



Dear Toluca Families,

As part of a continued effort to develop and protect its young arms, Toluca Baseball has initiated a league-wide set of guidelines for the workload of its pitchers. Below is some information that we hope will help you as parents assist us in creating a culture within Toluca that places a premium on long term arm care and overall player development.

THROWING VS PITCHING: Throwing and pitching are commonly associated with one another yet rarely defined. Why is throwing everyday viewed as healthy, yet pitching everyday as unhealthy? The answer...stress.

Throwing Analogy A: Yankees shortstop Derek Jeter fields a routine ground ball. He picks it up and leisurely throws with plenty of time to get the runner out at first.

Throwing Analogy B: Jeter fields a ground ball to his right that takes him to the edge of the outfield grass. He throws with all his strength, across his body to barely beat the runner to first for the out.

On the scorecard it will read 6-3 (SS to 1B) for both outs. However, the stress level on both throws are far from the same. Now imagine if Jeter had to make the throw in the second analogy 15-30 times an inning? Pitching stress as you may have guessed relates more to analogy B.

Pitching mechanics are designed to harmonize the body's maximum effort with it's maximum potential for throwing a baseball in the safest, most efficient way possible. However, even perfect mechanics won't eliminate stress. They merely reduce it. Therefore, while throwing a baseball is good for the arm, pitching requires stricter guidelines of observation to proactively reduce both short/long term negative affects of stress to the arm.

Professional/collegiate players will throw 5-7 days a week. When done correctly, this routine can be beneficial to the youth player as well. Throwing programs can consist of long toss, drills, weighted ball exercises, bullpens and even playing a light game of catch the day after pitching.

Throwing when done with a purpose, is the best way to develop arm strength, durability and accuracy.

PITCH COUNT PER INNING: Kids today are throwing harder and more often than they did in previous generations. There also seems to be more arm injuries than ever. One way to be proactive in keeping our players arms safe is by observing a pitch count.

Pitch count most often refers to the total number of pitches a player has thrown over the course of a game. While pitch count per game is still important to track, the latest data shows monitoring pitch count per inning is a better measurement to observe our youth pitchers by.

Below are three different scenarios of an inning pitch count that are commonly seen in games. They have been placed in a color system for simplicity.





Green Inning - If a pitcher throws fewer than 18 pitches in their first inning of work (not including warm up pitches) more often than not they should have the green light to pitch a second inning should their coach ask them to do so.

Yellow Inning - If their first inning of work is between 18-30 pitches, consider it a blinking yellow light. Depending on the pitcher, how conditioned their arm is and how they feel in that moment, pitching another inning is feasible. We would encourage you to err on the side of caution though. Good indicators of fatigue (vulnerability to injury) are changes in mechanics, velocity and accuracy. When an inconsistency with either or a combination of the three occur, it's probably time to end the outing.

Red Inning - If a pitcher goes more than 30 pitches in an inning they can finish that inning if the coach thinks it's appropriate. However, they should not come back for another inning that day. Vulnerability to injury is at its highest when throwing too many pitches in a row without rest.

*In regards to overall pitch count per game/week, Toluca Baseball has innings guidelines in place for each division to help monitor a pitchers use during the season. It is your job as parents to be sure to coordinate with your manager if your player is participating on multiple teams within Toluca or outside leagues.

Lastly, please keep in mind that just because your player says their arm doesn't hurt, does not mean you should keep allowing them to pitch past the suggested guidelines. While immediate injuries will be noticeable, many of the negative effects of "over" pitching aren't seen until the ages of 12-16. The goal is for all involved to be proactive so that your pitcher never knows the feeling of a hurt arm, now or in the future.

*Other teams and league's may choose to not abide by these guidelines. We would like to stress that they are certainly optional. While Toluca Baseball has a reputation and legacy for winning, we believe the long term health and success of our players should never be compromised for achievement.

REST: Pitchers should not be pitching on back to back days unless their total pitch count was below 24 the outing before. If they throw between 24-48* pitches they should have two days rest between outings. Between 48-72* pitches should be three days rest. More than 72* should be four days rest.

**These guidelines were taken from the current studies of Ron Wolforth, one of the leading and most respected pitching experts in the nation.*

SORENESS VS PAIN: Soreness or tenderness often occurs after an outing and is a normal part of the pitching process. However, if a child experiences PAIN they should stop pitching immediately and consult an orthopedic doctor. Toluca baseball does not in any way support or encourage our players pitching through pain. If the pain happens during a game, have your player call time out and signal to the coach that something is wrong. If it happens away from the field (home, school, etc), please notify your coaching staff to keep them up to date so that the necessary adjustments to the line up can be made and the health of your player tracked and accounted for.





WARM-UP: There's a saying "Warm up to throw, not throw to warm up". Time is often the biggest variable. It is your responsibility as parents to get your player to the ballpark with enough time for a proper warmup. We would encourage you to take the warm-up process as seriously as the game itself.

Ideally players will have 8-10 minutes of active warmup/stretching drills to get the blood flowing to all parts of the body.

Next we recommend doing arm circles. With a baseball in each hand, start with arms out, palms facing down, then 10 small circles forward, followed by 10 medium and 10 large. Then with palms facing up, repeat the exercise rotating the arms backwards.

As your players arms become stronger, they can increase the number of baseballs they hold in each hand. Similarly, they can also increase the number of arm circle sets from 3 to 5 by adding an additional set of medium and small rotations (S,M,L back to M,S) in each direction.

Arm circles do a great job of getting the shoulders loose before continuing with more arm and shoulder stretching exercises.

Another great resource to achieve a thorough warmup (in addition to the above exercises) is the arm band. While great for stretching, arm bands when used properly will also build strength. These exercises are more advanced and should be carefully supervised until the player is able to master the movements. Jaeger Sports* is a company that sells their patented "J-Band Jr." (for players 12 and younger) and provides a full set of exercises that will allow your player to achieve a complete warm up as part of a professional arm care program (*Their contact info is provided under "Additional Info").

Please keep in mind that all of these exercises should be done as diligently as possible BEFORE throwing. It is your players first and best defense against injury.

In season, all pitchers should complete the above warm up before every game. Closer to game time we would encourage them to throw a bullpen going through both their wind-up and stretch motions, along with mixing in their various pitches. Some players may need 20 warm up pitches, some may only need 10. Make what they need a priority and schedule it in.

If they are scheduled to pitch in relief during the later innings, coordinate with your coach to make sure your player has enough time to get loose and ready to pitch for the upcoming inning.

**In the event your player is entered into the game during the middle of an inning, keep in mind that most divisions and leagues allow 8 warm up pitches. If more warm up pitches are needed, the decision will be at the discretion of the umpire based on the guidelines for that particular game or league.*

While out of season, many kids will choose to play other sports and not even pick up a baseball. Other kids will enjoy the break and use that time as a rest period. Whatever your players choice, when baseball season rolls around, ease back into their throwing routine. The way they use the muscles in their bodies for baseball are very different than other sports. Allow them to gradually get back into baseball shape as it won't happen over night. In the beginning, spend more time stretching and getting the body loose,





keeping the intensity and duration of your throwing time low. Each day there after, gradually increase the duration and intensity of their throws, allowing them to listen to their arms and adjust as needed. Doing this anywhere from 3-5 days a week, 2-4 weeks before the season should get them where they need to be for Opening Day.

ARM CONDITIONING/LONG TOSS: Long toss is an effective way for pitchers to increase both arm health and velocity. For the upper levels of the game it has quickly become mandatory.

Players begin to throw 10 to 15 feet apart and slowly increase the distance as their arms warm up. Once going beyond 60 feet, they can begin to add in a light crow hop when necessary. This is referred to as the "Going Out" phase. It's about stretching the arm and getting it comfortable with distances longer than what players are usually asked to throw in a game. During a twenty minute long toss program, this phase should take a minimum of fifteen minutes.

**One important note to keep in mind; players need to throw the ball with an arc during this phase of long toss. Their throwing motion will stay the same while making a slight adjustment to their release point.*

Throwers should gradually push themselves to move out to distances they never thought possible. However, it is extremely important to always stay under control with both the body and accuracy of the throw. Players must never get to a place where they are straining to maintain good mechanics. If their mechanics fall apart or the throws are too wild (more than one or two steps away from partner) the player is out too far and at risk for injury. Just bring it in until control is reattained.

Once they are feeling their arms are stretched out and heated up, it's time to start the "Pull Down" phase. The distant player now moves in a few feet after each throw. Body control, accuracy and velocity are key. The goal is to have them in complete sync. No more arc or rainbows. It is now time to lower the release point and fire hard line drives. Throws during the pull down phase should be made without bouncing if possible. It is acceptable to bounce the throw because of the distance, as long as the focus remains on throwing line drives.

As a starting point for the youth baseball level, the first fifteen minutes will consist of the "Going Out" phase, with the "Pull Down" phase at five minutes. For the older, stronger or more advanced player, adjust the throwing program percentages above (75/25) to fit the desired time duration accordingly.

CONCLUSION: By monitoring the workload of pitchers and implementing an arm care program, our hope is that it will dramatically improve the prevention of injury and increase our pitchers overall ability to play at a higher level both now and long into the future.





ADDITIONAL INFO: Below are a few websites and links to some of the top pitching coaches in the game. Ron Wolforth, Jim Wagner and Alan Jaeger have all done camps and clinics with Toluca pitchers in the past year. They are not only some of the top pitching minds in baseball, but they have taken a special interest in our kids. We would encourage you to please take a look if you have a moment.



Coach Wolforth has put a tremendous amount of time into researching how to better prepare and train pitchers to dramatically improve every aspect of their game. He has had incredible success with his findings and has developed many training techniques, tools and instructional videos to educate and inspire pitchers at every age and skill level. Please check out his website for more info on his pitching boot camps and affordable DVD training series videos. <http://www.pitchingcentral.com/>



Jim Wagner of Throwzone, has been a great local resource for us. He works closely with Ron Wolforth, founder of the elite Texas Baseball Ranch and Pitching Central website, to bring us the latest in pitching development. He does personal and group instruction at his facility in Santa Clarita. <http://throwzone.com/>



Alan Jaeger and Jim Vatcher of Jaeger Sports have been a tremendous resource in developing a long toss and arm care program. They offer both group and individual training sessions along with products you can order online. <http://www.jaegersports.com/>

