

PARENT GUIDE

SIDELINED!

Preventing injuries on the playing field.

by **Connie Secor**

If your child is active in competitive sports, you know what it's like to worry about a young athlete making it through the season without injury. Over the last two decades, young athletes have experienced an alarming frequency of injuries. Statistics show that 3 to 11 percent of the millions of children who participate in sports are injured each year. The increase in injuries is reflective of the greater number of kids participating in organized sports, the intense level of training required and the high level of competition at which they play.

PROTECTIVE GEAR

Despite these statistics, countless injuries are avoided each year due to changes in game rules and the requirement of safety equipment. In scholastic football, for example, the number of serious head, neck and spine injuries has been considerably reduced by making such plays as clipping (blocking from the side or behind) and spearing (tackling with the head launched at the opponent) illegal. Improved protective gear has also helped reduce injury. In baseball and softball, breakaway bases have reduced knee, leg and other lower extremity injuries, while helmets and face masks have helped reduce head and eye injuries. In addition, new reduced-impact baseballs made of molded



polyurethane have proven to be three times less likely to cause severe head or chest injuries than the traditional leather-clad, rubber-core baseball.

THE BEST PROTECTION

Even in the safest of settings, with the best equipment and with everyone playing by the rules, accidents do happen. Knowing the types of injuries that commonly occur, as well as why and how youngsters get hurt, helps parents, coaches and physicians develop preventative measures to reduce the incidence and severity of injuries.

All athletes, regardless of age, are subject to two basic types of injuries: acute injuries that are the result of single-impact macrotrauma and

overuse injuries due to the repetitive microtrauma of athletic training. The American Academy of Orthopaedic Surgeons maintains that overuse injuries are occurring in far greater numbers than ever before, and children may be more susceptible to them than their adult counterparts. Overuse injuries in children are attributed to intensive sports training programs, longer playing seasons and specialty sports camps where hours are spent practicing the same repetitive motion: throwing, pitching, serving, etc. While an overuse injury generally responds well to rest, if the problem is ignored, it could become chronic and possibly lead to a lifelong disability.

MUSCULOSKELETAL STRUCTURE

An important factor to consider in understanding what causes sports injuries in young athletes is their physical limitations. Young athletes do not possess the coordination, strength or stamina of adults. Their musculoskeletal structure is made up of immature bone-tendon-muscle units and weak ligaments making certain bone growth sites susceptible to injury (i.e. knee, heel, shoulder, elbow, hip and back). During growth spurts in younger children, muscles may be temporarily shorter than the bones they are attached to, causing tight muscles which can result in strains and tears. If such injuries are not accurately diagnosed and properly treated, they can lead to chronic pain, traumatic arthritis, and in the worse case scenario- deformity and stunted bone growth.

According to New York Orthopaedic Surgeon **Jacob D. Rozbruch, M.D.**, a specialist in athletic trauma and consulting physician for the athletic teams of several New York City schools, the most common injuries of young athletes are: ankle sprains and fractures; finger and wrist sprains and fractures; knee cap bruises and dislocations; collarbone fractures and separations; shoulder sprains and dislocations; cartilage tears of the knee; and back sprains.

PRE-SEASON TESTS

The best method to determine if your child is prepared for athletic competition is with a pre-season musculoskeletal assessment physical, says **Rozbruch**. Such physicals are mandatory in professional sports and can be very helpful in prognosticating

potential problems before the playing season begins.

“These exams enable the physician to ascertain musculoskeletal strengths and weaknesses of each youngster and to determine the presence of any pre-existing condition,” says **Rozbruch**. Unlike the traditional physical which Drily checks for problems in the vital organs, this exam checks the extremities and joints. The exam’s findings help the physician monitor the player’s physical condition and help the team’s coach determine what exercise program to initiate to strengthen and protect the player from injury.

Roy Samuelsen, coach of a Manhattan school’s football team, welcomes pre-season physicals. “These exams are important in developing exercise regimes to strengthen weak muscles and joints, such as shoulders and ankles,” says Samuelsen. “They help me modify my training program to fit the needs of the individual player.” Samuelsen began a pre-season testing program several years ago and has found it to be very successful, resulting in significantly fewer injuries.

Unfortunately, his school is just one of a few which practices proper pre-season exams. “While most schools are equipped to handle post-injury in patients, many are not prepared to practice preventative medicine,” says **Rozbruch**.

MANDATORY TESTING

Several medical associations, including the American Medical Society for Sports Medicine (AMSSM), are hoping to change that by making pre-season testing mandatory and establishing uniform guidelines for evaluating young patients prior to athletic participation.

“At minimum, our preparticipation physical exam sets forth standards for assessing risk factors and the preexistence of injuries that might cause problems for young athletes during play,” says Tom Miller, executive director of the AMSSM. “Our goal is to have all physicians adopt this method of testing when treating young athletes.”

HEALTHFUL HINTS

In addition to getting a pre-season prognosis, consider these other preventative measures:

1) Do not allow your children to participate in sports they are not mature enough to play. The ACA Council on Sports Injury reminds us that most competitive children’s sports are organized according to 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 more physically developed.

2) Teach children to rest from any activity that causes pain because “play through” merely makes the problem worse.

3) Make sure they learn the appropriate playing techniques, wear protective equipment and do proper conditioning, such as flexibility exercises, warm up, and cool downs.

4) Use good judgement in treating your children’s complaints about pain. If your children feel pain, it generally indicates, something is wrong. Don’t ignore it. Take your children to a physician for proper treatment.

Connie Secor is a freelance writer who specializes in health topics.