

# National Concussion Protocol For Jockeys

Due to the inherent risks of riding racehorses, jockeys are at high risk of sustaining a head injury. It is important for jockeys and their families to understand the possible consequences of head injuries as well as assessment tools for detecting brain damage due to a blow to the head (concussion) and care of individuals that have suffered a concussion. This document provides a basic understanding of concussion and outlines the protocols in place at each Covered Racetrack to respond to injuries that may result in a concussion.

## What is a Concussion?

A concussion results from a head injury that causes damage to the brain.

A concussion is most often due to trauma from a direct hit to the head. Jockeys are at high risk for a concussion during a fall from a horse, either from collision with the ground or a horse. However, a concussion may also occur without contact with an object when the head moves suddenly and the brain collides with the inner surface of the bony skull.

Though a concussion is usually limited to injury of the brain, damage to the major blood vessels around the brain occasionally occurs. Damage to blood vessels around the brain can be life threatening and is not always immediately evident. Continued bleeding from damaged vessels can lead to worsening signs, and potentially coma and death in the 24 hours following injury. Internal bleeding requires treatment at a medical facility. This possibility demonstrates the need to seek evaluation and treatment at a medical facility whenever a concussion is suspected.

## Diagnosis and Recovery

Full recovery from a concussion is common if the jockey receives prompt and correct care. Time to recover is usually a few weeks but can vary. Some cases may require prolonged rest and limitation of activities for months or longer depending on the severity of symptoms and significance of the injury.

Suspecting that a jockey may have sustained a concussion is the most critical first step in diagnosing a concussion. The jockey and those people around them, must be familiar with the signs and symptoms of concussion and should immediately alert a member of the racetrack medical team, as prompt medical evaluation and care is crucial to recovery as well as identifying more severe injury such as blood vessel damage.



## Signs, symptoms and common complaints of patients with suspected concussions

(See appendix A for additional information)

- Amnesia (loss of memory) of the traumatic event
- Answering questions slowly
- Anxiety
- Balance problems
- Blacking out
- Cognitive (clear thinking) changes
- Compromised speech
- Coordination difficulty
- Confusion
- Dazed appearance
- Depression
- Difficulty concentrating
- Dizziness
- Ears ringing
- Not feeling "right"
- Drowsiness
- Fatigue
- Feeling clumsy
- Feeling emotional – sad, angry
- Feeling foggy
- Forgetfulness
- Headache or head pressure
- Irritability
- Light sensitivity
- Loss of consciousness
- Low energy
- Memory difficulty
- Moving slowly
- Nausea
- Neck pain
- Nervousness
- Noise sensitivity
- Numbness anywhere
- Repeating questions
- Seizure
- Sleep changes/problems
- Slurred speech
- Trouble focusing
- Vision changes or problems
- Vomiting
- Weakness

## Racetrack Response Plan for Jockeys with a Suspected Concussion

All jockeys who fall or are thrown from a horse will be evaluated by the racetrack's medical team for injury and signs of concussion.

All jockeys witnessed to have sustained a possible head injury by any means, including head-to-head contact with a horse or direct contact with the structure of the starting gate, will be evaluated by the racetrack's medical team for injury and signs of concussion.

The required evaluation will be documented on the HEADCHECK digital concussion platform. Based on the medical staff's scope of practice, either the Concussion Recognition Tool or the Sport Concussion Assessment Tool will be conducted.

An accident report is to be submitted on HEADCHECK with a corresponding Health Status update to notify authorized individuals (track staff, staff at other tracks that the jockey frequently races at, emergency contacts).

## Medical Team Evaluates and Does Not Suspect a Concussion



If after evaluation, the medical team **does not suspect a concussion**, where all testing is within normal limits and the jockey has no signs or symptoms of a concussion, the jockey will be allowed to return to ride the same day.

- The medical team will notify the clerk of scales and the stewards that the jockey is cleared to ride for the remainder of the day.
  - » In the HEADCHECK platform, the concussion assessment that was added at evaluation should reflect that a concussion was not suspected.
  - » An accident report is to be logged reflecting that the jockey is eligible to ride (if no other injuries are suspected).
- The jockey must meet with the medical team the next race day for a follow-up evaluation to determine if there are any late-developing concussion symptoms.
  - » The HEADCHECK platform is to be used to document the follow-up assessments, including a symptom assessment at minimum.
- If on the day following the traumatic event, the jockey is riding at a different racetrack, then a medical professional at the different track must evaluate the jockey.
  - » If authorized, the medical professional may view the jockey's concussion history (previous concussions, baseline test, initial post-injury assessment, etc.) on HEADCHECK to compare symptom scores.
  - » This follow-up evaluation must be reported to the medical team at the racetrack where the jockey sustained the injury and in the HEADCHECK platform, including a symptom assessment at minimum.

## Medical Team Evaluates and Does Suspect a Concussion



If after evaluation, the medical team **does suspect a concussion**, then the jockey will be removed from riding for a period of time determined by the medical team for observation. The observation period will be no less than 45 minutes and may be extended if the medical team feels additional time is warranted.

- The medical team will notify the clerk of scales and the stewards that the jockey will be observed for concussion signs or symptoms.
- Following the observation period, should the racetrack medical team determine that testing is within normal limits and there are no signs or symptoms of concussion, the jockey will be allowed to return to ride the remainder of that day.
- The jockey must meet with the medical team the next race day for a follow-up evaluation to determine if there are any late-developing concussion symptoms.
- If on the day following the traumatic event, the jockey is riding at a different racetrack, then a medical professional at the different track must evaluate the jockey.



- » If authorized, the medical professional may view the jockey's concussion history (previous concussions, baseline test, initial post-injury assessment, etc.) on HEADCHECK to compare symptom scores.
- » This follow-up evaluation must be reported to the medical team at the racetrack where the jockey sustained the injury and in the HEADCHECK platform, including a symptom assessment at minimum.

## Medical Team Continues to Suspect a Concussion



If following the observation period, the racetrack medical team **continues to suspect a concussion**, then the jockey will be removed from riding for the remainder of the day and may be transferred to a hospital emergency department if the racetrack medical team determines it is warranted.

- The racetrack medical team will notify the clerk of scales and the stewards that the jockey is ineligible to ride until a qualified medical provider knowledgeable in concussion management and familiar with the skills needed to perform the job of a jockey provides a written release for the jockey to return to ride.
- The written release must be presented to the racetrack medical team, the stewards and the clerk of scales.
  - » The written release must be uploaded to the HEADCHECK platform as a "clearance to ride" note.
  - » The addition of a "clearance to ride" note will update the jockey's health status to "eligible" (if all requirements have been met, otherwise, the health status will update to "missing requirements").
- The jockey must meet with the racetrack's medical team for a follow-up evaluation, once per day, prior to riding, for a period determined by the racetrack's medical team.
  - » If authorized, the medical professional may view the jockey's concussion history (previous concussions, baseline test, initial post-injury assessment, etc.) on HEADCHECK to compare symptom scores.
  - » This follow-up evaluation must be reported to the medical team at the racetrack where the jockey sustained the injury and in the HEADCHECK platform, including a symptom assessment at minimum.



## Medical Team Confirms Concussion



Any jockey with a **confirmed concussion** as determined by the racetrack's medical team will be ineligible to ride the remainder of that day and will be transferred to a hospital emergency department.

- The racetrack medical team will notify the clerk of scales and the stewards that the jockey is ineligible to ride until a qualified medical provider knowledgeable in concussion management and familiar with the skills needed to perform the job of a jockey provides a written release for the jockey to return to ride.
- The written release must be presented to the racetrack medical team, the stewards, and the clerk of scales.
  - » The written release must be uploaded to the HEADCHECK platform as a "clearance to ride" note.
  - » The addition of a "clearance to ride" note will update the jockey's health status to "eligible" (if all requirements have been met, otherwise, the health status will update to "missing requirements").
- The jockey must meet with the racetrack's medical team for a follow-up evaluation, once per day, prior to riding, for a period determined by the racetrack's medical team.
  - » If authorized, the medical professional may view the jockey's concussion history (previous concussions, baseline test, initial post-injury assessment, etc.) on HEADCHECK to compare symptom scores.
  - » This follow-up evaluation must be reported to the medical team at the racetrack where the jockey sustained the injury and in the HEADCHECK platform, including a symptom assessment at minimum.

## Care Plan for a Jockey Diagnosed with a Concussion

Jockeys with a suspected concussion:

- should not be left alone,
- should have their family and friends involved and educated about concussions, how to care for and recognize symptoms and to report worsening conditions to medical professionals.



## Physical and Cognitive Rest

Physical rest and relative cognitive rest for a few days will usually result in a reduction in symptoms.

The early phase of recovery is especially important. Returning to a demanding physical activity, like horse racing, too soon after a concussion can result in cumulative brain damage that increases the risk of permanent loss of physical or cognitive functions.

In most cases, a gradual increase in daily activity level is allowed if symptoms do not worsen.

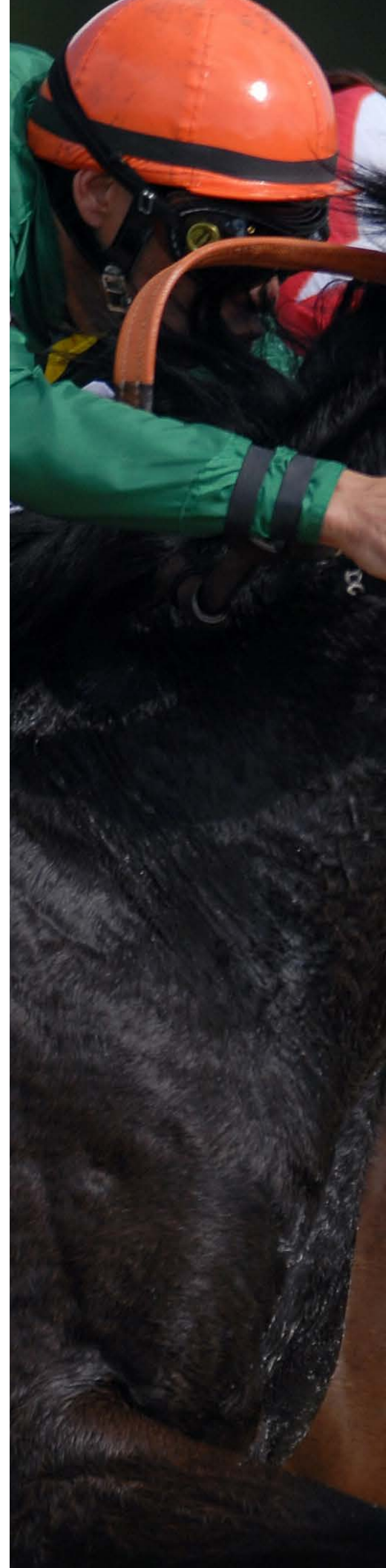
## Progressive Exercise Program

Once usual daily activities can be conducted without concussion-related symptoms returning, a medically managed progressive exercise program supervised by a health care provider may be appropriate. If symptoms return, physical and relative cognitive rest should be resumed until concussion related symptoms have resolved. Once symptoms are resolved, a progressive exercise program is initiated to recondition the rider for the vigorous demands of horse racing.

When returning to ride, a jockey, like all athletes, should follow a graduated, medically managed exercise sport specific progression, with increasing amounts of exercise supervised by a healthcare provider. [See appendix B for an example of one such program.](#)

## General information

- The HISA National Concussion Protocol for Jockeys is available on the HISA website, [www.HISAus.org](http://www.HISAus.org).
- Covered Racetracks using the HISA National Concussion Protocol for Jockeys are encouraged to post a printed copy of it in a prominent place in the jockeys' quarters.
- Jockeys are responsible for familiarizing themselves with this HISA National Concussion Protocol for Jockeys.
- Jockeys must annually acknowledge that they have read the [HISA National Concussion Protocol in the HISA portal](#), prior to riding any race held at a covered racetrack. Jockeys will be notified via the HISA portal each time the Protocol is updated.
- Jockeys must complete a baseline concussion test annually, using a concussion assessment tool (preferably SCAT6) before being allowed to race.
- Jockeys must report all injuries and any signs or symptoms of a concussion immediately to the racetrack's medical team.



# Appendix A – Concussion Recognition Tool

## 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.

#### 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.

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Developed by: The Concussion in Sport Group (CISG)

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# Appendix B – Return to Ride Communication Tool Example

## Return to Ride Communication Tool

<b>STAGE 1:</b> <b>No sporting activity</b>  Symptom-limited physical and cognitive rest;  Any person sustaining a head injury must be without symptoms prior to starting Return to Ride (RTR) progression	<b>STAGE 2:</b> <b>Light aerobic/ cardiovascular exercise</b>  Walking, swimming, stationary cycling, 15-30 minutes  No resistance training. Heart rate $\leq$ 70%  Grooming/Feeding Horses	<b>STAGE 3:</b> <b>Equine/Sport-specific exercise</b>  Jump Rope/Squat Jump Jumping Jacks Box Jumps/Step Ups Burpees/Lunge Jump Mountain Climbers Bicycle Circles/Pushups  <b>Equicizer:</b> 2 trials at 30-45 seconds each with 30 second rest.  No head-impact activities: Barn work, cleaning stalls	<b>STAGE 4:</b> <b>Noncontact riding</b>  <b>Equicizer:</b> 6 trials: 30 sec on/off 1 min on/off 1.5 min on/off 2 min on/off  May start resistance training.	<b>STAGE 5:</b> <b>Re-introduction to Horse</b>  Following medical clearance, participating in galloping and breezing during morning workout (no others on track); 30-min mounted individual trot  Release to all strength/endurance activities at max HR	<b>STAGE 6:</b> <b>Return to Horse/ Competition:</b>  Medical clearance will be determined by team physician
<b>Recovery</b>	<b>Increase heart rate</b>	<b>HR <math>\leq</math> 85% Maximum; increase strength, balance</b>	<b>HR to <math>&lt;</math> 95% Max; increase balance/ coordination/cognition</b>	<b>Restore confidence; assess functional skills</b>	
<b>Symptom-free for 24 hours?</b> <b>Yes:</b> Begin Stage 2  Time and date completed: _____ _____ _____	<b>Symptom-free for 24 hours?</b> <b>Yes:</b> Move to Stage 3  Time and date completed: _____ _____ _____	<b>Symptom-free for 24 hours?</b> <b>Yes:</b> Move to Stage 4  Time and date completed: _____ _____ _____	<b>Symptom-free for 24 hours?</b> <b>Yes:</b> Move to Stage 5  Time and date completed: _____ _____ _____	<b>Symptom-free for 24 hours?</b> <b>Yes:</b> Return to play  Time and date completed: _____ _____ _____	

Medical clearance required before moving to Stage 5