

The Number-one Risk of Arm Injuries Continues to be Year-round Play

If baseball is to continue to be “America’s Pastime,” we need to make sure that arm injury prevention is a number-one priority. There is no question that Little League® International is working hard to keep our young athletes healthy. From my perspective, there is no youth baseball league that has done more to promote youth baseball as a safe and healthy sport, particularly Little League’s executive staff, along with the rest of the Little League International Directors.

For years, the arm injury rates in youth baseball has been on the rise. Due to this trend, several years ago, dramatic steps were taken by Little League Baseball® to make youth baseball a safer and healthier sport. This effort has been successful in curtailing many of traumatic injuries due to overuse. However, there is much more work to be done.

Decreasing Injuries

The initial step taken at Little League to decrease arm injuries was the development of the [pitch count rules](#). The pitch count rules were generated after long periods of study and research at USA Baseball and the American Sports Medicine Institute (ASMI).

Avoid Fatigue

In regards to overuse injuries that occur in youth baseball, **fatigue continues to be the driving factor**. Research work done at ASMI in Birmingham, Ala., and from the Andrews Research and Education Institute (AREI) in Gulf Breeze, Fla., has proven that if a young baseball player plays

with fatigue, there is a 36 to 1 increased incidence that they can injure their throwing shoulder and/or elbow.

Fatigue can be defined in three different ways.

1. Event Fatigue – too many pitches in a game.
 2. Seasonal Fatigue – too many pitches and/or innings in a season.
 3. Year-Round Fatigue – playing youth baseball year-round.
- Parents should remember the jeopardy they are putting their young players in when fatigue occurs. Little League International has done a lot to educate their coaches, the players, parents, and grandparents to the risks involving fatigue and arm injuries, and what steps need to be taken to play the game safely. It's also important to note that Little League also has rules to limit the pitcher moving to catcher and vice versa in the same game to limit additional throwing.

Risk – Year-Round Baseball and Softball

Parents need to realize that the number-one risk factor of arm injuries for our youth continues to be year-round baseball or softball. If parents understand the injury risk factors, it only takes common sense to be able to recognize what to do to decrease injuries.

In the case of year-round baseball or softball, it is recommended that young players have at least two months off each year where they are not playing any type of overhead sports. Preferably, it is recommended three to four months off each year. Even professional baseball players get that period of time off, and certainly our kids are more vulnerable to injury than our mature professional players.

Risk – Playing In More Than One League At A Time

The second risk factor is playing in more than one league at the same time. Certainly, for those parents that have their children participating in Little League, they should try to make sure their children do not participate in more than one league at the same time. When multiple leagues are played in during the same season (time of year), there are few safeguards, and the chance of overuse injuries dramatically increases.

Risk – Showcase Events

Some showcases are very well organized and have the health and well-being of the young players as their top priority. There are other showcases, however, that are not well organized and carry a high injury rate. Today's parents, unfortunately, and mistakenly, consider showcases as a way for their child to get scouted for both college scholarships and professional play. These showcases don't mean near as much as parents think they do, and they can produce serious injuries over a concentrated weekend period.

Risk – Radar Gun

Young baseball players should not concentrate on their velocity. This is promoted by a dad's radar gun in the backyard or by a coach putting a radar gun on a young pitcher which promotes a pitch velocity beyond their safety margin. Young baseball players in the Little League age groups have an underdeveloped elbow ulnar collateral (Tommy John's) ligament, and it is easy to redline that ligament if they are over-throwing with a radar gun.

Risk – Poor Mechanics (curve ball)

The problem with curve balls at an early age is that it is a highly sophisticated neuromuscular controlled pitch that is difficult to throw. It is recommended that players not throw curveballs until they are old enough to shave. That means they have gone through puberty and their bones have matured. Poor mechanics continue to promote injuries, so working on good mechanics for any position in youth baseball is extremely important. While seeking out a pitching coach to learn good mechanics sounds like a good idea, there is a caution involved as well ... pitching lessons add an additional workload that could cause harm.

Once again, congratulations to the leadership of Little League International for all the organization has done to keep the safety and well-being of our young players a top priority. I, as a member of the Board of Little League International, will continue to monitor all of the safety concerns associated with our wonderful sport, and will do everything I can to help protect our young players. I am sure Little League International and its Board of Directors will continue to make the necessary safety changes to allow baseball to continue to thrive around the world.

By Dr. James Andrews

Note – Doctor James Andrews is internationally known and recognized for his skills as an orthopaedic surgeon as well as his scientific and clinic research contributions in knee, shoulder, and elbow injury prevention and treatment. Doctor Andrews is a founding member of Andrews Sports Medicine and Orthopaedic Center and is also co-founder of the American

Sports Medicine Institute (ASMI), a non-profit institute dedicated to injury prevention, education and research in orthopaedic and sports medicine. Doctor Andrews is Senior Consultant for the Washington Redskins Professional Football team and Orthopaedic Medical Director for the Tampa Bay Rays Professional Baseball team. Doctor Andrews serves on the Medical and Safety Advisory Committee of USA Baseball, and is a former member of the Little League International Board of Directors.