



The Warm-Up is the Workout

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Possibly the most overlooked and undervalued part of a training session or lacrosse game is the warm-up. While coaches do preach the importance of the warm-up prior to a game they almost always just mean the lacrosse skills part, of getting out on the floor or field and doing some shuttle drills and warming up the goalie. The physical warm-up tends to just consist of jogging around a few times and then inevitably forming a large circle with the team Captain in the middle leading the team through some static stretches (that most of the players just talk and joke through, not really even putting any effort into such basic and simple tasks). Static stretches are those that are held in a stationary position for roughly 30 seconds. However even this is better than what most older players do when they go to their local gym to workout and do not even warm-up at all, but go directly into lifting weights (chest and biceps for the guys almost every time too, but that is a discussion for another day). I would like to introduce the concept and importance of the actual physical preparation and warming up of the body before a game, practice, or performance training session and all the things a proper warm-up will accomplish to help you perform at your absolute peak level right from the start and more importantly help to reduce the likelihood of injury during the game.

Lacrosse is a fast paced game requiring intense outbursts of strength and power, and requiring the body to be flexible and mobile at the same time so that the athlete can move properly. It is a sport where the player is in constant motion. From a commonsense perspective then it should be very clear that standing in one place will not prepare the body appropriately for the game. Sitting down reaching towards your toe will not prepare the body to run at maximum speed. A proper warm-up must include motion and dynamic stretching. Dynamic stretching includes sport specific movements that increase range of motion while moving. The warm-up helps to bridge the gap from performing regular daily activities to playing at peak levels. The goal of the warm-up is to: increase blood flow to the muscle, increase core temperature, increase dynamic flexibility, move all joints through their maximum range of motion, activate muscles, and most importantly excite and activate the nervous system. Too many times increasing the core temperature and blood flow to the muscle receives maximum priority when in reality the activation of the nervous system is actually the most important aspect. The nervous system is what signals the muscles to contract and is responsible for recruiting the muscles to perform the required actions. By having the nervous system activated and excited it is able to signal and recruit more muscle fibres in a faster amount of time to perform a given task. This will result in being faster and more powerful right from the start of a game or practice. In turn, static stretching by itself has been found to actually dull the neural system, in effect putting the muscles to sleep. Obviously, this is not something we want to do immediately before playing a game. However it must be stated that static stretching does have a purpose if used properly.

Now that the goals of the warm-up have been established and identified we can begin to discuss how to accomplish all of them and lay out the order and duration it should last. A proper warm-up before a game should last 15-20 minutes. It should begin slowly and gradually build up in intensity culminating with full speed and high intensity drills. At first it should consist of general movements and gradually move into more sport specific drills and activities. It should include linear and lateral movements to mimic movements that will occur during the game. At the end of the warm-up the player should be sweating. Following is a sample breakdown of a warm-up and one I recommend you try using before your next game, practice, or training session. I am sure that many of the exercises/stretchers are known and a description of each is beyond the scope of this article but I will describe briefly some of the less well-known movements.



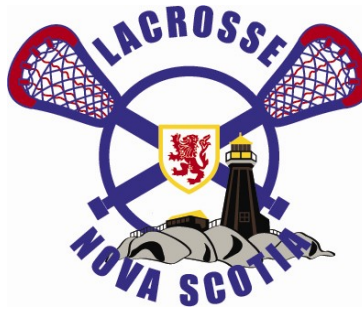
Static Stretching: As I said earlier it does have a purpose if used properly. It will initially dull the nervous system but because of the drills and exercises that will be completed after the static stretching occurs these effects will be negated. This portion should be no longer than 5 minutes in duration.

Active Dynamic Stretching: This will comprise the rest of the warm-up. If playing box lacrosse the width of the arena floor can be used. If playing field or having to warm-up outside prior to a box game due to time constraints with the floor, a 20-30 yard length of area is optimal. This portion consists of:

- ½ Speed Run
 - Walking Quad Stretch
 - Walking Knee Hugs
 - Forward Lunge Walk
 - Carioca Left/Right (also known as karaoke)
 - Trail Leg Walking: stepping over an imaginary hurdle out to the side
 - ¾ Speed Run
 - Walking Supermans: balancing on one leg, reach forward with hands and backwards with other leg trying to get the body parallel to the ground
 - Straight Leg March: arms out front, keep legs straight and kick them forward trying to reach hands
 - Lateral Shuffle-to-Backpedal Left/Right
 - High Knee Run
 - Butt-kickers
 - Standing Long Jumps
 - Rapid Response-Fast Feet: imagine a line on the ground and step over it forwards and backwards as fast as possible for 5 seconds, then jog it out (this works to really excite the nervous system)
- Maximum Speed Run x2

At the conclusion of this warm-up all of the goals that were previously mentioned will have been attained. Core temperature will be up, blood flow to the muscles will have increased, the muscles will be more flexible, the joints will have been moved through their entire range of motion, and the muscles and neural system will be activated. The athlete will be sweating, will feel tired, but ultimately will be ready to play at peak performance from the opening whistle instead of taking a few minutes or shifts to get into the game.

I cannot stress the importance of the warm-up enough. In fact, I do not even like the term as athletes automatically assume they can just coast through it and not put in maximal effort because it's 'only the warm-up.' On top of all the physical benefits attained from a well-designed warm-up, it will also help psychologically prepare you for the upcoming game. The ritualistic nature of a physically challenging warm-up before every game will help you reach the proper mental state to perform at the highest level, you will be ready to go while your opponent will have only jogged around and joked with teammates when the game starts. The benefit to that is very obvious. As much emphasis as I have put on the warm-up before a game even more emphasis should be on it during a performance training/workout session. Every training session I direct with athletes includes a warm-up, movement skills training, power development, strength training, and conditioning. If the athlete could only perform one portion of that workout I would choose the warm-up every single time. No one other portion will yield more positive benefits than the warm-up will. Increased flexibility, improved joint range of motion, improved posture, and most importantly reduced potential of injury in the future. Give it a try before your next game or training session and you'll feel the results immediately.



Sources

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