

Ice Hockey - Mobilisation & core strength pre-game Program for Oxford Junior Stars Ice hockey club

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Introduction

This mobilisation program is meant for the intermediate ice hockey athlete (8-17 years of age) with some core strength. The workout is to be performed before every ice session. This session should take 25mins, inc 5-8min run.

Warm Up

Spend 5-8 minutes warming up, using activities such as jogging or jumping rope. The goal here is to increase the core temperature prior to participating in dynamic flexibility training.

Cardio Program

Activity	Intensity	Duration	Comments				

Summary of the program

Activity	Type	Sets	Reps	Duration	Tempo	Intensity	Rest
1 leg track leg swing	Flexibility		1	30	•	•	
0 0				seconds			
Ice Skaters	Exercise	1		1min	fast	high	none-next exercise
Lunge Jacks	Exercise	1		1min	fast & controlled	high	none-next exercise
Twisters Stationary	Exercise	1		1min	fast	high	none - next exercise
Lateral Lunge to Balance	Exercise	1	10-20/side		slow	med	none
Transverse Lunge with Reach	Exercise	1	10-20/side		slow	med	none
Lunge with Lateral Flex and Opposite Arm Reach	Exercise	1	10-20/side		slow	med	none
Core War	Exercise	1-3	1min		Controlled	High	10
							Seconds
Reverse Plank - Table Top	Exercise	1	10	5sec	slow	high	none
Crunch – Leg Lifts	Exercise	1		1min	slow	controlled	none
Iso abs - side with abduction	Exercise	1		1min	slow	high	none
Abdominals - backstroke	Exercise	1		1min	slow	high	none
Side to Side Hip Swing (Scapula)	Exercise	1	8/side		slow	low	none- next exercise
Erector Spinae – Cross Leg	Flexibility	1	1/side	30sec/side	static	low	none
King Pigeon Pose	Flexibility	1	1/side	30sec/side	static	slow	none

Cool Down

After the strength training portion of the training is completed the last exercises function as static flexibility training.

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Reps: 1 Sets: Intensity:

Tempo: Rest: Duration: 30 seconds

Preparation

- Maintain good posture with shoulder blades retracted and depressed and good stability through the abdominal complex.
- Initiate a thorough dynamic warm-up prior to starting this exercise, which engages the nervous system.

- This dynamic movement pattern involves taking the leg through an active run pattern while balancing on opposite leg.
- Start by leaning the body about 30° and bringing trial leg up in triple flexion (at the foot, knee and hip) as shown.
- Quickly accelerate the leg into triple extension (at the foot, knee and hip), briefly brushing the forefoot on the ground as it passes the planted foot.
- At a moderate speed, bring the leg back to triple flexion and repeat.
- Adjust pace and rhythm according to your ability to maintain balance and posture during the movement pattern.





Ice Skaters

Reps: Sets: 1 Intensity: high
Tempo: fast Rest: none-next exercise Duration: 1min

Preparation

- Initiate a thorough dynamic warm-up prior to starting this exercise, this engages the nervous system.

Movement

- Begin in runner's stance, knees and elbows bent.
- The beginner version of this exercises is done moving side to side.
- Perform a lateral hop, accelerating through the outside leg and keep the body in good alignment.
- Land on a flat foot (the heel and toes at the same time) and decelerate through knee and hip flexion.
- Jump back to starting position with same technique.
- Make sure to control hips in a frontal plane and keep your centre of gravity inside the planted leg.
- Progression: frontal and transverse ice skater.



Lunge Jacks

Reps: Sets: 1 Intensity: high
Tempo: fast & controlled Rest: none-next exercise Duration: 1min

Preparation

- Maintain good posture (ensure that the visual gaze is straight ahead) and good stability through the abdominal complex
- Initiate a thorough dynamic warm up prior to starting this exercise, this engages the nervous system.

Movement

- This movement involves a jump lunge in the sagittal plane with a jumping jack arm movement $% \left(1\right) =\left(1\right) +\left(1\right$
- Perform a forward jump lunge (for description see 'jump lunge- sagittal' in the exercise library)
- As you alternate the jump lunge, perform frontal plane jumping jack arm motions
- Perform the desired number of reps but NOTE that this exercise causes a lot of fatigue (you may choose a lower rep range to begin)
- Pay close attention to the video link to observe the fluidity of this motion



Twisters Stationary

Reps: Sets: 1 Intensity: high
Tempo: fast Rest: none - next exercise Duration: 1min

Preparation

- Initiate a thorough dynamic warm-up prior to starting this exercise, this engages the nervous system
- Ensure the individual is very proficient at multi-directional hops and has good strength in the transverse plane before prescribing this exercise.

- Start with the feet together, knees bent and looking straight ahead as shown
- With the hands together, perform hip twists
- The lower extremity including feet will rotate as you hop
- Ensure that you land on the toes and on the same spot on the ground
- The hands will rotate in the opposite direction to the legs
- Take care to observe the relative timing of this exercise
- TRAINERS: If there is pain, loss of balance, of altered neuromuscular control -- REDUCE the range of motion of the hops and arm drives.





Lateral Lunge to Balance

Reps: 10-20/side Sets: 1 Intensity: med Tempo: slow Rest: none Duration:

Preparation

- Begin with both feet shoulder-width apart and hands on hips.

Movement

- Lunge to the side landing on the entire foot, coming to a stabilized position, with mobile foot pointing at a slight angle (to allow for the slight external rotation that must occur when abduction occurs at the hip), and the knee directly over 2nd and 3rd toe.
- The lunge knee should be bent 90° while the stationary leg is straight.
- From this position drive off of front foot (heel first) onto back leg.
- Stand directly up into a balance position with balance leg straight and opposite leg flexed 90° at the hip and knee with foot dorsiflexed.
- Note: This can be done in all three planes of motion: frontal, sagittal and transverse.
- Progression: On airex pad or other unstable surface.



Transverse Lunge with Reach

Reps: 10-20/side Sets: 1 Intensity: med
Tempo: slow Rest: none Duration:

Preparation

- Start off with small step and a shallow knee flex.
- Keep the movement of the hands reaching subtle.
- Don't try to control the movement consciously.
- Be aware of an upright trunk.

Movement

- Step to the side and slightly behind, while rotating the hips and torso and allowing the body to react to the ground force, gravity and momentum.
- Make sure both arms rotate and lift to shoulder height and reach in a controlled manner.
- Return to the starting position and alternate.
- Gradually increase the range of movement.



Lunge with Lateral Flex and Opposite Arm Reach

Reps: 10-20/sideSets: 1Intensity: medTempo: slowRest: noneDuration:

Preparation

- Start with a small step, shallow knee flexion and lateral reach to ensure proper alignment and neuromuscular stability in the frontal plane before increasing range of motion and depth of lunge.
- Be aware of an upright trunk.

- Step forward with left leg.
- Drop right knee gently towards the floor.
- Laterally flex trunk to the left and reach over with right hand.
- Once a gentle stretch is felt, return and repeat.





Core War

Reps: 1minSets: 1-3Intensity: HighTempo: ControlledRest: 10 SecondsDuration:

Preparation

- Maintain good posture throughout the exercise, good stability through the abdominal complex, and neutral spine angles.
- Initiate a thorough dynamic warm up prior to starting this exercise, this engages the nervous system.

Movemen

- This movement involves a game that is a standing hand "push" pattern with a partner.
- Stand tall with your knees slightly bent, your feet shoulder width apart pointing straight and your hands with palms open at shoulder height (as shown).
- Your partner is a mirror image of you (see video).
- The objective of the game is to push your partner off balance (by pushing on each other's hands) so that they take a step.
- Start with the feet firmly planted on the ground and the hands up but not in contact with your partners
- Your can try to "overpower" (try and forcefully push them over), "bluff" (use speed to quickly fake them out) or "underpower" (as they push you, you allow your arm to come back so they fall towards you),anything to get your opponent to take a step.
- Watch the video to see exercise dynamics.
- TRAINERS: Ensure the individual braces the abdominal complex.



Reverse Plank - Table Top

Reps: 10 Sets: 1 Intensity: high Tempo: slow Rest: none Duration: 5sec

Preparation

- Place your hands behind you on the mat with your fingers pointing forward toward your buttocks.
- Place both feet in front of you flat on the floor hip width apart.

Movement

- Lift your torso from the mat to weight bear on both hands and feet evenly.
- Bring your torso as close as you can to neutral spinal alignment.
- If you would like to challenge yourself, keep neutral spinal alignment and lift one foot off the floor to 'march'
- Hold the position, then return to the starting position and repeat for 3-5 repetitions.





Crunch - Leg Lifts

Reps:Sets: 1Intensity: controlledTempo: slowRest: noneDuration: 1min

Preparation

Ensure the individual is proficient at a crunch before prescribing this exercise.

Movement

- Lie supine on the ground.
- The hands should be to the side of the body with the shoulders on the ground.
- With the upper body still, lift both legs at the hips off the ground as shown (ensure to keep the legs straight).
- Pay close attention to the video to observe the relative timing of this dynamic movement pattern.
- TRAINERS: Watch for a forward head carriage, anterior collapsing of the shoulders and holding of the breath. These are indications that the exercise is too difficult and should be regressed.

Notes

make sure that your back stays perfectly still, no rocking in your lower back





Iso abs - side with abduction

Reps:Sets: 1Intensity: highTempo: slowRest: noneDuration: 1min

Preparation

- Maintain good posture throughout the exercise with shoulder blades retracted and depressed, good stability through the abdominal complex, and neutral spine angles.
- Activate the core with a good drawing in and pelvic floor contraction.

Movement

- Start in a iso abs side lying position, the elbow and knee are on the ground, core is activated, glutes are squeezed and shoulder blades are retracted and depressed.
- Perform side bridge and simultaneously straighten opposite arm towards ceiling and abduct top leg into triple extension (at hip, knee, and ankle).
- Hold for desired time and repeat.
- Trainers: Watch for external rotation in the top leg and for flexion of the hips ... if noticed it may indicate that more stretching or more cueing is needed.
- Other progression: Inertia progression cable resistance placed on the leg.





Abdominals - backstroke

Reps:Sets: 1Intensity: highTempo: slowRest: noneDuration: 1min

Preparation

- Maintain good posture throughout the exercise with shoulder blades retracted and depressed, good stability through the abdominal complex, and neutral spine angles.

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- Begin in a crunch position (shoulders slightly off the mat), ensure that the spine is 'long' and not excessively rounded in flexion.
- Hands are to the side, palms facing up (as shown).
- While holding the crunch, perform a backstroke motion with one hand. VARIATION: The eyes can follow the hand motion.
- Once the backstroke motion has been completed, return the hand to the side and alternate sides.







Side to Side Hip Swing (Scapula)

Reps: 8/side Sets: 1 Intensity: low Tempo: slow Rest: none- next exercise Duration:

Preparation

- Face wall, place one hand shoulder height against the wall.
- Soften knees.

- Reach hand down across the opposite knee.
- Perform a gentle 'backhand swing' with your arm, rotating trunk.
- Allow feet to pivot with rotation of trunk.
- Keep the movement very subtle.
- Don't force the movement.





Erector Spinae - Cross Leg

Reps: 1/side Sets: 1 Intensity: low
Tempo: static Rest: none Duration: 30sec/side

Preparation

- Lie supine on ground with left leg straight out, and right leg bent and crossed over left side as shown.

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Movement

- Draw your belly button inward.
- Slowly use your left arm against your right crossed leg to apply pressure to the point of tension.
- Hold for 20-30 seconds, repeat for 2-3 reps.



King Pigeon Pose

Reps: 1/side Sets: 1 Intensity: slow
Tempo: static Rest: none Duration: 30sec/side

Preparation

- Begin in a runner's lunge position with both hands on the floor on both sides of the front foot.

- Keep the trailing leg straight while drawing the front leg behind the left arm and hand.
- The shin of the right leg should be facing forward.
- The foot of the right leg should be out at a 90° position.
- Gently allow the hips to come to the floor without allowing any twisting (transverse) movement in the hips.
- Keep the torso as erect as possible.
- Bring the hands back by the right foot so that the torso is directly over the hips.
- Hold this position for 3-6 breaths.
- Repeat the entire movement for the opposite leg.

