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Hockey Stretches and Flexibility Exercises

There are many versions of the sport of hockey, though the two primary forms are ice hockey and field hockey. The origins of hockey date back some 4000 years - drawings exist in Egypt which depict a game resembling field hockey. Modern field hockey appeared only in the mid-18th century in England however, primarily in the schools. The game later became well established in the first half of the 19th century, with the first club - Blackheath in south-east London - being created in 1849.



Two teams compete in hockey, each attempting to manoeuvre a ball, or a disc-shaped object known as a puck, into the opponent's net or goal, using a hockey stick. Field hockey may be played on gravel, natural grass, or various kinds of artificial turf, using a hard ball. Ice hockey may be played

either indoors or outdoors, substituting a puck for a ball. Field hockey is played worldwide, particularly in Europe, India, Pakistan, Australia, New Zealand, South Africa and South Asia, while ice hockey is mostly popular in the colder climes.

Modern hockey sticks are J-shaped and made of a composite of wood, fiberglass and/or carbon fibre. The blade at the bottom of the stick can lie flat against the playing surface and can curve either direction, to accommodate both left- and right-handed players. The curved hook at the playing end is used to propel the ball or puck. Ice hockey has been an Olympic sport since 1924. Generally, right handed players shoot with a left

curved stick while left-handed players, shoot with a right curved stick, in each case allowing greater control.

Most ice hockey worldwide is played under the rules of one of three organizations, Hockey Canada, USA Hockey, and the International Ice Hockey Federation. In each case, the rules vary somewhat. Ice hockey is played on a marked surface of ice known as the hockey rink. In most cases, there are six ice-skated players per side on the ice at any time. Teams are made up of five players and one goaltender per side. The game's objective is to score goals by hitting the puck into the opponent's goal net, which is placed at the opposite end of the rink. Players maneuver the puck using the hockey stick, and may under strict rules, also redirect the puck with any part of their bodies. A game is made up of three periods, each lasting twenty minutes.

In the U.S. popularity is concentrated in the Northeast, the Midwest, and Alaska. In Canada, where the game enjoys immense popularity, hockey is the national winter sport.

Anatomy Involved

Hockey relies heavily on both upper and lower body musculoskeletal anatomy, as well as aerobic and cardiovascular endurance. Among the most critical muscles used in both field and ice hockey are:

- Abdominal muscles
- Oblique muscles
- Erector spinae muscles and associated back muscles
- Hip extensors including the gluteal and hamstring muscles
- Hip flexors and quadriceps muscles

Muscles of the core are particularly critical for hockey. Core muscles include the abdominal muscles (such as the rectus abdominus and more importantly, the transverse abdominus), and the internal and external oblique muscles. A strengthened core permits greater power, increasing speed and precision, reducing the risk of injury. The hockey slap shot for example requires the contraction of core muscles, which assist in stabilizing the body. The slap shot follow-through also requires force largely generated in the core musculature.

Calf muscles are essential to support and stabilize the ice skater, while quadriceps and gluteal muscles, particularly the gluteus maximus are relied on for skating power. Large muscles in the legs generate enormous power for the hockey player but must be supplied with large amounts of oxygen when they are being worked. The gluteus maximus, critical in forceful skating, is the largest muscle in the body, used to extend the leg at the hip. Muscular growth or hypertrophy results from this muscle being extensively worked by the athlete.

Quadriceps muscles in the thighs also play an important role in skating. Their action is to extend the knee as well as acting to hold the knee in a static flexed position. Muscles of the inner and outer thigh act to adduct the leg, moving it away from the body's center, during the pushing phase of the skater's stride. The inner thigh muscles are used in abduction - pulling the leg inward during the recovery portion of the stride.

Among upper body muscles, the anterior and middle deltoids and biceps muscles are the most heavily used.

Most Common Hockey Injuries



Hockey players are prone to a variety of overuse injuries due to movement inherent in the game, as well as assorted acute or traumatic injuries. Back muscle strain or back ligament sprain, groin strains, hip flexor strain, adductor strain, and tendonitis of the hip, pelvis, and groin; hip, knee or shoulder injury, wrist, hand and finger injuries, head and neck injuries including concussion and

assorted contusions are all commonplace.

Hockey is a dynamic, fast-paced and aggressive sport, involving frequent collisions. Players are vulnerable to injury from high-impact impact with other players, boundary walls and goal posts. Additional risk of traumatic injury comes from possible impact with skate blades, hockey sticks, balls or pucks - some traveling more than 100 MPH. The most common injuries include:

- Lacerations (cuts) to the head, scalp, and face
- Contusions, which may occur in the upper or lower body

- Neck and spine injuries
- Knee injuries, particularly sprains to the medial collateral and capsular ligaments
- Shoulder injuries, including acromioclavicular, or AC joint separation, (also known as a separated shoulder) as well as shoulder dislocation
- Gamekeeper's thumb, resulting from the tearing of the ulnar collateral ligament
- Fractures of the hand and wrist
- Concussion, ranging from mild to severe and involving brief to extended periods of unconsciousness.
- Skate bite - a friction injury produced by the tough leather of the skate boot pressing on the tendon in front of the ankle

Injuries to the shoulder joint (as a result of checking with the body of another player or hockey stick) occur frequently in the game. The shoulder joint is composed of the humeral head and the glenoid fossa of the scapula. This highly mobile joint is relatively exposed, making it highly vulnerable to injury. Subluxation of the shoulder occurs when the humeral head slips out of joint, occasionally causing temporary paralysis. Fractures of the clavicle are also a common affliction, requiring proper medical attention.

Injury Prevention Strategies

The aggressive and fluid nature of hockey leaves players vulnerable to an assortment of sudden injuries due to accidents on the ice. While these are difficult to prevent, other injuries may be reduced with proper conditioning, attention to correct technique, protective gear, etc. Strengthening and stretching programs will help reduce the incidence of strains, sprains, muscle tearing and a range of overuse injuries.

The following safety points should be strictly adhered to:

- Always properly warm-up (including practice skating) prior to play
- Allow an adequate cool-down period and perform after-game stretching
- Always use helmets and face shields. They have been shown to reduce the incidence of head and facial injuries

- Inspection of the ice surface for obstructions or damaged areas, as well as the goal area should be carried out prior to play

The Top 3 Hockey Stretches

Below are 3 of the most beneficial stretches for hockey. Obviously there are a lot more, but these are a great place to start. Please make special note of the instructions beside each stretch.



Reaching Lateral

Side Stretch: Stand with your feet shoulder width apart, then slowly bend to the side and reach over the top of your head with your hand. Do not bend forward.



Kneeling Quad

Stretch: Kneel on one foot and the other knee. If needed, hold on to something to keep your balance and then push your hips forward.



Kneeling Heel-down

Achilles Stretch: Kneel on one foot and place your body weight over your knee. Keep your heel on the ground and

lean forward.