PROTOCOL FOR A PUPIL WHO HAS SUSTAINED A HEAD INJURY

1. INTRODUCTION

A head injury is any trauma that leads to injury of the scalp, skull or brain. These injuries can range from a minor bump on the skull to a devastating brain injury.

Head injuries can be classed as either closed or penetrating. In a closed injury the head sustains a blunt force by striking against an object. In a penetrating injury an object breaks through the skull and enters the brain.

It is important that appropriate safety equipment is available for each sport as recommended by their regulating body and is used where there is potential for head injury.

2. PROCEDURES

First Aid

Treatment varies according to the severity of the injury, type and location of the injury, and development of secondary complications.

For mild head injury, no specific treatment may be needed other than observation for complications, although an initial examination should still be carried out.
Over-the-counter analgesics may be used for headaches. Ice may be applied to the area to cool and lessen bruising

Head injuries can be potentially complicated and difficult to manage. For this reason the casualty should always be managed by the school nurse or if they are not on site, a first aider.

Assessing the level of consciousness is the single most important examination following a blow to the head.

Minor head injuries

Treatment

- The pupil should be sent to the medical room.
- The nurse will observe for signs of a head injury.
- All flesh wounds will be treated appropriately.
- Bumps to the head can be iced for up to 20 minutes but pupils should be monitored for changes in their condition

- Where a pupil has received a blow to the head should be given head injury advice, either in hardcopy or email / phone call. This outlines the signs and symptoms to be observed for and outlines the details of the injury.
- Prep school pupils may also receive a " I have bumped my head" sticker so that staff are aware.

More serious injuries

The following symptoms may suggest a more serious injury that requires emergency medical treatment:

- Altered level of consciousness / increased drowsiness
- Loss of consciousness
- Bleeding
- Decreased rate of breathing
- Confusion / irritability / agitation / restlessness
- Convulsions
- Fracture in the skull
- Facial bruising and fractures
- Nausea/vomiting
- Dizziness
- Memory loss
- Fluid drainage from the nose, mouth or ears (may be clear or bloody)
- Headache (may be severe and generalise)
- Hypotension (low blood pressure)
- Personality changes
- Slurred speech
- Stiff neck
- Swelling at the site of the injury
- Blurred or double vision
- Scalp wound
- Change in the size or reaction of the pupils.

Suspected spinal injury

Spinal injuries are most likely to be caused during the following activities;

- Diving
- Horse riding
- Rugby
- A fall from a height greater the 2 ½ times the casualties own height
- Car vs pedestrian > 30mph
- Car vs car > 40mph

However this is not exclusive. Where there is a head injury the first aider may suspect a spinal injury

<u>Treatment</u>

- Immobilise the casualty's head placing hands either side of the casualty's head

- Call EMS (Emergency medical services) and inform paramedics of the situation
- Do not move unless necessary
- Reassure the casualty

Head injury only

1	The player must be transferred to hospital if they: ● are unconscious for 3 minutes or more OR ● have retrograde amnesia (they cannot remember the blow or the events leading up it) OR ● have any of the major symptoms listed above. If they are unconscious on the pitch the game must be stopped and they should not be moved until the arrival of the ambulance.
2	The player must leave the pitch immediately for the rest of the game if they: ● are unable to get up unaided OR ● appear confused and disorientated after the blow. They should be treated as concussion and placed on the GRAS protocol and observed for 24 hours for signs of symptoms getting worse. Where symptoms get worse they should seek medical attention. See XXX below for details of the GRAS programme.
3	A player who falls to the ground after a blow to the head may continue playing if: ● they get to their feet unaided and immediately AND ● they appear fully conscious and oriented They should report to the Medical Lead at the end of the session for an assessment.
All staff and first aiders should follow the principle "if in doubt sit them out"	

<u>Treatment for non hospitalised head injuries</u>

- The Medical Lead must be contacted immediately either to attend the pupil at the site of the accident, or the pupil may be escorted by an adult to the Medical Room.
- If off site, one member of staff should be allocated to the care of the child.
- The Medical Lead or First Aider will then carry out an assessment of the child's neurological status and arrange the appropriate medical treatment.
- If the incident happens and the School Nurse / Medical Lead is not available, or it occurs off site, then the casualty should be assessed by a First Aider, an accident report written and the pupil must see the Medical Lead at the earliest opportunity.
- It is the first aider's or ML's responsibility to decide whether the pupil requires further medical treatment, and in all cases the parents will be notified.

If the child has sustained a head injury at an event not related to the school, it is the parents' responsibility to inform the Medical Lead so that appropriate care can be continued in school.

Any loss of consciousness, however brief, must result in the referral of the casualty to a doctor (either their own GP or A&E dept).

The incident must be reported in the accident book and added to the pupils medical record .

Head injury with suspected spinal injury

The following treatment protocol should be followed:

If the casualty is unconscious an emergency ambulance (999) must be called immediately. If it is obvious that the injury is major do not wait for the School Nurse to assess the casualty: dial 999 straight away

- Call the Medical Lead, giving clear details of the whereabouts of the casualty. In the absence of the Medical Lead, a First Aider At Work should take the lead.
- Clear the area to ensure casualty and first aider remain safe from further harm
- Immobilise the head and neck immediately by placing hands on the casualty's head, keeping the head in line with the spine and preventing movement.
- Check the casualty's Airway, Breathing and Circulation. If necessary begin CPR
- If the casualty's breathing and heart rate are satisfactory, but they are unconscious treat this as if there is a spinal injury
- Attempt to stop any bleeding by placing a clean dressing on the wound.
    - If the injury is serious be careful not to move the head. If blood soaks through, place another dressing on top of the first, but do not remove the original.
- If a skull fracture is suspected do not apply pressure to the bleeding site.
    - Cover with a clean dressing and await medical help.
- If the casualty vomits, remember there may also be a spinal injury, the casualty should be log- rolled by rolling head, neck and body as one unit to prevent choking. This should only be performed with the School Nurse or a FAAW first aider as the lead

DO NOT

- remove the helmet of a casualty if you suspect a serious head injury
- wash a head wound that is deep or bleeding profusely
- remove an object sticking out of a wound. Place rolled up bandages either side of the object to stabilise it.
- move the casualty unless absolutely necessary.
- shake the casualty if she seems dazed.
- pick up a fallen child with any sign of a head injury.

A full report of the incident should be made in the accident book and added to the pupil's medical records. The Head and parents should be contacted.

3. CONCUSSION PROTOCOL

What is Concussion?

Concussion is a complex process caused by trauma that transmits force to the brain either directly or indirectly and results in temporary impairment of brain function. Its development and resolution are rapid and spontaneous. A player can sustain a concussion without losing consciousness. Concussion is associated with a graded set of clinical signs and symptoms that resolve sequentially. Concussion reflects a functional rather than structural injury and standard neuro-imaging is typically normal.

Common early signs and symptoms of concussion

Symptoms	Headache, dizziness, “feeling in a fog”
Physical signs	Loss of consciousness, vacant expression, vomiting, inappropriate playing behaviour, unsteady on legs, slowed reactions Visual disturbances such as blurred or “fuzzy” vision
Behavioural changes	Inappropriate emotions, irritability, feeling nervous or anxious
Cognitive impairment	Slowed reaction times, confusion/disorientation, poor attention and concentration, loss of memory for events up to and/or after the concussion
Sleep disturbance	Drowsiness

Onsite Assessment

If a player receives a knock on the head, in addition to obvious signs and symptoms, the staff member will ask the player the following memory questions:

- At what venue are we today?
- Which day is it?
- Who scored last in this game (or relevant question)?
- Name
- Date of birth

If the player fails to answer correctly the five memory questions, the player should be removed from the area of play for a medical evaluation (staff should use professional judgement if a player does not answer a question correctly i.e. in the heat of the moment a player may genuinely not remember who scored last or what day it is). Blurred or “fuzzy” vision should also be treated in the same way and professional judgement also used if the player does not seem “right” (slurred speech, odd behaviour such as anger or crying etc.) The player MUST NOT resume play once removed from the field for suspected concussion.

The player must not be left alone and MUST be taken to the Medical Centre by an adult. If this is not possible the Medical Lead should be called to attend the pupil.

The coach MUST inform the PE teacher if a bang on the head has occurred leading to a player needing to be removed from the field of play (even if concussion is not diagnosed and the player returns to play).

Offsite Assessment

If a player receives a knock on the head, in addition to obvious signs and symptoms, the coach will ask the player the following memory questions:

- At what venue are we today?
- Which day is it?
- Who scored last in this game (or relevant question)?
- Name
- Date of birth

If the player fails to answer the five memory questions, the player should be removed from the field of play for a medical evaluation (staff should use professional judgement if a player does not answer a question correctly i.e. in the heat of a match a player may genuinely not remember who scored last).

The player MUST NOT resume play once removed from the field for suspected concussion.

The player must not be left alone.

The staff member must be responsible for handing over or communicating with parents what has occurred (and not rely on the player to do this)

The staff member MUST inform the Medical Lead if a bang on the head has occurred leading to a player needing to be removed from the field of play (even if concussion is not diagnosed and the player returns to play).

Whilst the support of medical professionals in the crowd (parents and supporters) should not be discouraged, it is the decision of the member of staff in charge that must make the decision on future course of action i.e. returning to play, Medical Centre etc.

4. MANAGEMENT FOLLOWING AN INJURY AND RETURN TO ACTIVITY AND SPORT

Concussion Management

An injured brain is at risk of further injury. Repeated injury can cause subtle, long lasting, disabling damage. The object of restricting sporting activity after a head injury is to avoid further trauma while a player may be experiencing incoordination or slow reflexes as a result of the first blow. There is always the risk of some neurological damage even in those who have not lost consciousness.

'Post – concussion syndrome', comprising headaches, dizziness, irritability, and difficulty in concentration can persist for weeks or even months. The treatment is:

- Rest (lying down when symptoms are bad)
- Simple analgesia (Paracetamol)
- Reassurance that things will improve
- Prevention of further injury.

With repeated episodes, however minor, if there has been definite loss of consciousness, or repeated post-concussional features, a complete ban on contact sports should be considered.

At this stage parents should be advised to seek a neurological opinion.

Summary Principles

- Concussion must be taken extremely seriously to safeguard the long term welfare of the individual.
- Players suspected of having concussion must be removed from play and must not resume play in the match.
- Players suspected of having concussion must be medically assessed.
- Players suspected of having concussion or diagnosed with concussion must go through a graduated return to activity and sport (GRAS).
- Players must receive medical clearance before returning to play.
- CONCUSSION MUST BE TAKEN EXTREMELY SERIOUSLY

Graduated Return to Activity and Sport (GRAS) Programme

Where a pupil has experienced a head injury and concussion is identified, pupils must follow the Graduate Return to Activity and Sport programme (GRAS). Please refer to the UK Concussion Guidelines for Grassroots Sport for further details:

https://www.sportandrecreation.org.uk/policy/research-publications/concussion-guidelines

For pupils in Reception to Year 6, the GRAS programme will be managed by the School Nurse / Medical Lead.

For pupils in Years 7 and above, a professional medical service is provided by Return 2 Play.

Where the Parents do not wish to engage in the Return to Sport programme at all, the school will keep the pupil off sport for 3 weeks

GRAS Programme (Reception - Year 6)

The School Nurse / Medical Lead will oversee the daily GRAS by asking the following questions:

Have you experienced any vomiting today?

- Have you had any dizziness or loss of balance today?
- Have you had any visual problems, not being able to focus, blurred vision, not being able to see out of part of your eye today?
- Have you had any headaches today?

The School Nurse / Medical Lead will use the GRAS programme following concussion.

After being placed on the GRAS programme, the pupil will be issued a GRAS card (available on MSP) by the School Nurse / Medical Lead.

A GRAS card must be completed in order to return to play. A copy should be kept with the pupil and a copy with the medical centre.

A pupil will be moved up the protocol by the School Nurse / Medical Lead. If a pupil answers “yes” to any of the questions they may be referred to the GP. No pupil may return to match play without completion of the GRAS card and approval by the School Nurse / Medical Lead.

The GRAS is managed by the GP (where possible) and School Nurse / Medical Lead.

In order to progress up the levels, the player should present this card to their School Nurse / Medical Lead every 48 hours, when the screening questions will be asked.

The player should also take this to Games sessions to show their PE teacher/TODs where on the GRAS they are and as such what activity they may take part in.

The School Nurse / Medical Lead will keep the parents informed of the progress

GRAS Programme (Year 7 and above)

Where a pupil receives a head injury, they will attend the Medical Centre where the School Nurse / Medical Lead will advise on whether the GRAS programme is required to be followed. Where a pupil has experienced the head injury at TODs or at off site PE, these staff are able to add the pupils to the GRAS program (i.e. deemed to have suffered concussion).

Once the pupils' details are added to the Return2Play (R2P) platform the parents will be notified and the GRAS programme will be subsequently managed by parents and R2P.

The School Nurse / Medical Lead, Head of Year, TODs and PE staff will have access to R2P to view the result of the concussion clinic to identify what activities a pupil is able to take part in and when they can safely return to activity or sport.

Refusal to engage with R2P

If a parent refuses to engage with R2P the school will still need to ensure they follow the return to sport process. The pupil will follow the GRAS programme in place for younger pupils as detailed above.

Post-concussion syndrome

90% of concussions are resolved in 3 days. The remaining 10% are usually resolved in 3 weeks with a small minority turning into post-concussion syndrome, lasting a long period of time.

Long term effects of concussion – tiredness, headaches, chronic fatigue, dizziness, irritability, lack of focus and memory issues, poor concentration. This can lead to anxiety and depression.

Support systems to put in place:

- Reduced physical activity – find their “sweet spot” not too much to tire them but enough to release endorphins
- Reassure them they will get better and will recover
- Give them control over their activity
- Flexible expectations
- Gradual return to sport and education
- Good communication
- Goal setting

The school have a responsibility to:

- Train staff appropriately in the high risk areas
- Monitor head injuries
- Follow procedures and guidelines and make these available to staff
- Supply appropriate equipment
- Appointed concussion co-ordinator – this will be the school nurses

18. LEGISLATION AND GUIDANCE

This Policy bears due regard to the following statutory guidance and other advice

UK Concussion Guidelines for Grassroots Sport - https://www.sportandrecreation.org.uk/policy/research-publications/concussion-guidelines

National Sports Medicine Institute - www.nsmi.org.uk

England Rugby - Headcase

Return 2 Play - Ongoing Management

England Hockey - Safe Hockey

GRADUATED RETURN TO EDUCATION/WORK & SPORT SUMMARY

(See full table below for detail)

Stage 1	**Relative Rest for 24–48 hours** • Minimise screen time • Gentle exercise*
Stage 2	**Gradually introduce daily activities** • Activities away from school/work (introduce TV, increase reading, games etc)* • Exercise –light physical activity (e.g. short walks) *
Stage 3	**Increase tolerance for mental & exercise activities** • Increase study/work-related activities with rest periods* • Increase intensity of exercise*
Stage 4	**Return to study/work and sport training** • Part-time return to education/work* • Start training activities without risk of head impact*
Stage 5	**Return to normal work/education and full training** • Full work/education • If symptom-free at rest for 14 days consider full training
Stage 6	**Return to sports competition (NOT before day 21) as long as symptom free at rest for 14 days and during the pre-competition training of Stage 5**

*rest until the following day if this activity more than mildly increases symptoms.

https://www.sportandrecreation.org.uk/policy/research-publications/concussion-guidelines