

Elastic Bands and Plyometric Box Training for In-Season Strength and Injury Prevention

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1. Elastic bands for shoulder health
 1. One of the most overlooked aspects of serving and attacking is **deceleration** of the hitting arm.
 2. This is where many shoulder injuries occur and it is often not trained and strengthened.
 3. Common shoulder injuries that we are trying to avoid:
 1. **Rotator Cuff Tendonitis**
 2. **Labrum Strain/Tear**
 3. **Rotator Cuff Strain/Tear**
 4. Examples of exercises to strengthen and rehab shoulder muscles:
 1. Shoulder abduction to 90 degrees
 1. Description: **stand on one end of band with foot, straight arm and hold other end of band, raise hand laterally to shoulder height, 10-15 reps each side**
 2. External Rotation
 1. Description: **attach band to wall/post/door at belly button height, elbow 90 degrees down at side with hand in front, externally rotate the hand out, 10-15 reps each side**
 3. Internal Rotation
 1. Description: **attach band to wall/post/door at belly button height, elbow 90 degrees down at side with hand in front, internally rotate the hand to flat against stomach, 10-15 reps each side**
 4. External Rotation at 90-degree abduction
 1. Description: **attach band to wall/post/door at chest height, elbow 90 degrees out to the side at shoulder height with hand in front, rotate hands up while maintaining elbow position, 10-15 reps**
 5. Shoulder Extension
 1. Description: **attach band to top of weight rack or door, straight arm out front grab band at shoulder height, bring hand down to beside your hip, 10-15 reps each side**
 6. Shoulder Flexion to 90-Degrees
 1. Description: **stand on one end of band, grab the other end, straight arm and raise hand in front to shoulder height, 10-15 reps each side**

2. Plyometric Box Training

1. One of the most overlooked aspects of jumping is **landing**.
 1. What goes up, must come down, don't forget that.
2. Most jumping related injuries happen when we land, not when we jump.
 1. Sprained and fractured ankles and knee ligament/cartilage damage being most common.
 2. What can we do to minimize these nightmare situations?
3. Examples of plyometric training
 1. Depth Drops
 1. Description: **12-24" box, step off the box, land with both feet at the same time, absorb the impact down into a squat position, 3-8 reps**
 2. Depth Jumps:
 1. Description: **8-24" box, same as Depth Drops, but after landing, jump up onto an equal or higher box, 5-10 reps**
 3. Lateral Hurdle Jumps:
 1. Description: **6-18" agility hurdle, stand beside the hurdle, feet close together, jump laterally back and forth with both feet, 3-5 sets, 6-14 reps per set**
 4. Approach Jump to Box
 1. Description: **12-24" box, attack footwork, land on the box, 3-5 sets, 3-5 reps per set**
 1. **Take extra care to make sure the box is stabilized and doesn't slide.**
 5. Bulgarian Split Squat Jumps
 1. Description: **18-24" box, one foot up on box, other about 24" from box, squat to 90 degrees in front knee, jump and land on that same foot, 2-3 sets, 3-5 reps per foot**