

# **Core Training for Hockey**

By Mary Barnes, MS, ATC, LAT and Jay Dawes, MS, CSCS,\*D

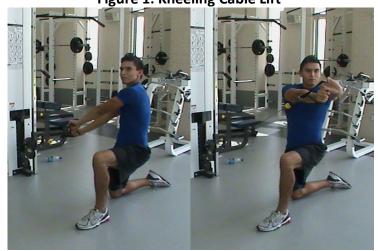
A strong foundation is important for any athlete, but especially for hockey players. For example, during a slap shot or slap pass the Hockey player must be able to transfer energy from the ice, up through the legs, torso and the arms to generate the stick speed necessary to hit the puck with power and accuracy. During this full body movement, much of the power generated comes from core strength and stability. Attempting these rotational movements with a weak or unstable core, therefore, can lead not only to less power and accuracy, but can also lead to injuries of the lower back. The contact nature hockey makes low back injuries a concern. Additionally, athletes with a history of back pain or injury are at an even greater risk for additional injury.

For these reasons increasing core strength and endurance is critical. However, it is important that the athlete follows a systematic training progression to maximize performance and reduce injury risk. The following is a sample training progression for improving core endurance and strength.

## **Kneeling Cable Lift**

- Begin by grasping the handle using an alternated grip (lead hand on top). Turn sideways and drop the knee closest to the weight stack straight down approximately 1-1-1/2 ft away from the weight stack while keeping the opposite leg foot in full contact with the ground.
- While keeping good posture the back flat and the arms straight, rotate the torso and move the handle upward and across the front of the body until it is at shoulder level, and just outside the opposite leg knee
- Return to the starting position using the same path traveled to lift the handle.

Figure 1: Kneeling Cable Lift



## **Standing Cable Lift**

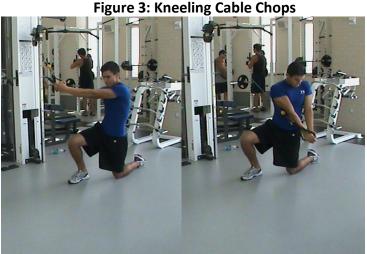
- This exercise should be performed in the same manner as the Kneeling Cable Lift; however the athlete will perform this advanced progression from a standing position rather than the kneeling position.
- Once the athlete has lifted the handle to the opposite shoulder, they should pivot the back foot (a.k.a- squash the bug) in order to reduce injury risk to the spine. The lead foot should remain pointing straight ahead throughout the duration of this exercise.



**Figure 2: Standing Cable Lift** 

## **Kneeling Cable Chops**

- Begin by grasping the handle using an alternated grip (lead hand on top). Turn sideways and drop the knee farthest from the weight stack straight down while keeping the opposite leg foot closest to the weight stack in full contact with the ground.
- Using an alternated grip, with the hand closest to the weight stack on top, grab the cable handle.
- Extend the arms and in one smooth and fluid motion, rotate the torso touching the handle to the opposite side, then return the handle back to the starting position using the same path and movement pattern.



## **Standing Cable Chop**

- This exercise uses the same movement pattern described in the Kneeling Cable Chop exercise; however it is performed from a standing position.
- As the athlete moves the handle across the body, they should pivot the back foot, similar to the Standing Cable Lift exercise, in order to reduce injury risk to the spine. The lead foot should also remain pointing straight ahead throughout the duration of this exercise.



**Figure 4: Standing Cable Chop** 

## **Program Design**

Once the athlete is able to master the technique in both the kneeling chop and lift they may progress to the standing variation of these exercises in order to increase sport-specificity. It is important that this progression is followed, because if an athlete fails to demonstrate the proper muscular strength and endurance to stabilize the trunk from the kneeling position it may increase risk of injury in the standing position. As a reminder, the core should be doing the work during this exercise progression; if the arms including the shoulder or elbow become sore, it is likely that there are errors in the form. It is also important that the athlete perform an equal volume of work with both the chop and the lift on both sides of the body ensure proper muscular balance. One chop and lift exercise should be performed for at least 2-3 sets, 2-3 non-consecutive days per week with a weight that will allow the athlete to perform no more/or less than 10-15 repetitions with good form and technique.

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