

Prevent injuries before getting on the field

from stopssportsinjuries.org

QUICK FACTS

- Twenty percent of children ages 8 to 12 and 45 percent of those ages 13 to 14 will have arm pain during a single youth baseball season.

- According to the CDC, more than half of all sports injuries in children are preventable.

- Since 2000 there has been a fivefold increase in the number of serious shoulder and elbow injuries among youth baseball and softball players.

Injuries in young athletes are on the rise, but elbow and shoulder injuries in children are on the verge of becoming an epidemic. Thousands of children are seen each year complaining of elbow or shoulder pain. Damage or tear to the ulnar collateral ligament (UCL) is the most common injury suffered and is often caused by pitchers throwing too much. This ligament is the main stabilizer of the elbow for the motions of pitching. When it becomes damaged, it can be difficult to repair and rehabilitate.

Research points to overuse as the principle risk factor for injury amongst youth baseball players. Poor pitching mechanics also contribute to injury risk. Another suggested risk factor is poor physical fitness.

Throwing curveballs has been suggested as a risk factor, but the existing research does not support this concern. However, a youth pitcher may not have enough physical development, neuromuscular control, and proper coaching instruction to throw a curveball with good mechanics. Throwing curveballs too early may be counter-productive, leading to arm fatigue as well as limiting the youth's ability to master fastball mechanics.

Overuse injuries—especially those related to the UCL (ulnar collateral ligament) and shoulder—are preventable. Some tips to keep you in the game throughout your life include:

- Warm up properly by stretching, running, and easy, gradual throwing
- Rotate playing other positions besides pitcher
- Concentrate on age-appropriate pitching
- Adhere to pitch count guidelines, such as those established by Little League Baseball (see tables in following pages)
- Avoid pitching on multiple teams with overlapping seasons
- Don't pitch with elbow or shoulder pain, if the pain persists, call us!
- Don't pitch on consecutive days
- Don't play year-round
- Never use a radar gun
- Communicate regularly about how your arm is feeling and if there is pain
- Develop skills that are age appropriate
- Emphasize control, accuracy, and good mechanics
- Master the fastball first and the change-up second, before considering breaking pitches
- Speak with a sports medicine professional or athletic trainer if you have any concerns about injuries or prevention strategies



PRONE WALK-OUTS

Keep glutes and abdominals tight. Maintain rigid spine/trunk as you walk out. Only walk out as far as you can maintain control and flat back.

2-3 Sets of 10 Reps



PRONE PLANK ON ELBOWS

Keep glutes and abdominals tight maintain rigid trunk.

Begin 2-3 sets holding for 30 seconds, working up to a minute.



BRIDGE

Tighten glutes and lift bottom off of floor. Then lower bottom, slowly back to the floor.

2-3 Sets of 10-15 Reps



SINGLE LEG BRIDGE

Keep one leg straight and one leg bent. Maintain tight abdominal muscles and tighten glutes on bent leg side. While keeping glutes and abdominal muscles tight, lift bottom off of floor. Lower slowly.

2-3 Sets of 10 Reps



WALL BALL DRIBBLE

Using a weighted ball (1-2lbs.), bounce ball against wall. Begin with 30 sec. and work up to 1 min. You may begin initially, with ball at shoulder height and slowly move ball up wall as you gain strength and stability.

FLAMINGO

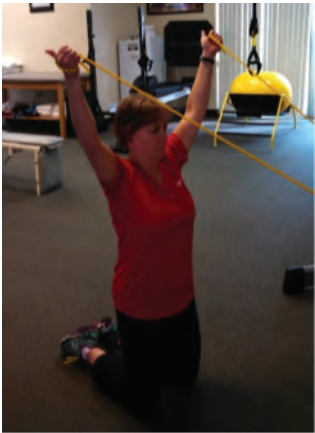
Stand on left leg maintain control of left hip. Start with both arms to your right. Pull band across your body fully extending left arm to your side. Then push the band out in front of you with right hand.

2-3 Sets of 10-15 Reps

SCAPULAR 5X5

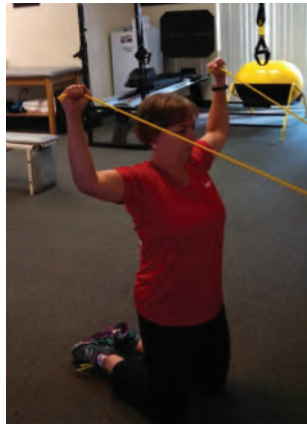
A weak or misaligned scapula (shoulder blade) is a likely culprit in some of the most common shoulder injuries among pitchers. Use the exercises below for strengthening the shoulder girdle & scapular stabilizers.

You'll need: light resistance tubing. For each exercise listed below, hold for 5 seconds x 5 reps.



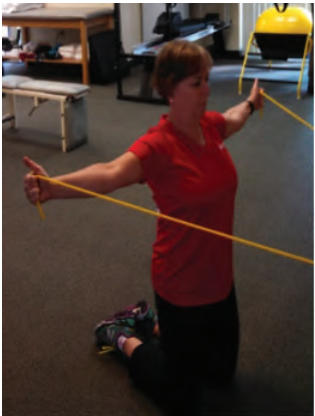
Y'S

Raise arms overhead in Y position (thumbs up).



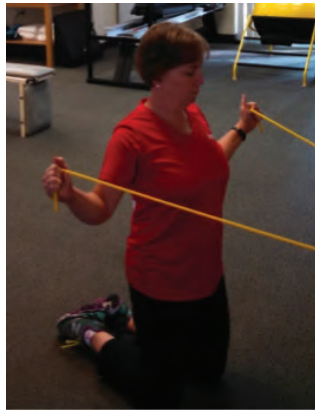
FIELD GOAL

Shoulders back pinching shoulders together. Hold elbows at 90°.



T'S

Arms outstretched, thumbs up, pinch shoulder blades together.



W'S

Arms down towards side, elbows bent in "W" position. Keep arms shoulder blades pinched together.



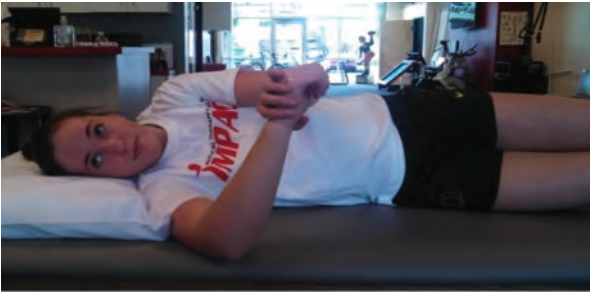
I'S

Keep arms straight and down to side.

STRETCHES

Stretching is essential for healing and remodeling after tissue damage and injury. After exercise, stretching assists with the breakdown and absorption of waste, facilitating recovery.

For each stretch listed below, hold for 30 seconds, 3 times a day.



SLEEPER STRETCH

Lay on side with your arm at 45° from your body. Then create 90° angle with your elbow. Slowly push hand towards floor. Stretch should be felt in back of shoulder. Do both sides. Stretch should be felt in the back of the shoulder.



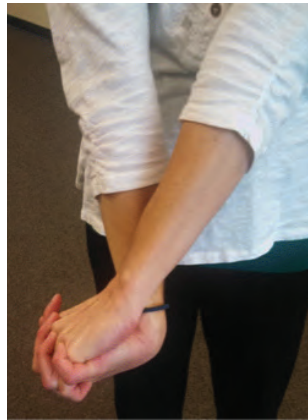
DOORWAY STRETCH

Place forearms on wall or door jam and lean forward from waist. Stretch should be felt in the pecs.



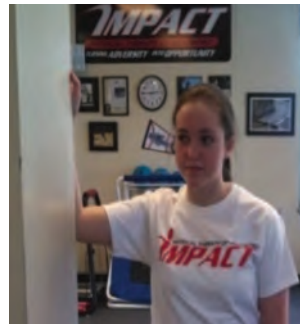
WRIST FLEXION STRETCH

Hold arm outstretched palm up. Use other hand to pull the hand backwards causing a stretch not pain.



WRIST PRETZEL STRETCH

Extend arm with wrist down fingers interlocked, then rotate wrist away from the body and use your other hand to pull the wrist upwards. Should feel like a stretch, not painful.



ONE-ARM DOORWAY STRETCH

Place forearm on wall or door jam and lean forward from waist. Stretch should be felt in the pecs.



WRIST EXTENSOR STRETCH

Hold arm outstretched palm down. Use other hand to pull the hand downwards causing a stretch not pain.

FOAM ROLLING

Foam rolling assists with myofascial/soft tissue release and improves joint mobility.



THREAD THE NEEDLE WITH EXTENSION

Kneel on the ground and place the arm closest to the foam roller firmly on the ground for support. Take your other arm and thread the needle, rolling the arm out as far as you can. You should feel a stretch on your back. On the way back, raise arm up to the ceiling, opening up the chest.

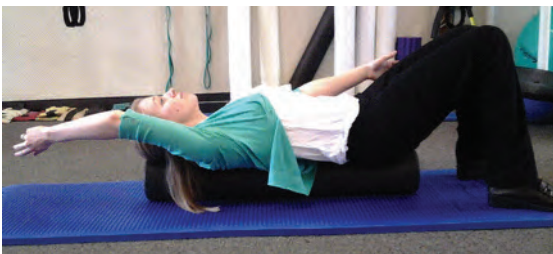
2 sets of 10 (each side)



IRON CROSS

Lay on foam roller head to tail bone. Extend arms straight up. Then open arms trying to touch the hands to the floor.

2 Sets of 10 (each side)



SCISSOR LIFTS

Lay length wise on the foam roller; alternately lift arms back and forth trying to touch each hand to floor.

2 Sets of 10 (each side)

FOAM ROLLING, CONT.



FOAM ROLLING LATISSIMUS

Lay your side on the foam roller with one arm raised rolling onto your back. Go back and forth for 3-5 min.



THORACIC EXTENSION

Lay over the foam roller with arms supporting the head. Letting your back relax over the roller, roll up and down the back periodically for 3-5 min.



OVERHEAD FOAM ROLLING

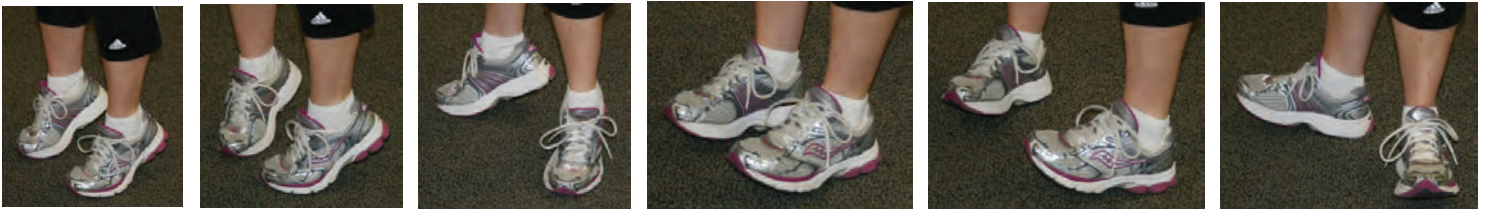
Lay lengthwise along the foam roller and slowly raise arms overhead trying to touch hands to the floor.

2 Sets of 10

DYNAMIC WARM UP

A dynamic warm-up is the best way to prepare your body for dynamic workouts. It increases core body temperature and blood flow to muscles, lubricates joints, and enhances coordination and motor ability. The following series of dynamic movements will develop flexibility, balance, coordination, mobility, and strength.

TOE & HEEL WALKS: FORWARDS/BACKWARDS



Straight Toe in Toe out Straight Toe in Toe out

Do all below as walk, then as skip. OAL: Opposite arm/opposite leg. SAL: same arm/same leg.



High Knee Butt Kick Crossover (OAL) External rotation (SAL) Internal rotation (SAL) Straight leg (SAL)



Carioca/Grapevine