Graduated Return to Activity & Sport

GRAS
PROGRAMME

Community Rugby

September 2023
PRINCIPLES

This HEADCASE version of the Graduated Return to Activity & Sport (GRAS) programme is aligned with the UK Concussion Guidelines for (Non-Elite) Grassroots Sport (published by the UK government April 2023) and has been adapted to provide community rugby specific context and examples.

The GRAS Programme

- Applies to all players involved in community rugby and sport, irrespective of age.
- Follows a return to activity, learn then play pathway. The priority is to return to normal life, school/work before rugby.

There is a minimum return time of 21 days (with the date of injury being day 0), provided there is a symptom free period of 14 days. This means players will miss a minimum of two weeks with the potential to play on the third weekend (but only if they have been symptom free for the preceding 14 days).

How does this differ from the old guidelines?

1. Importantly this pathway, recognising the value of light physical activity in a player’s recovery, no longer requires an initial complete 14-day stand-down period.

A player can start very light physical activity 24 - 48 hours after their concussion provided that their symptoms are not more than mildly exacerbated. After a first week of progressive light exercise, provided symptoms are not more than mildly exacerbated by the activity, the player is able to start non-contact training activities in the second week with resistance training activities also started in this week.

2. Contact training activities with a predictable risk of head injury can then be introduced in week 3 (but only if/when the athlete has been symptom free for 14 days).

Detailed information is provided in the HEADCASE Extended Guidelines.
Overview of:

Graduated Return to Activity & Sport (GRAS) programme

STAGE 1: Initial Relative Rest
24 - 48 hours after concussion

STAGE 2: Return to Daily Activities & Light Physical Activities
Following 24 - 48 hours initial rest period (min 24 hours after concussion event)

STAGE 3: Aerobic Exercise & Low Level Body Weight Resistance Training
Start Stage 3 when symptoms allow e.g., mild symptoms are not worsened by daily activities/light physical activities

STAGE 4: Rugby-Specific Non-Contact Training Drills & Weight Resistance Training
No earlier than Day 8

STAGE 5: Full Contact Practice
No earlier than Day 15

STAGE 6: Return to Play
No earlier than Day 21

See Section 17 of the UK Concussion Guidelines for Non-Elite (Grassroots) Sport and its Graduated Return to Activity (Education & Word) & Sport Summary.
GRAS STAGES

ALWAYS REMEMBER!
DAY 0 = when suspected concussion happened
**STAGE 1**  Initial Relative Rest

**Timeline**

24 - 48 hours after concussion.

**Daily Living & Return to Activity**

- Take it easy for the first 24 - 48 hours after a suspected concussion.
- You may do some easy daily activities (e.g., walking or reading) provided that your concussion symptoms are no more than mildly increased.
- Phone or computer screen time should be kept to the absolute minimum to help recovery.
- It is best to minimise any activity to 10 - 15 minute slots.
- Consider time off or adaptation of study/work (liaise with school or work if needed).

**Return to Sport / Rugby**

- You may do some gentle activity (walking and easy daily activities) provided that your concussion symptoms are no more than mildly increased.
- Rest until the following day if these activities more than mildly increases symptoms.
- No rugby-specific or organised sporting activity during the initial rest period.

**Comments / Practical Considerations**

Initial rest should be a minimum of 24 - 48 hours.

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**STAGE 2**  Return to Daily Activities & Light Physical Activities

**Timeline**

Following 24 - 48 hours initial rest period (min 24 hours after concussion event).

**Daily Living & Return to Activity**

- Increase daily activities.
- Increase mental activities e.g., easy reading, limited television, phone, and computer use.
- Gradually introduce school and work activities at home.
- Rest if these activities more than mildly increase symptoms.
- Advancing the volume of mental activities can occur as long as they do not increase symptoms more than mildly.

**Return to Sport / Rugby**

- Gradually introduce very light physical activity e.g., 10 - 15 minutes of walking.

**Comments / Practical Considerations**

- There may be some mild symptoms with activity, which is OK.
- If any symptoms become more than mildly worsened by any mental or physical activity in Stage 2, rest until they subside.
**Stage 3** Aerobic Exercise & Low Level Body Weight Resistance Training

**Timeline**

**Start Stage 3** when symptoms allow e.g., mild symptoms are not worsened by daily activities/light physical activities.

**Daily Living & Return to Activity**

- Once short periods of normal level of daily activities can be tolerated then look to increase the time e.g., **20 - 30 minutes** then brief rest.
- Discuss with school or employer about return; consider initially returning part-time, including additional time for rest or breaks, or doing limited hours each day from home.

**Return to Sport / Rugby**

- Introduce physical activity e.g. **10 - 15 minutes** of jogging, swimming, and stationary cycling at low intensity (able to easily speak during exercise).
- Gradually introduce low level intensity body weight resistance training e.g., pilates/yoga
- Use exercises from the [Activate programme](#) to reintroduce functional conditioning and movement control exercises.
- The duration and the intensity of the exercise can gradually be increased according to tolerance
- No high intensity exercise or added weight resistance training.

**Comments / Practical Considerations**

- If symptoms more than mildly increase, or new symptoms appear, stop, and rest briefly until they subside.
- Resume at a reduced level of exercise intensity until able to tolerate it without more than mild symptoms occurring.
**Stage 4: Rugby-Specific Non-Contact Training Drills & Weight Resistance Training**

**Timeline**
No earlier than **Day 8**.

**Daily Living & Return to Activity**
- Continue to review return to school/work and/or reduced activities in the workplace (e.g., half-days, breaks, avoiding hard physical work, avoiding complicated study).

**Return to Sport / Rugby**
- You may start non-contact training activities in your chosen sport once you are not experiencing symptoms at rest from your recent concussion.
- Progress the duration and intensity of aerobic exercise training e.g., increase in **15 minute** increments.
- Use the **Activate programme** to develop functional conditioning and movement control.
- Return to normal resistance training (if applicable).
- Introduce non-contact static rugby specific skills e.g., kicking, passing drills.
- Only non-contact rugby training activities with **NO** predictable risk of head injury.
- Look to progress non-contact training in terms of intensity and duration, and to more complex training drills (still non-contact) that combine aerobic and non-contact rugby specific skills e.g., running whilst passing/kicking.
- Work on skills to get ready for contact (such as positioning).

**Comments / Practical Considerations**
- If symptoms more than mildly increase, or new symptoms appear, stop, and rest briefly until they subside.
- Resume at a reduced level of exercise intensity until able to tolerate it without more than mild symptoms occurring.

A player should **ONLY** move on to Stage 5 (return to contact training) when they have **NOT** experienced symptoms at rest from their recent concussion for **14 days**.
**Stage 5** Full Contact Practice

**Timeline**
No earlier than **Day 15**.

**Daily Living & Return to Activity**
- Daily activities, school/work have returned to normal.

**Return to Sport / Rugby**
- Return to normal rugby training activities including contact.
- Use the **Activate programme** to develop functional conditioning and movement control.
- Exposure to activities involving head impacts or where there may be a risk of head injury should be gradual, which could include:
  - Walk-throughs of various tackle types.
  - Practice of tackles using shields & tackle bags.
  - Slow increase in difficulty with moving players.
  - Slow introduction of decision making drills, ensuring good technique throughout.

**Comments / Practical Considerations**
- Recurrence of concussion symptoms following head impact in training should trigger removal of the player from the activity.
- Should continue to be symptom free.
- Any occurrence of symptoms will require moving back to a previous stage where level of activity/exercise does not more than mildly worsen symptoms.

**Stage 6** Return to Play

**Timeline**
No earlier than **Day 21**.

**Daily Living & Return to Activity**
- Return to normal level of daily activities.

**Return to Sport / Rugby**
- Return to normal game play.
- Continue to use the **Activate programme** to reduce the potential risk of concussion.

**Comments / Practical Considerations**
Symptom free at rest for **preceding 14 days** AND continue to be symptom free during pre-competition training (stages 4 - 5).
# Example Concussion Timetable

For context, a concussion timetable could look like:

<table>
<thead>
<tr>
<th>DAY 0</th>
<th>Concussion on Saturday 1st October.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAY 4</td>
<td>All concussion-related symptoms resolved by Wednesday 5th October.</td>
</tr>
<tr>
<td>DAY 18</td>
<td><strong>No less than 14 days</strong> is needed before the individual returns to sport-specific training in involving head impacts or where there may be a risk of head injury (Stage 5) on Wednesday 19th October.</td>
</tr>
<tr>
<td>DAY 25</td>
<td>Continue to be guided by the recommendations above and, if symptoms do not return, the individual may consider returning to competitive sport with risk of head impact on Wednesday 26th October.</td>
</tr>
</tbody>
</table>
1. Progressing too quickly through Stages 3 - 5 whilst symptoms are significantly worsened by exercise may slow recovery.

2. Although headaches are the most common symptom following concussion and may persist for several months, exercise should be limited to that which does not more than mildly exacerbate them.

3. Symptom exacerbation (worsening) with physical activity and exercise is generally safe, brief and is self-limiting typically lasting from several minutes to a few hours.

4. Resolution of symptoms is only one factor influencing the time before a safe return to competition with a predictable risk of head injury.

5. Approximately two-thirds of individuals will be able to return to full sport by 28 days.

6. Disabled people will need specific tailored advice which is outside the remit of this guidance.

7. Medical advice from the NHS via 111 should be sought if symptoms deteriorate or do not improve by 14 days after the injury.

8. Those with symptoms after 28 days should seek medical advice via their GP.