Diagonal strengthening 2

A) Attach elastic band above shoulder height to your side as shown. Grab the band with your palm facing inward. Pull your arm down and across your body and turn palm backward. Slowly return to starting position.

B) Repeat with the above motion in the opposite direction with the band attached below your waist as shown.

C) Complete these exercises standing on one leg to increase the challenge.

Sidelying hip abduction

Lie on your side. Keep your hip straight and in line with your body. Lift the top leg upward toward the ceiling. Do not turn your foot upward – keep the foot facing forward.

Side plank

Lie on your side with your legs straight and body in a straight line. Push your body upward with your elbow as shown. Hold your hips in the air in straight line. Complete the following to increase challenge of exercises during the side plank:

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Tips to prevent overhead injuries

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Source: Photomark by James R. Andrews, MD and Glenn S. Fleisig, PhD

Fundamental Exercises for the Overhead Athlete
**Stretches for the Overhead Athlete**

Hold stretches for 20-30 seconds; and repeat at least 2 times on each side.

**Sleeper stretch**

Lie on your side as shown. Line elbow up with shoulder and keep elbow bent to about 90 degrees. Use other arm to gently push the hand downward toward the floor. Hold for 20-30 seconds. Do not over stretch and do not cause pain at the shoulder.

**Cross body stretch**

Bring arm across body with elbow straight. Hold the elbow with the other arm and gently pull across your body until a gentle stretch is felt in the back of the shoulder.

**Standing pec stretch**

Standing in a corner place arms at chest level on the wall. Step forward and keep back straight. Keep all your weight on your feet (this is not a push up) as you feel a stretch in your chest region. Do not shrug your shoulders.

**Hip flexor stretch**

Start in half kneeling position. Shift the body forward by lunging slightly through the front leg. Feel a gradual pull through the front of the back hip. Elevate your arm (on the same side as your back leg) overhead then pull the shoulder blade down and back toward the opposite rear pocket.

**Recommended Exercises**

Do 15 reps of each resistance exercises, 2 times each side. If the exercise is too easy or hard, increase or decrease the resistance/weight, respectively. As with all shoulder strengthening exercises, do not shrug your shoulders.

**Sidelying rotation with weight**

Lie on your side with your elbow bent. Place pillow between your arm and your body. Rotate hand upward while maintaining your elbow in contact with the pillow.

**Shoulder rows**

Lie on your stomach with arms out at your sides. Elbow bent. Squeeze your shoulder blades as your elbows move upward toward the ceiling, hold for a count of 5.

**Shoulder lifts**

Hold arms out to your side with thumbs pointing to the ceiling. Squeeze shoulder blades together as your elbows move upward toward the ceiling while keeping elbows straight, hold for a count of 5.

**Shoulder Y’s**

Hold arm out to your side with elbow straight — in a “Y” position — keep thumbs upward pointing at ceiling. Raise arms up toward the ceiling, hold for a count of 5.

**Standing rotation**

Standing with arm at about 90 degrees out to the side as shown. Tie band below your shoulder height and rotate arm behind you. Maintain good posture.

Repeat with the band behind and above you. Blend elbow 90 degrees and move arm downward by pivoting at the elbow.

**Serratus bear hug**

Stand with your upper arms level at side with elbow bent. Move arms upward and slightly inward. Hold for 3 count then slowly relax to start position.

**Diagonal strengthening 1**

A) Attach elastic band above shoulder height and behind you as shown. Grab the band with your arm facing forward. Pull your arm down and across your body and turn palm inward. Slowly return to starting position.

B) Repeat with the above motion in the opposite direction with the band attached below your waist as shown.

C) Complete these exercises standing on one leg to increase the challenge.
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**Adolescent Baseball Guidelines**

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<tbody>
<tr>
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<td>50</td>
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<tr>
<td>9-10</td>
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<td>11-12</td>
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Days of rest required based on pitch count:

<table>
<thead>
<tr>
<th>Pitch count (ages 11-14)</th>
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<th>Days of rest required after pitching</th>
</tr>
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<tbody>
<tr>
<td>21-40</td>
<td>26-60</td>
<td>1</td>
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<tr>
<td>41-60</td>
<td>51-75</td>
<td>2</td>
</tr>
<tr>
<td>&gt;60</td>
<td>76-105</td>
<td>3</td>
</tr>
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Source: Photomontage by James R. Andrews, MD and Glenn S. Fleisig, PhD

**Tips to prevent overhead injuries**

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**Recommended Exercises**

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<td>17-4</td>
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Source: Dr. James Andrews, MD and Glenn S. Fleisig, PhD

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