

SPORTS FORUM

Concussion & Return to play policy

SPORTS FORUM

Concussion – Recognition and
Management

Background

- Consensus statement on concussion in sport—the 5th international consensus conference on concussion in sport held in Berlin, October 2016
- FEI sponsorship and representation on Scientific Committee



What is Sports Related Concussion?

- *SRC is a traumatic brain injury induced by biomechanical forces transmitted to the brain*
- *SRC typically results in the rapid onset of short-lived impairment of neurological function that resolves spontaneously. However, in some cases, signs and symptoms evolve over a number of minutes to hours. “Delayed concussion”*

Suspect Concussion – striking head



“

Sport related concussion is a traumatic brain injury induced by biomechanical forces.

”

Suspect Concussion – landing heavily



“

Sport related concussion is a traumatic brain injury induced by biomechanical forces.

”

Recognising Concussion using CRT 5

- Recognise and Remove
- Recognise the type of impact which may lead to concussion
- CRT 5 is used for identification of suspected concussion

CONCUSSION RECOGNITION TOOL 5®

To help identify concussion in children, adolescents and adults



FIFA®



UEFA

RECOGNISE & REMOVE

Impacts can be associated with serious and potentially fatal brain injuries. The Concussion Recognition Tool 5 is to be used for the identification of suspected concussion. It is not designed to diagnose concussion.

STEP 1: RED FLAGS – CALL AN AMBULANCE

There is concern after an injury including whether ANY of the following signs are observed or complaints are reported then the player should be safely and immediately removed from play/game/activity. If no licensed healthcare professional is available, call an ambulance for urgent medical assessment:

- | | | |
|--|---------------------------------|--|
| • Neck pain or tenderness | • Severe or increasing headache | • Deteriorating conscious state |
| • Double vision | • Seizure or convulsion | • Vomiting |
| • Weakness or tingling/numbing in arms or legs | • Loss of consciousness | • Increasingly restless, agitated or combative |

Remember:

- In all cases, the basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- Assessment for a spinal cord injury is critical.
- Do not attempt to move the player (other than required for airway support) unless trained to do so.
- Do not remove a helmet or any other equipment unless trained to do so safely.

If there are no Red Flags, identification of possible concussion should proceed to the following steps:

STEP 2: OBSERVABLE SIGNS

Observable clues that suggest possible concussion include:

- | | | |
|---|--|--|
| • Player is motionless on the playing surface | • Disorientation or confusion, or an inability to respond appropriately to questions | • Balance, gait difficulties, motor incoordination, stumbling, slow laboured movements |
| • Player is slow to get up after direct or indirect hit to the head | • Blank or vacant look | • Facial injury after head trauma |

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STEP 3: SYMPTOMS

- | | | | |
|----------------------|-------------------------|----------------------|----------------------------|
| • Headache | • Blurred vision | • More emotional | • Difficulty concentrating |
| • "Pressure in head" | • Sensitivity to light | • More irritable | • Difficulty remembering |
| • Balance problems | • Sensitivity to noise | • Sadness | • Difficulty remembering |
| • Nausea or vomiting | • Fatigue or low energy | • Nervous or anxious | • Feeling slower down |
| • Drowsiness | • "Don't feel right" | • Neck Pain | • Feeling like "in a fog" |
| • Dizziness | | | |

STEP 4: MEMORY ASSESSMENT

(IN ATHLETES OLDER THAN 12 YEARS)

Failure to answer any of these questions (modified appropriately for each sport) correctly may suggest a concussion:

- "What venue are we at today?"
- "What team did you play last week/game?"
- "Which half is it now?"
- "Did your team win the last game?"
- "Who scored last in this game?"

Athletes with suspected concussion should:

- Not be left alone initially (at least for the first 1-2 hours).
- Not drink alcohol.
- Not use recreational/ prescription drugs.
- Not be sent home by themselves. They need to be with a responsible adult.
- Not drive a motor vehicle until cleared to do so by a healthcare professional.

The CRT5 may be freely copied in its current form for distribution to individuals, teams, groups and organisations. Any revision and any reproduction in a digital form requires approval from the Concussion in Sport Group. It should not be altered in any way, rebranded or sold for commercial gain.

ANY ATHLETE WITH A SUSPECTED CONCUSSION SHOULD BE IMMEDIATELY REMOVED FROM PRACTICE OR PLAY AND SHOULD NOT RETURN TO ACTIVITY UNTIL ASSESSED MEDICALLY, EVEN IF THE SYMPTOMS RESOLVE

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Step 1: Red Flags – Call an Ambulance

- Neck Pain/tenderness. Double vision. Weakness/tingling in limbs
 - Severe or increasing headache. Convulsions.
 - Deteriorating conscious state or loss of consciousness.
 - Vomiting. Increasingly restless or agitated.
-
- Remember: **A**irway **B**reathing **C**irculation. Spinal cord injury.
 - Do not remove helmet or move patient unless trained to do so

Step 2; Observable signs



Level of consciousness

Motionless

Slow to get up



Confusion

Disorientated

Unable to respond appropriately to questions

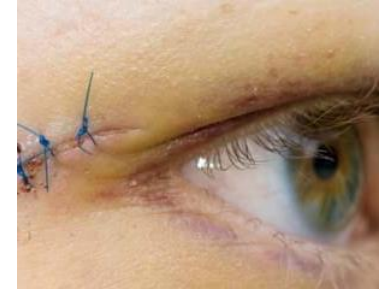


Balance

Incoordination

Stumbling

Slow laboured movements



Facial injury

Blow to head causing facial injury likely to be associated with concussion

Step 3; Symptoms

- Headache, “pressure in head”, balance problems, Nausea/vomiting, drowsiness, dizziness
- Blurred vision, sensitivity to light or noise, fatigue, “don’t feel right”
- More emotional, more irritable, sadness, anxiety/nervous, neck pain
- Difficulty concentrating/remembering, slowed down, like “in a fog”

Step 4: Memory Assessment (athletes over 12 years age)

- Sport specific questions e.g.
- What is the name of this competition?
- What horse were you riding?
- Where was your last competition?
- Are you competing any other horses today?
- Who has come with you today?

Managing Concussion (general)

- Do not leave alone (at least first 2 hours)
- Must not drink alcohol
- Must not take recreational/prescription medication
- Must not be sent home by themselves
- Must not drive a motor vehicle until passed by a medical professional

Understanding Concussion

- No one is slightly concussed, all concussions are significant
- Symptoms can be delayed
- You can suffer mild symptoms or severe symptoms
- Generally follows a recognised pattern of resolution



Concussion – Considerations before Return to Sport

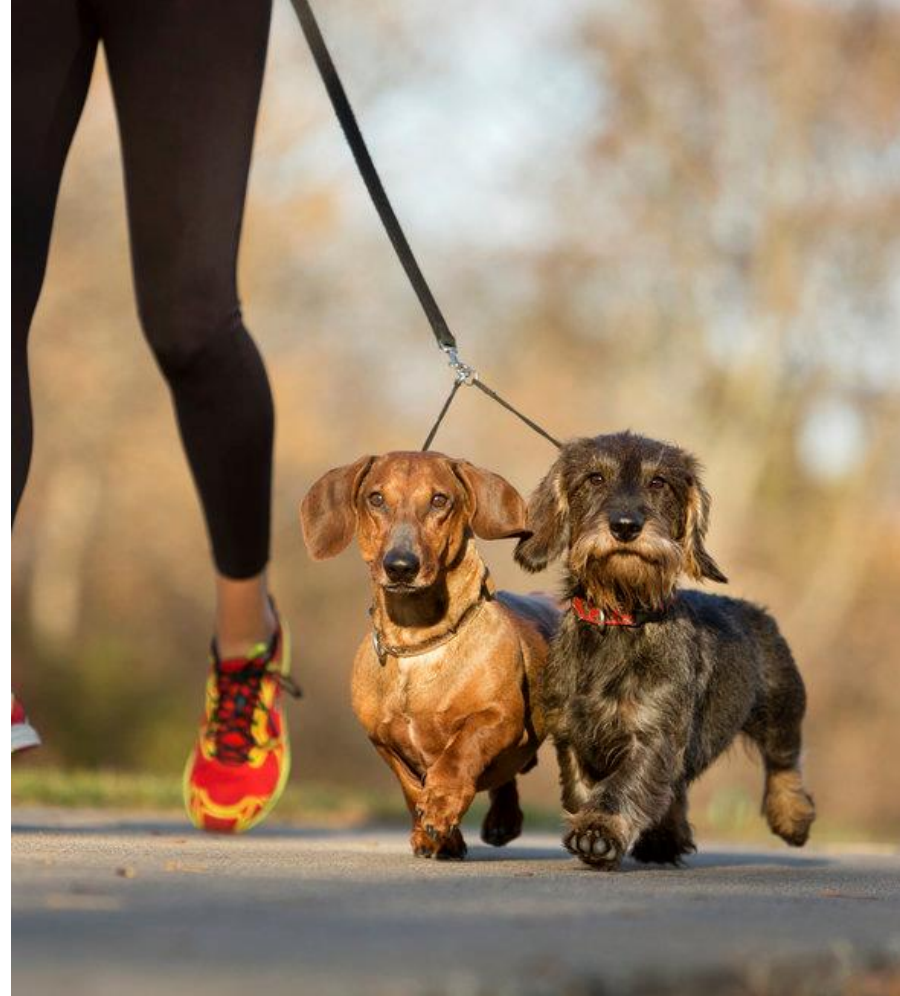
- Recovery periods can vary dramatically, severity of early symptoms are a consistent predictor of recovery
- Recovery slower in younger age groups
- Investigations (scans) do not diagnose or prove recovery
- Graduated return to sport with medical guidance when symptoms have resolved

Dangers of Return to Sport before Full Recovery

- Effects of concussion increase the risk of another fall
- The concussed brain is more susceptible to injury in the case of another fall.
- Second Impact Syndrome
- Chronic Traumatic Encephalopathy ????

Return to Sport

- Graduated return, starting with light aerobic exercise



Return to Sport

- Increasing workload



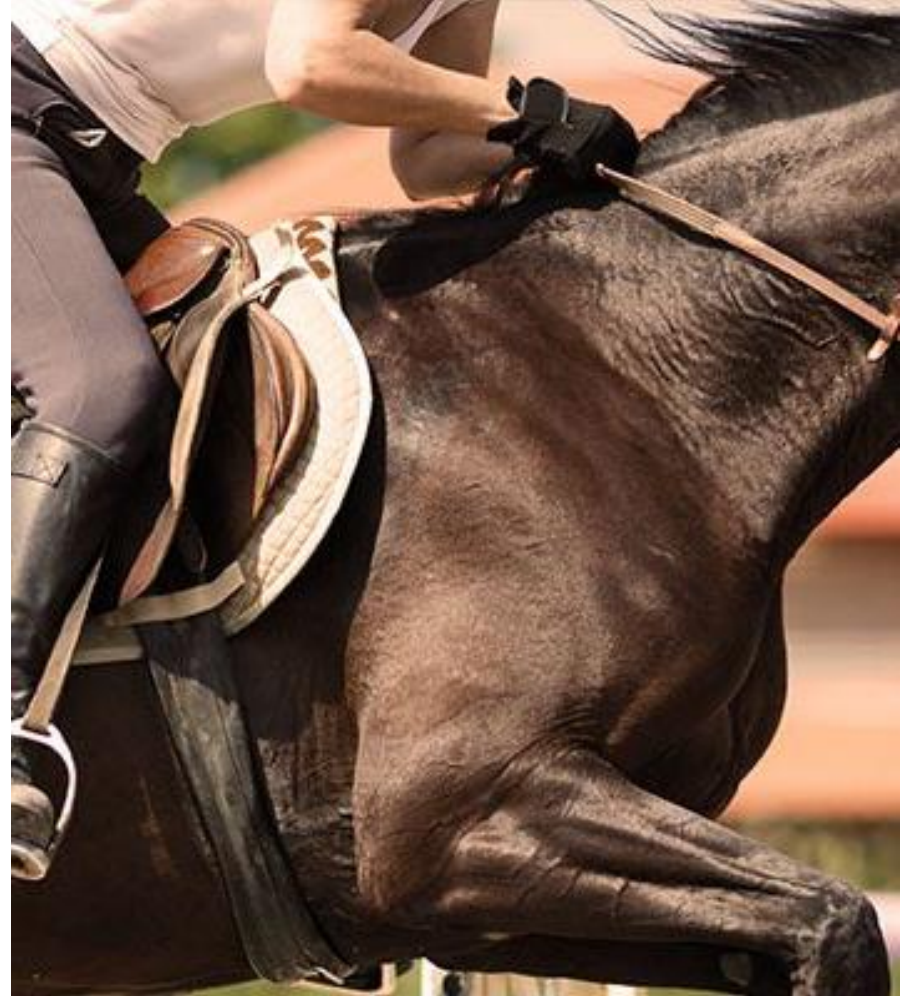
Return to Sport

- Increasing workload, gentle schooling



Return to Sport

- Ready to compete, after medical clearance by appropriately trained healthcare professional.



Recognising Concussion is Vital

- Education – challenge for sports federations
- Athletes
- Coaches
- Officials (including medical)
- Parents



THANK YOU

SPORTS FORUM

Concussion awareness for a safer sport

CONCUSSION AWARENESS & EDUCATION

- **An absolute necessity in equestrian sport**
To prevent secondary concussion and accidents to athlete, horse, spectators
- **Everyone is involved**
Athletes
Athletes' entourage
Medical & emergency care providers
Officials
OCs
NFs...



Ignorance about concussion is very common,
even in the medical profession.

Dr Peter Whitehead, Chair FEI Medical Committee



CONCUSSION BASICS 1 – RECOGNISE

- **Know when to check for concussion**
Nature of the accident
«Red flag» signs
Dispell myths...
- **Know and use concussion recognition tools**
CRT5 available on FEI's website and in FEI's «Doctor's Pack»

CONCUSSION BASICS 2 – MANAGE

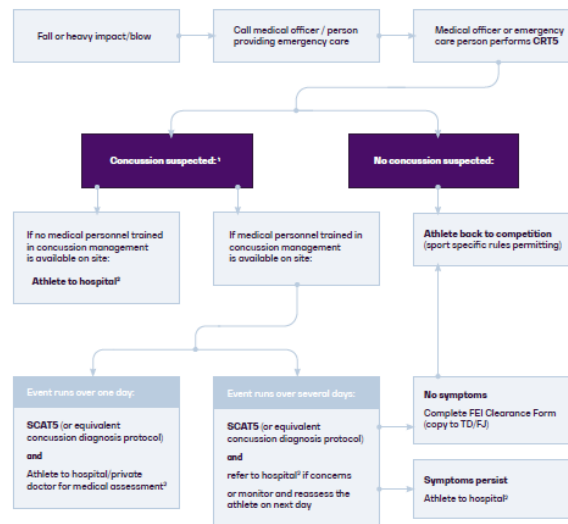
- **Know what to do if concussion is likely**
Tools and concussion management chart in the FEI's "Doctor's Pack" (Officials, medical & emergency care providers, OCs)
- **Make sure athlete does not drive or ride a horse until symptoms have cleared**
Balance and overall coordination are affected

CONCUSSION RECOGNITION & MANAGEMENT AT FEI EVENTS

A flow chart showing the key steps to find out whether concussion should be suspected and know what to do next.

Concussion

recognition and management process
at FEI events



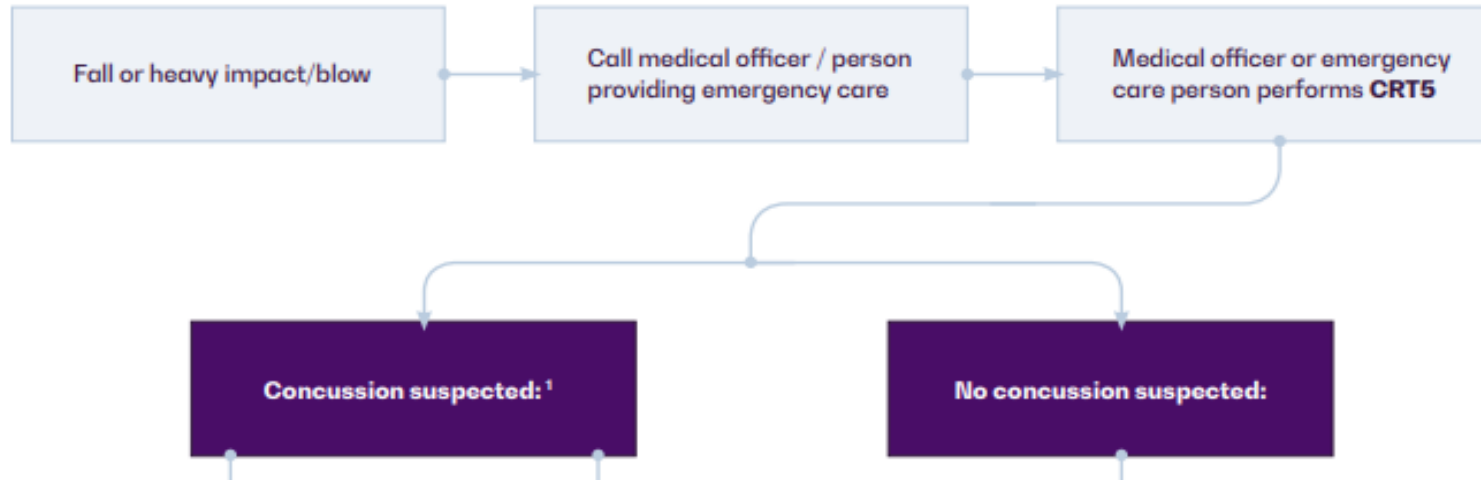
¹ In all cases of suspected concussion:

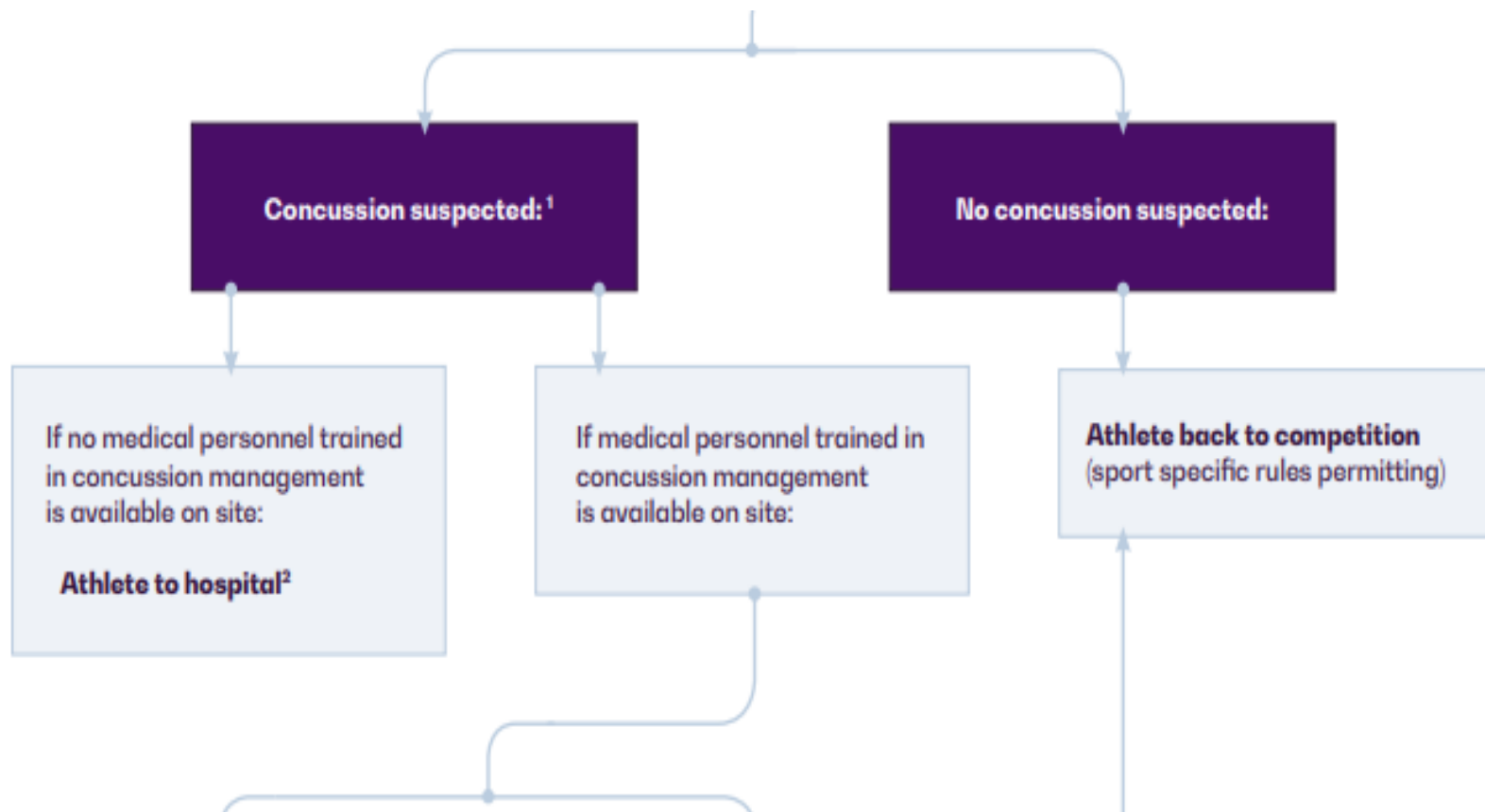
- GJ President must be informed
- Medical officer / person providing emergency care fills Alert Sheet and gives to Technical Delegate/Foreign Judge
- Technical Delegate/Foreign Judge emails Alert Sheet within 24 hours to medical@fei.org

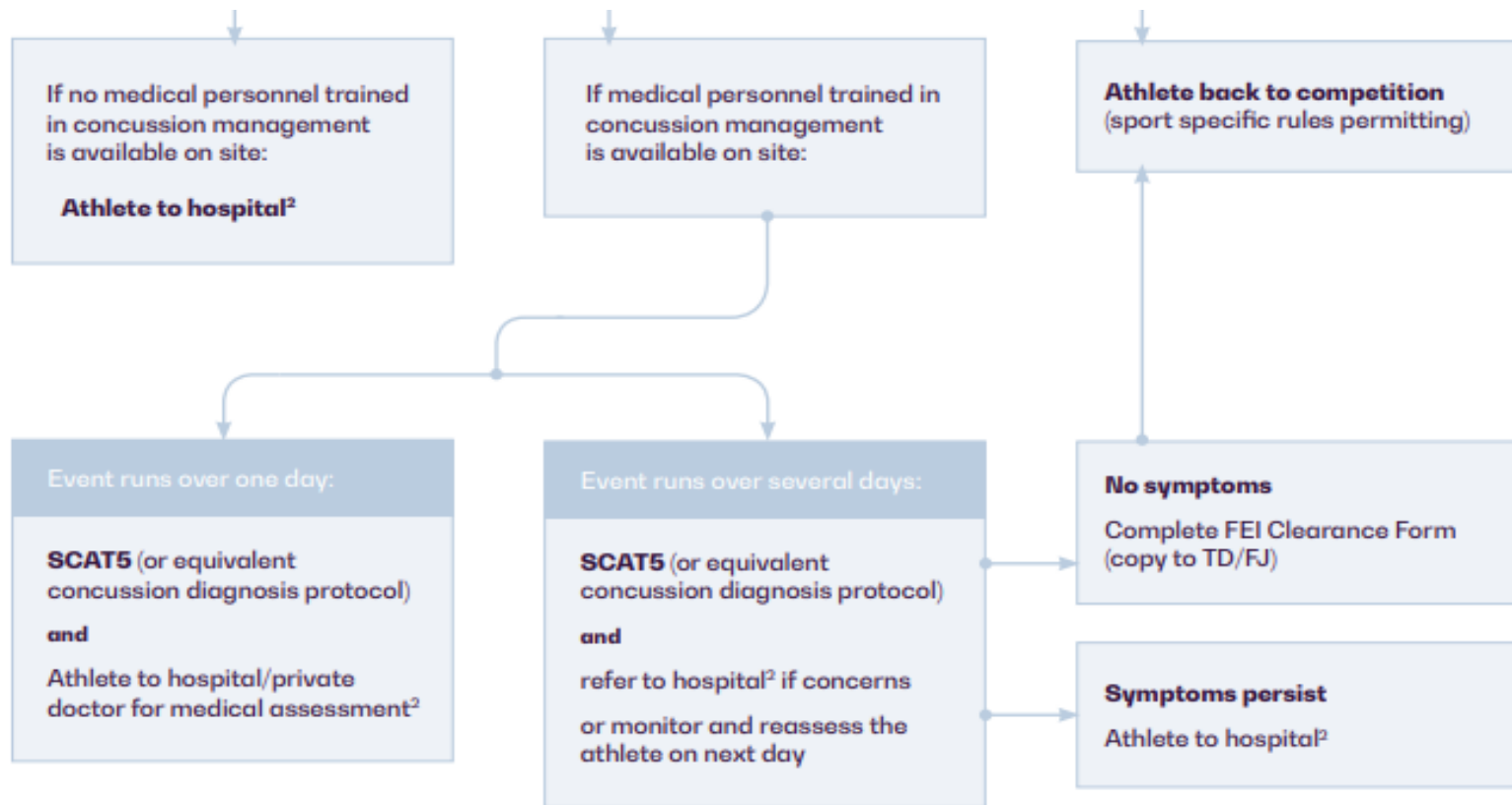
² Any athlete diagnosed with concussion must receive written clearance from an appropriate health care provider before they compete again in an FEI sanctioned event.

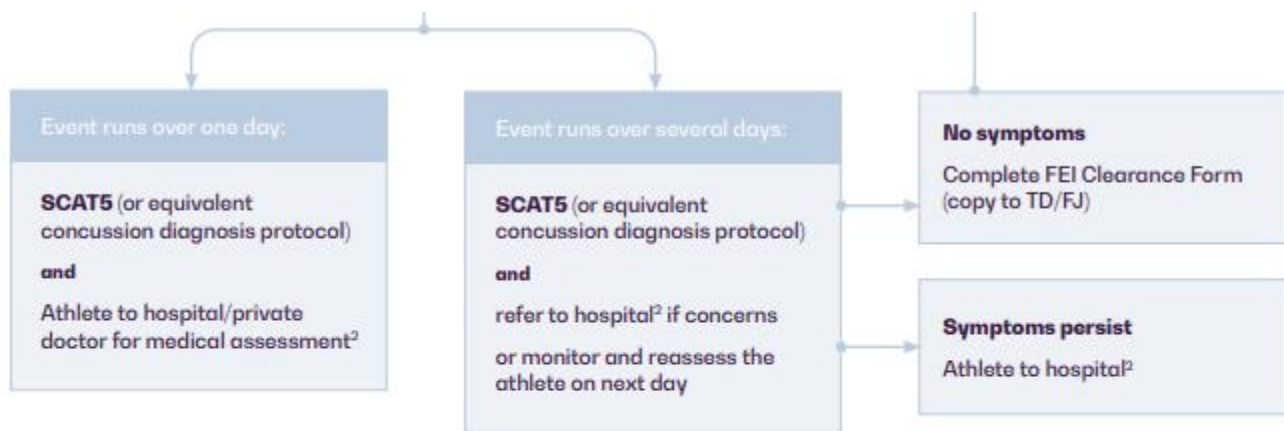
Concussion

recognition and management process
at FEI events









¹ In all cases of suspected concussion:

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² Any athlete diagnosed with concussion must receive written clearance from an appropriate health care provider before they compete again in an FEI sanctioned event.

CONCUSSION BASICS – 3 RETURN TO RIDING

- Return to riding is a step-wise process
- Clearance by appropriate health care practitioner
- FEI Clearance form

Concussion Clearance Form



Note: The health care provider completing this form should be familiar with the International Concussion in Sport Group Guidelines, the current Concussion Recognition Tool (CRT) and Sport Concussion Assessment Tool (SCAT), and must have the ability to perform a basic neurologic exam.

Athlete's Name:

FEI ID Number:

Date of Birth:

Date of Injury:

I have assessed this athlete for possible concussion/concussion recovery and declare him/her fit to return to equestrian competition.

I can confirm that where relevant this athlete has completed the stages of return to riding as detailed overleaf.

Date of Evaluation:

Treating health care provider information

(please print/stamp)

By signing this document, I confirm that I am familiar and trained in sport concussion assessment and management.

Name:

Qualifications:

Signature:

Office Phone:

Office Address:

Email:

Concussion Clearance Form

Athlete Information



Concussion is a traumatic brain injury that interferes with normal brain function. Concussion is caused by a biomechanical force or hit, to the head or body, transmitted to the brain. Concussion can occur with or without loss of consciousness (being "knocked out").

Concussion management is very important to make sure that all symptoms have cleared before return to riding. This is because further damage may occur if the brain receives additional impacts before it has fully recovered from the initial concussion episode.

Concussion Management:

1. Any athlete with concussion or suspected of having a concussion should be evaluated by an appropriate¹ health-care professional that day;
2. Cognitive judgement, balance and coordination are impaired in concussion injury. The athlete must not return to riding a horse on the same day of a concussion;
3. Any athlete with a concussion must follow the stages of return to riding outlined below under medical guidance before final clearance can be issued by an appropriate² health-care professional.

Stages of Return to Riding

If at any of the stages indicated below the athlete becomes symptomatic, he/she should revert to the first stage of activity for 24 hours before attempting again to move on to the next stage.

1. **Rest** - No activity, complete cognitive and physical rest, do NOT Ride a horse. Once asymptomatic proceed to stage 2.
2. Progress to light aerobic training (walking, jogging), no resistance training.
3. Progress to sports specific exercise, e.g. riding on the flat, hacking.
4. Gradually increased training intensity.
5. Full training after medical clearance³.
6. Back to equestrian competition.

¹ Health care professional experienced in the management of sport concussion in line with the International Concussion in Sport Group Guidelines

² As above.

³ This clearance can only be issued by a health care professional experienced in the management of sport concussion in line with the International Concussion in Sport Group Guidelines.

FOR A SAFE «RETURN TO PLAY» AFTER A CONCUSSION...

- NFs must check the athlete's fitness to compete

A medical suspension should be applied until clearance is received

- FEI automatic alert system to be introduced on June 1, 2018
 - It will inform NFs when one of their athletes sustains a serious injury at an FEI event
 - All disciplines except Eventing

HOW THE ALERT SYSTEM WORKS

- Online form accessible to authenticated Technical Delegates and/or Foreign Judges (all disciplines except Eventing)
- The form will have to be filled out for every event and will also allow reporting when no injuries occurred.

HOW THE ALERT SYSTEM WORKS (2)

- The form can be filled out offline.
- The TD/FJ judge will liaise with the medical professional to fill out the form on the ground.
- Once the form is submitted, notifications will automatically be sent out to the Competing For and Host NF (if different) of the athlete if follow-up has been deemed necessary by the medical professional

HOW THE ALERT SYSTEM WORKS (3)

- Relevant FEI staff members will have access to the content of all the online forms.
- For all athletes, the record of an injury will be available only to relevant FEI staff members

FEI WEBSITE RESOURCES

WELCOME TO THE FÉDÉRATION EQUESTRE INTERNATIONALE



FEI
SPORTS FORUM
26-27 March 2018
IMD, Lausanne
[REGISTER NOW!](#)



RANKINGS & STANDINGS

[See All Rankings](#)



JUMPING

LONGINES RANKINGS

Rankings No 205 (31.01.2018)

1. Kent FARRINGTON (USA) with 8298 pts
2. Harrie SMOLDERS (NED) with 8019 pts
3. Mclain WARD (USA) with 2908 pts



Jumping



Dressage



Eventing



Driving



Endurance



Vaulting



Raining

LATEST PRESS NEWS

[See All News](#)



VON ECKERMANN SETS SWEDISH HEARTS RACING AND WHITAKER QUALIFIES FOR YET ANOTHER FINAL AT LAST

Your Role

- Athlete
- Official
- Organiser
- Veterinarian
- Event Medical Officer
- National Federation
- Bidder
- Media
- Horse Owner
- Coach



EQUINE WELFARE

ATHLETE HEALTH & SAFETY

ATHLETE HEALTH & SAFETY

Concussion Medical Coverage of Events Riding while pregnant Safe handling of horses Personal Protective Equipment

HUMAN ATHLETE HEALTH & SAFETY

Welcome to the FEI Medical Committee's information pages, dedicated to key health and safety matters for human Athletes in equestrian sport. The mission of the FEI Medical Committee of the FEI is to advise the FEI Headquarters on matters relating to the health and safety of Athletes and on all matters related to human anti-doping testing.

Knowledge contributes to safety. With these pages the Medical Committee hopes to raise awareness and bring clarity on issues which concern everyone involved in equestrian sport at any competition level. In particular, we strongly recommend that everyone involved in our sport takes the time to read the information on Concussion published in these pages, and familiarize themselves with the **Concussion Recognition Tool (CRTS)**, keeping in mind that where concussion is even suspected expert advice must be sought.

These pages will be updated from time to time with new topics and/or additional information for the existing ones where relevant. If you have queries please feel free to [send us an email](#).

Best regards,

The FEI Medical Committee

CLICK HERE FOR
HEALTH CARE PROFESSIONALS
INFORMATION



Concussion

Medical Coverage
of Events:
Guidelines for Organisers

Riding while pregnant

Recommendations

Safety and Personal

Your Role

Athlete

Official

Organiser

Veterinarian

Event Medical Officer

National Federation

Bidder

Media

Horse Owner

Coach



MEDICAL & SAFETY INFORMATION FOR HEALTH CARE PROFESSION

[Concussion](#)[Medical Coverage of Events Guidelines](#)[Riding while pregnant](#)[Doctor's pack](#)[Personal Protective Equip](#)

HUMAN ATHLETE MEDICAL & SAFETY INFORMATION FOR HEALTH CARE PROFESSIONALS

Dear Colleagues,

The FEI is very grateful that so many within the medical profession offer their services to our sport. We hope that colleagues will find the medical information useful and **we welcome feedback**.

Whilst recognising that medical facilities around the world vary, we hope that these web pages will encourage common standards of medical practice. It is also essential for all healthcare workers in our sport to be familiar with the relevant medical rules and have a good knowledge of athlete antidoping.

Whatever the equestrian discipline, we strongly request that Athlete injuries are reported to the FEI Medical Committee via the FEI Officials at the competitions. Feedback from competitions is essential for us to be able to advise on the facilities and expertise that are needed in our sports.

Best regards,

The FEI Medical Committee



SUBSCRIBE TO THE
FEI MEDICAL COMMITTEE UPDATES



Clean Sport
for Humans

[Concussion](#)[Riding while pregnant](#)[Safety and Personal
Protective Equipment](#)[Doctor's pack](#)[Medical Coverage
of Events:
Guidelines for Organisers](#)[Latest News](#)[Medical Information
form for
Eventing Armband](#)


Doctor's Pack

February 2018
v1.0

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Athlete Injury Report form for Medical Officers/Emergency
care providers at FEI events

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Concussion Recognition and Management at FEI events

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Concussion Recognition Tool 5 (CRT5)

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Sport Concussion Assessment Tool 5 (SCAT5)

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Child SCAT5

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Print 

FEI Concussion Clearance Form

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Print 

UPCOMING PROJECTS

- **Awareness / Education**

Courses on FEI Campus; smart phone app...?

Officials/Coaches manuals

- **Support to NFs**

NF experience sharing; best practice recommendations

NFs: tell us what you need 😊

- **Contact us**

catherine.bollon@fei.org

THANK YOU

HEADS UP TO CONCUSSION AN EC INITIATIVE

Position of Canada on Sport Specific Concussion Policies



- 1.4 million over 2 years for focussing on concussion education, prevention, diagnosis, management, and development of Return to Play protocols for athletes and students
- Federal/Provincial working group for Concussion in Sport created in 2015
- 2016 Governor Generals conference on Concussion in Sport: We can do Better
- EC participated in National Concussion Harmonisation Project and now complies with [Canadian Guideline for Concussion in Sport](#)

EC Concussion by the Numbers

231

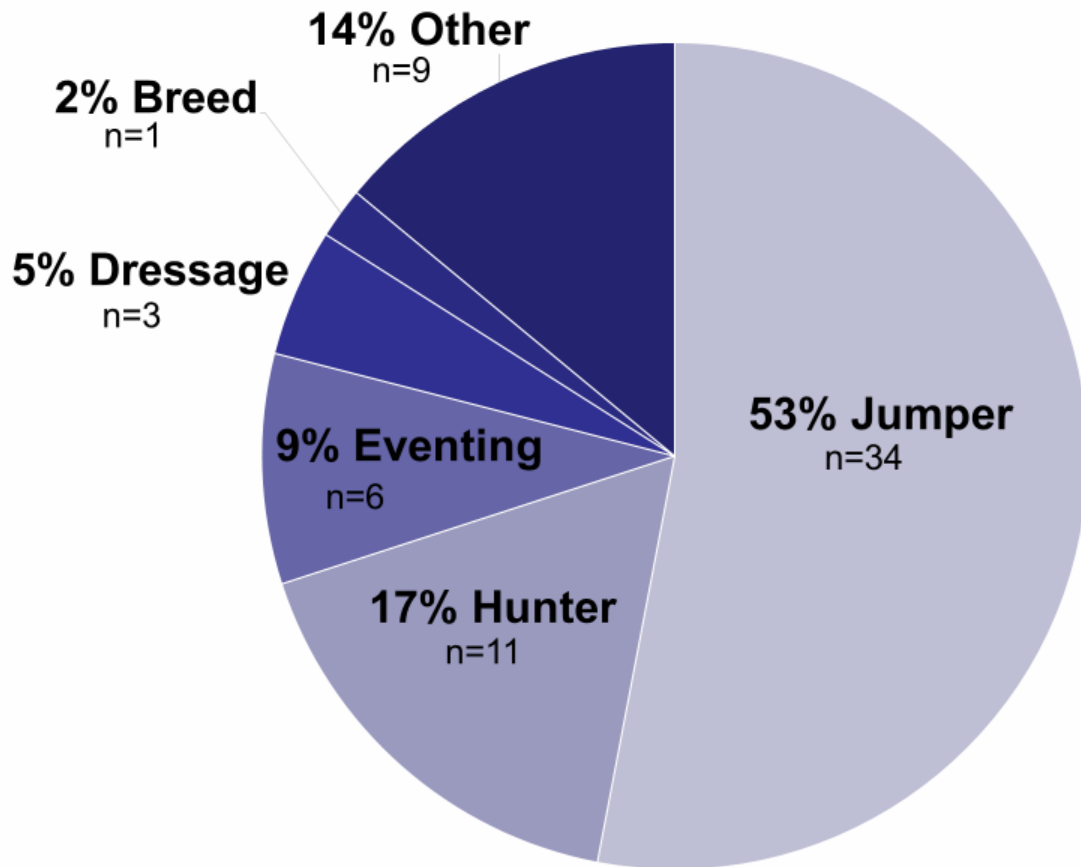
Accidents
were reported
to EC in 2017

28% of
Accidents
Reported to EC in
2017 resulted in
medical
suspensions for
possible
concussion.

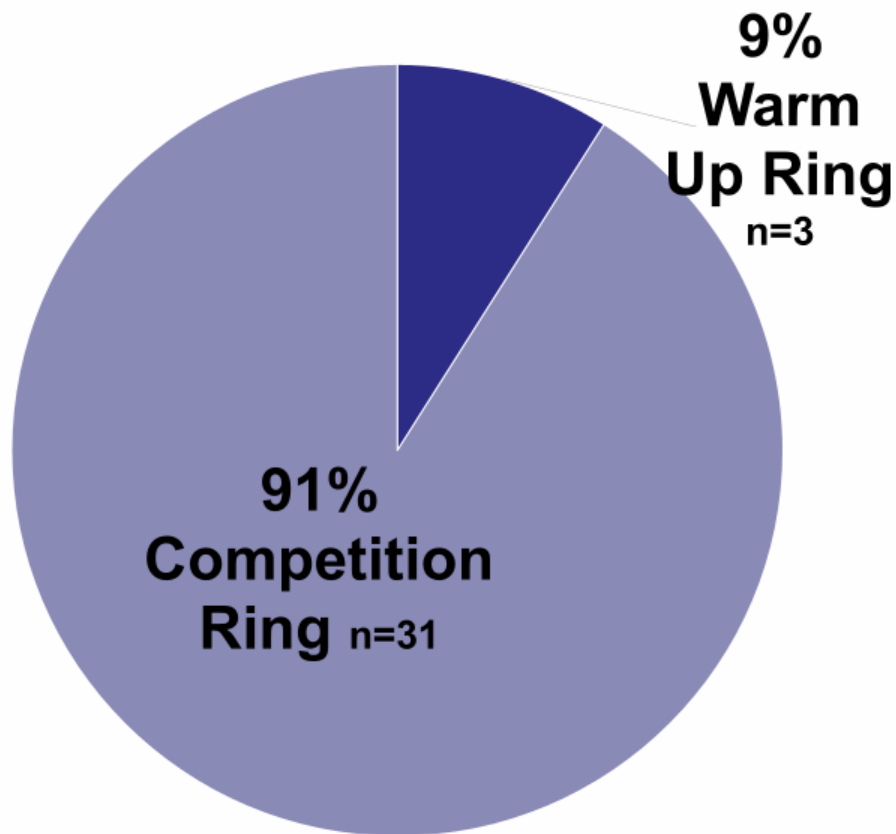
81% of
medical
suspensions
returned to
play within the
season.

14 days
was the
average
length of
suspension

Discipline Specific Concussion Metrics

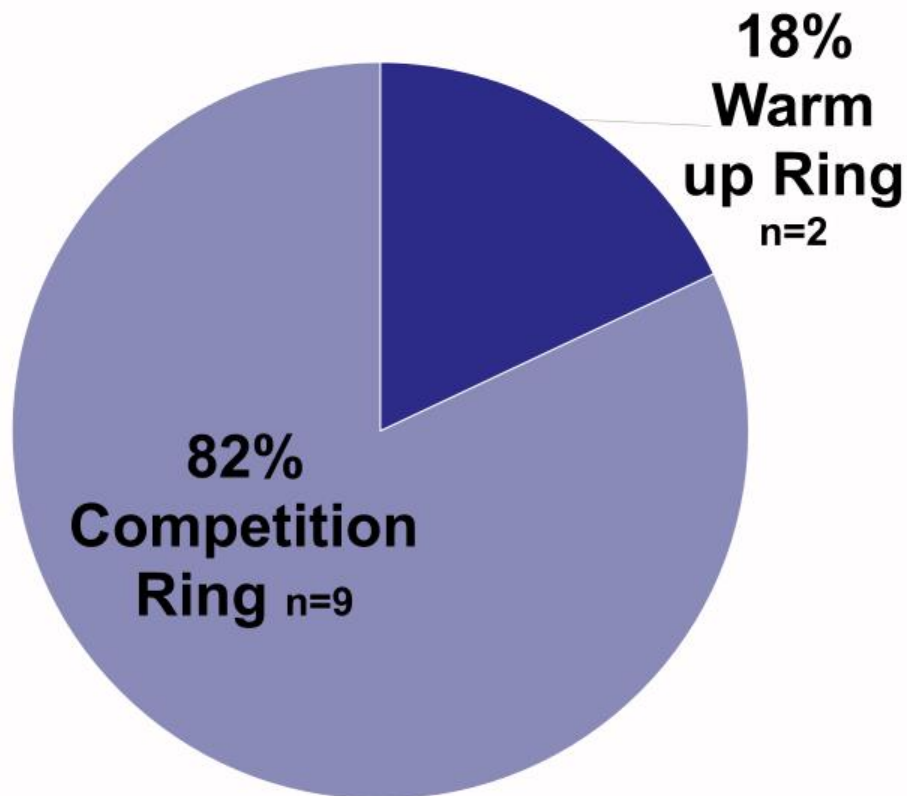


Jumping

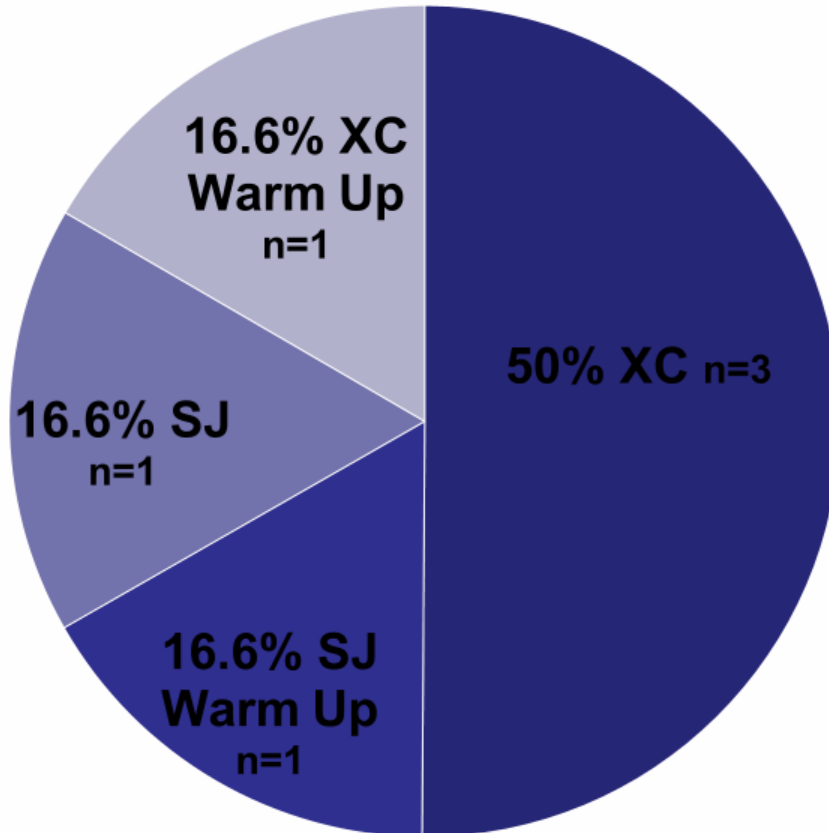


NOTE: The vast majority of these occurred at the 0.9 to 1.10m level.

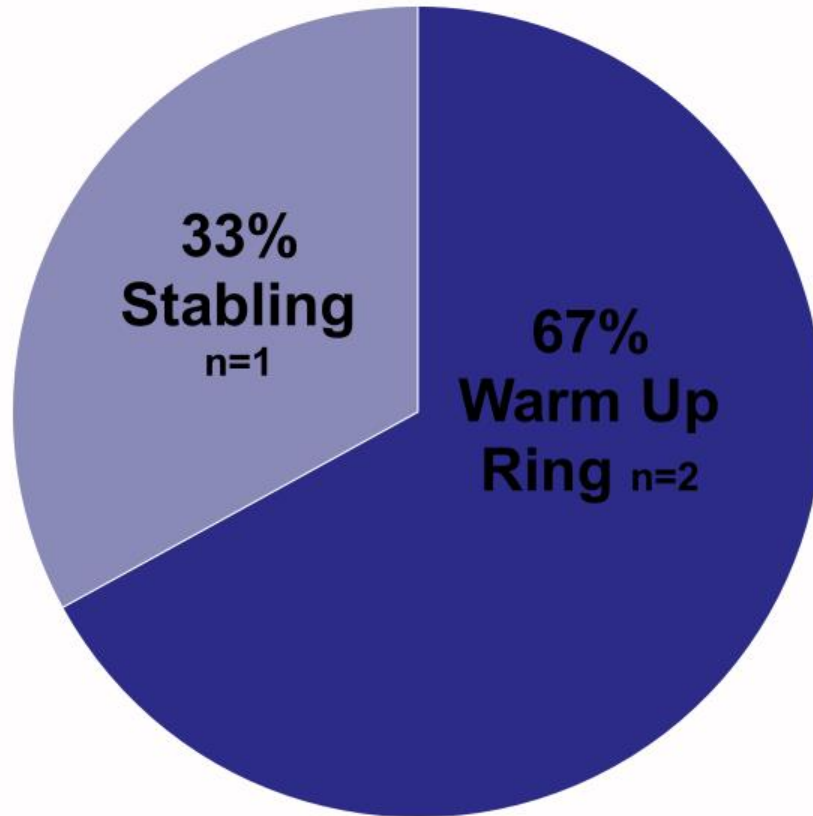
Hunter



Eventing



Dressage



The Process

1. Pre-Season Education

Who: athletes, parents, coaches, officials, trainers, teachers, healthcare professionals, all stakeholders

How: Pre Season Education Sheet, website information, webinars, social media, stakeholder presentations

Accident: Impact to the head, face, neck or body

Who: EC Official Completes Accident Injury Report Form

Head Injury is suspected

Who: Onsite qualified medical personnel, or EC Official

No Head Injury suspected

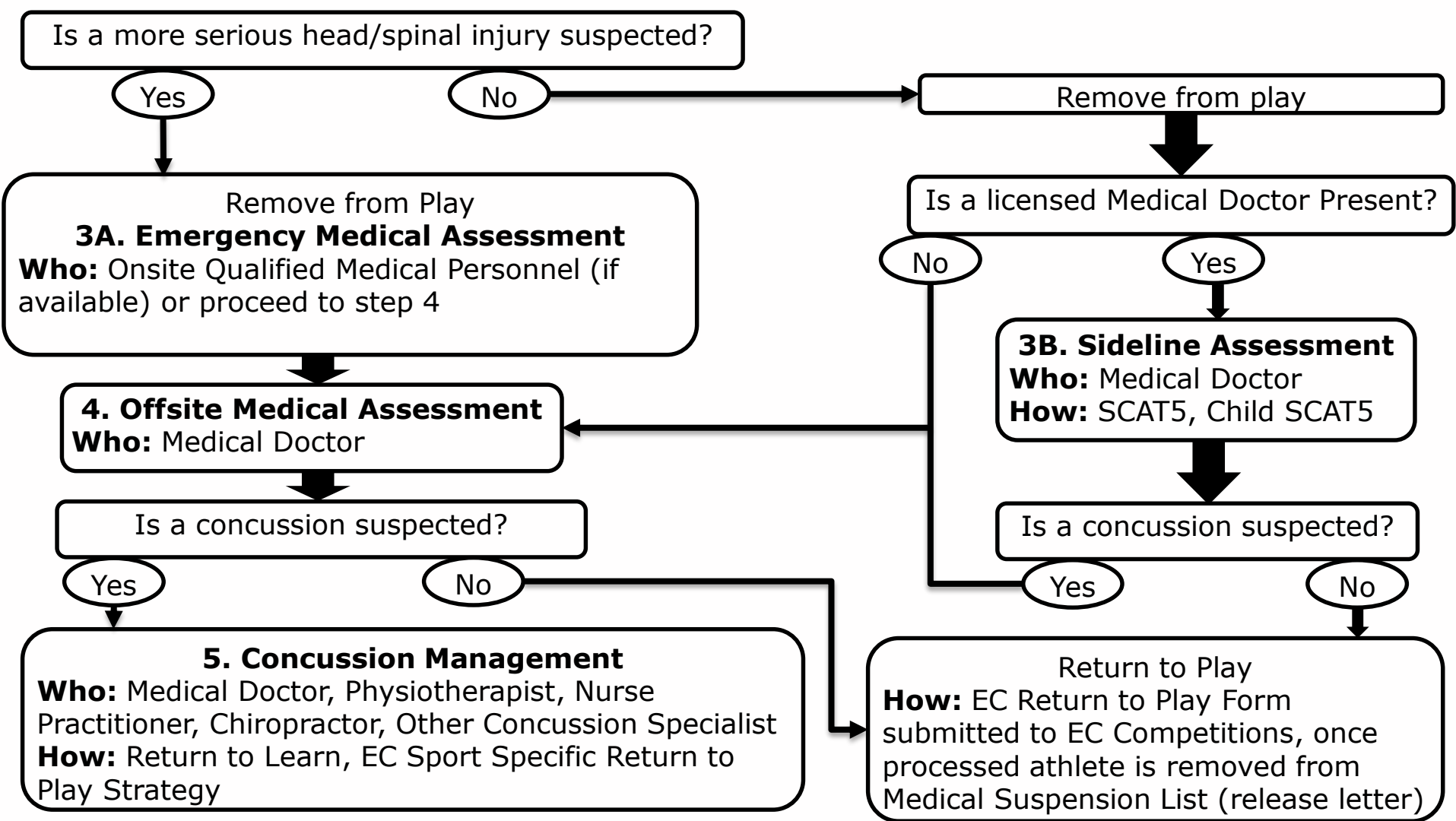
Remainder of pathway not applicable

2. Head Injury Recognition

Who: Athletes, parents, coaches, officials, trainers, healthcare professionals

How: Concussion Recognition Tool (CRT5)

EC: EC Officials Files Accident Injury form which is processed by Competitions Dept and athlete is placed on medical suspension and receives notification



Does the athlete have persistent symptoms? *>4 wks in children, >2wks in adults

Yes

No

6. Multidisciplinary Concussion Care

Who: Medical Doctor, Physiotherapist, Nurse Practitioner, Chiropractor, Other Concussion Specialist

EC: Athlete remaining on the EC Medical Suspension List after the calendar year in which the suspension occurred will receive a notification of prolonged suspension from EC memberships to assist athlete in returning back to play

Return to Play

How: EC Return to Play Form submitted to EC Competitions, once processed athlete is removed from Medical Suspension List by Competitions Athlete receives medically release letter

EC Accident Injury Report Form



3. Incident Description

☐ Possible head injury / concussion and medically suspended from competition

☐ Other injury:

☐ Approved to Compete (Must provide explanation) :

Attending Medical
Personnel (name) :

Phone #:

☐ Doctor ☐ EMT / Paramedic ☐ Nurse ☐ Nurse Practitioner ☐ First Responder ☐ Veterinarian
☐ Other:

EC Sport Specific Return to Play Guidelines



- The EC Sport Specific Stepwise Return to Play Guidelines are outlined on the [EC Return to Play Form](#). Athletes and parents can clearly see which stage is tolerated and therefore which activities should be engaged.
- Athletes and parents should also consult the [Parachute Return to Learn Protocol](#) as applicable.

EC RETURN TO PLAY FORM



Name of athlete:

Date (DD/MM/YY):

Date of Occurrence

(DD/MM/YY):

Physician:

Licence MD#:

A CONCUSSION is a serious event, but you can recover fully from such an injury if the brain is given enough time to rest and recuperate. Returning to normal activities, including sport participation, is a step-wise process that requires patience, attention, and caution.

Each step must take a minimum of one day but could last longer, depending on the athlete and his or her specific situation.

If symptoms reappear at any stage, go back to the previous stage until activities are tolerated for at least 24 hours.

Complete the Return to Learn protocol before beginning Stages 5 and 6 of the Return to Play process.

STEP 1: Daily activities that do not provoke symptoms

After an initial 24-48 hours of physical and cognitive rest, gradual re-introduction of daily activities. Refrain from participating in any sporting and physical activities or physical exertion. Only indulge in activities that do not worsen symptoms.

STEP 2: Light Aerobic Exercise, Unmounted

Activities such as walking or stationary cycling. The athlete should be supervised by someone who can help monitor for symptoms and signs. No resistance training or weight lifting. The duration and intensity of the aerobic exercise can be gradually increased over time if no symptoms or signs return during the exercise or the next day. Sport-specific activities off of the horse such as light grooming or tacking up to ensure these are tolerated prior to getting back on the horse.

☐ Symptoms? Return to previous step. If symptoms persist, return to rest and consult a trained physician.

☐ No symptoms? Proceed to Step 3 the next day.

STEP 3: Sport Specific Activities, Mounted - Light Flatwork

Activities such as walking or hacking can begin at step 3. There should be no jarring motions or work at speed.

☐ Symptoms? Return to previous step. If symptoms persist, return to rest and consult a trained physician.

☐ No symptoms? Proceed to **Step 4** the next day.

STEP 4: Begin Drills – Schooling

☐ Symptoms? Return to previous step. If symptoms persist, return to rest and consult a trained physician.

☐ No symptoms? The time needed to progress from non-contact exercise will vary with the nature of the concussion and type of symptoms that the athlete experiences. Proceed to **Step 5** only after medical clearance.

STEP 5: Begin Jumping/Full Training, once cleared by a physician

☐ Symptoms? Return to previous step. If symptoms persist, return to rest and consult a trained physician.

☐ No symptoms? Proceed to **Step 6** the next day.

STEP 6: Competition

☐ Athlete is completely recovered and cleared to return to active play and competition.

☐ Athlete does not appear to have a concussion and does not require a stepwise Return to Play process.
The athlete can return to full competition immediately.

Signature:

Date (DD/MM/YY):

Physician Stamp or attached
prescription pad / letterhead

EC Areas of Focus for 2018



- General Concussion Education and Awareness
- Communication on EC Rules and Sport Specific Protocol



Questions