What is concussion?
Sports related concussion is a traumatic brain injury that is caused by a direct force to the head or a force elsewhere in the body which is transmitted to the head. Concussion results in temporary impairment of brain function.

What causes it?
Concussion can be caused by a blow to the head or from a whiplash type movement of the head and neck that can occur when a player is tackled or collides with another player or the ground.

Recommendation
Return to learn before return to play. A young player who is in school or college should have returned to learn before progressing to Stage 2.

Prolonged rest is not encouraged.
After a brief period of complete mental and physical rest (1-2 days), players should be encouraged to become gradually and progressively more active while staying below the activity level that brings on or worsens symptoms.

Injury Prevention in Rugby

Prevention

Mouth guards are essential for protecting against dental injuries and they may have some protective effect in concussion. It is therefore advisable to always wear a mouth-guard when playing rugby.

Technique
Work on improving your tackle technique may help reduce injury risk.

Play by the rules:
Foul play causes injury (e.g. high tackles).

Players should not return to play until they:
- Are symptom free
- Have completed the GRTP
- Have sought medical clearance to return
- Have returned to learn/work

How it’s used?
The GRTP may take longer than the minimum period stated therefore timings should be used as a guide only.
The protocol should not replace advice given to an individual by their medical practitioner.
Players under 20 years of age must take a minimum of 23 days to get through the GRTP. Adult players must take a minimum of 21 days.

Remember:
A player who has suffered from a concussion should return to learn (i.e. school/college) or work before they return to play. They should remain at Stage 1A or 1B and not progress to Stage 2 of the GRTP if they have not returned to school or work due to their concussion.

What is this wallet card and who is it for?
The IRFU Graduated Return To Play (GRTP) protocol guides the player through the seven rehabilitation stages following a concussion or suspected concussion. There are suggested activities in each stage which may be used to gradually increase the amount, intensity and/or type of exercise that the player does in order to ensure a safe and successful return to sport.

The protocol may be used by players, coaches, parents, teachers or anyone who is helping a player get back to rugby following a concussion.

How should it be used?
Players can only move on to Stage 2 once they are symptom free.

If a player is asymptomatic at day 14 but symptoms had persisted for a significant period of time within STAGE 1A & 1B, it may be appropriate to seek medical advice on the stage at which the player should progress through STAGES 2-6.

Day 0 and Days 1-2.
During this stage the player is resting and ensuring they do not do anything that brings on or worsens symptoms.

If you only progress to the next stage if you are symptom free during the activity of that stage and for 24 hours after it.

If you have symptoms during the activity or afterwards you should avoid any activity that brings on or worsens symptoms.

If symptoms persist return to and repeat the previous stage the next day.

If you have continued symptoms then you cannot progress through the stages and you should see a health care professional.

If you get symptoms during Stages 2 to 5 please follow the flow chart to see how to progress through the GRTP and when to see your doctor.

GUIDELINES

STAGE 0 starts at the time of injury and includes the following activity of days (i.e. Day 0 and Days 1-2). During this stage the player is resting and ensuring they do not do anything that brings on or worsens symptoms.

No Symptoms

STOP

INFORM

REHAB

RETURN

The protocol should not replace advice given to an individual by their medical practitioner.

Players under 20 years of age must take a minimum of 23 days to get through the GRTP. Adult players must take a minimum of 21 days.

Players can only move on to Stage 2 once they are symptom free.

If a player is asymptomatic at day 14 but symptoms had persisted for a significant period of time within STAGE 1A & 1B, it may be appropriate to seek medical advice on the stage at which the player should progress through STAGES 2-6.

If you only progress to the next stage if you are symptom free during the activity of that stage and for 24 hours after it.

If you have symptoms during the activity or afterwards you should avoid any activity that brings on or worsens symptoms.

If symptoms persist return to and repeat the previous stage the next day.

If you have continued symptoms then you cannot progress through the stages and you should see a health care professional.

If you get symptoms during Stages 2 to 5 please follow the flow chart to see how to progress through the GRTP and when to see your doctor.

REMEMBER...

No Symptoms

DURING STAGES 2 TO 5

Develop Symptoms

Repeat stage at which developed symptoms

No Symptoms

Develop Symptoms

Still Have Symptoms

Develop Symptoms

No Symptoms

Still Have Symptoms

Develop Symptoms

No Symptoms

Develop Symptoms

Stop

INFORM

REHAB

RETURN

Continue through GRTP

Develop Symptoms

No Symptoms

Development Symptoms

No Symptoms

Still Have Symptoms

No Symptoms

CONTINUE THROUGH GRTP

Develop Symptoms

SYMPTOMS (i.e. GO BACK ONE STAGE)

You were able to do without symptoms.

You were able to do without symptoms.

No Symptoms

DURING STAGES 2 TO 5

REST OR RETURN TO STAGE 1A/1B FOR 24HRS

RETURN TO STAGE 1A OR 1B. SEE YOUR DOCTOR

RETURN TO STAGE 1A OR 1B. SEE YOUR DOCTOR

In order to ensure a safe and successful return to sport players can only move on to Stage 2 if they have been symptom free during the activity of that stage and for 24 hours after it.
## GRADUATED RETURN TO PLAY TABLE

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ADULTS</th>
<th>US - U20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day 0</strong> Day 0 <strong>Day 0</strong></td>
<td><strong>Day 0</strong></td>
<td><strong>Day 0</strong></td>
</tr>
<tr>
<td><strong>Day 1</strong></td>
<td><strong>Day 1</strong></td>
<td><strong>Day 1</strong></td>
</tr>
<tr>
<td><strong>Day 2 or 3</strong></td>
<td><strong>Day 2 or 3</strong></td>
<td><strong>Day 2 or 3</strong></td>
</tr>
<tr>
<td><strong>UP TO Day 5-6</strong></td>
<td><strong>UP TO Day 5-6</strong></td>
<td><strong>UP TO Day 5-6</strong></td>
</tr>
<tr>
<td><strong>UP TO Day 6</strong></td>
<td><strong>UP TO Day 6</strong></td>
<td><strong>UP TO Day 6</strong></td>
</tr>
<tr>
<td><strong>UP TO Day 14</strong></td>
<td><strong>UP TO Day 14</strong></td>
<td><strong>UP TO Day 14</strong></td>
</tr>
<tr>
<td><strong>UP TO Day 21</strong></td>
<td><strong>UP TO Day 21</strong></td>
<td><strong>UP TO Day 21</strong></td>
</tr>
</tbody>
</table>

### STAGE 0
**REST:** Complete physical & cognitive rest. **Aim:** Rest, ensuring no activity that brings on symptoms.

### STAGE 1A
**SYMPTOM LIMITED ACTIVITY:** Daily activities that do not provoke symptoms. Typical activities during the day as long as they do not increase symptoms (e.g., reading, screen time, light housework, walking). Start with 5–15 min at a time and gradually build up. **Borg Rating 6 - 10:** Walking at a comfortable pace, breathing slightly increased. Must not worsen symptoms. **Heart Rate:** <50% maximum. Progress to next step when player has completed minimum 3 days at this level. **Aim:** Gradual reduction of work/school activities without worsening symptoms.

### STAGE 1B
**SYMPTOM LIMITED EXERCISE:** Exercise that does not provoke symptoms. Slowly build up the duration and intensity of the exercise. **Borg Rating 11 - 13:** Walking or jogging at a pace to cause minimal sweating, slight breathlessness and able to hold conversation. Non-contact activities. **No resistance training.** Must not worsen symptoms and heart rate <70% maximum. **Aim:** Increase intensity and duration of exercise.

### STAGE 2
**INCREASED AEROBIC EXERCISE:** Exercise that causes increased heart rate and lasts for approximately 30–40 mins. **Borg Rating 13 - 15:** Jogging / stationary bike at a pace to cause sweating, breathlessness and able to hold conversation with difficulty. No contact activities. **No resistance training.** Must remain symptom free. **Heart Rate:** <80% maximum. **Aim:** Increase intensity and duration of exercise.

### STAGE 3
**RUGBY SPECIFIC EXERCISE:** Begin to reintegrate to drills but avoid contact. **Borg Rating 13 - 15:** Running drills building to max 60–80% effort (e.g. non-contact warm up with team). Balance exercises. **Low level resistance training (e.g. body weight exercises).** No head impact / contact activities. **Aim:** Add movement and challenge coordination and balance.

### STAGE 4
**NON-CONTACT RUGBY TRAINING DRILLS:** Harder training drills; e.g. passing drills requiring increased cognition as well as physical exertion. **High level balance tasks.** May start progressive resistance training building to 60–70% 1rep maximum (1RM). **No CONTACT**
- Individual handling skills
- Static lateral passing (unopposed/no decisions) 10-20m
- Swerve run – 50-70% pace over 20m
- Side step - 50/70% pace over 15m
- Single leg standing with eyes closed, (e.g. standing on one foot)

**Aim:** Exercise that challenges coordination and requires increased concentration.

### STAGE 5
**FULL CONTACT PRACTICE:** Following medical clearance, participate in normal training activities and full contact practice. **Aim:** Restore confidence and assess functional skills by coaching staff.

### STAGE 6
**NORMAL GAME PLAY.** If all previous stages have been completed successfully then the player may return to play on this day. Adults take a minimum of 21 days and U20s a minimum of 23 days to progress through the GRTP.