**Rehab for overhead athletes**

By Ted Fifield, DPT

The calendar has rolled into May with the last sports season upon us. With it comes the smell of the grass and the sound of the ball hitting the glove. Perhaps you’re already rehabbing one of these athletes. Particularly if this is an overhead athlete, consider how much strain that arm has been through this year relative to the proper training and rest. If not, they could just be throwing it all away.

In recent Springs, there have been almost as many updates to pitch counts as tax laws. The enforcement of a pitch count began in Little League in 2007 to limit throwing with fatigue to prevent shoulder and elbow injuries in baseball and softball players. Do you know how many pitches a pitcher is allowed to throw in a given day? What about how many days of rest after pitching? These are the current mandatory Little League rules for pitches per day based on age (A) and days rest following pitches in a day (B):

A. League Age:
**13-16** – 95 pitches per day
**11-12** – 85 pitches per day
**9-10** – 75 pitches per day
**7-8** – 50 pitches per day

B. Pitches in a Day:

**>66** - 4 days rest

**51-65** - 3 days rest

**36-50** - 2 days rest

**21-35** - 1 day rest

1**-20**- 0 day rest2

Interestingly, Little League has no required rest for pitchers over 14. It shouldn't be argued that they too require rest, but it's currently not mandatory. Certain rules do exist to limit position changes most notably for catchers, but we have to question how well those are enforced. Even more so when factoring in warm ups, pitches between innings, and playing other positions or sports including travel teams that fall outside these rules. Most states including Connecticut have their own rules for high school pitchers. The CIAC (Connecticut Interscholastic Athletic Conference) provides such restrictions for high school pitchers based only on pitch count:

Pitches in a Day:

**>110** - 4 days rest

**76-110** - 3 days rest

**51-75**- 2 days rest

**26-50** - 1 day rest

**1-25**- 0 day rest1

For USA Baseball and MLB's Pitch Smart, their recommendation limits college pitchers to a max of 120 pitches per day. That would result in 5 days rest after throwing 106+ pitches with 4 days rest following 81-105 pitches thrown in one day. Furthermore, they recommend all pitchers take 4 months off from overhand throwing including at least 2 to 3 months consecutively. As stated by USA Baseball, "Ultimately, it is the responsibility of the parent and the athlete to ensure that the player follows the guidelines for his age group over the course of a year3."

According to NATA (National Athletic Trainers Association), there are five ways to help prevent overuse injuries: proper education & supervision, pre-participation physical exams, rule changes & participation limits, training & conditioning programs, and delayed sports specialization. Before the season, athletes should first start a basic fitness routine and then increase training loads by no more than 10% per week. In season, there should be a structured warm up program to help prevent injuries. They recommend limiting sport to 16 to 20 hours per week, having one to two required days off from sport, and only participating on one team of the same sport per season4.

All of this information makes it even more important to talk about overuse with your athletes and their parents/guardians with coaches, trainers, doctors, etc. as needed. Their treatment plans are patient specific and dependent on countless factors from participation to injury history. That same pitcher you're treating could be playing on a travel team or could've had symptoms throwing a football. If this overhead athlete continues to overuse their arm particularly with poor mechanics, they are likely to get injured and not recover fully. Count on it.

Sources:

1. *CIAC Baseball Committee, Modification of the Pitching Limitation Rule.*[*https://www.casciac.org/pdfs/ModifiedBaseballPitchingRulewquestions.pd*](https://www.casciac.org/pdfs/ModifiedBaseballPitchingRulewquestions.pdf)*. November 21, 2018. (Accessed April 10, 2019).*
2. *Little League, Regular Season Pitching Rules.*[*https://www.littleleague.org/playing-rules/pitch-count/*](https://www.littleleague.org/playing-rules/pitch-count/)*. (Accessed April 10, 2019).*
3. *MLB Pitch Smart, Guidelines for Youth and Adolescent Pitchers.*[*https://www.mlb.com/pitch-smart/pitching-guidelines*](https://www.mlb.com/pitch-smart/pitching-guidelines)*. (Accessed April 10, 2019).*
4. *Valovich McLeod TC, Decoster LC, Loud KJ, Micheli LJ, Parker JT, Sandrey MA, White C.  National Athletic Trainers' Association Position Statement: Prevention of Pediatric Overuse Injuries.  J Ath. Tr. 2011;46(2):206-220.*