

IF IN DOUBT; SIT THEM OUT

Concussion Guidance

Welsh Amateur Boxing
Association (WABA)

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INTRODUCTION

The following information is intended to provide guidance on how to recognise concussion and on how it should be managed from the time of injury through to a safe return to boxing and wider grassroots sport.

This information has been amended from the DCMS guidance for concussion, which has been agreed by all major sporting organisations across the UK. This version has been amended for an amateur boxing audience, but can be used as a framework for individuals participating in all grassroots sports – primary school age and upwards. It is aimed for environments where Healthcare Professionals are typically not available onsite to manage concussed individuals.

This document contains general medical information, but this does not constitute medical advice and should not be relied on as such. This guidance is not a substitute for medical advice from a qualified medical practitioner or healthcare provider. You must not rely on this guidance as an alternative to seeking medical advice from a qualified medical practitioner or healthcare provider. **If you have any questions or concerns about a particular medical matter you should immediately consult a qualified medical practitioner.**

If you think you may be suffering from a medical condition you should seek immediate medical attention. You should never delay seeking medical advice, disregard medical advice or discontinue medical treatment because of information contained in this guidance. At all levels in all sports, if an individual is suspected of having a concussion, **they must be immediately removed from play.**

WHAT IS CONCUSSION?

Concussion is a traumatic brain injury resulting in a disturbance of brain function. It affects the way a person thinks, feels and remembers things.

Loss of consciousness (being 'knocked out') occurs in less than 10% of concussions and is not required to diagnose concussion. However, anyone who loses consciousness because of a head injury has had a concussion. Anyone with suspected concussion should be immediately removed from the field of play and assessed by an appropriate Healthcare Professional or access the NHS by calling 111 within 24 hours of the injury.

There may be times when the person may have no visible signs such as looking blank and being off balance. It can be very difficult to differentiate concussion from other more serious injuries, such as bleeding in the brain. Other significant injuries such as injuries to the neck or face can also occur along with concussion.

Boxing on with symptoms of concussion can make symptoms worse, significantly delay recovery, and, should another head injury occur, result in more severe injury and in rare cases, death (known as second impact syndrome). **This is why it is so important to remove anyone with suspected concussion from the at-risk activity immediately**

Concussion Can Affect People in 4 Main Areas

PHYSICAL

e.g. Headaches,
Dizziness,
Vision Changes

MENTAL

PROCESSING

e.g. not
thinking clearly/
feeling slow

MOOD

e.g. short fused,
sad, emotional

SLEEP

e.g. - not being
able to sleep /
sleeping too
much

CAUSES + CONSEQUENCES

Concussion can be caused by a direct blow to the head but can also occur when knocks to other parts of the body result in rapid movement of the head (e.g. whiplash type injuries).

A history of previous concussion(s) increases the risk of sustaining a further concussion, which may then take longer to recover. A history of a recent concussion can also increase the risk of other sport related injuries (e.g. musculoskeletal injuries).

Concussions can happen at any age. However, children and adolescents:

- May be more susceptible to concussion.
- Take longer to recover and returning to education too early may exacerbate symptoms and prolong recovery.
- Are more susceptible to rare and dangerous neurological complications, including death caused by a second impact before recovering from a previous concussion.

SPOTTING THE SYMPTOMS!

There are two ways to identify some of the symptoms of concussion; what you see (visual clues) and what behaviours you observe (what you're told/what you're asked about). Below is a breakdown of some examples of what could suggest your boxer has a concussion.

VISUAL

- Loss of consciousness or responsiveness
- Unsteady on feet/balance problems or falling over/ incoordination
- Dazed, blank or vacant look
- Slow to respond to questions
- Confused/not aware of plays or events
- Grabbing/clutching of head
- An impact seizure/convulsion
- Tonic posturing – lying rigid/ motionless due to muscle spasm (may appear to be unconscious)
- More emotional/irritable than normal for that person
- Vomiting

OBSERVATIONAL

- Disoriented (not aware of their surroundings)
- Headache / Dizziness / feeling off-balance
- Mental clouding, confusion or feeling slowed down
- Drowsiness/feeling like 'in a fog'/ difficulty concentrating
- Visual problems
- Nausea
- Fatigue / 'Pressure in head'
- Sensitivity to light or sound
- More emotional / Don't feel right
- Concerns expressed by parent, official, spectators about a boxer

URGENT MEDICAL ATTENTION

If any of the following 'red flags' are reported or observed, the boxer should receive urgent medical assessment from an appropriate Healthcare Professional onsite or in a Hospital Accident and Emergency (A&E) Department, using emergency ambulance transfer if necessary:

Any loss of consciousness because of the injury

Deteriorating consciousness (more drowsy)

Amnesia (no memory) for events before or after the injury

Increasing confusion or irritability
Unusual behaviour change

Any new neurological deficit e.g.
—Difficulties with understanding, speaking, reading or writing
—Decreased sensation
—Loss of balance
—Weakness
—Double vision •

Seizure/convulsion or limb twitching or lying rigid/ motionless due to muscle spasm

Severe or increasing headache
Repeated vomiting

Severe neck pain

Any suspicion of a skull fracture (e.g. cut, bruise, swelling, severe pain at site of injury)

Previous history of brain surgery or bleeding disorder

Current 'blood-thinning' therapy

Current drug or alcohol intoxication

WHAT'S NEXT!

All those suspected of sustaining a concussion should be assessed (where possible) by an appropriate onsite Healthcare Professional or by accessing the NHS by calling 111 within 24 hours of the injury.

If there are concerns about other significant injury or the presence of any of the 'red flags' above, then the boxer should receive urgent medical assessment onsite (if possible) or in a Hospital Accident and Emergency (A&E) Department using ambulance transfer by calling 999 if necessary.



IMMEDIATE MANAGEMENT

Anyone with a suspected concussion should be **IMMEDIATELY REMOVED FROM ACTIVITY**. If there is any risk, always remember: **IF IN DOUBT; SIT THEM OUT**

Once safely removed from activity, the boxer must not be returned to activity that day and until an appropriate Healthcare Professional has excluded concussion or the patient has completed the return to boxing guidance (RTBG).

If a neck injury is suspected, the boxer should only be moved by Healthcare Professionals with appropriate training. Athletes, coaches, officials, anyone who suspects someone may have concussion **MUST** do their best to ensure that the individual is removed from play in as rapid and safe a manner as possible.

DO'S + DONT'S

If an athlete is suspected to be concussed:

DO'S

Be removed safely from activity immediately.

Get assessed by an appropriate Healthcare Professional onsite or access the NHS by calling 111 within 24 hours of the incident.

Rest & sleep as needed for the first 24-48 hours – this is good for recovery. Easy activities of daily living and walking are also acceptable

Minimise smartphone, screen and computer use for at least the first 48 hours. Limiting screentime has been shown to improve recovery.

DONT'S

Be left alone in the first 24 hours.

Consume alcohol in the first 24 hours and/or if symptoms persist.

Drive a motor vehicle within the first 24 hours. Commercial drivers (HGV etc.) should seek review by an appropriate Healthcare Professional before driving.

INCIDENT RECORDING

Once an assessment has taken place and the boxer is safe or under the supervision of a medical provision, an incident report needs to be recorded to ensure that the incident has been recorded and that the boxer follows the Return to Boxing guidance (RTBG), ensuring the boxers takes the time required to make as best a recovery as possible and see them return safely to activity.

Should the incident occur in a carded bout, the event doctor should conduct the required protocol to establish if the boxer needs further medical support. This incident will then be noted within the boxers medical card and, once diagnosed, the RTBG should be followed.

If the incident occurs within the club environment outside of competition, then it is the duty of the supervising coach to ensure that the incident is recorded and guidance is followed, both when recording the incident and from a RTBG perspective.

As well as the medical card notation, WABA asks all coaches / doctors / anyone present or concerned that when a suspected concussion takes place, **please complete the online form from the QR code below**. This QR code has been sent to every affiliated WABA club. This form takes no longer than five minutes to complete, but it enables WABA to support the club / boxer with their return to boxing.

Boxing Incident Report Form



CONCUSSION RECOVERY

Generally, a short period of relative rest (24-48 hours) followed by a gradual stepwise return to normal life and then subsequently sport is the cornerstone of concussion management. In the first 24-48 hours, it is ok to perform mental activities like reading, and activities of daily living as well as walking.

After initial assessment and confirmation of concussion by an appropriate Healthcare Professional onsite or via NHS by calling 111, the graduated return to activity (education/work) and sport programme typically can be self-managed, although severe or prolonged symptoms (over 28 days) should be under the supervision of an appropriate Healthcare Professional and management will depend on the severity of symptoms and the types of symptoms and difficulties that are present. **This varies from person to person and is not a 'one size fits all' process.**

After a 24-48 hour period of relative rest, a staged return to normal life (education/work) and sport at a rate that does not worsen existing symptoms, or produce new symptoms is the main aim. This is before a return to sport is contemplated.

It is acceptable to allow students to return to school or work activities, and subsequently school or work part-time (e.g. half-days or with scheduled breaks), even if symptoms are still present, provided that symptoms are not severe or significantly worsened. The final stage of return to school or work activity is when the individual is back to full pre-injury mental activity, **and this should occur before** return to unrestricted sport is contemplated.

Similar to the return to education/work progression, the return to sport progression can occur at a rate that does not, more than mildly, worsen existing symptoms or produce new symptoms. It is acceptable to begin light aerobic activity (e.g. walking, light jogging, riding a stationary bike etc.), even if symptoms are still present, provided they are stable and are not getting worse and the activity is stopped for more than mild symptom exacerbation. Symptom exacerbations are typically brief (several minutes to a few hours) and the activity can be resumed once the symptom exacerbation has subsided.

Although symptoms may resolve following a concussion, **it takes longer for the brain to recover.** The aim through this guidance is to **REHABILITATE THE PERSON & GIVE THE BRAIN TIME TO RECOVER.**

RECOVERY TIMES

It's important to remember, that CONCUSSION RECOVERY TIMES VARY.

Most symptoms of a concussion resolve by two to four weeks, but some can take longer. Everyone is unique in their recovery duration which is why completion of a graduated return to activity (education/work) and sport programme is important to reduce the risks of a slow recovery, further brain injury, and longer-term problems. Children and adolescents may take longer to recover than adults.

If symptoms persist for more than 28 days, individuals need to be assessed by an appropriate Healthcare Professional – typically their GP.

Please note that headaches can persist for several months or more, well after the acute injury from the concussion has resolved. They may resemble migraine and may be associated with nausea and sensitivity to light and/or sound. Sometimes they are from a neck injury. Persisting symptoms are not usually due to a more severe brain injury and, if the headache is not increased by mental or physical activity and the frequency and intensity is managed adequately, it should not preclude an individual from returning to school, work and physical activity

RETURN TO BOXING GUIDANCE (RTBG)

The guidance below attempts to put a timeframe on the gradual return to activity that a boxer would experience following a concussion / suspected concussion diagnosis.

In the first instance, the boxer should undertake a short period of relative rest (first 24-48 hours) followed by a gradual, step-wise return to normal life (education, work, low level exercise), then subsequently to sport.

Progression through the stages below is dependent upon the activity not more than mildly exacerbating symptoms. Medical advice from the NHS via 111 should be sought if symptoms deteriorate or do not improve by 14 days after the injury. Those with symptoms after 28 days should seek medical advice via their GP.

Participating in light physical activity is beneficial and has been shown to have a positive effect on recovery after the initial period of relative rest. **The focus should be on returning to normal daily activities of education and work** in advance of unrestricted sporting activities.

IF SYMPTOMS CONTINUE BEYOND 28 DAYS, REMAIN OUT OF SPORT AND SEEK MEDICAL ADVICE FROM A GP / HEALTHCARE PROFESSIONAL.

The graduated return to activity (education/work) and sport programme is designed to safely allow return to education, work and sport after concussion for the overwhelming majority of athletes who will not benefit from individualised management of their recovery.

Some athletes, as happens in Elite and Professional sport, may have access to Healthcare Professionals experienced in sports concussion management who take responsibility for an individualised, structured, multi-modal, multi-disciplinary management plan to include medical, psychological, cognitive, vestibular and musculoskeletal components.

Athletes who are managed in such Enhanced Care pathways may be formally cleared for an earlier return to competition

Return to Boxing Guidance (RTBG)

More detailed summary found on next page

Stage 1

Relative Rest for 24-48 hours

Minimise Screen time
Gentle Exercise

Stage 2

Gradually Introduce Daily Activities

Activity away from school / work
Light exercise / physical activity

Stage 3

Increase Tolerance of Mental & Exercise Activity

Increase Study/Work with rest periods
Increase intensity of exercise

Stage 4

Return to Study/Work/Sport Training

Part time return to education/work*
Start activity without risk of head impact

Stage 5

Return to Normal Work/Education/ Training

Full time work / education
if symptom free for 14 days, consider full training

Stage 6

Return to Competition

(Not before Day 21) as long as symptom free for 14 days during stage 5

RETURN TO BOXING GUIDANCE (RTBG)

Stage	Focus	Description of Activity	Comments
Stage 1	Relative Rest Period 24-48 Hours	Take it easy for the first 24-48 hours after a suspected concussion. It is best to minimise any activity to 10 to 15-minute slots. You may walk, read and do some easy daily activities 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	There may be some mild symptoms with activity, which is OK. If they become more than mildly exacerbated by the mental or physical activity in Stage 2, rest briefly until the subsides
	Return to Normal Daily Activities outside School & Work	Increase mental activities through easy reading, limited television, games, and limited phone and computer use. Gradually introduce school and work activities at home. Advancing the volume of mental activities can occur as long as they do not increase symptoms more than mildly.	
Stage 2	Physical Activity (E.g. Week 1)	After the initial 24-48 hours of relative rest, gradually increase light physical activity. Increase daily activities like moving around the house, simple chores and short walks. Briefly rest if these activities more than mildly increase symptoms.	Progressing too quickly through stages 3 - 5 whilst symptoms are significantly worsened by exercise may slow recovery. 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. Symptom exacerbation with physical activity and exercise is generally safe, brief and is self-limiting typically lasting from several minutes to a few hours.
	Increase tolerance of thinking activities	Once normal level of daily activities can be tolerated then explore adding in some home-based school or work-related activity, such as homework, longer periods of reading or paperwork in 20 to 30-minute blocks with a brief rest after each block. Discuss with school or employer about returning part-time, time for rest or breaks, or doing limited hours each week from home	
Stage 3	Light aerobic exercise (eg Weeks 1 or 2)	Walking or stationary cycling for 10-15 minutes. Start at an intensity where able to easily speak in short sentences. The duration and the intensity of the exercise can gradually be increased according to tolerance. If symptoms more than mildly increase, or new symptoms appear, stop and briefly rest. Resume at a reduced level of exercise intensity until able to tolerate it without more than mild symptom exacerbation. Brisk walks and low intensity, body weight resistance training are fine but no high intensity exercise or added weight resistance training.	

RETURN TO BOXING GUIDANCE (RTBG)

Stage	Focus	Description of Activity	Comments
Stage 4	Return to Study & Work	May need to consider a part-time return to school or reduced activities in the workplace (e.g. half-days, breaks, avoiding hard physical work, avoiding complicated study).	Progressing too quickly through stages 3 - 5 whilst symptoms are significantly worsened by exercise may slow recovery. 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. Symptom exacerbation with physical activity and exercise is generally safe, brief and is self-limiting typically lasting from several minutes to a few hours
	Non-Contact Training (Eg During Week 2)	Start training activities in chosen sport once not experiencing symptoms at rest from the recent concussion. It is important to avoid any training activities involving head impacts or where there may be a risk of head injury. Now increase the intensity of exercise and resistance training.	
Stage 5	Return to full academic or work related activity	Return to full activity and catch up on any missed work.	Individuals should only return to training activities involving head impacts or where there may be a risk of head injury when they have not experienced symptoms at rest from their recent concussion for 14 days. Recurrence of concussion symptoms following head impact in training should trigger removal of the player from the activity
	Unrestricted training activities (Not before week 3)	When free of symptoms at rest from the recent concussion for 14 days can consider commencing training activities involving head impacts or where there may be a risk of head injury.	
Stage 6	Return to competition	This stage should not be reached before day 21* (at the earliest) and only if no symptoms at rest have been experienced from the recent concussion in the preceding 14 days and now symptom free during pre-competition training. The day of the concussion is Day 0 (see example below).	Resolution of symptoms is only one factor influencing the time before a safe return to competition with a predictable risk of head injury. Approximately two-thirds of individuals will be able to return to full sport by 28 days but children, adolescents and young adults may take longer. Disabled people will need specific tailored advice which is outside the remit of this guidance

ADDITIONAL RESOURCES

AIBA GUIDANCE – FOR DOCTORS

The concussion guidance below refers to actions within competition.

A Referee should stop a bout if the Boxer is demonstrating signs of altered consciousness.

Occasionally, the Ringside Doctor will be called to evaluate a Boxer for Concussion in the neutral corner.

It is not possible for a Ringside Doctor to conduct a proper Concussion Evaluation on a Boxer in the short evaluation period (approx. 1 minute).

Therefore, the Ringside Doctor must:

- a) Evaluate the Boxer's state immediately after the blow – stunned, unbalanced, uncoordinated!
- b) Evaluate the Boxers approach to corner – unbalanced, swaying, abnormal?
- c) Is the Boxer disorientated, vacant, dismayed?
- d) Check Pupils – equal, reactive, nystagmus e) Check for signs of cranial nerve weakness,
- f) Speak to athlete – are responses adequate – incorrect, slurred? (this is difficult to assess if the Doctor and the Boxer do not speak the same language)
- g) Conduct balance test – BESS

If the Ringside Doctor has any indication that the Boxers' response is abnormal or there is a suspicion of a concussion - the bout must be stopped and the Boxer sent to the Medical Room for a Concussion Evaluation. (approximately 20 – 25 minutes after the end of the bout)

For full AIBA Medical Rules, last published in October 2020, please click [HERE](#)

DCMS GRASSROOTS SPORT GUIDANCE

The information within this document has been adapted by the guidance provided by the UK Government and DCMS. As a public funded organisation within Wales, WABA, as are all National Governing Bodies within Wales, are supported by both Welsh Government and Sport Wales. Both organisations fully endorse this guidance.

A copy of the DCMS published 'UK Concussion Guidelines for Non-Elite (Grassroots) Sports, can be found by clicking [HERE](#)

BRITISH JOURNAL OF SPORTS MEDICINE (VIDEO)

A Video has been published by the British Journal of Sports Medicine (BJSM) who have been studying the effects of concussion for over 20 years. The video may not refer directly to terminology used within the WABA Concussion guidance document, but the principles of what is shared remain consistent. You can view the video by clicking the link [HERE](#)