

# PITCHING COUNT SAFETY

A PARENT'S GUIDE TO SIGNS, SYMPTOMS, TREATMENT & PREVENTION

The **American Sports Medicine Institute** recommends these regulations for age and pitch count.

| AGE   | MAX PITCHES PER GAME | MAX GAMES PER WEEK |
|-------|----------------------|--------------------|
| 8-10  | 52                   | 2                  |
| 11-12 | 68                   | 2                  |
| 13-14 | 76                   | 2                  |
| 15-16 | 91                   | 2                  |

For developing pitchers, small pitch totals with more frequency (e.g. two innings, three times per week) are easier on the arm and better for skill development than large pitch totals in a single outing (e.g. six innings, one time per week). It is most important for developing pitchers to have at least one day of rest after each game.

Relative body size is another factor in arm care. For example, a skinny, 12-year-old with an above-average arm and below-average functional strength is in jeopardy to hurt his arm with large pitch totals in a single game. Conversely, a six-foot-tall, 180-pound 12-year-old should be able to better handle the high-end pitch total limit for a youth pitcher without significant risk of injury.

Once a pitcher of any age gets into muscle failure competition, every pitch is exponentially more stressful on the arm. The following is a single formula for youth pitchers: Every pitch past muscle failure equals three pitches before muscle failure. For example, a 12-year-old who hits muscle failure with 60 pitches in four innings but throws one more inning of 15 pitches actually stressed his arm the equivalent of 105 pitches.

With skill work, the pitcher should be completely warmed up and loosened up before going to the mound. Then, his pitch totals should be kept at 30 to 45.

## PREVENTION STRATEGIES

Conditioning, flexibility, strength and functional movement training may reduce the risk of non-contact injuries.

### Proper mechanics:

Proper throwing and mechanics reduces stress on joints and muscles, reducing the risk of injury.

### Warm up and cool down:

Baseball warm up involves both the lower and upper body. Start at a slower, more relaxed pace and gradually increase intensity. When perspiration begins, the muscles are ready for a workout.

**Stretching:** Stretch only after having warmed up; a cold muscle is more likely to tear when stretched. Stretching after a workout increases flexibility and reduced stress on joints. Perform stretches slowly, holding each position for at least five seconds.

**Nutrition:** Proper diet and hydration before and during your workout will help you achieve peak performance.

Too many young pitchers experiment with breaking balls or split-finger fast balls before they have developed proper mechanics and useable strength.

## ICE AND AEROBIC ACTIVITY TO FACILITATE RECOVERY TIME

When a pitcher is in muscle failure with competitive pitch totals, just icing the arm isn't as effective for recovery as combining ice and some form of aerobic activity at an intensity level at which it's impossible to carry on a conversation. Ice should be used for a maximum 10 minutes on the elbow and 20 minutes on the shoulder. Two minutes of aerobic activity should be performed for every one minute of ice.



# PITCHING COUNT SAFETY (CONT.)

## HYDRATION TO FACILITATE RECOVERY TIME

Some of the first signs of dehydration are diminished concentration and inability to focus. Simply hydrating early and often will actually facilitate a pitcher's mental acuity in preparation and competition. Cramping muscles will pull extra fluids and electrolytes from the system and can significantly delay the total-body recovery process.

## SLEEP CYCLES TO FACILITATE RECOVERY TIME

All human beings need sleep to recover from their daily activities. Athletes, especially teenage athletes, are in need of even more sleep. Pitchers should plan to sleep at night for six hours, 7-and-a-half hours, or nine hours, and whenever possible, mix in a daily 20- to 30- minute "power nap."

## BUMPS, BRUISES, TWISTS & MUSCLE STRAINS

These can affect all areas of the body.

Recommended treatment is the **PRICE** formula:

**P**rotect the area with a sling or crutches, if necessary.

**R**est the injured area.

**I**ce the injury for 20 minutes at a time. Do not apply the ice directly to the skin.

**C**ompress the injured area with a wrap. Do not pull tightly, as this can cut off circulation.

**E**levate the injured area above the heart.

### SSM HEALTH CARDINAL GLENNON SPORTSCARE

SSM Health Cardinal Glennon SportsCare is the premier pediatric sports medicine provider in St. Louis and St. Charles. We provide exclusive, direct access to comprehensive medical care for young athletes. By working with multiple specialists and care partners, we guarantee your child will get the top care that is best suited to treat their unique injury, improving recovery time and outcome.

Specialists your child has access to through SSM Health Cardinal Glennon SportsCare include orthopedists, pulmonologists, cardiologists, radiologists, neurologists, emergency medicine physicians, adolescent medicine physicians, rehabilitation specialists, physical therapists, nutritionists and pediatric psychologists.

Partners your child has access to through SSM Health Cardinal Glennon SportsCare include SSM Health Cardinal Glennon Children's Hospital, SSM Health

Orthopedics, SSM Physical Therapy and SLUCare Physician Group of Saint Louis University. We also keep kids in the game through educational programs and support for parents, coaches and athletes that focus on injury prevention, proper technique and overall athletic health.

For more information about SSM Health Cardinal Glennon SportsCare or to find a specialist for your athlete, call us at **314-577-5640** or visit us at [cardinalglennon.com/sportscare](http://cardinalglennon.com/sportscare).

Expert care for young athletes by SSM Health Cardinal Glennon Children's Hospital and SSM Health emergency medicine specialists, **24 hours a day in the ER** at: SSM Health DePaul Hospital, SSM Health St. Clare Hospital, SSM Health St. Joseph Hospital - Lake Saint Louis, SSM Health St. Joseph Hospital - St. Charles.



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