



## Irish Judo Association Concussion and Head Injury Protocol

INDEX	
<b>Page 1</b>	Introduction
<b>Page 2</b>	Index
<b>Page 3</b>	Head Injuries Protocols in the event of a Minor Head Injury Second Impact Syndrome Concussion Severe Brain Injuries
<b>Page 4</b>	Spinal Injuries Black Out
<b>Page 5</b>	How to recognise a concussion on the mat
<b>Page 6</b>	Red Flags for more Serious Head Injuries Red Flags for Spinal Injuries
<b>Page 7</b>	The Concussion Recognition Tool
<b>Page 8</b>	Why must Concussion be taken seriously? What to do if you suspect a Concussion Gradual Return to Play (GRTP)
<b>Page 9</b>	Gradual Return to Play (GRTP) Stages



# IRISH JUDO ASSOCIATION

## Introduction

This document on Concussion and Head Injury Protocols has been produced following multiple discussions from club officials, coaches, judoka, and concerned parents regarding the current protocols in the IJA for management of concussions and head injuries. General consensus is that the current protocols needed to be updated based on international best practices of other sports bodies.

For the most part head injuries are not the most common of injuries in the world of judo but they do still occur, when an injury occurs on the judo mat whether it be in the club environment or competition environment it is treated in a professional manner and following the injury the precautions in place are for the most part adhered to by everyone.

The main concern raised in discussions regarding head injuries over the past number of years is where a judoka takes a head injury away from the mat but does not inform the club, coach, or competition officials prior to taking to the judo mat. Repeat injuries are often life threatening. First Aid training is adhered to by all clubs in the organisation but most often this involves coach and club officials, what we hope to achieve with this is to bring the information to those who do not part-take in first aid training, we also hope to bring a broader awareness to the judoka or parents of the judoka and help them understand the long-term benefits of disclosing injuries obtained off or on the mat and the long term health risks of not disclosing this information.

## Head Injuries

Head injuries are common and can happen in a variety of ways, from simple trips and falls to serious assault, traffic accident or sports injuries. A head injury can cause a range of symptoms depending on whether the brain has been injured, and how severely. Most head injuries are minor but, in some cases, they can cause severe brain damage. It is important to remember no two people are the same and no two injuries are the same and also, we are not doctors and therefore we do not diagnose level of injury.

## Protocols in the event of a Minor Head Injury or Shime – Waza resulting in unconsciousness and/or concussion

1. Unconsciousness may result from the application of a Shime-waza (strangulation technique) if the player fails to submit.
2. Unconsciousness may result from of a direct blow to the head, face, neck or elsewhere on the body where an impulse force is transmitted through to the head and may result in the player being concussed.
3. Concussion can occur without the player being knocked out and losing consciousness - it should always be considered a possibility and be taken seriously. The IJA encourages people who have any concerns following a head injury to themselves or to another person, regardless of the injury severity, to seek immediate medical advice.



# IRISH JUDO ASSOCIATION

---

## **Second Impact Syndrome**

Impact Syndrome (SIS) is a very rare condition in which a second concussion occurs before a first concussion has properly healed, causing rapid and severe brain swelling. SIS can result from even a very mild concussion that occurs days or weeks after the initial concussion and can have catastrophic results. By following the above protocols, the risk of SIS will be greatly reduced.

## **Concussion**

Concussions result from many types of incidents, but unique issues arise from sports-related concussions because decisions need to be made about safe return to practice and competition after a period of recovery. This “invisible” injury disrupts the brain’s normal physiology which can affect mental stamina and function, causing the brain to work longer and harder to complete even simple tasks. A concussion may involve loss of consciousness (being “knocked out”), but the majority do not. Ultimately, ALL concussions are serious because they are brain injuries!

## **Signs of head injury;**

- Loss of consciousness or impaired consciousness
- Poor coordination/balance
- Fits/seizures
- Slow to answer questions or follow instructions
- Easily distracted/inability to concentrate on tasks
- Displaying inappropriate emotions (e.g. laughing, crying)
- Nausea/vomiting
- Slurred speech
- Personality changes
- Decreased fighting ability

## **Symptoms of head injury;**

- Problems understanding, speaking, reading or writing.
- Loss of feeling in part of the body or problems with balance or walking.
- General weakness.
- Changes in eyesight.
- A seizure (also known as convulsion or fit).
- Problems with memory of events before or after the injury.
- A headache that won't go away.
- Vomiting.
- Irritability or altered behaviour such as being easily distracted, not themselves, no concentration, or no interest in things around them, this is particularly important in younger children <5 years.
- Unconsciousness or lack of full consciousness, even if the person has now recovered.
- Any clear fluid running from the ears or nose.
- Bleeding from one or both ears.
- Any signs of skull damage or a penetrating head injury.



# IRISH JUDO ASSOCIATION

- The injury was caused by forceful blow to the head at speed e.g. fall from 1 meter in height.
- The person has had previous brain injury.
- The person has had previous problems with uncontrolled bleeding or blood clotting disorder.

**N.B.** If a player displays any of the above symptoms and signs – concussion should be considered, and it is recommended the player is withdrawn from the competition or training and assessed further. This point is paramount – any player suspected of having concussion should initially be treated as though they are concussed, and it is recommended withdrawn from a competition or training immediately and assessed by a doctor or physiotherapist. The Irish Judo Association recommends that the following protocols be implemented by the club coach and/or club officials.

## **Players UNDER 16 years of age blow to the head**

In the event of a player under the age of 16 years becoming unconscious/concussed as a result of a blow to the head, face, neck or elsewhere on the body the following protocol applies.

1. The player must be immediately withdrawn from training.
2. Children and adolescents behave differently to adults and more "damage" can occur silently without subjective symptoms being evident. They need more observation and must be sent to the local Accident and Emergency (A&E) department on the day of the incident for medical assessment and follow up even if they appear alright post-incident.
3. Complete physical and mental rest for 7-10 days is mandatory following the incident (no matter the outcome at the A&E department) and the player will require re-assessment by a competent medical professional before restarting training.
4. Following clearance by a competent medical professional and the mandatory 7-10-day rest period, the player should follow a graduated return to training over the period of the following four weeks (28 days) (see page 3).
5. An incident report form must be completed.

## **Shime Waza (Strangulation Technique)**

In the event of a player under the age of 16 years becoming unconscious as a result of a Shime Waza (strangulation technique the following protocol applies).

1. The player must be immediately withdrawn from training and no further judo or judo related training that day.
2. The player must be sent to the local Accident and Emergency (A&E) department on the day of the incident for medical assessment and follow up even if they appear alright post-incident.
3. If checked and cleared by the A&E department the player may be allowed to return to training following a minimum of 3 days physical and mental rest.
4. An incident report form must be completed.



# IRISH JUDO ASSOCIATION

## **Players OVER 16 years of age blow to the head**

In the event of a player over the age of 16 years becoming unconscious/concussed as a result of a blow to the head, face, neck or elsewhere on the body the following protocol applies.

1. The player must be immediately withdrawn from training.
2. It is recommended that the player be sent to the local Accident and Emergency (A&E) department on the day of the incident for medical assessment and follow up even if they appear alright post incident.
3. Complete physical and mental rest for 7-10 days is mandatory following the incident (no matter the outcome at the A&E department).
4. Complete physical and mental rest for seven days following the incident is mandatory (no matter the outcome at the A&E department). This should be followed by a graduated return to training over the period of the following fourteen (14) days.
5. It is highly recommended that the player be re-assessed by a competent medical professional before restarting training.
6. An incident report form must be completed.

## **Shime Waza (Strangulation Technique)**

In the event of a player over the age of 16 years becoming unconscious as a result of a Shime - Waza (strangulation technique) the following protocol applies.

1. In the event of a player becoming unconscious as a result of a Shime-waza (strangulation technique) it is recommended that no further judo or judo related training that day.
2. It is recommended that the player attends the local Accident and Emergency (A&E) department on the day of the incident for medical assessment and follow up even if they appear alright post incident.
3. An incident report form must be completed.

## **Graduated Return to Judo Training**

The return to training follows a recommended stepwise process as follows. This process should be conducted over a period of 4 weeks for players under 16 years of age and 2 weeks for players over 16 years of age with a minimum of 24 hours between each step.

With this stepwise progression, the player should continue to the next step only if he/she shows no symptoms at the current level. If the symptoms/signs occur at the current step, the player drops back to the previous step and tries to progress again after 24hrs.

1: No Activity Complete physical and cognitive rest for 7-10 days or until the player shows no symptoms. Players under 16 years of age require clearance by a competent medical professional.

Step

2: Light Aerobic Exercise This can be walking, swimming, stationary cycling at an intensity of less than 70% max heart rate. Step

3: Sport Specific Drills This can be running drills involving changes in direction, agility training, Tsugi-ashi, Tai-sabaki and Uchi-komi with 'therabands'.



# IRISH JUDO ASSOCIATION

Step 4: Contact Training Drills This will include progressive Uchi-komi, Nage-komi and Kumi-kata drills, combinations and transitions.

Step 5: Full Training Return to full training including randori and full strength and conditioning training.

Step 6: Full Return to Judo Return to full competition training and competition.

## **Severe Brain Injury**

When a head injury causes severe injury to the brain (traumatic brain injury) signs usually appear in the first few hours, but not necessarily immediately, this may lead to serious complications that need immediate treatment, this is why caution after all head injuries is important.

## **Spinal Injury**

It is important to remember that with all serious head injuries there is a risk of spinal injury, if the injured person complains of neck injury following an injury to the head they need to have their neck assessed before the concussion is assessed.

## **Black Out**

Judo is very aware of the safety of participants and so in training all judoka are thought to “Tap Out” when they need, training emphasises the need to Tap Out rather than get hurt. Having said this there are times when during intense competition / training that a player may not tap out and instead can Black Out (go unconscious), this is most likely caused by one of two ways;

1. Stimulation of the Vagal Nerve which runs down either side of the neck, this stimulation can slow down the heart rate so much that it reduces blood flow to the brain causing Vasovagal Syncope rendering the judoka unconscious.
2. External pressure applied on the Carotid Artery which again is located either side of the neck, this pressure applied on the Carotid Artery reduces or interrupts blood supply to the brain and so can render the judoka unconscious. An interruption to the blood supply to the brain is a serious event and any person rendered unconscious even if only for a moment should NOT be permitted to continue judo that day and should be observed and seek medical advice if they feel unwell e.g., headache, dizziness, nausea, vomiting, blurred vision, unsteady gait, or any other feeling that is not normal.

**N.B. Any player rendered unconscious in any sport should refrain from partaking in any physical activities for at least 24 hours, to seek medical attention is advised.**



# IRISH JUDO ASSOCIATION

## How to Recognise a Concussion on the Mat

If a judoka has any one of the following, they must be immediately removed from the mat and not return that day,

### What you may see while the judoka is on the mat:

<ul style="list-style-type: none"><li>• Loss of consciousness</li><li>• Seizure or convulsion</li><li>• Balance problems</li></ul>	<ul style="list-style-type: none"><li>• Lying motionless on the mat</li><li>• Grabbing /clutching head</li><li>• Slow to get up</li></ul>	<ul style="list-style-type: none"><li>• Unsteady on feet</li><li>• balance problems or falling over</li></ul>
--	---	---

### When you talk to the judoka:

<ul style="list-style-type: none"><li>• Confusion</li><li>• Disorientated</li></ul>	<ul style="list-style-type: none"><li>• Complaining of signs &amp; symptoms listed above</li><li>• Judoka 'just not right'</li></ul>
---	--

### What the judoka complains of:

<ul style="list-style-type: none"><li>• Nausea (feeling sick)</li><li>• Vomiting</li><li>• Drowsiness</li><li>• Judoka is emotional</li><li>• Irritability</li><li>• Sadness</li></ul>	<ul style="list-style-type: none"><li>• Judoka is more nervous or anxious</li><li>• "Doesn't feel right"</li><li>• Headache</li><li>• Dizziness</li><li>• Feeling slowed down</li></ul>	<ul style="list-style-type: none"><li>• "Pressure in head"</li><li>• Blurred vision</li><li>• Sensitivity to light</li><li>• Amnesia</li><li>• Feeling like "in a fog"</li><li>• Fatigue or low energy</li></ul>
--	---	--

Signs and symptoms of a concussion usually start at the time of injury, but the following may be delayed for up to 24 – 48 hours after the injury. **The judoka may complain, or you may notice;**

<ul style="list-style-type: none"><li>• Any of the above mentioned</li><li>• Drowsiness</li><li>• Fatigue or low energy</li></ul>	<ul style="list-style-type: none"><li>• Amnesia</li><li>• Trouble sleeping</li><li>• Trouble concentrating</li></ul>	<ul style="list-style-type: none"><li>• Feeling slowed down</li><li>• Slow reaction times</li></ul>
---	--	---

## Red Flags for more Serious Head Injury

If a judoka has a more serious head injury you may see the following red flags at the time of injury or later on:

<ul style="list-style-type: none"><li>• Unresponsive or becoming less alert</li></ul>	<ul style="list-style-type: none"><li>• More than 1 episode of vomiting</li></ul>	<ul style="list-style-type: none"><li>• Increasing or worsening of any complaint</li></ul>
---	---	--

1. Call an ambulance and do not move an unconscious judoka unless they are in harm's way.
2. Always assume an unconscious judoka has a spinal injury.



## Red Flags for Spinal Injury

If a judoka has a suspected spinal injury, then this becomes the primary concern. Call an ambulance and do NOT move the judoka. This injury needs to be medically assessed before they are assessed for concussion. Support and reassure the judoka in position they land as shown during first aid training, advise them not to move until the ambulance arrives.

The following are red flags for spinal injury;

• Judoka is unresponsive	• Significant neck pain	• Reluctant to move	• Loss of normal sensation or movement
--------------------------	-------------------------	---------------------	--

## The Concussion Recognition Tool

The Concussion Recognition Tool was developed by the Concussion in Sport group to help identify the signs and symptoms of concussion. This assessment cannot be used to determine if the Judoka can go back on the mat. If there is a reason to prompt a suspicion of concussion the Judoka must be removed from the mat and cannot return that day.

872

© Concussion in Sport Group 2017  
Echemondia et al. Br J Sports Med 2017;51(922):doi:10.1136/bjsports-2017-092562

### CONCUSSION RECOGNITION TOOL 5<sup>®</sup>

To help identify concussion in children, adolescents and adults

**RECOGNISE & REMOVE**

Head impacts can be associated with serious and potentially fatal brain injuries. The Concussion Recognition Tool 5 (CRT5) is to be used for the identification of suspected concussion. It is not designed to diagnose concussion.

**STEP 1: RED FLAGS — CALL AN AMBULANCE**

If 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/burning 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**

**Visual clues that suggest possible concussion include:**

• Lying 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
• Slow to get up after a direct or indirect hit to the head	• Blank or vacant look	• Facial injury after head trauma

© Concussion In Sport Group 2017

**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	• Feeling slowed down
• Nausea or vomiting	• Fatigue or low energy	• Nervous or anxious	• Feeling like "in a fog"
• Drowsiness	• "Don't feel right"	• Neck Pain	
• 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 by 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

© Concussion In Sport Group 2017

## Why must Concussion be taken seriously?

Ignoring the signs and symptoms of concussion can result in a more serious brain injury, prolonged recovery time and may even result in death. Returning to sport before complete resolution of the concussion exposes the judoka to recurrent concussions that might occur with lesser force. Repeat concussions could mean an athlete has to retire from all sport earlier than expected and can result in long term or life altering brain impairment.





# IRISH JUDO ASSOCIATION

## **What to do if you suspect a Concussion:**

If at any time during training or competition a judoka has a concussion, or you suspect they have a concussion that person must be withdrawn from the session not to return until medically assessed.

- It is regulation, the judoka's welfare is the primary concern at all times.
- The judoka must not be left alone,
- The **MUST NOT** drive a vehicle.
- They **MUST NOT** consume alcohol.
- They should be medically assessed as soon as possible.
- They **MUST NOT** return to the mat before completing the gradual return to play (GRTP),

This means the judoka must not return to ANY sport without carefully completing the GRTP. It is the responsibility of the judoka (senior) or parents of the judoka (junior) to adhere to the GRTP and not attend judo if the judoka sustained a head injury in another sport. Failure to disclose a head injury from another sport is reckless, it endangers life or the quality of life for that judoka and creates distrust in the sport.

## **Gradual Return to Play (GRTP)**

GRTP is a staged process in which an athlete can return to sport following a concussion, this can only be completed with medical clearance. The GRTP is staged process and is designed over a three-week period, however in some cases can take longer depending on the recovery time of the injured athlete. On average adults take between 14 -21 days recovery time however children can take 3 – 4 weeks recovery time after a concussion, so progression through the stages of the GRTP depends on the person themselves and their recovery progress. You can **ONLY** progress to the next stage provided your symptoms do not worsen and you do not develop new symptoms. Remember it is in your best interest to complete this process correctly and honestly because failure to do so can have life altering consequences if you sustain any additional concussions. The GRTP process is recognised internationally by a wide variety of sports.

### **Gradual Return to Play (GRTP) Stages**

Adults must spend at least 24 hours on each stage – stages 2 – 5 (21 days minimum to complete GRTP). Those under 20 must spend at least 48 hours on each stage – stages 2 – 5 (23 days minimum to complete GRTP). A player can only progress stages provided symptoms don't worsen and no new symptoms. If you develop new symptoms return to previous stage for 24 hours, only continue if no new symptoms.

**GRTP is a 7-stage process as shown below. It is the responsibility of the player and/or parents of the player to declare to a sport if they suffered a concussion from other sports/activities.**

### **NOTE:**

Concussion research is ever evolving and so protocols put in place to deal with such injuries should be re-addressed on an annual basis regardless of whether change is necessary at that moment or not, it would allow the IJA members and clubs to maintain international best practice in the treatment and recovery process of such injuries.



# IRISH JUDO ASSOCIATION

Adult:	U 20 years:	
Days 0 - 2	Days 0 – 2	<b>Stage 0:</b> Starts at the time of injury and includes the following 2 days (ie days 0 and days 1 and 2) During this stage the judoka is at rest, mentally and physically, and ensures they do not do anything that brings on or worsens symptoms.
Days 3 – 14	Days 3 - 14	<b>Stage 1:</b> Back to school / work following Medical advice. No contact sport or aggressive activity. Light activity only (e.g. short walks) progression in distance / pace daily provided symptoms don't worsen or no new symptoms. Progress to increase breathing rate but still able to hold conversation. Progress to moderate activity (provided symptoms don't worsen) light jogging at a pace to cause minimal sweating, slight breathlessness but still able to hold a conversation.
Day 15	Days 15 – 16	<b>Stage 2:</b> Light aerobic activity to increase heart rate (approx 5 – 10 mins). No weights or resistance at this point.
Day 16	Days 7 - 18	<b>Stage 3:</b> Moderate activity to increase heart rate with head and body movement. This can include light weights and mild resistance.
Day 17	Days 19-20	<b>Stage 4:</b> Heavy non-contact physical activity, such as running / sprinting, regular weights or resistance, non-contact sport specific drills. Sport Specific Drills. This can be running drills involving changes in direction, agility training, Tsugi-ashi, Tai-sabaki and Uchi-komi with 'therabands'.
Days 19 – 20	Days 21-22	<b>Stage 5:</b> Return to the mat in full contact in controlled practice (crash mat) max times thrown 10 (only provide no symptoms). Contact Training Drills This will include progressive Uchi-komi, Nage-komi and Kumi-kata drills, combinations and transitions.
Days 21 – 23	Days 23	<b>Stage 6:</b> Completion – full return to judo provided no symptoms. GRTP can only be completed following medical assessment and their recommendation on returning to sport.

A handwritten signature in cursive script that reads 'Sean Fleming'.

**Signed: Mr. Sean Fleming**  
**Irish Judo Association President**  
**Policy Updated: 02.11.2021**  
**Next policy review: 02.11.2024**