

Prairie



Orthopaedic & Plastic Surgery

Preseason Training Program*

Overview

3 days per week on alternating days (60-90 minutes)

Stretching: 3 sets of 30 seconds each (15-20 minutes)

Warm up: Skipping (2 laps), side shuffle (2 laps)

Plyometric jump training: Perform on mats, Rest 1-2 minutes between jumping exercises.

Rest period: Rest and Stretch (15 minutes)

Weight lifting: 1 set, 12 repetitions for upper body and 15 repetitions for lower body.

Post-training: Cool down walk (2 minutes), stretching (5 minutes).

Stretching

1. Calf stretch 1
2. Calf Stretch 2: soleus
3. Quadriceps
4. Hamstrings
5. Hip Flexors
6. Iliotibial band/lower
7. Posterior Deltoids
8. Latissimus dorsi
9. Pectoralis/biceps

Weight Training

1. Abdominal Curl
2. Back Hyperextension
3. Leg Press
4. Calf Raise
5. Pullover
6. Bench Press
7. Latissimus dorsi pull down
8. Forearm Curl
9. Warm-down/short stretch

Plyometric Jump Training Program

Exercise	Duration or Repetitions by Week	
	<i>Week 1</i>	<i>Week 2</i>
<i>Phase I: Technique</i>		
1. Wall jumps	20 sec	25 sec
2. Tuck jumps	20 sec	25 sec
3. Broad jumps stick (hold) landing	5 reps	10 reps
4. Squat jumps	10 sec	15 sec
5. Double-legged cone jumps	30/30 sec	30/30 sec (side-to-side and back-to-front)
6. 180 deg. jumps	20 sec	25 sec
7. Bounding in place	20 sec	25 sec
<i>Phase II: Fundamentals</i>	<i>Week 3</i>	<i>Week 4</i>
1. Wall jumps	30 sec	30 sec
2. Tuck jumps	30 sec	30 sec
3. Jump, jump, jump, vertical jump	5 reps	8 reps
4. Squat jumps	20 sec	20 sec
5. Bounding for distance	1 run	2 runs

6. Double-legged cone jumps	30 sec/30 sec	30 sec/30 sec (side-to-side & back-to-front)
7. Scissors jump	30 sec	30 sec
8. Hop, hop, stick landing	5 reps/leg	5 reps/leg

<i>Phase III: Performance</i>	<i>Week 5</i>	<i>Week 6</i>
1. Wall jumps	30 sec	30 sec
2. Step, jump up, down, vertical	5 reps	10 reps
3. Mattress jumps	30 sec/30 sec	30 sec/30 sec (side-to-side & back-to-front)
4. Single-legged jumps distance	5 reps/leg	5 reps/leg
5. Squat jumps	25 sec	25 sec
6. Jump into bounding	3 runs	4 runs
7. Hop, hop, stick landing	5 reps/leg	5 reps/leg

Glossary of Jump Training Exercises

- 180° Jumps:** Two-footed jump. Rotate 180° in mid-air. Hold landing for 2 seconds and then repeat in reverse direction.
- Bounding for Distance:** Start bounding in place & slowly increase distance with each step, keeping knees high.
- Bounding in Place:** Jump from one leg to the other straight up & down, progressively increasing rhythm & height.
- Broad Jumps-Stick (hold) Landing:** Two-footed jump as far as possible. Hold landing for 5 seconds.
- Cone Jumps:** Double-legged jump with feet together. Jump side-to-side over cones quickly. Repeat forward & backward.
- Hop, Hop Stick:** Single-legged hop. Stick second landing for 5 seconds. Increase distance of hop as technique improves.
- Jump into Bounding:** Two-footed broad jump. Land on single leg, then progress into bounding for distance.
- Jump, Jump, Jump, Vertical:** Three broad jumps with vertical jump immediately after landing the third broad jump.
- Mattress Jumps:** Two-footed jump on mattress, tramp, or other easily compressed device. Perform side-to-side and back-to-front.
- Scissors Jump:** Start in stride position with one foot well in front of other. Jump up, alternating foot positions in mid-air.
- Single-Legged Jumps, Distance:** Single-legged hop for distance. Hold landing (knee bent) for 5 seconds.
- Squat Jumps:** Standing jump raising both arm overhead, land in squatting position touching both hands to floor.
- Step, Jump Up, Down, Vertical:** Two-footed jump onto 6- to 8-inch step. Jump off step with two feet, then vertical jump.
- Tuck Jumps:** From standing position jump, and bring both knees up to chest as high as possible. Repeat quickly.
- Wall Jumps (Ankle Bounces):** With knees slightly bend & arms raised overhead, bounce up and down off toes.

*Hewitt, et al. American Journal of Sports Medicine 1999

ACL Injury High Risk Techniques

“Avoid”

1. Straight Leg Landing
2. One step stop
3. Plant and cut

ACL Injury Prevention Techniques

“Use”

1. Land with bent knees and hips
2. 3 step stop
3. Rounded accelerated turn