

# OFF-ICE TRAINING RECOMMENDATIONS

## **LEG POWER (Test: Standing Long Jump)**

Power is defined as the ability to generate force at high rates of speed (power= strength x speed). To improve leg power you must increase leg strength. You must also train the body to produce movements fast! The best hockey-specific exercises for increasing leg strength are single-leg squats, double-leg squats, lateral squats, lunges, step-ups and dead-lifts. Plyometrics (jumping, hopping, bounding) are also extremely valuable for improving the body's ability to generate force fast!

## **ACCELERATION SPEED (Test: 10 Yard Sprint)**

Hockey is a game of repeated accelerations. Rarely do you skate in a straight line for more than 5-10 yards. The ability to start and increase speed rapidly is essential for on-ice success! Speed equals stride length x stride frequency. Acceleration speed relies primarily on stride frequency- the ability to turn the feet over quickly while applying high levels of force in to the ground (or ice). The best way to improve speed is to run/skate fast over short distances. Increasing leg power (as explained above) will significantly improve acceleration speed.

## **AGILITY (Test: Pro Agility)**

Agility is defined as the ability to change directions. This is also a very important component of on-ice success since hockey involves constant stopping, starting, twisting and turning. The ability to stop fast and start fast depends on a strong core and lower body. The core muscles must be strong to stabilize the body as it moves explosively in multiple directions. The lower body (legs) must be strong to decelerate (reduce force) the moving body and immediately reaccelerate. To improve agility you must focus on increasing core and lower body strength, while also practicing short change of direction drills on and off the ice. Practice combinations of movements that are similar to those you perform on the ice. For defensemen, emphasis should be placed on changing from backward-forward (opening the hips), and forward-backward.

## **UPPER BODY STRENGTH/ENDURANCE (Test: Max Pushups/Max Pull-ups)**

Upper body strength and endurance are important components of athleticism that effect your on-ice skill execution. Rather than emphasizing bench press, which is completely non-functional (since you are lying down on a stable surface when you do it) pushups and pull-ups demonstrate your strength relative to your bodyweight. Pushups test your pressing strength, while pull-ups test your pulling strength. It is important to train body aspects of strength! To improve upper body strength begin by mastering your bodyweight! Do pushups (there are 100's of different ways to do them) and pull-ups consistently. Performing other upper body exercises with dumbbells and barbells can also be effective when performed consistently and progressing regularly.

## **CONDITIONING (Test: 300-Yard Shuttles, 2 reps, 3:00 Rest)**

Hockey is an anaerobic intermittent sport. Each shift involves a very high intensity effort for 30-60 seconds, followed by a recovery period of 2:00-3:00 minutes. The ability to sustain an intense effort throughout a shift, recovery quickly, and return to the ice to perform another intense effort requires exceptional training of the body's energy systems. To improve hockey-specific conditioning interval training must be a priority. Train for the game by training like the game! Long, slow distance running does not prepare the mind or the body, and can actually make you slower! You must train fast to be fast! Through interval training (alternating between intense work efforts and rest periods) you will improve both your anaerobic power and your recovery (mostly dependent on your aerobic system).