# CRT6™

## Concussion Recognition Tool

### To Help Identify Concussion in Children, Adolescents and Adults

## What is the Concussion Recognition Tool?

A concussion is a brain injury. The Concussion Recognition Tool 6 (CRT6) is to be used by non-medically trained individuals for the identification and immediate management of suspected concussion. It is not designed to diagnose concussion.

## Recognise and Remove

### Red Flags: CALL AN AMBULANCE

If **ANY** of the following signs are observed or complaints are reported after an impact to the head or body the athlete should be immediately removed from play/game/activity and transported for urgent medical care by a healthcare professional (HCP):

- **Neck pain or tenderness**
- **Seizure, 'fits', or convulsion**
- **Loss of vision or double vision**
- **Loss of consciousness**
- **Increased confusion or deteriorating conscious state (becoming less responsive, drowsy)**
- **Weakness or numbness/tingling in more than one arm or leg**
- **Repeated Vomiting**
- **Severe or increasing headache**
- **Increasingly restless, agitated or combative**
- **Visible deformity of the skull**

## Remember

- In all cases, the basic principles of first aid should be followed: assess danger at the scene, check airway, breathing, circulation; look for reduced awareness of surroundings or slowness or difficulty answering questions.
- Do not attempt to move the athlete (other than required for airway support) unless trained to do so.
- Do not remove helmet (if present) or other equipment.
- Assume a possible spinal cord injury in all cases of head injury.
- Athletes with known physical or developmental disabilities should have a lower threshold for removal from play.

This tool may be freely copied in its current form for distribution to individuals, teams, groups, and organizations. Any alteration (including translations and digital re-formatting), re-branding, or sale for commercial gain is not permissible without the expressed written consent of BMJ.

### If there are no Red Flags, identification of possible concussion should proceed as follows:

Concussion should be suspected after an impact to the head or body when the athlete seems different than usual. Such changes include the presence of **any one or more** of the following: visible clues of concussion, signs and symptoms (such as headache or unsteadiness), impaired brain function (e.g. confusion), or unusual behaviour.



**Developed by: The Concussion in Sport Group (CISG)**

Supported by:

International Olympic Committee



Br J Sports Med: first published as 10.1136/bjsports-2023-107021 on 14 June 2023. Downloaded from http://bjsm.bmj.com/ on September 14, 2023 by guest. Protected by copyright.

# CRT6 Concussion Recognition Tool

## To Help Identify Concussion in Children, Adolescents and Adults

## 1: Visible Clues of Suspected Concussion

Visible clues that suggest concussion include:

- Loss of consciousness or responsiveness
- Lying motionless on the playing surface
- Falling unprotected to the playing surface
- Disorientation or confusion, staring or limited responsiveness, or an inability to respond appropriately to questions
- Dazed, blank, or vacant look
- Seizure, fits, or convulsions
- Slow to get up after a direct or indirect hit to the head
- Unsteady on feet / balance problems or falling over / poor coordination / wobbly
- Facial injury

## 2: Symptoms of Suspected Concussion

| Physical Symptoms |
|---|
| Headache |
| "Pressure in head" |
| Balance problems |
| Nausea or vomiting |
| Drowsiness |
| Dizziness |
| Blurred vision |
| More sensitive to light |
| More sensitive to noise |
| Fatigue or low energy |
| "Don't feel right" |
| Neck Pain |

| Changes in Emotions |
|---|
| More emotional |
| More Irritable |
| Sadness |
| Nervous or anxious |

| Changes in Thinking |
|---|
| Difficulty concentrating |
| Difficulty remembering |
| Feeling slowed down |
| Feeling like "in a fog" |

**Remember,** symptoms may develop over minutes or hours following a head injury.

## 3: Awareness

**(Modify each question appropriately for each sport and age of athlete)**

Failure to answer any of these questions correctly may suggest a concussion:

**"Where are we today?"**

**"What event were you doing?"**

**"Who scored last in this game?"**

**"What team did you play last week/game?"**

**"Did your team win the last game?"**

**Any athlete with a suspected concussion should be - IMMEDIATELY REMOVED FROM PRACTICE OR PLAY and should NOT RETURN TO ANY ACTIVITY WITH RISK OF HEAD CONTACT, FALL OR COLLISION, including SPORT ACTIVITY until ASSESSED MEDICALLY, even if the symptoms resolve.**

Athletes with suspected concussion should **NOT**:

- Be left alone initially (at least for the first 3 hours). Worsening of symptoms should lead to immediate medical attention.
- Be sent home by themselves. They need to be with a responsible adult.
- Drink alcohol, use recreational drugs or drugs not prescribed by their HCP
- Drive a motor vehicle until cleared to do so by a healthcare professional

British Journal of Sports Medicine



Br J Sports Med: first published as 10.1136/bjsports-2023-107021 on 14 June 2023. Downloaded from http://bjsm.bmj.com/ on September 14, 2023 by guest. Protected by copyright.