

PITCH THIS

PITCH COUNTS AND MECHANICS MATTER

KEY FACTORS IN YOUTH THROWING INJURIES INCLUDE THE FOLLOWING:

FATIGUE • OVERUSE • IMPROPER MECHANICS

Individuals are at greater risk for injury when they throw too many innings over the course of a year.

Those throwing more than **100 INNINGS** in any given **YEAR** were

3.5x

more likely to have an injury, those who competed more than eight months out of the year were

5x MORE likely to be injured.

OTHER FACTS IN REGARDS TO OVERUSE:

Playing for multiple teams at the same time; too many pitches per game and not enough recovery between appearances (throwing more than **80 pitches** per game were **4x** more likely to suffer an injury); regularly pitching despite arm fatigue (**36x** more likely to suffer an injury)

IT IS IMPORTANT for each league to set workload limits for their pitchers to limit the likelihood of pitching with fatigue. Research has shown that pitch counts are the most accurate and effective means of doing so.

PITCH COUNT LIMITS AND REQUIRED REST RECOMMENDATIONS

AGE	DAILY MAX (PITCHES IN GAME)	REQUIRED REST (PITCHES)				
		0 Days	1 Days	2 Days	3 Days	4 Days
7-8	50	1-20	21-35	36-50	N/A	N/A
9-10	75	1-20	21-35	36-50	51-65	66+
11-12	85	1-20	21-35	36-50	51-65	66+
13-14	95	1-20	21-35	36-50	51-65	66+
15-16	95	1-30	31-45	46-60	61-75	76+
17-18	105	1-30	31-45	46-60	61-75	76+
19-22	120	1-30	31-45	46-60	61-75	76+

BIOMECHANICAL FACTORS

USE THESE BIOMECHANICAL FACTORS IN TERMS OF PITCHING MECHANICS THAT CAN DECREASE STRESS IN THE THROWING ARM:



Keep the throwing hand on top of the ball as the hand breaks from the glove during the early cocking phase.

Landing with the stride foot pointing toward home plate with the lead shoulder closed and pointing toward home plate at stride foot contact (These checkpoints occurring together has been shown to decrease stress on the throwing shoulder)

Remember the trunk and lower body are extremely important in proper mechanics for throwing. Throwing is a whole body movement and being able to generate more speed and power from the legs and trunk has been correlated with increased throwing velocity in several studies.

SOURCES: Chris Glanz, PT, Atrium Medical Center; American Sports Medicine Institute (ASMI); Pitch Smart: USA Baseball, <http://m.mlb.com/pitchsmart/pitching-guidelines>, 5/26/2016