

Title: **Pre-Season Conditioning - Part 4**

Date:	Venue: Playing Field	Duration: 1 Hour 15 Minutes	No of Players:	Ability / Level:	Equipment: Cones, Water Bottles and a Whistle
-------	--------------------------------	---------------------------------------	----------------	------------------	---

Session Goals:
 Hockey players require a blend of strength, power and muscular endurance. We have been building on this in the previous weeks.
 This week we move more towards the anaerobic power and anaerobic endurance which is essential for hockey players.
 Although the majority of the game is spent in low-level activity such as walking and light jogging, repeated back-to-back sprints mean that it is important that players should have good levels of speed and tolerance to lactic acid.

Personal Coaching Goals:
 The objective of this session is to start getting your players' bodies used to working anaerobically to make the players more efficient.

 10 minute warm up of dynamic stretches and drills, 5 minutes plyometrics, 24 minutes for Strength, 10 minutes for Cardio#1, 6 minutes for Speed and Agility, 12 minutes for Cardio#2 and finally 5 minutes for Cool down.

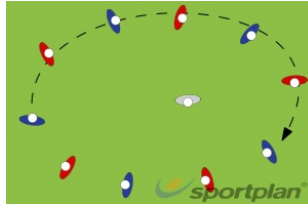
 Pre warm up set up the following: Six lines of cones approximately 10 meters apart.

Time	Task / Activity / Session Content	Coaching Points
------	-----------------------------------	-----------------

Warm Up

Circle Running

Get your group to form a large circle facing the back of the person in front, with you stood in the center. Make sure the circle is as large as possible to save players from running in a tight circle.
 Start the group slowly jogging in one direction and every 20-30 seconds change the direction - indicate this by blowing the whistle.
 Get them to do all of the drills below in both directions.



 **Coaching Tips**

This warm up is a good way to get your group to all work at same pace, so no one falls behind and is good for team building as everyone stays together.
 Hockey involves fast changes of direction as well as moving in every direction. It's good to practise moving at speed in multiple directions. This is also good for spatial awareness as players have to stay a constant distance from the others.
 The drills that are incorporated into the warm up are good for re-educating and conditioning the body to move at speed more effectively which is important for hockey being a fast game with a lot of rapid changes of directions.

1. Change in speed:

Over the course of the warm up the speed should be progressively increased. Within the warm up speed can be changed on demand of either a command or a whistle. Go from a jog then short sharp burst. Start and stop the burst with a whistle.



2. Run backwards:

Running backwards is not only essential within hockey it is also very good at re-balanceing the body by working the opposite muscles to running forwards.



3. Side step facing middle:

Rapid side steps. Take a step to left foot out to the side then bring the right foot to meet left. Stay on for toes and stay tall. Make sure you do the exercise in both directions.



4. Sidesteps facing out:

Rapid side steps. Take a step to left foot out to the side then bring the right foot to meet left. Stay on for toes and stay tall. Make sure you do the exercise in both directions.



5. Fast feet side step facing the middle:

Side step facing the middle of the circle - is side stepping in a squat position with back straight, head up.

This is a great warm up that doubles as fitness.



7. Grape vine (cross overs):

Step out to your right side on your right foot. The left leg crossed behind the right foot to place the left foot on the ground. Step out to the right again with the right foot and bring the left foot this time in front of the right leg. Repeat in the opposite direction so that the left leg leads.



6. Fast feet side step facing outside circle:

Same again but this time get your players to face the other way.

Fast feet in the side step wakes up the link between your players' brains and muscles. This exercise can be done multiple times within the warm up.



8. High knees:

Use arms to help drive knees high and stay on toes. Concentrate on the height of the knees and the speed of the cadence, fast, rather than covering a long distance. Short and sharp drill.



9. Kick your bottom with feet:

The aim is to have a fast cadence. Use your arms to balance the body and drive the movement. Try to kick your bottom with the heels of your foot. Not about distance covered, more about speed of movement.



10. High Skip:

Use arms to help drive the knee up and simultaneously explode off the floor with the opposite leg and foot to gain as much height as possible off the ground. Concentrate on the height of the knees and height of the hop rather than covering a long distance. The explosive phase is the up, the recovery phase in-between.



11. Feint dodge:

Throw a dodge the opposite way you are running then continue the way you started.



Dynamic Stretches



Notes

Dynamic stretches to be done in circle.



Notes

Keep the movement continuous, don't stop and hold.

1. Lunge:

Keep front knee over the front foot. Push hips forward and try to rotate pelvic bone up towards the sky to increase the stretch on the hips.



3. Leg swings - Front and Back:

This can be done in pairs for support. Try to keep hips square and swing legs forward and back. Bend knee when the leg is at the back, like preparing to kick a ball. Feel in hamstrings when the leg is at the front and quads and hip when the leg is at the back.



5. Sumo Twist:

Squat down and push knees out with elbows, stand, turn and face opposite direction. Try to keep the chest high rather than leaning forward.



7. Windmill arms:

Standing tall make big circle with arms going in opposite directions.



2. Sideways Lunge:

Take a step to side, put weight on one leg and bring the toe up of the other. Toe pointing to the sky.



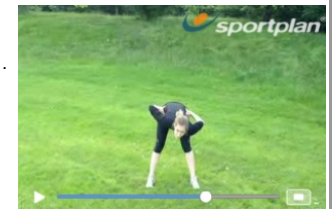
4. Leg swings - Side to side:

Can be done in a pair for support the easiest position is facing each other with arms out in front holding each others elbows. Swing the legs in front of the body trying to keep the leg in the frontal plane (parallel with the body).



7. Body Rotation:

Standing up with arms on hips. Start by making small hip rotations then larger, keep feet planted. As you lean forward feel the stretch on hamstrings.



8. Front and Back Clap:

Clap hands together in front of body while pushing hands up and then around the back clap hands together.



Plyometrics

Explosive strength training

Players perform these practices on the start line. These practices won't make your players tired but they will make them faster!



Coaching Tips

Perform 10 of each drill each out, looking for a very explosive movement. This is not a competition about who can cover the most distance, it's about height!
After each practice walk back and then start the next exercise.

1. High Skip:

Use arms to help drive the knee up and simultaneously explode off the floor with the opposite leg and foot to gain as much height as possible off the ground. Concentrate on the height of the knees and height of the hop rather than covering a long distance. The explosive phase is the up, the recovery phase in-between.



3. Split Squat Jumps:

Get until a lunge position with the back leg straight down from the hip with the knee at right angles with the front leg at right angles to the hip. Explode out of the floor and while in the air swap which leg is in front. Try to gain maximum height rather than distance. Only a small distance may be traveled and this is fine.



5. Single leg lateral hops:

To perform a lateral hop start by standing on one leg with your hands on your waist or by your sides. This is essentially a skip but unlike the high skip you try to cover maximum distance rather than height. Take off from one leg and land on that same leg, then repeat on the opposite side.



2. Squat Jumps:

This exercise starts with a deep squat. Explode off the floor into a jump trying to get a maximum height not distance. The up phase is the fast, power phase and the down phase is the slower recovery. It is not a race to complete each repetition the aim is to get maximum height.



4. Bounding:

This is essentially taking long strides while running. Think about driving the knees up and really exploding off the ground and using the arms to drive.



Strength

Deep Squats and Shuttle Runs

Place cones at 10 metres intervals over 50 meters.

Get players into pairs. While one person in pair does shuttle run the other member of the pair is doing deep squats, holding the position for a few seconds before standing and repeating.

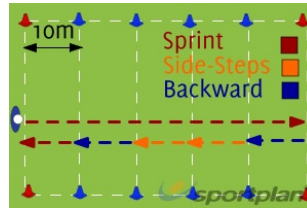
Once the player doing the shuttle run has finished players swap over.

After pairs have both performed deep squats they should then work their way through the exercises below (press ups, lunges, the plank and back extensions) alternating between running and performing these strength exercises.

This is one set - repeat 3 times.

The Shuttle Run:

Sprint to the 50 meter cone and turn. At speed run backwards from 50-40m line. Side step facing one way from the 40-30m line. Side step the other way from 30-20m line. Run backwards 20-10m line. Turn and sprint back to the start line.



Notes

High levels of strength are a prerequisite for superior speed, power, strength endurance and overall hockey performance.

Upper body and core strength are important to increase the power of the hit and push as well as being able to maintain position with less fatigue.

The reason for doing 1 minute of each practice is to keep a strength endurance element. Players will have to breathe hard to keep the movement going.

Running backwards is an excellent way for the body to balance out the muscles used when just running forward.

Hockey is a fast turning multi-directional game and players need to be able to move in all direction and change direction at speed.

Lunging in all directions is good as when tackling or reaching for the ball it is unlikely that the player will only ever lunge forwards in one direction. Also single leg strength is important for speed and balance and in the prevention of injuries.

1. Deep Squat :

Stand with feet hip's width apart with toes facing slightly out. Squat down as if sitting on a seat. Push bum out. Get as low as possible. Should get to 90 degrees. Can use their arms for balance. When they stand up push hips through at the top to complete the movement.



3. Clock-wise Lunge:

This is exactly the same as a normal lunge except that rather than just lunging forwards to 12 o'clock you lunge to 1 o'clock, then 3 o'clock, 5 o'clock, 6 o'clock, 7 o'clock, 9 o'clock and then lastly 11 o'clock.



5. Back Extension:

Lie on tummy with arms by side with palms up. As you rotate palms to face down lift chest off the ground. As arms go back to starting position gently lower your torso back to the ground.



2. Press Ups:

Full press ups, no knees down. A good press up is the opposite of a chest press, pressing the arms up from beside the chest rather than up by the shoulders



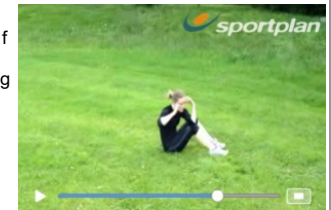
4. Plank:

Tummy facing the ground, tummy and bum tight. Don't let head drop try to keep a straight line from bace of head to coccyx.



6. Sit up with twist :

Lie on the floor on your back. Bend knees so that your feet are flat on floor and put tongue to the roof of your mouth to engage neck and upper back muscles. Hands on the side of head sit up by trying to row up the spine. Tuck chin into chest and curl the spine. Twist the left elbow to touch right knee and then right elbow to touch left knee. And curl back down keeping the chin tucked in. Lie down slowly. Then come up again but alternate which elbow touches which knee each time.



Cardio #1

Speed endurance - Squares

Mark out an area approximately 50 meters by 50 meters.

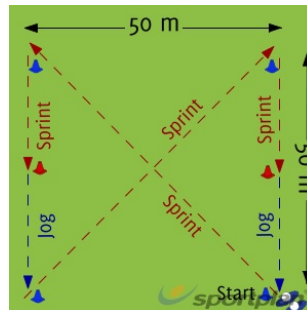
Starting in one corner get your players to:

Sprint diagonally across the square to the opposite corner and halfway along one side (red lines).

Then they jog the rest of this side of the square (blue lines).

Now sprint diagonally to the opposite corner and halfway along this side of the square before joggin back to the start position.

This is one set.



Coaching Tips

Allow your players to rest for 1 minute by gently jogging.
Complete 4-6 sets.



Discussion

In competitive sports such as hockey there's nothing more discouraging than trying to perform the most basic of skills when your muscles are flooded with lactic acid.
During a multi-sprint games players are frequently required to make explosive runs or sprints consecutively, without rest. Receiving a pass or trying to make a shot in this exhausted state is often the last thing they want.
Lactic tolerance training will help you to recover more quickly from successive bursts of speed and power. It will increase your tolerance to lactic acid and allow you to maintain a highwork rate for longer.

Speed and Agility

Follow the leader

Split your group into pairs or small teams of 3 or 4 and nominate one player from each group as the pace setter, they can choose to jog, run and sprint when and as they wish over a large area.

The following players must attempt to react quickly to keep pace with the leader.

After one and a half minutes change the leader.

After 6 minutes have a recovery period.



Notes

This is an excellent drill which helps to develop reaction time, acceleration and speed endurance, which are all important in hockey.

Cardio #2

Explosive exercises and a sprint finish!

Split your players into two equal groups and get them to stand on lines 40 metres apart facing each other. Players perform all the exercises below and must then finish with a 20m sprint.

Players can only move onto the next exercise once all players have finished the previous one. The last team to get all their members to the central 20m line have to do 10 extra burpees.



Notes

Anaerobic power and anaerobic endurance are high in elite hockey players. Although the majority of the game is spent in low-level activity such as walking and light jogging, repeated back-to-back sprints make speed and tolerance to lactic acid an important characteristic in players.

Power is required for acceleration, speed and quick changes in direction. Upper body strength allows players to shoot more powerfully and pass over a greater range of distances.

10 x Squat thrusts:

Start in the press up position. Bring both feet up under chest into a tuck. The closer the feet move up the chest the better. Then return both feet back to the press up position. Keep hips low.



10 x Bunny Hop:

Similar to the Squat jump except instead of trying to get maximum height this time on the jump you try to get maximum distance with each jump.



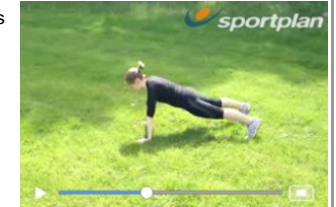
10 x Burpees:

The beginning of exercise is the same as the squat thrust, bring feet together up underneath chest. From there move weight backwards and jump up. Make sure you leave the ground as you jump up and clap your hands above your head.



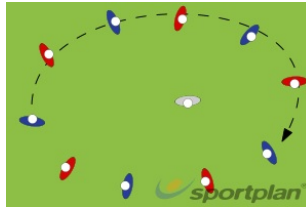
10 press-ups and a 20m sprint:

Full press ups, no knees down. A good press up is the opposite of a chest press, pressing the arms up from beside the chest rather than up by the shoulders



Cool Down

Get your group to form a large circle facing the back of the person in front, with you stood in the center. Make sure the circle is as large as possible to save players from running in a tight circle. Start the group slowly jogging in one direction and every 20-30 seconds change the direction - indicate this by blowing the whistle. Get them to do all of the drills below in both directions.



Coaching Tips

Gradually get your players to slow down and then walk before getting into the final static stretches below. It is important to cool down after a tough fitness session to avoid injuries. Players must hold each stretch for 10 seconds and must not bounce when stretching - just hold the stretch.

1. Hamstrings:

Hold stretch for 10 seconds. Don't bounce. Put weight through the back leg and support body weight by holding onto that knee. Plant the heel of the front leg and point toes towards the sky. lean forwards.



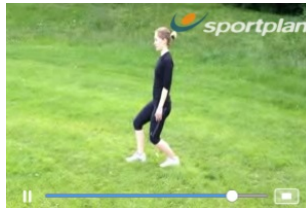
2. Quads:

Hold stretch for 10 seconds. Don't bounce. Keep knees together. Partners can be used for balance. Push hips forward.



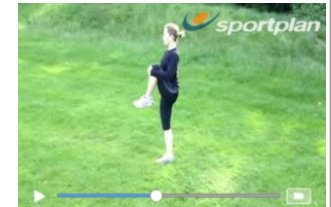
3. Calves:

Hold stretch for 10 seconds. Don't bounce. Put all the weight on the back leg, keep foot planted on the floor while bending knee as much as possible.



4. Hip Flexors:

Hold stretch for 10 seconds. Don't bounce. Stand on one leg and bring your other knee into your chest and hold there against your body with both your hands. Repeat with other leg.



5. Lower Back:

Hold stretch for 10 seconds. Don't bounce.



6. Shoulders:

Hold stretch for 10 seconds. Don't bounce.



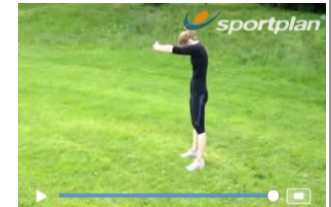
7. Chest:

Hold stretch for 10 seconds. Don't bounce.



8. Upper Back:

Hold stretch for 10 seconds. Don't bounce.



Other Comments:

"I always turn to the sports section first. The sports page records people's accomplishments; the front page has nothing but man's failures." Earl Warren

Evaluation: