass. It is this vulnerable area that is the weakest part of the skeleton, and most prone to injury, especially in the young adolescent. If growth site injuries are not diagnosed accurately and treated properly, they can lead to chronic pain, traumatic arthritis, and – in the worse case scenario – deformity and stunted bony growth.

What are the causes of sports injuries in children?

Given the spontaneous nature of children, their limited degree of agility, and the "controlled chaos" of children's play, it is not surprising that falls, twists, and collisions, will inevitably result in strains and sprains, bruises and abrasions. But there are some sports that yield specific injuries.

- ✂ Soccer is the most popular sport in the world, and the fastest growing team sport in the U.S. Soccer players who are hit by the ball, fall and come into contact with other players, often suffer bruises, knee, ankle and shin injuries.
- ✂ Gymnastics is a growing trend in the U.S., with training starting as early as age 3. Although the risk of injury seems proportionate to the skill of the athlete, the greatest number of injuries occur during floor exercises and tumbling, with other injuries resulting from upsets on the balance beam and uneven parallel bars. The most common injuries to gymnasts are spinal injuries.
- ✂ Playground equipment, although not associated with a sport, is responsible for an estimated 125,000 injuries annually. Three quarters of all playground injuries happen on swings and monkey bars. Injuries on slides and seesaws account for the remaining fourth. (U.S. Consumer Product Safety Commission).

Children who complain of elbow pain are likely to be suffering from an overuse syndrome. Little League elbow, for example, results in pain, stiffness, and reduced range of motion. A characteristic complaint of single-sport athletes, particularly baseball players, this injury is directly related to the frequency and intensity of the pitch. Swimmers and skaters may also be at risk for developing an overuse syndrome because of repetitive stress on particular joints.

Osgood-Schlatter's Disease is not a disease process, but a mechanical injury of the knee at the junction of the kneecap tendon and the tibia. It occurs in children and young adolescents who have most likely experienced microtrauma or overuse from repetitive kneeling, running and jumping activities.

Children rarely complain about back pain, but if it persists, restricts activity, or interrupts sleep, it is a concern that should be considered seriously. After a chiropractor has

ruled out serious disease or systemic cause for pediatric back pain, you may find that the child's complaints are due to soft tissue injuries, overuse syndromes, or postural irregularities.

How can my chiropractor help?

The role of the chiropractor is crucial in preventing sports injuries in children. Prior to any sports involvement, the child should undergo a Pre-Participation Evaluation (PPE).

The PPE consists of a routine medical history, and physical examination with emphasis on a neuromusculoskeletal evaluation, all of which are helpful in determining the readiness factor of the child for the sport in question.

The PPE may uncover special medical problems such as juvenile diabetes, epilepsy, asthma, cardiac conditions, previous sports injuries or other clinical problems that may prevent the child from participating in sports. Additionally such an evaluation should indicate which activities are more suited to a child with special medical considerations.

As the child begins sports participation, your doctor of chiropractic can offer guidelines on exercise, conditioning techniques, nutrition, and general fitness. Of course, when treatment is needed, the chiropractor is fully equipped to manage nonsurgical treatment for typical sports injuries.

How else can I protect my child against sports injuries?

Although parents may not be able to soften the blow from an athletic injury, they can minimize serious injury by taking some basic preventative measures.

- ☞ Determine the child's physical maturation level and match the child's size with an appropriate sport. Most competitive children's sports are organized according to chronological age rather than physical skill or maturation. Slower maturing children are often at greater risk of injury because they are competing with peers who may be larger and physically more developed.
- ☞ De-emphasize winning. When it comes to sports, children primarily want to have fun, secondarily they may want to win. Parents who emphasize winning, place undue stress on children and rob them of the joy of simply participating. A child who is stressed, who is trying to meet parents' and coaches' unrealistic expectations, is more susceptible to injury than a child who enters the playing arena with the confidence that comes from positive and encouraging adult attitudes.
- ☞ Seek professional advice. Given the fact that children will get hurt in play, it is critical that parents use good judgment in treating complaints about pain. What may act like a simple sprain may actually be a growth plate that demands professional diagnosis on the extent of the injury

and how to proceed with treatment. Check to see if your child's organized athletic team has a chiropractor, skilled in the handling of sports injuries, affiliated with it.

Summing Up

Sports involvement is one way children can implement fitness as an integral component of their lifestyle. To be successful, the elements of the child/sports equation must add up to fun, fitness, and safety. Parents, coaches, program sponsors, and chiropractors must actively help to create an esteem-building experience that will be memorable for the child long past the moment of play.