



Pitching and Youth Baseball

“Baseball is one of the safest sports available for today’s youth.” However, many of the serious injuries suffered by adult baseball pitchers may have begun to develop at the youth level. Because of the recent high incidence of injury, the USA Baseball Medical and Safety Advisory Committee’s purpose is to provide scientifically based information to help reduce the risk of injury. There are many variables involved with pitching that may cause injury such as the number of pitches thrown, the type of pitch, and proper pitching mechanics.

A study published in 2002 in the American Journal of Sports Medicine showed a significant relationship between the number of pitches thrown and the risk of shoulder and elbow pain in youth baseball. Pitch count limitations can help control the risk of overuse in pitchers. The recommended limits for youth pitches are as follows:

The 2002 study also showed youth pitchers who threw curve balls or sliders have an increased risk of elbow and shoulder pain. Youth pitchers should avoid throwing breaking pitches in order to reduce the risk of overuse injuries. They recommend avoiding these types of throws until their bones have matured, typically about 13 years of age.

Pitchers should develop proper mechanics as early as possible to help reduce the risk of injury. With any repetitive activity, such as pitching, muscle tightness will occur. This muscle tightness can significantly impact the biomechanics of the pitch, which can lead to injury. Proper stretching can help avoid this and should be done on a routine basis, as well as proper warm-up on the field. A physical therapist can assess and then instruct a pitcher in proper stretching techniques. This will not only help decrease the risk of injury but can also improve their pitching.

Strengthening should address a good balance between anterior and posterior shoulder muscles. Proper shoulder strengthening will help increase their resistance of the arm to fatigue and reduce injury. Since throwing involves all muscles in the body, a general conditioning program is also encouraged, emphasizing “core strengthening”. As important as training and strengthening is, rest is as important. Baseball pitchers need a period of “active rest” after their season ends. They are encouraged to participate in activities that do not include overhead throwing.

Coaches and parent should listen to a young pitcher when he complains about arm pain. If they complain during a game, they should be removed immediately. If this pain does not resolve within 4 days or if the pain reoccurs immediately the next time they pitch, parents should seek medical attention.

Summary:

1. Listen to the young athletes
2. Count pitches
3. Control pitch type
4. Stretch and strengthen properly
5. Emphasize good throwing mechanics
6. HAVE FUN!

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