



**NSGSC**



**Injury Prevention**



# Injury Prevention

## Injury Prevention

**Injury prevention programs enhance performance and keep kids in sports longer!**

- **The risk of knee injury in youth female athletes is 2-8 X greater compared to male athletes**
- **Non – contact ACL injuries occur more often in female athletes especially in the 12-13 year age group!**
- **After a knee injury, 44% of girls will not return to their previous level of activity and have an increased chance of developing osteoarthritis later in life**
- **70-80% of youth ACL injuries occur in non-contact positions during decelerations and changing direction or landing on one leg**

**Injury prevention programs work!**

- **Adherence of the program is KEY to injury prevention**
- **Injury prevention programs have the best outcomes if they are performed 2-3 times a week**
- **The potential for a non-contact ACL injury decreases by 67% in a well adhered injury prevention program**
- **Performing an injury prevention program for at least 2 months has been shown to improve balance, strength and agility**
- **Strengthening exercises have been shown to be safe and effective in players younger than 14 years old**



# Warm Up (U10-12)

## Beginner Warm Up Routine

- The risk of knee injury in youth female athletes is 2-8 X greater compared to male athletes
- Non – contact ACL injuries occur more often in female athletes especially in the 12–13-year age group!
- After a knee injury, 44% of girls will not return to their previous level of activity and have an increased chance of developing osteoarthritis later in life
- 70-80% of youth ACL injuries occur in non-contact positions during decelerations and changing direction or landing on one leg



# Warm Up (U13+)

## Advanced Warm Up Routine

**Injury prevention programs enhance performance and keep kids in sports longer!**

- **The risk of knee injury in youth female athletes is 2-8 X greater compared to male athletes**
- **Non – contact ACL injuries occur more often in female athletes especially in the 12–13-year age group!**
- **After a knee injury, 44% of girls will not return to their previous level of activity and have an increased chance of developing osteoarthritis later in life**
- **70-80% of youth ACL injuries occur in non-contact positions during decelerations and changing direction or landing on one leg**



# Exercises

## Strength & Resistance Exercises

The strength and resistance exercises provided in the NSGSC Injury Prevention program are designed to help provide guidance for coaches, players and families to help reduce risk of injury. These exercises are intended to help increase muscular strength and improve overall mobility.



# Exercises



**START**

## Nordic Hamstring Curls

- High kneeling with your partner supporting your ankles
- Tuck your hips under and keep your upper back over your hips
- Move straight forward from your knees without bending at your hips or back
- Stop yourself with your hands and push back up



**FINISH**

**Repetitions: 8**

**Sets: 3**



# Exercises



**START / FINISH**

## Front Plank

- Start on your stomach with your forearms near your ears
- Tuck your toes and lift your knees off the ground for the advanced version
- Push up so your hips and shoulders are in a straight line
  - Beginner: stay on your knees
  - Advanced: go up onto your toes
- If you feel your back, tuck your bum, and lift your hips more or do the version on your knees

**Repetitions: 20-30s**

**Sets: 3**



# Exercises



**START / FINISH**

## Front Plank

- Start on your stomach with your forearms near your ears
- Tuck your toes and lift your knees off the ground for the advanced version
- Push up so your hips and shoulders are in a straight line
  - Beginner: stay on your knees
  - Advanced: go up onto your toes
- If you feel your back, tuck your bum, and lift your hips more or do the version on your knees

**Repetitions: 20-30s**

**Sets: 3**





# Exercises



**FINISH**

**START**



## Side Plank

- Start on your side with your knees bent and your forearm on the ground. Your feet should be in line with your bum and your knees will be in front
- Push into your forearm and lift your ribs up
- Push your knees into the ground and bring your hips forward and up to be in line with your knees and shoulder

**Repetitions: 20-30s**

**Sets: 3**



# Exercises



**START**

## Single Leg Bridge

- Start on your back with your knees bent and feet on the ground
- Hold behind one of your knees
- Push your foot into the ground and lift up your hips
- Keep your ribs from popping up: make sure it is all coming from the hip

**Repetitions: 20-30s**

**Sets: 3**

**FINISH**





# Exercises



**START**

## Copenhagen Adductor Strength

- Lay on your side with your partner supporting your knee and lower leg. Alternatively, put your top knee on a chair.
- Push up into a side plank. You should be supported by your forearm and the top knee
- Dip your hips down toward the ground and back up
  - Beginner: leave your bottom foot on the ground
  - Advanced: lift your bottom leg up the whole time



**FINISH**

**Repetitions: 8-10**

**Sets: 3**



# Exercises



**START**

## Copenhagen Adductor Strength

- Lay on your side with your partner supporting your knee and lower leg. Alternatively, put your top knee on a chair.
- Push up into a side plank. You should be supported by your forearm and the top knee
- Dip your hips down toward the ground and back up
  - Beginner: leave your bottom foot on the ground
  - Advanced: lift your bottom leg up the whole time



**FINISH**

**Repetitions: 8-10**

**Sets: 3**



# Exercises



## Alternate Adductor Strength

- Lay beside your partner with a band around the ankles that are beside one another. Bend the opposite knee
- Partner one stabilizes while the Partner two pulls the leg with the band to midline
- Repeat on the other side

**Repetitions: 12-15**

**Sets: 3**



# Exercises



## Standing Balance – Alphabet with Ball

- Stand on one leg with the other leg on the ball
- With the foot on the ball, spell out the alphabet using both sides of your feet
- Stay on one foot for the whole alphabet

Repeat on the opposite leg

**Repetitions:** 1 right leg & 1 left leg

**Sets:** 3

**START/FINISH**



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**Thank you to Nick Riccardi and Jen Keefer for your knowledge and expertise on this topic!  
Videography and photography done by Joshua Schmitz.**