



13 Ways To Prevent Pitching Arm Injuries In Youth Pitchers Ages 7-14

By Steven Ellis, former Chicago Cubs pitching pro

Did you know that nearly 49% of youth baseball pitchers will suffer an elbow or shoulder injury in 2015?

49%...

And at the high school level, pitching injuries are even worse.

Doctors are now performing *five times* more "Tommy John" elbow surgeries than they were just a decade ago, according to the American Journal of Sports Medicine.

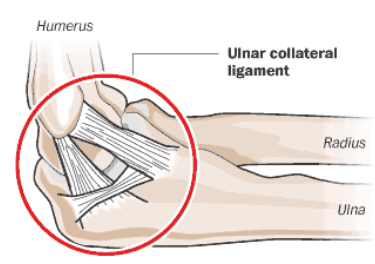
And Dr. James Andrews, one of the most acclaimed orthopedic surgeons in the world for the treatment of pitching arm injuries, has said his clinic has seen a *tenfold* increase in visits from high school and youth pitchers in the past 10 years.

10 times.

Look, it's no secret that injuries among baseball pitchers at *all* levels are on the rise, but elbow and shoulder injuries in Little League and throughout other youth baseball organizations are on the verge of becoming an epidemic.

Thousands of pitchers are seen each year complaining of elbow or shoulder pain. Your son or a youth pitcher you know may be one of them

Damage or tear to the ulnar collateral ligament (UCL) is the most common injury suffered. This ligament is the main stabilizer of the elbow during a pitcher's release of the baseball.



The good news is there's a lot we parents and coaches can do to help our kids pitch safe and stay healthy this season.

As a former pro pitcher and now parent and coach of young pitchers, I know firsthand how important it is to help our kids pitch safe and stay healthy on the mound.

Here are 13 ways (plus 2 bonus strategies) to prevent pitching arm injuries to point you and your son in the direction of success:

- 1. Make certain pitchers are properly conditioned before throwing full velocity or pitching competitively.**
- 2. Make certain pitchers have and use a proper stretching and warm up program before throwing.**
- 3. Develop a year round throwing program to maintain arm strength and stamina, flexibility, and normal range of motion.**

I personally recommend 1-2 month rest period at end of a long season, and then begin a limited and modified off season throwing program.

- 4. Teach and supervise a proper weight and resistance program.**

I recommend the [TUFFCUFF Jr Pitching Guide](#); coaches or medical personnel should be responsible for implementing this program.

Many pitchers restrict their flexibility and range of motion by improper use of weights.

Other pitchers have actually weakened themselves by over stretching the shoulder joint, causing too much laxity.

- 5. Have the pitcher throw at reduced velocity and shorter distance when learning new techniques or new pitches.**
- 6. Limit the amount of throwing a pitcher does during drills and practices if he plays another position.** The positions which would cause the least amount of stress on the arm are first base or outfield.
- 7. Make certain the pitcher dressed properly for warmth during cold temps, or to prevent early heat exhaustion during very hot weather.** Also be aware of proper intake of fluids to prevent early dehydration and muscle fatigue.
- 8. Don't use a radar gun;** emphasize the development of proper pitching mechanics, control and accuracy in young pitchers before pitching velocity. Learn the fundamentals now, and the velocity will come later as the pitcher grows and matures.



9. Adhere to the following pitch count guidelines established by MLB, USA Baseball and Little League Baseball.

Recommended pitch count limits

Age	Pitches/Game
7-8	50
9-10	75
11-12	85
13-16	95
17-18	105

Source: MLB "Pitch Smart", USA Baseball, Little League Baseball

10. Make sure the pitcher gets proper rest after pitching appearances in games (and even in practices and/or scrimmages) by adhering to the following recommended rest period guidelines:

Recommended rest periods

Number of Pitches	Rest Period
61+	3 days
41-60	2 days
21-40	1 day
1-20	None

Source: Little League Baseball



11. Concentrate on age-appropriate pitching skills.

Nolan Ryan didn't start pitching until he was in high school. Most Big League pitchers didn't develop secondary pitches or breaking pitches before the age of 13 or 14 years old—they threw nothing but fastballs and change ups.

Recommended ages for learning different pitches

Pitch Type	Age
Fastball	8 ± 2
Change-up	10 ± 2
Curveball	14 ± 2
Knuckleball	15 ± 2
Slider	16 ± 2
Forkball	16 ± 2
Screwball	17 ± 2

Source: American Orthopaedic Society for Sports Medicine

➔ As for the relationship between certain pitch types and increased stress on the elbow, it has traditionally been believed that the curveball is a more harmful pitch than the fastball or change-up. This led to recommendations by the American Orthopaedic Society for Sports Medicine that youth pitchers refrain from beginning to throw curveballs until the age of 14.

12. Make certain a pitcher pitches with proper mechanics.

While each pitcher throws somewhat within his own style, through the critical phase of throwing, most successful injury free pitchers use very similar time-proven techniques.



From what I've observed in working with hundreds of pitchers, is that from the hand break through the deceleration phase of the pitching motion, most successful pitchers use basically the same arm action.

Other common traits of successful pitchers include some of the following:

- Proper balance, flexibility and control of the body
- Good body and arm alignment
- Proper weight transfer
- A long smooth arc of deceleration of the pitching arm

When analyzing the pitching motion of a pitcher who is experiencing arm problems, be on the lookout for the following pitching faults, which may potentially be the root cause for the soreness or pain.

Recommended action steps for sore arms

Pain	Why it might be happening	What to look for (mechanics)
Bicep or Tricep	A result of not having enough functional strength in the arm as the demands of throwing increase, especially early in the season.	Failing to utilize legs, hips and trunk to throw, making the arm carry a majority of the workload.
Shoulder	A result of poor throwing mechanics and not strengthening the small muscles in the rotator cuff (particularly, the decelerators) and scap with a weekly arm care program.	Releasing the baseball when the elbow is behind the chin and dragging the arm. Postural inefficiencies.
Elbow	A result of poor throwing mechanics and weak functional strength in the wrist and forearms.	Snapping the wrist when throwing a breaking pitch; releasing the baseball when the elbow is behind the chin; and dragging the arm.

13. Take care of your arm before and after you throw.

Obviously, having a clean arm action will eliminate a lot of problems, but if you don't prep and recover you will still run into injuries.



There are also ways to improve your arm action with arm care activities such as the following examples:

- Resistance tubing or Jobs exercises;
- Scap holds and waiter walks (shoulder stability);
- Wrist weight exercises (forearm stability);
- Rice bucket exercises (finger and forearm strengthening);
- 2-lbs. mini med ball throws (reverse and pivot pickoff);
- Some kind of rhythmic stabilization (mini med ball throws against a rebounder, kneeling stabilizations, or the "shoulder tube"); and
- Foam roll with lacrosse ball (roll the lax ball over arm to find tender spots, increase pressure to release built up knots).

And remember, arm care shouldn't stop just at the arm, either.

Mobility and flexibility of the hips and thoracic extension of the back is just as important. The hip flexors, internal and external rotators, hamstrings and groin all need active and static care.

14. Bonus: Play multiple sports (and multiple positions on the baseball field). Different sports, and different positions, require different muscles – but they all continue to improve overall athleticism, competitiveness and mental toughness that all translates back to pitching.

Football develops strength, soccer endurance, basketball agility and endurance, and track speed. Young kids will only gain from playing multiple sports. This may also prevent burnout in one sport.

15. Bonus: Use the off-season to rest completely from baseball. If you're looking for a scholarship or your child wants to make baseball a career, playing may make him better, but too much of a good thing will increase their risk for injury.

Finally, even though I recommend light weight, full range of motion conditioning and strength work like the program I put together in my [TUFFCUFF Jr Pitching Guide](#), I sincerely believe that *the single best method* to build throwing arm strength and stamina – and to prevent pitching arm injuries in little league age youth pitchers – is to throw a baseball...

...and throw it mechanically correctly *all the time*.

Now it's time to hear from you: Are there any pitching injury prevention techniques that I missed? Or maybe you have an idea of how I can make this checklist even better?

Either way, send me a message to my personal email at steven@thecompletepitcher.com and let me know what you think of this list.

