



ACTIVATE INJURY PREVENTION PROGRAMME

In 2018, the Camogie Association, in partnership with DCU, conducted its first national survey of self-reported worst injuries¹. The research found that at least one injury was sustained by 88.2% of camogie players during the previous season, and 60.0% sustained 2+ injuries. Knee and ankle ligament injuries and hamstring strains were key injuries identified. Knee injuries accounted for the greatest proportion of overall injuries and more often required surgery and extended periods of time (>6 weeks) off from play. One of the key recommendations from this research identified the need for the introduction of an appropriate injury prevention programme to help reduce injury risk in Camogie players. The *Activate Warm Up* has been identified as an appropriate injury prevention programme for implementation in Camogie.

Activate is a Camogie, LGFA and GAA specific warm-up that has been developed by SINI and Ulster GAA. Activate is an injury prevention programme that is designed for use before training and matches. The programme has been adapted from FIFA's successful 11+ programme to meet the specific needs of Camogie/LGFA/GAA players and to reduce the incidence of common lower limb injuries among players, particularly Anterior Cruciate Ligament (ACL). It is backed by solid medical research and if performed regularly with proper technique it is proposed that it can lead to a reduction in leg injuries by up to 50%. The injury prevention programme consists of three phases. Phase 1 involves running, cutting and landing mechanics, phase 2 involves strength, plyometric and balance exercises and phase 3 involves sport specific agility and power exercises. A description of each phase is detailed below.

PHASE 1 - RUNNING, CUTTING AND LANDING MECHANICS

OUT	IN
 <p>Drill 1 JOG 2 reps (focusing on upper body technique)</p> <ul style="list-style-type: none"> Exaggerate arms (hands hip to lip). Keep chest open and head up. 	 <p>Drill 1 A SKIP 2 reps</p> <ul style="list-style-type: none"> Co-ordinate arms and legs. Pick up knees and toes.
 <p>Drill 2 ½ PACE RUN 2 reps (focusing on lower body technique)</p> <ul style="list-style-type: none"> Stay tall through the hips. High knee drive. Run off the balls of the feet. 	 <p>Drill 2 ICE HOCKEY STOP 2 reps</p> <ul style="list-style-type: none"> Stop in a lateral lunge at each cone. Keep head and back straight. Sit down and back on lead leg.
 <p>Drill 3 JUMP, CATCH AND LAND 2 reps</p> <ul style="list-style-type: none"> When landing, keep feet hip width apart. Land by flexing hips and knees. Keep knees over toes. 	 <p>Drill 3 PICK UPS 2 reps</p> <ul style="list-style-type: none"> For Gaelic Football: alternate pick-up leg. For Hurling: alternate between a jab lift and a roll lift.
 <p>Drill 4 PARTNER SHUFFLE 2 reps</p> <ul style="list-style-type: none"> Adopt semi-squat position. Keep body facing forward. Side step with legs. 	 <p>Drill 4 LUNGE STOPS 2 reps</p> <ul style="list-style-type: none"> Decelerate from jog by dropping into lunge. Keep knee in line with foot and hip. Prevent knee from drifting forwards of toes.
 <p>Drill 5 SLOW PLANT & CUT 2 reps</p> <ul style="list-style-type: none"> When planting, pick a spot lateral to cone. Drop the inside shoulder. Flex knee to load over foot. 	 <p>Drill 5 SQUAT STOPS 2 reps</p> <ul style="list-style-type: none"> From a jog, decelerate at each cone by stopping in a squat position. Keep feet hip width apart. Focus on activation of glutes and hamstrings.

¹ O'Connor, S., Leahy, R., Whyte, E., O'Donovan, P., & Fortington, L. (2019). Understanding Injuries in the Gaelic Sport of Camogie: The First National Survey of Self-Reported Worst Injuries. *International Journal of Athletic Therapy and Training*, 1-24.

PHASE 2 – STRENGTH, PLYOMETRICS AND BALANCE

Alternate between Circuits 1 and 2 on a monthly basis

CIRCUIT 1



Exercise 1 5 reps per leg

ARABESQUE

- Players stand 2m apart and perform Arabesques between hand passes.
- On receiving ball, player extends back leg and tilts forward, keeping a straight back.
- Keep the stance leg in a straight line.



Exercise 2 10 swings each side

LEG SWINGS (FRONT)

- Holding your partner's shoulder, swing inside leg forwards and backwards, in sync with outside arm.
- Keep hand high.
- Encourage good hip extension.



Exercise 3 10 reps – 5 reps each leg

PARTNER PUSH INTO LUNGE (STRAIGHT)

- Player drops into a forward lunge after expected straight push in the back from partner.
- Keep front knee in line with hip and ankle.
- Land and push off heel.



Exercise 4 5 reps initially (increase to 10 over time)

NORDIC HAMSTRING CURL

- Partner keeps feet firmly pressed to ground.
- Head, body and thighs stay in line.
- Movement should only occur in the knees.



Exercise 5 Hold for 10secs (increase to 30secs over time)

FRONT PLANK

- Assume press-up position with hands under shoulders.
- Keep body in a straight line.
- Tighten abdominals and hold trunk stable.



Exercise 6 10 reps each side

SIDE PLANK WITH LEG LIFT – BENT KNEE

- Flex lowermost leg to 90°.
- Keep backside tucked in and head back.
- With hips off ground, keep body straight and lift top leg.



Exercise 7 5 reps per leg

SPLIT LEG SQUATS

- Drop back knee to the ground.
- Prevent front knee corkscrewing towards middle.
- Prevent front knee from passing toes.



Exercise 8 5 reps per leg

LATERAL HOP AND HOLD

- Land on a slightly flexed knee with weight on forefoot.
- Upper body & hip should remain aligned.

CIRCUIT 2



Exercise 1 5 reps per leg

ARABESQUE

- Players stand 2m apart and perform Arabesques between hand passes.
- On receiving ball, player extends back leg and tilts forward, keeping a straight back.
- Keep the stance leg in a straight line.



Exercise 2 10 swings each side

LEG SWINGS (LATERAL)

- Stand behind your partner and hold onto their shoulders.
- Swing your leg across the body from inside to out.



Exercise 3 10 reps

PARTNER PUSH INTO LUNGE (MULTI-DIRECTIONAL)

- Player drops into a lunge after varied push from behind.
- Prevent knee from corkscrewing in.
- Land and push off heel.



Exercise 4 5 reps initially (increase to 10 over time)

NORDIC HAMSTRING CURL

- Partner keeps feet firmly pressed to ground.
- Head, body and thighs stay in line.
- Movement should only occur in the knees.



Exercise 5 10 reps holding for 2 secs

FRONT PLANK WITH LEG LIFT

- Assume press-up position with hands under shoulders.
- Keep body in a straight line.
- Alternate leg lifts without losing form.



Exercise 6 10 reps each side

SIDE PLANK WITH LEG LIFT – STRAIGHT LEG

- Lie on side and support body on elbow with bottom leg straight.



Exercise 7 10 reps

SCISSOR JUMPS

- With hands on hips, assume split squat position and jump vertically.
- Knees stay in line with feet and hips during transitions.



Exercise 8 5 reps per leg

DIAGONAL HOP AND HOLD

- Remember to pause after each small diagonal hop.
- Upper body & hip should remain aligned.

PHASE 2 – CONTINUED

CIRCUIT 1


Exercise 9
 10 reps **PRISONER SQUATS**

- With feet hip width apart and facing forwards: break at hips to sit back and down.
- Aim to get thighs to horizontal.


Exercise 10
 5 reps per leg **COUNTER MOVEMENT JUMP**

- From a semi-squat use arms to jump high in air.
- Keep feet hip width apart.
- Prevent knees coming together when jumping and landing.

CIRCUIT 2


Exercise 9
 10 reps **PRISONER SQUATS**

- With feet hip width apart and facing forwards: break at hips to sit back and down.
- Aim to get thighs to horizontal.


Exercise 10
 10 reps **COUNTER MOVEMENT JUMP WITH A TWIST**

- From a semi-squat use arms to jump high in air.
- Keep feet hip width apart.
- Prevent knees coming together when jumping and landing.

PHASE 3 – AGILITY & POWER

OUT


Drill 1
 2 reps **¾ PACE RUN**

- Staying tall, use arms and high knees, encouraging forefoot contacts.


Drill 2
 2 reps **2 FORWARDS 1 BACK**

- With feet hip width apart, use plenty of small steps to change direction.


Drill 3
 2 reps **FAST PLANT & CUT WITH BALL**

- Execute at ¾ pace and retain good plant & cut mechanics.


Drill 4
 10 reps **FAST FEET SHUFFLE: FRONT TO BACK (TWO LEGS)**

- Off forefeet, shuffle as quickly as possible front to back.


Drill 5
 5 reps each leg **DYNAMIC LUNGE**

- Transfer body weight out and across from back foot to front.
- Think of knee as a spring, absorbing and returning energy.

IN


Drill 1
 2 reps **HIGH SKIPS**

- Lead with a high knee to bounce high in air.


Drill 2
 2 reps **BOUNDS**

- With a whole foot contact, hit the ground hard and lead with the knee.


Drill 3
 2 reps **ONE ON ONE**

- Players should side step off right and left legs to go past partner.


Drill 4
 10 reps **FAST FEET SHUFFLE: RIGHT TO LEFT (SINGLE LEG)**

- Staying solid through the hip, shuffle quickly from right to left off one leg.