



Managing Underage International Hockey Workloads:

Supporting Development and
Preventing Injury and Overtraining



Supporting Development and Preventing injury and overtraining

The following guidelines aim to ensure a balanced approach to skill development, physical performance, and injury prevention in Hockey Ireland's Pathway. By managing player's training load and schedule, introducing adequate recovery and prioritising athletic development, we aim to support the long-term development, performance and health of youth hockey players.



73%

of players were
injured at some point
during the season

40%

had consecutive
(repeat /
longstanding) injuries

56%

experienced time-
loss injuries (missed
training or matches)

20%

The most common
injuries were knees,
followed by hip / groin

50/50

Injuries were split
50/50 between
contact and non-
contact

Why this matters

In Ireland, youth international hockey players - particularly in the U16 and U18 categories- are experiencing increasingly high training loads due to simultaneous involvement with school, club, and international teams. The research Hockey Ireland is conducting with UCD shows that in a typical week, U16/U18 players attend 5–8 hockey sessions across school, club, and international squads, sometimes with multiple matches or double sessions. One in four athletes did 8 or more sessions a week on average. This creates cumulative load without adequate recovery:

What's at risk?

Although high training volumes may seem beneficial, they can actually hinder development if sustained for too long without adequate rest and recovery. Excessive training without recovery can lead to:

1. Fatigue and burnout
2. Reduced performance,
3. Missed opportunities for athletic development,
4. Higher risk of injuries.

The International Olympic Committee highlight that youth overtraining can lead to long-term performance decline, as well as burnout – which includes emotional and physical exhaustion, reduced sense of achievement, and loss of interest in sport.

Long term athletic development

Developing athletes (age 11-19 years) have a key "window of opportunity" for physical development(Lloyd et al., 2015). Young athletes respond well to building strength fundamental movement skill development, and muscle power. Skipping gym sessions due to packed hockey schedules leads to missed developmental opportunities. Research shows that appropriately delivered age appropriate strength training improves performance, mental well-being, and reduces injuries like ACL tears (Faigenbaum et al. (2009); Myer et al. (2011); Lesinski et al. (2016)).

To support long-term success and health, it's essential to create clear limits around training load and make room for strength training as a non-negotiable part of the week.





Guidelines

Load Management - Training and Matches

Effective load management improves session quality, reduce low-value sessions ensures players can make the most of sessions that offer greater technical and competitive value for growth.

- Players should only play hockey a maximum of 5 days per week
- Players should have two full hockey-free days per week. A gym session can be done on one of those days, but the other should be fully focused on recovery. This is to facilitate proper recovery and athletic development (outlined below).
- Players should avoid training/playing hockey more than 3 consecutive days without a rest day.
- Limit double hockey session days to once per week, ensuring adequate recovery between sessions. (There may be times where players should do a gym session and hockey session in the same day)
- Players should play a maximum of 2 hockey matches per week, except during tournaments
- Players should not play school friendlies if they have other competitive matches scheduled that week..

Gym Sessions

Develop resilience, performance and injury resistance:

- Pre-season: Minimum of two gym sessions per week
- In - season: Minimum of one gym session per week or as per the athlete's individualised development plan.

Team Management

Playing on multiple teams comes with its challenges, prioritising exposures is vital to protect and develop players.

- Where players are involved with multiple teams, prioritisation should be given to the environments offering the greatest development challenge, competitive level, and coaching quality.
- Players competing in senior club hockey should be registered for only one school team to avoid fixture congestion.

Optimising Recovery

Rest is where the gains happens. Key strategies to promote effective recovery in youth athletes include:



Sleep:

Adolescents need 8-10 hours of high-quality sleep per night. Sleep is the most powerful recovery tool and is essential for muscle repair, hormonal balance, cognitive function, and emotional regulation. Reducing screen use in the hour before bed improves sleep quality.



Nutrition:

Re-fuelling after sessions with a balanced mix of protein and carbohydrates, as this supports muscle recovery and provides energy to perform.



Hydration:

Drink consistently throughout the day and replenish fluids after training.



Active Recovery:

Light movement (e.g., walking, swimming, mobility work) on rest days can help reduce muscle soreness and improve circulation without adding training stress.

Players should communicate with coaches and staff when they feel tired, sore, or emotionally drained.

Benefits of a Structured Training Week

- **Injury Prevention:** Overtraining and too many matches increase the chance of both acute and overuse injuries.
- **Better Physical Development:** Protecting time for gym based resistance training is critical to improve physical qualities essential to hockey such as speed, acceleration, and power.
- **Higher Session Quality:** Well-rested players can train with more focus and intensity, getting more out of each session. Players can prioritise sessions that offer a greater competitive or technical stretch, where more growth happens.
- **Holistic Development:** A balanced week allows time for school, rest, friends, and downtime—key to long-term athlete success, reducing burnout and injury.
- **Recovery and Adaptation:** Rest and recovery are essential for physiological adaptation, called supercompensation. When training stress is balanced with proper rest, players become faster, stronger, and more resilient. But without recovery, the body can't adapt. Things like sleep quality, and mental focus are important. Rest isn't time off—it's when the gains happen.

Acknowledgments & References

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