

# Head Injury and Concussion Policy

*(Including potential, suspected and diagnosed concussion)*

## 1. Policy Statement

Northern Districts Gymnastic Club (NDGC) has the responsibility to ensure a safe environment for all participants and staff. This means having policies, procedures, rules, standards, and guidelines that promote safe programs in a safe environment which are overseen by qualified/certified personnel.

NDGC believes the most important element in the management of head injuries and concussion must always be the welfare of the participant.

## 2. Review History

Version	Date Reviewed	Date Endorsed	Content Reviewed
1		08/11/2021	Policy document created and endorsed

## 3. Policy Scope

This policy applies to all NDGC members, athletes, participants, coaches, officials, administrative staff and volunteers.

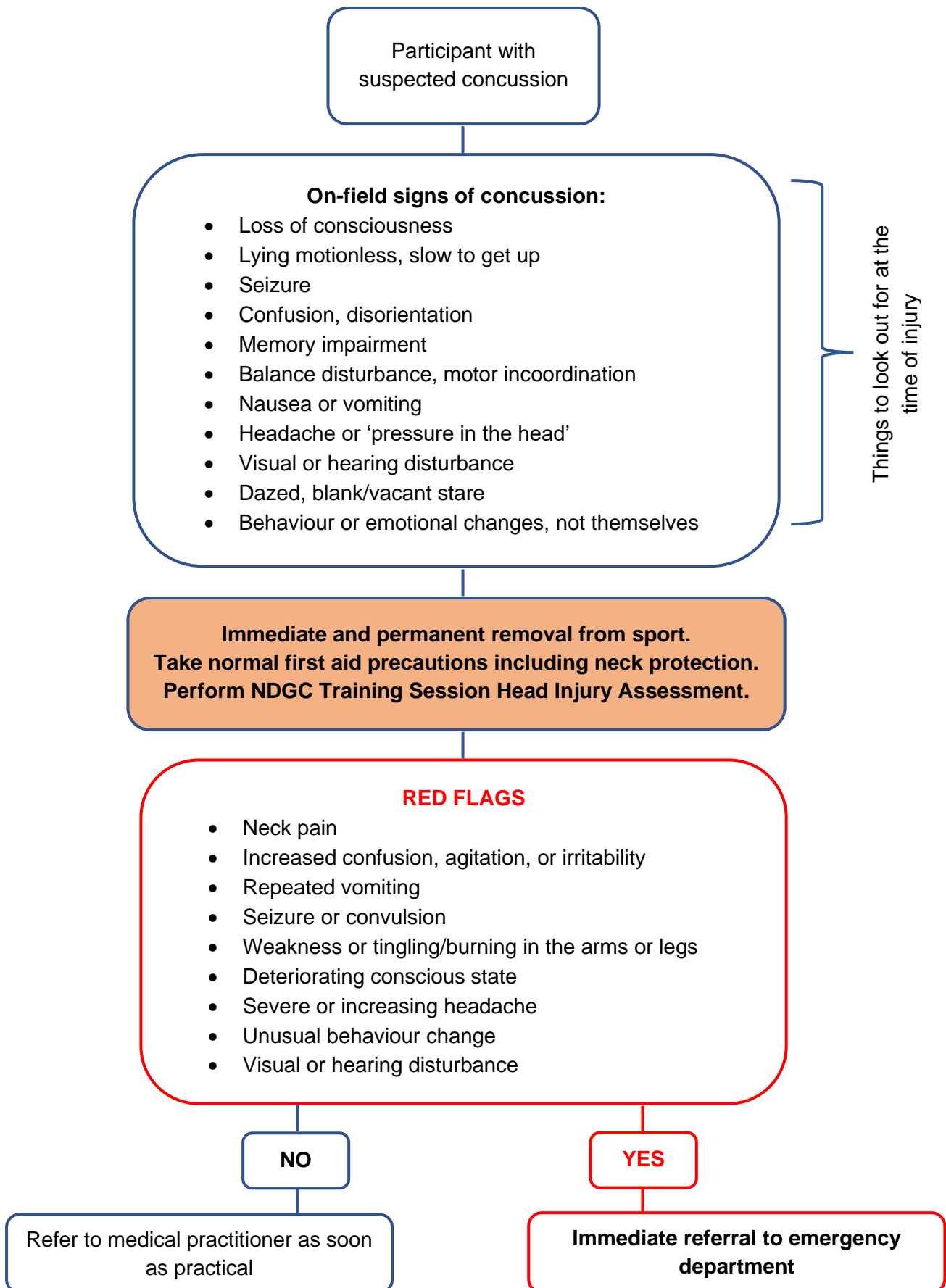
## 4. What is concussion

Concussion is a traumatic brain injury, induced by biomechanical forces to the head, or anywhere on the body which transmits an impulsive force to the head. Such injuries have the potential to cause sudden or delayed-onset concussion. Concussion causes short lived neurological impairment, and the symptoms may evolve over the hours or days following the injury.

## 5. Recognising concussion

Recognising concussion can be difficult. The signs and symptoms are variable, non-specific and may be subtle. Only a medical professional/practitioner can diagnose a concussion. Coaches, athletes, participants, members, staff and volunteers are responsible for recognising a suspected concussion. Section 5.1 on the next page outlines the flow chart for the immediate management of a suspected or potential concussion.

## 5.1. Concussion Management Flow Chart / Guidelines for Suspected Concussion



There may be obvious signs of concussion such as loss of consciousness, brief convulsions or difficulty balancing or walking. However, the signs of concussion can be more subtle. The Sport Concussion Assessment Tool (SCAT5) identifies 22 possible symptoms:

- Headache
- 'Don't feel right'
- 'Pressure in the head'
- Difficulty concentrating
- Neck pain
- Difficulty remembering
- Nausea or vomiting
- Sensitivity to light
- Fatigue or low energy
- Dizziness
- Confusion
- Blurred vision
- Drowsiness
- Balance problems
- More emotional
- Sensitive to noise
- Irritability
- Feeling slowed down
- Sadness
- Feeling like 'in a fog'
- Nervous or anxious
- Trouble falling asleep (if applicable)

Recognising concussion is critical to the correct management and prevention of further injury. The [Concussion Recognition Tool](#) (CRT5), is designed to help those without medical training, detect and recognise concussion.

NDGC Training Session Head Injury Assessment (*Appendix 13.1*) is designed to help guide immediate management of a suspected concussion. This assessment is not intended for diagnostic purposes and does not replace medical advice. When completing the assessment, if there are abnormal neurological signs, or signs of a head or neck injury, an ambulance must be called immediately.

When a participant is suspected of having a concussion, first aid principles still apply and a systematic approach to assessment of Airway, Breathing, Circulation (ABC) applies in ALL situations. Cervical spine injuries should be suspected if there is any loss of consciousness, neck pain or a mechanism that could lead to spinal injury. A medical practitioner should review any participant with a suspected concussion. If there is no medical practitioner present at the facility, the participant must not return to sport on the same day a concussion is suspected. If there is any doubt about whether a participant is concussed, the participant should not be allowed to return to sport that day. A participant with suspected concussion should be reassessed to look for developing symptoms and cleared by a medical practitioner before returning to sport. Due to the evolving nature of concussion, delayed symptom onset is not unusual. Therefore, any participant cleared to return to sport after medical assessment for suspected concussion should be monitored closely during training/competition, for developing symptoms or signs. If symptoms develop, the participant should be removed from sport.

## 5.2. Red Flags – Monitor participant closely and refer for medical assessment

Sometimes there will be clear signs that a participant has sustained a concussion. Participants displaying any of the following clinical features should be immediately removed from sport:

- Loss of consciousness
- No protective action taken by the participant in a fall to the ground, directly observed or on video
- Impact seizure or tonic posturing
- Confusion, disorientation
- Memory impairment
- Balance disturbance or motor incoordination

- Participant reports significant, new or progressive concussion symptoms
- Dazed, blank/vacant stare or not their normal selves
- Behaviour changes atypical of the participant.

### 5.3. Red Flags – Refer to nearest Emergency Department

Some features suggest more serious injury and participants displaying any of these signs should be immediately referred to the nearest emergency department:

- Neck pain (do not move participant, call an ambulance)
- Increasing confusion, agitation, or irritability
- Repeated vomiting
- Seizure or convulsion
- Weakness or tingling/burning in the arms or legs
- Deteriorating conscious stage
- Severe or increasing headache
- Unusual behaviour change
- Double vision

Urgent hospital referral is necessary if there is concern regarding the risk of structural head or neck injury. Contact 000 immediately and do not move the participant.

## 6. Removal from participation/sport

First Aid Principles and the primary survey should be considered and completed in the first instance where a participant is unconscious or falls heavily on their head, back or neck. It is extremely important to manage all participants in this scenario as though they have a neck or spinal injury. Urgent hospital referral is necessary if there is concern regarding the risk or structural head or neck injury. Ring 000 immediately.

A participant who is unconscious or falls heavily on their head, neck or back, must only be moved by qualified health professionals trained in spinal immobilisation (e.g., Paramedic). If no qualified person is present, do not move the participant, call 000, follow their advice and wait for the ambulance to arrive.

Participants with any of the symptoms outlined in section 5.3 above, should be referred to an emergency department immediately. If the participant is unconscious or has fallen heavily on their head, neck or back, do not move them.

A participant with a suspected concussion must not be allowed to return to participation on the same day unless cleared by a medical practitioner. Without a medical clearance, the participant is unable to return to training or competition despite any suggestion from the parent, participant, or coach.

Participants with suspected concussion should:

- Be immediately removed from participation
- Not be left alone initially
- Not drink alcohol
- Not use recreational drugs
- Not take certain prescription medications including aspirin, non-steroidal anti-inflammatory

- drugs, sleeping tablets and sedating pain medications
- Not be sent home by themselves
- Not drive a motor vehicle
- Be referred for an appropriate medical assessment

## 7. Referral for Medical Assessment

All participants with concussion, suspected concussion, or other head injury, must have a medical assessment by a medical practitioner. If one is not present at NDGC, the participant should be referred to a local general practice or hospital emergency department. Once the diagnosis of concussion has been made, immediate management is physical and cognitive rest for around 24- 48 hours. This may include time of school or work and relative rest from cognitive activity. Most concussive symptoms should resolve in 10 – 14 days. However, recovery will vary from person to person, and from injury to injury.

### 7.1. Concussion in Children and Adolescents

Children and Adolescents (up to 18 years of age) have a slower rate of recovery from concussion. A more conservative approach to concussion is recommended and **return to learn** should take priority over return to sport. School programs may need to include more regular breaks, rests and increase time to complete tasks. The child's return to sport program should be extended so that the child does not return to full training less than 14 days from the resolution of all symptoms.

### 7.2. Concussion in Participants with Disabilities

There is limited evidence or theoretical underpinnings to suggest that a participant living with a disability requires a modified concussion management strategy. A participant living with a physical disability requires the same concussion management strategy to any other participant of the same age and gender. A participant living with an intellectual disability may take longer to recover than other participants and therefore should be managed conservatively.

## 8. Return to Gymnastics if medically cleared from Concussion at initial appointment

All participants with concussion, suspected concussion, or other head injury, must have a medical assessment by a medical practitioner. If the medical practitioner clears the participant from having a concussion, the participant must not return to Gymnastics training for a period of seven days (e.g.: 7 days' rest). Due to the nature of Concussion, delayed symptoms are not unusual.

### 8.1. Stages return to gymnastics (when medically cleared from Concussion)

After a period of minimum seven days' rest, the participant may return to gymnastics (unless advised otherwise by a medical professional) if no symptoms are present. The return should be of a graded nature and symptoms should be monitored. If any symptoms of concussion are present, the athlete should rest from activity for 24 hours. No inversion should be performed within the first week. If no symptoms are present during the return, the participant may return to full training in week 2. Concussion symptoms should continue to be monitored.

## 9. Return to Gymnastics following a diagnosis of Concussion

Managing concussion is a shared responsibility between the participant, coach, club, parents and medical practitioner. Open communication is essential, and information should be shared between all parties involved with the participant. In every case, the decision regarding timing of return to gymnastics should be made by a medical practitioner. A concussed participant must not be allowed to return to training or competition before having a medical clearance.

A conservative approach (i.e., longer time to return to gymnastics) is used in cases where there is any uncertainty about the participants recovery. NDGC supports the “*if in doubt, sit them out*” approach.

NDGC members should follow the recommendations below with a participant returns to training:

- Participants should not return to training until they have returned to school/learning without a worsening in symptoms
- Participants should return to gymnastics training in a gradual-staged approach. A medical clearance must be provided to enter the graded loading program
- A rehabilitation program should be supervised by the treating medical practitioner and should follow a graded symptom limited progression
- Participants should be symptom free during their rehabilitation program. If they develop symptoms at any stage, then they should step down to the previously symptom free level and try to progress again after a further 24 hours rest
- If symptoms progress or worsen, a review is recommended by a medical practitioner

The activity phase should proceed as outlined below, with a minimum of 24 hours spent at each level. The activity should only be upgraded if there has been no recurrence of symptoms during that time. If there is a recurrence of symptoms, there should be a ‘step down’ to the previous level for at least 24 hours (after symptoms have resolved). Each participant is different; therefore, it may take a longer for some individuals.

The steps in the activity phase are:

- **Step 1** – Symptom limited activity – Perform everyday activities without symptoms
- **Step 2** – Light aerobic activity (at an intensity that can easily be maintained while having a conversation) until symptom free
  - Walking, jogging, cycling at a slow to medium pace
  - No strength training or inversion
- **Step 3** – Moderate aerobic exercise (increased heart rate)
  - No strength training or inversion
- **Step 4** – Sport specific exercise
  - Increase duration and intensity of activity
  - Basic skills training can commence
  - Commence light strength training
- **Step 5** – Restricted inversion training (**Clearance required to enter this stage**)
  - Return to full training with limits placed on the number of times of inversion
    - Monitor symptoms

- **Step 6** – Further relaxation of inversion training
- **Step 7** – Full training

It is important that the participant does not become disoriented or lose balance. The participant should be able to stay focused on the assigned skills, and the coach should closely monitor all activity to ensure concussion symptoms do not return. *Appendix 13.2: NDGC Return to Training Guide following a Concussion*, provides greater detail for each step above. The graded exercise program should be managed by a medical professional.

Prior to the return, parents must provide a written clearance to NDGC with the information below. This may be in the template provided in *Appendix 13.3*, or a written medical certificate by the treating physician:

- Injury information
- Medical advice sought (who, where and when)
- Any recommendations or advice from medical professional about the return to sport.

## 10. Additions and Changes to Policy

Recommended changes to this policy may be submitted to NDGC for consideration. Management will review the recommendations and make changes to this policy if necessary. Should changes be accepted, the policy would be updated, dated and circulated.

## 11. Confidentiality and Reporting

Breaches of this policy must be reported to NDGC within 14 days of any occurrence. Breaches of this policy must be kept confidential and disclosure to any third party beyond NDGC management is not permitted.

## 12. References

- Concussion Recognition Tool 5©. (2017). *British Journal of Sports Medicine*, 51, 872.
- Elkington, L., Manzanero, S., & Hughes, D. (2019). Concussion in Sport Australia: Position Statement. *Australian Institute of Sport*.
- Gymnastics Western Australia. (2018). Concussion Management Policy.
- Sport Concussion Assessment Tool – 5<sup>th</sup> Edition. (2017). *British Journal of Sports Medicine*, 51(11), 851-858.
- Sports Medicine Australia. (2018). Concussion in Sport Policy.

## 13. Appendix

- 13.1. NDGC Training Session Head Injury Assessment
- 13.2. NDGC Return to Training Guide following a Concussion
- 13.3. NDGC Return to Training Following a Medical Clearance from Concussion Template

Appendix 13.1: NDGC Training Session Head Injury Assessment

**NDGC TRAINING SESSION HEAD INJURY ASSESSMENT**

- This form is not intended for diagnostic purposes and is in no way a substitute for medical advice.
- This form is to be completed by the senior-most coach in attendance of the incident.
- This form is to guide immediate management and does not replace qualified medical advice.
- This form **must be completed when:**
  - An athletes' head forcefully hits the floor, a wall, or object (vault table, high bar uprights, beam, etc).
  - An athlete reports knocking their head (whether observed directly, via video review or by another athlete).

**This form does not replace the SCAT5 which must be performed in any case of suspected concussion. This form does not replace a standard incident report form which must also be completed.**

**1. GENERAL INFORMATION**

Athlete Name: \_\_\_\_\_

Date: \_\_\_\_\_

Coaches Name: \_\_\_\_\_

Time: \_\_\_\_\_

**2. STRUCTURAL HEAD OR NECK INJURY**

1. Are there clinical features including abnormal neurological signs of a serious or structural head and/or neck injury, requiring emergency management (ambulance requested)?

YES

NO

**\*\*\* IF YES, DIAL 000 IMMEDIATELY, DO NOT MOVE THE ATHLETE, DO NOT PROCEED THROUGH THIS FORM \*\*\***

**3. REMOVAL FROM TRAINING**

The athlete **must** be removed from training with any of the following clinical features observed directly, or by video review of the incident

2. Loss of consciousness
3. No protective action in fall to object/floor<sup>1</sup>
4. Impact seizure<sup>2</sup> or tonic posturing<sup>3</sup>
5. Motor incoordination<sup>4</sup>
6. Dazed or blank/vacant stare<sup>5</sup>
7. Behaviour changes atypical of athlete
8. Confusion or disorientation
9. Memory impairment
10. Athlete reports significant or progressive concussive symptoms

Observed	Reported	No



#### 4. OUTCOME & ACTION

If 'Observed' or 'Reported' is ticked for items 1 – 10, clear diagnosis of brain injury or concussion and no return to training.

#### 5. SIGNATURE OF COACH COMPLETING FORM

Signature of Coach: \_\_\_\_\_

Date: \_\_\_\_\_

Time of Completion: \_\_\_\_\_

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#### Definitions:

- <sup>1</sup> Falls to floor/apparatus in an unprotected manner (i.e., without stretching out hands, putting arms above head, covering face, absorbing impact with body part other than head)
- <sup>2</sup> Involuntary movements of the trunk or limbs that comprise periods of asymmetric and irregular rhythmic jerking of axial or limb muscles
- <sup>3</sup> Involuntary sustained contraction of one or more limbs (typically upper limbs), so that the limb is held stiff despite the influence of gravity of the position of the athlete. The tonic posturing could involve other muscles such as the neck, back, trunk and lower limb.
- <sup>4</sup> Appears unsteady on feet (including losing balance, staggering/stumbling, struggling to get up, falling), or in the upper limbs (including fumbling). May occur in rising from ground, or in motion of walking/running.
- <sup>5</sup> Athlete exhibits no facial expression or apparent emotion in response to the event/environment (may include a lack of focus/attention of vision). Blank/vacant look is best appreciated in reference to the athlete's normal or expected facial expression.

#### Acknowledgements:

This form was adapted from the AFL (Australian Football League) & AFLDA (Australian Football League Doctors Association) for the 2020/21 AFL & AFLW seasons.

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#### References:

- McCrorry P, Meeuwisse W, Dvorak J, et al. Consensus statement on concussion in sport-the 5th international conference on concussion in sport held in Berlin, October 2016. Br J Sports Med 2017 doi: 10.1136/bjsports-2017-097699
- Patricios J, Fuller GW, Ellenbogen R, et al. What are the critical elements of sideline screening that can be used to establish the diagnosis of concussion? A systematic review. Br J Sports Med 2017 doi: 10.1136/bjsports-2016-097441
- Makdissi M, Davis G. The reliability and validity of video analysis for the assessment of the clinical signs of concussion in Australian football. J Sci Med Sport 2016;19(10):859-63. doi: <http://dx.doi.org/10.1016/j.jsams.2016.02.015>
- McCrea M, Meier T, Huber D, et al. Role of advanced neuroimaging, fluid biomarkers and genetic testing in the assessment of sport-related concussion: a systematic review. Br J Sports Med 2017 doi: 10.1136/bjsports-2016-097447

Appendix 13.2: NDGC Return to Training Guide following a Concussion

Step	Rest	Recovery	Graded loading – individual program			Graded loading – full training						Return to competition
Components	Rest	Symptom - limited activity	Light aerobic exercise	Moderate aerobic exercise	Sport - specific exercise	Restricted inversion training	Recovery	Controlled inversion training	Recovery	Full training	Recovery	Return to full training schedule
<b>Goal</b>		Daily activities that do not provoke symptoms	Light aerobic exercise (e.g., walking/jog/cycling at slow to medium pace) No strength training No inversion at all (handstands, cartwheels, saltos, etc)	Moderate aerobic exercise (i.e., increased heart rate) No strength training No inversion at all (handstands, cartwheels, saltos, etc)	Increased intensity & duration of activity. Add sports specific drills (basic training skills) Commence light strength training	Return to full training within a session with limits on flipping (based on observed control, reported dizziness, etc)	Can participate in other components of program (e.g., strength, flex, dance skills)	Return to full training within a session with more relaxed limits on flipping	Can participate in other components of program (e.g., strength, flex, dance skills)	Return to full training with no limits on flipping, etc	Can participate in other components of program (e.g., strength, flex, dance skills) as well as limited full training	
<b>Duration</b>	Min 24-48 hours	Minimum 24 hours	Minimum 24 hours	Minimum 24 hours	Minimum 24 hours	At least 1 day between sessions to monitor for recurrence of symptoms		At least 1 day between sessions to monitor for recurrence of symptoms		At least 1 day between sessions to monitor for recurrence of symptoms		
<b>Requirements to move to next stage</b>		24 hours completely free of concussion related symptoms & medical clearance to enter graded loading program	Remain completely free of any concussion-related symptoms	Remain completely free of any concussion - related symptoms	Remain completely free of any concussion - related symptoms <b>and medical clearance to commence full training</b>	Remain completely free of any concussion - related symptoms – and athlete confident to participate in training		Remain completely free of any concussion - related symptoms and athlete confident		Remain completely free of any concussion - related symptoms, athlete confident, <b>and medically cleared for unrestricted return to training</b>		

- *Regular monitoring is essential. If symptoms recur, the athlete should go back to the previous symptom-free step.*
- *This document is not intended for medical use and is in no way a substitute for medical advice.*
- *This form is intended to help inform concussion management and does not replace qualified medical advice.*

**Policy title:** Concussion Policy

**Responsible Officer/Department:** Child Safety Officer/Competitive Programs Manager

**Date of Policy:** November 2021

**Date of next review:** February 2022

*Appendix 13.3: NDGC Return to Training Following a Medical Clearance from Concussion Template*

**Return to Training Clearance and Declaration**

**Participant Name:** \_\_\_\_\_

**Participant DOB:** \_\_\_\_\_

**Participant Class at NDGC:** \_\_\_\_\_

**Date Medical Treatment was sought:** \_\_\_\_\_

**Where Medical Treatment was sought:** \_\_\_\_\_

**Name of treating physician:** \_\_\_\_\_

**Medical diagnosis / findings:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Any recommendations / advice from treating physician:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Cleared to return to gymnastics:** YES / NO

**Further information:** \_\_\_\_\_

\_\_\_\_\_

**Declaration by Parent**

I, \_\_\_\_\_ hereby declare that my child, \_\_\_\_\_, has attended a medical assessment by a medical professional, and has been cleared of Concussion. I understand that my child must undergo a period of seven days' rest before returning to Northern Districts Gymnastic Club for gymnastics training. I understand that there will be a graded return to training, involving light activities during week one and only progressing to full training if symptom free at the end of week one.

**Parent Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_