

The 12 R's

OF A SPORT RELATED CONCUSSION

Sport-related concussion is a traumatic brain injury caused by a direct blow to the head, neck or body resulting in an impulsive force being transmitted to the brain that occurs in sports and exercise-related activities.

01

REDUCE

Take steps to reduce the risk of concussion.

Concussion prevention starts before an injury occurs. Evidence-informed rules and policies, appropriate protective equipment, training strategies, and effective concussion management can help reduce the risk of concussion and recurrent injury.



02

RECOGNIZE

Know what a concussion is and what to look for.

A concussion is a brain injury that can result from an impact to the head, neck or body. Signs and symptoms can vary and may develop over time. Recognition tools, such as the CRT6 and SCAT6, can help identify a suspected concussion.



03

REMOVE

Remove from activity and protect from further injury.

If a concussion is suspected, immediately remove the person from the at-risk activity to protect them from further potential injury. Signs and symptoms can develop or change over time, so appropriate assessment and follow-up are important. "When in doubt, sit them out".



04

RE-EVALUATE

Reassess the concussion and guide ongoing care.

Follow-up assessment helps healthcare professionals understand how a concussion is affecting the person, monitor recovery, guide individualized treatment, and identify when additional care may be needed. The SCOAT6 and Child SCOAT6 can support this clinical evaluation.



05

REST & EXERCISE

Rest briefly, then gradually return to activity.

Relative rest is recommended for the first 24 to 48 hours, as strict rest until symptoms resolve is not beneficial. Light physical activity can begin as tolerated, followed by a gradual increase in activity. Avoid activities with a risk of contact, collision or falling until medically cleared.



06

REFER

Connect with the right care when symptoms persist.

Symptoms lasting longer than four weeks are considered persisting symptoms and may benefit from further assessment and targeted care. Depending on the person's symptoms and needs, referral may involve healthcare professionals from different disciplines with specialized knowledge and skills in concussion management.



07

REHABILITATION

Use targeted treatment to support recovery.

Rehabilitation can be tailored to a person's symptoms and needs. If dizziness, neck pain or headaches persist for more than 10 days, cervicovestibular rehabilitation is recommended. Other approaches, including vestibular rehabilitation and aerobic exercise, may also support recovery.



08

RECOVERY

Recovery is individual and involves more than symptoms.

Recovery should consider how a person feels and functions at rest, during thinking and physical activity, and as they return to their usual activities. Healthcare professional assessment can help monitor these different aspects of recovery.



09

RETURN TO LEARN & RETURN TO SPORT

Return gradually through a step-by-step process.

Return to learning and sport should progress gradually based on recovery. Both can occur at the same time, but full return to learning should occur before unrestricted return to sport. Medical clearance is required before returning to activities at risk of contact, collision or falling.



10

RECONSIDER

Understand what we know, and what we still don't know.

Research continues to examine the potential long-term effects of concussion and repetitive head impacts on brain health. While some studies have identified associations in certain groups, important uncertainties remain about long-term risks and more research is needed.



11

RETIRE

Retirement decisions should be individualized.

There is no single factor or number of concussions that automatically means a person should retire from contact or collision sport. Decisions should consider the person's health and injury history, the sport, risks and benefits, personal preferences, and appropriate medical advice.



12

REFINE

Keep improving concussion knowledge and care.

Concussion knowledge continues to evolve, and current approaches may not work equally well for everyone. More inclusive research and diverse perspectives are needed to improve prevention, assessment and management across different people, populations and sport settings.



The 12 R's provide a logical approach to sport-related concussion management and considerations. They reflect evidence-informed recommendations from the Amsterdam 2022 International Consensus Statement on Concussion in Sport.

Source: Patricios, J. S., et al. (2023). Consensus statement on concussion in sport: the 6th International Conference on Concussion in Sport, Amsterdam, October 2022. British Journal of Sports Medicine, 57(11), 695–711.

For education and awareness purposes. This resource does not replace individualized assessment, diagnosis or care from a qualified healthcare professional.