

Higher National Unit Specification

General information for centres

Unit title: Prevention and Rehabilitation of Sports Injuries

Unit code: DD33 34

Unit purpose: This unit introduces candidates to the basic principles of prevention and rehabilitation of sports injuries. It also introduces candidates to the recognition of potential hazards within a sporting environment.

On completion of this unit the candidate will be able to:

1. Describe methods of injury prevention in practical performance.
2. Describe potential hazards which could place performers at risk.
3. Describe the rehabilitation process for sporting injury.

Credit value: 0.5 HN Credit(s) at SCQF level 7: (4 SCOTCAT credit points at SCQF level 7*)

**SCOTCAT points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCOTCAT points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to doctorates.*

Recommended prior knowledge and skills: It would be advantageous if candidates had prior knowledge of some of the issues surrounding health and safety and also risk management issues. Ultimately, entry is at the discretion of the centre.

Core skills: There may be opportunities to gather evidence towards core skills in this Unit, although there is no automatic certification of core skills or core skills components.

Context for delivery: If this Unit is delivered as part of a group award, it is recommended that it should be taught and assessed within the subject area of the group award to which it contributes. This Unit is included in the framework for the HNC/D Sports Coaching with Development of Sport.

Assessment: The unit will be assessed:

- for Outcome 1 by restricted response questions
- for Outcome 2 by a report containing a risk assessment and observation checklist. The report, in 750 words, will be produced by a visit to observe a session at a sporting facility. The candidate must provide evidence of a risk assessment, behaviour of participants; normal operating procedures (NOP) and emergency action plan (EAP) pertaining to the facility visited and activity session observed.

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- for Outcome 3 by a report of the rehabilitation process for a selected post acute injury. The candidate, in 500 words, must describe the 4 stages involved, outline 6 principles of rehabilitation and identify the roles of 5 personnel involved in the rehabilitation process.

Higher National Unit specification: statement of standards

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The sections of the Unit stating the Outcomes, knowledge and/or skills, and evidence requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Describe methods of injury prevention in practical performance.

Knowledge and/or skills

- Management strategies for the avoidance of injury
- Principles for injury prevention
- Contra-indications to sporting activity and exercise
- Equipment and clothing design with respect to injury prevention
- Physical fitness requirements for sport and exercise and the related factors influencing injury potential
- Awareness of the rules/laws for sport

Evidence requirements

To achieve this outcome the candidate will need evidence to demonstrate their knowledge of methods of injury prevention in practical performance.

The assessment will take the form of a restricted response assessment from which the candidates will be required to answer the following:

- 1 Identify and explain 3 management strategies for the avoidance of injury
- 2 Describe 4 principles for injury prevention
- 3 Identify and explain 5 contra-indications to sporting activity and exercise
- 4 Describe the design factors of 2 items of equipment and 2 items of clothing which help reduce injury potential for a selected sport
- 5 Identify 5 physical fitness requirements for a selected sport/exercise and 5 related factors influencing injury potential

Higher National Unit specification: statement of standards (cont)

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- 6 Identify 4 rules/laws from any sporting activities (name the activities) which are designed to prevent injury to participants.

Assessment guidelines

The type of assessment used for this outcome should enable the candidate to demonstrate their knowledge of methods of injury prevention in practical performance. This will be taken place under supervision. The candidate needs to be asked to clearly explain each area in the knowledge and skills section. The assessment will take the form of a restricted response assessment.

Outcome 2

Describe potential hazards which could place performers at risk.

Knowledge and/or skills

- Maintenance of facilities and equipment to comply with safety and legal requirements
- Risk assessment undertaken
- Participants behaviour placing others at risk
- Normal Operating Procedures (NOP) pertaining to the sport and/or exercise facility
- Emergency Action Plan (EAP) pertaining to the sport and/or exercise facility

Evidence requirements

To achieve this outcome the candidate will need evidence to demonstrate their knowledge of potential hazards which put performers at risk.

The candidates will be required to observe a practical session within a facility and produce a report of 750 words. This must detail the following:

- 1 The candidate should clearly identify the NOP and EAP of an area of the facility visited.
- 2 The candidate must provide a risk assessment for the area of the facility visited.
- 3 The candidate must provide information of any behaviour that constitutes a risk, including any incorrect techniques used during the session observed at the facility visited
- 4 The candidate must provide information on the condition of the equipment and clothing used by the participants in the observed session.

The report should be signed wherever possible by the coach/supervisor/facility manager of the session observed in order to authenticate the report.

Higher National Unit specification: statement of standards (cont)

Unit title: Prevention and Rehabilitation of Sports Injuries

Assessment guidelines

The candidate should observe a session at the facility. The report should contain a basic risk assessment for the area of facility used for the session observed. The candidate also needs to describe the NOPs and EAPs for the facility and the condition of equipment, clothing etc. used in the session.

Outcome 3

Describe the rehabilitation process for sporting injury.

Knowledge and/or skills

- Stages of rehabilitation
- Principles of rehabilitation
- Responsibilities of personnel involved in rehabilitation process
- Major post acute injuries in sport

Evidence requirements

To achieve this outcome the candidate will need evidence to demonstrate their knowledge of the rehabilitation process. The candidate will undertake a report.

The candidate will be required to select a post acute injury in sport and describe in 500 words:

- 1 The 4 stages of rehabilitation involved in the process
- 2 6 principles of rehabilitation
- 3 The responsibilities of 5 personnel involved in the rehabilitation process.

Assessment guidelines

The type of assessment used for this outcome should enable the candidate to demonstrate their knowledge of the process of rehabilitation from a major post acute injury. The assessment will take the form of a report.

Administrative Information

Unit code: DD33 34

Unit title: Prevention and Rehabilitation of Sports Injuries

Superclass category: PB

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Higher National Unit specification: support notes

Unit title: Prevention and Rehabilitation of Sports Injuries

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 20 hours.

Guidance on the content and context for this Unit

Outcome 1

Contra-indications to sporting activity and exercise:

Age; recent operations; heart conditions; epilepsy; diabetes; asthma; disability; sex; age; pregnancy; other medical conditions; obesity; eating disorders, etc.

Equipment and clothing design with respect to injury prevention:

Sports specific equipment and clothing; body temperature control; personal clothing and equipment.

The facility requirements for safe participation of the activity selected:

Correct surface for activity; clearly marked courts/pitches/arenas; adequate space around playing area; equipment secure and in correct position;

Principles for injury prevention:

Proper physical and mental condition to take part in a sport/activity; correct choice of sport/activity for an individual performer; adherence to the rules/guidelines for the chosen sport/activity; use of correct clothing, footwear and equipment in an appropriate manner for the chosen sport/activity; adoption of correct safety and prevention measure and the use of common sense.

Rules/Laws with regard to injury prevention for a selected sport;

Rules about bad behaviour/conduct; rules about violence; rules about misuse of equipment; rules about techniques that are illegal for the sport;

Injury management strategies:

Staff training; adequate supervision by trained personnel; knowledge of adequate preparation techniques (warm up, cool down and stretching); risk assessment schedule; Coach and player education programmes; training and qualification courses for officials; Disclosure Scotland or equivalent current legislation checks carried out; Training individuals in facility and equipment use, setting up and maintenance.

Physical fitness requirements for sport and exercise:

Cardiovascular endurance, local muscular endurance; flexibility; strength; agility; power; coordination; balance; speed.

The related factors influencing injury potential:

Physical fitness; psychological fitness; physique; environment; technique; age; sex; smoking, drinking and drugs.

Higher National Unit specification: support notes (cont)

Unit title: Prevention and Rehabilitation of Sports Injuries

Outcome 2

Maintenance of facilities and equipment to comply with safety and legal requirements:

Upkeep of playing surfaces; keeping an equipment log of damaged items; cleaning and maintenance rota of facility and equipment in place; booking systems for facility and equipment; emergency exit and other signs in place

Risk assessment undertaken:

Check playing surfaces; check equipment, clothing and footwear; check lighting; check weather for outdoor sports and activities; check individuals participating; risk assessment schedule in place; identify sites of danger.

Participants' behaviour placing themselves and others at risk:

Unsupervised activities; aggression; lack of match officials; disregard for the rules of the activity; deliberate and abusive behaviour toward individuals and officials; 'mucking about'; using equipment inappropriately; coaches getting performers to undertake 'dangerous' exercises.

Normal Operating Procedures (NOP) pertaining to the sport and exercise facility:

Risk assessment schedule; roles of personnel; maintenance schedules; cleaning schedules; security procedures; reporting procedures; line management roles and responsibilities; booking and paying procedures; basic first aid procedures; day to day running procedures (setting up equipment, checking facility for damage/cleanliness).

Emergency Action Plan (EAP) pertaining to the sport and exercise facility:

Major incident procedures in place for the facility covering fire, bomb scare/gas leak, serious injury, illness and car park incidents. What action should be taken; personnel responsible for managing the emergency; duties to be undertaken in an emergency.

Outcome 3

Stages of rehabilitation: (usually 4)

Stages in the rehabilitation process from the initial diagnosis and first aid given right through to the moment of full fitness and return to performance. The stages are usually indicated by when they happen, i.e. Early (1st), Intermediate (2nd), Late (3rd) and then Pre-Discharge (4th). This will also include the part of the process where the performer is undertaking 'remedial' exercises as part of a rehabilitation programme.

Principles of rehabilitation:

Basic principles include: maintaining general fitness; monitoring health; undertaking safe and effective exercises; use of fitness testing to monitor progress and boost confidence; restoring functional and anatomical recovery; setting long and short term goals; completion of rehabilitation is when full training and competition are resumed; getting fit is a full time 'job'; rehabilitation needs team work.

Responsibilities of personnel involved in rehabilitation process:

- 1 **Injured performer;** set goals, control progress, manage fitness maintenance, communicate to all involved in recovery, do exercises as needed,
- 2 **First Aider;** give initial treatment, arrange transportation, make a report
- 3 **Physiotherapist/sports therapist;** agree on goals set, manage remedial exercise programme, ensure progress is safe, communicate with all parties involved, keep records of progress, manage fitness testing

Higher National Unit specification: support notes (cont)

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- 4 **Coach/fitness instructor/trainer;** agree on goals set, look after player on return to training sessions, ensure fitness programme helps recovery, communicate with all involved, assist in fitness testing,
- 5 **Surgeon/doctor;** manage medical requirements and after care of any operation,
- 6 **Team mates/friends/family;** transport injured player as needed, give emotional support and encouragement, give financial assistance, help in maintaining fitness,
- 7 **Psychologist/nutritionist;** give appropriate advice as requested, communicate with all involved,
- 8 **Alternative practitioners (osteopath; chiropractor etc.);** manage any programme when requested as part of rehabilitation programme, communicate with all involved
- 9 **Manager/agent/sponsor/employer;** give financial assistance, give encouragement and support

This list is not exhaustive and does not indicate that all listed are going to be involved in a rehabilitation process.

Major Post Acute Injuries:

- Cruciate ligament damage from skiing
- Torn Meniscus (cartilage) from Rugby
- Ankle fracture from Basketball
- Dislocated shoulder from Judo
- Achilles tendonitis from x-country running/marathon
- Tennis elbow from tennis/racket sports
- Golfer's elbow from golf
- Chronic groin strain of a football player

This list, with other injuries added, can be used for the candidates to select from.

Guidance on the delivery and assessment of this Unit

All outcomes should be delivered at a basic level in order that the candidates get a full understanding of the basic principles involved in prevention and rehabilitation of sports injuries. Due to the notional length of this Unit all the information required for the assessment can be given theoretically, with detailed information produced in the form of handouts and other recommended websites and/or reading materials.

Higher National Unit specification: support notes (cont)

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Outcome 2

The candidates will be required to produce a report of 750 words, which contains:

- 1 Identified NOP and EAP of the facility visited.
- 2 A risk assessment of the area of the facility visited.
- 3 Information of any behaviour that constitutes a risk, including any incorrect techniques used during the session observed at the facility visited
- 4 Information of the state of the equipment and clothing used by the participants in the observed session.

The report should be signed wherever possible by the coach/supervisor/facility manager of the session observed in order to validate the report.

An alternative possibility would be to produce a short video of a facility and part of a session, which shows possible risk elements and other ‘errors’. The candidate could watch and then compile a report as indicated above. The NOP and EAP for the facility observed could be given to the candidate to summarise.

Outcome 3

To achieve this outcome the candidate will need evidence to demonstrate their knowledge of the rehabilitation process. The candidate will undertake a report.

The candidate will be required to select a post acute injury in sport and describe in 500 words:

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Open learning

Any candidate studying by open learning using materials provided by the Centre would need to attend the centre for assessments. Alternatively the Centre could have an approved ‘agent’ to undertake and supervise the assessment process.

Higher National Unit specification: support notes (cont)

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Special needs

This Unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative Outcomes for Units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, 2001).

General information for candidates

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General information for candidates (cont)

Unit title: Prevention and Rehabilitation of Sports Injuries

BIBLIOGRAPHY

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| *Sports Injuries, Their prevention and treatment. | Dr Lars Peterson & Dr Per Renstrom |
| *Sports Injury, Prevention & First Aid Management | UK Sport |
| *Sports Injury Management | Christopher M Norris |
| Rehabilitation of Sports Injuries: Scientific Basis | Walter R Frontera |
| Sports Injuries: Basic principles of prevention & care | Dr Per Renstrom |

* Recommended

WEB SITES

www.physioroom.com

www.sportsinjuryclinic.net

www.ski-injury.com

www.sportsmed.org

www.medirectsport.com/sportsinjuries/

<http://cvu.strath.ac.uk/courseware/sports/injuries/>

This web site deals with the treatment of soft tissue injuries and is part of sports medicine course run by Strathclyde University.