

NORTHSTAR PERFORMANCE INDEX (NPI)

The Northstar Performance Index is a uniform and quantitative test to establish basic, relevant metrics for our athletes. The NPI is conducted by Northstar's Sports Performance Director, Ron Greenfield, a prominent strength and conditioning professional who has trained many successful Division I athletes, specializing in women's lacrosse players and numerous All-Americans. The training exercises below and corresponding online videos are for your reference and use, to improve your speed, agility, endurance, and to prepare for the NPI.

I. NPI Objective: An innovative standard of excellence for the most elite high school girls lacrosse players, the NPI tests speed, agility, endurance, and general athletic capacity.

II. NPI Stations:

- 1. Pro Agility Test** // Best of 2
- 2. 40-Yard Sprint** // Best of 2
- 3. Northstar 40-Yard Sprint:** With your stick and the ball, Drop = DQ! // Best of 2
- 4. 300-Yard Shuttle:** 25 yard turns, 60 sec. rest in between // x2, *Both scores displayed to demonstrate endurance*
- 5. Vertical Measurement** // Best of 2. Brief rest between jumps
- 6. Broad Jump Testing** // Best of 2. Brief rest between jumps.

III. Northstar-Specific Suggested Training Exercises:

Below is a list of training exercises which can be incorporated into your existing workout routine. This **is not** a complete training routine, nor is it mandatory, but simply suggested exercises for you to utilize and/or incorporate into your existing workout. If you do not have access to specific weights or supplies – move onto the next exercise!

****Please see our [NPI Page](#) for video demos of many of these exercises!**

Safety: If you have injuries or pain, consult a physician before you attempt the exercises.

- Jump Rope: 1-3 min / focus on speed
- Depth Jump: 5/8 reps / Step off box (alternate legs) and then with knees flexed, explode into a jump (use arms to help propel you up)
- Box Jumps: 10 reps / As high as you can go: 6", 12", 18", 24"
- Rotational Step-Ups / Band Lightly Resisted
- Wall Sit: 2 min / 1 set on heels & 1 set on balls of your feet
- KB Swings: 10 swings x3
- BB/DB SL Squats: 10/8/6 reps / increase weight as your decrease reps
- BB/DB/KB Step Ups: 10 reps per leg
- 2" Runs: 30sec x 3 / Very rapid and small steps - only moving inches at a time. Focus on foot speed and slow arm movement. Forces quick feet.
- DB/BB/KB Clock Lunges: / reverse, diagonal, lateral, front, cross / 10 reps

• XI. TRAINING: STRENGTH & CONDITIONING (CON'T)

- Ski Hops: 30 sec x3
- SL DB/KB/BB Calf Raises: 25 reps x3
- Lateral Box Jumps: 10 reps (left/right is 1 rep)
- Foot Fires ("Fast Feet"): 30 sec x3 (front/lateral)
- Band Resisted Starts: 10 reps
- Sled Runs: 50 yards x3 (1min rest between reps)
- Lateral Band Walk: OH (overhead), Squat (no weights, just hands in air focusing on form) / 10 steps with squat left and 10 steps right
- 300 yard shuttle (cone 25 yards): x3 with 1 min rest between sets / Goal: 65 seconds or under
- KB/DB/BB Hang Cleans: 5 reps x 3
- SB SL Leg Curls: 10 sec hold for 5 reps
- SA DB/KB Snatch: 10 reps x 3
- Rapid Jumps: 1 min (focus on foot strike speed versus height) // hand up and continuously jump - not for height but how many can you do in the minute, emphasizing quick and fast feet
- Heavy Jump Rope: 50 reps
- Kangaroo Jumps: 1 min (straight legs using the balls of your feet to jump) // Feet together with small flexing of the knees, flexing your feet to jump. Small movement, not for distance or height - strengthens calf, ankle, and shin.
- Lateral Bounds: 10 reps x 3
- Hurdle x Step: 1 min x 3 // using a 12" hurdle, cross step over it as many times (both feet on one side and then the other) as you can in a minute. This is an agility drill.
- Seated Box Jump: 5 reps x 3 // from seated position on an 18" box, rock forward and with feet on the ground, jump onto a 24 or 30" box. Designed to take away upper body & increase leg strength.
- Agility Ladder (with or without resistance) various exercises: 10 reps x3
- DB Arms Swings: 30 sec x 3 (focus on arms staying bent and speed)
- TRX SL Lunge/Hop: 10 reps
- TRX SL Sprinting: 30 sec x 3
- BOSU Ball Lateral Hops: 1 min x 3 // Single leg is on one side of the floor and other leg is on top of BOSU Ball. Drive off BOSU leg and bring that leg to the other side and leg that was on the floor is now on the top of the BOSU BALL.
- BOSU 1/4 Turn Hops clockwise/counterclockwise direction: x2
- BOSU SL Squat (or on Bench Squat): 3/5 lbs DB x10 reps

Exercise Key:

KB = Kettle Bell

DB = Dumb Bell

BB = Barbell

SB = Stability Ball

SL = Single Leg

SA = Single Arm

TRX = Suspension System

BOSU = Dome Ball

IV. Existing Northstar Invitational Best Times (2012-2019):

Pro Agility Test: 4.40

40-Yard Sprint: 4.96

Northstar 40 Yard (with stick/ball): 4.71

300-Yard shuttle (2-run average): 62 s.

Vertical Jump: 26.5 in

Broad Jump: 89 in