R041 – Reducing the risk of sports injuries
Learning outcome 1

- Learners must be taught:
- extrinsic factors which can influence the risk of injury, i.e.
  - type of activity (e.g. contact sports present different injury risks from gymnastic activities)
  - coaching/supervision, i.e.
    - poor/incorrect coaching techniques
    - ineffective communication skills
    - importance of adhering to rules and regulations
  - environmental factors, i.e.
    - weather
    - playing surface/performance area and surrounding area
    - other participants
  - equipment, i.e.
- protective equipment (e.g. shin pads in football, gum shield in boxing, helmet in cycling, goggles in skiing)
- performance equipment (e.g. hockey stick, cricket ball, rock climbing harness)
- clothing/footwear suitable for playing surface/weather conditions/specific sport or activity

- safety hazards, i.e.
  - risk assessments
  - safety checks
  - emergency action plans

intrinsic factors which can influence the risk of injury, i.e.

- physical preparation, i.e.
  - training
  - warm up
  - cool down
  - fitness levels
  - overuse
  - muscle imbalances

- individual variables, i.e.
  - gender
  - age
  - flexibility
  - nutrition
  - sleep
  - previous/recurring injuries
psychological factors, i.e.

- motivation
- aggression
- arousal/anxiety levels

○ posture and causes of poor posture, i.e.
- poor stance/gait (e.g. bending your knees or hunching your shoulders when standing)
- sitting positions (e.g. slumping/slouching on the sofa rather than sitting upright)
- physical defects (e.g. muscles weaken around an injured area)
- lack of exercise (e.g. lack of core muscle strength means less support, being overweight puts strain on posture)
- fatigue (e.g. tired muscles will be unable to support the skeleton properly)
- emotional factors (e.g. having low self-esteem/lack of confidence can influence posture)
- clothing/footwear (e.g. wearing shoes with high heels can affect posture)

○ sports injuries related to poor posture, i.e.
- pelvic tilt
- lordosis
- kyphosis
- round shoulder
- scoliosis.
Intrinsic injury - can cause injury over something you have control over

Extrinsic injury - one which results from factors external to the body

Task - for each of the following, decide whether it is intrinsic or extrinsic

- **Type of activity** (e.g. contact sports present different injury risks from gymnastic activity).

- **Individual variables**, i.e. gender, age, nutrition, flexibility, sleep, previous injury

- **Environmental factors** – weather, playing surfaces, other participants

- **Safety hazards**, i.e. risk assessments (size of group, age), safety checks (equipment, playing surface)

- **Sports injuries caused by poor posture**: Round shoulder, scoliosis, kyphosis, lordosis, pelvic tilt.
Emergency action plans – where to go in an emergency.

- **Physical preparation**, i.e. Training, warm-up, cool down, fitness levels, overuse of particular muscles.

- **Equipment** – protective equipment, i.e. shin pads in football, gum shield in boxing, helmet in cycling, goggles in skiing.

- **Psychological factors**, i.e. motivation, aggression, arousal/anxiety levels.

- **Coaching/supervision** (e.g. poor/incorrect coaching techniques, ineffective communication skills, importance of following the rules and regulations).

- **Posture and causes**, i.e. poor stance (e.g. bending knees, hunching shoulders when standing), sitting positions (e.g. slumping/slouching on the sofa rather than sitting upright), lack of exercise (e.g. lack of core strength or being overweight which puts a strain on your muscles), clothing and footwear (e.g. high heels).
Extrinsic factors

- **Type of activity** (e.g. contact sports present different injury risks from gymnastic activity).

- **Coaching/supervision** (e.g. poor/incorrect coaching techniques, ineffective communication skills, importance of following the rules and regulations).

- **Environmental factors** – weather, playing surfaces, other participants

- **Equipment** – protective equipment, i.e. shin pads in football, gum shield in boxing, helmet in cycling, goggles in skiing).

- **Safety hazards**, i.e. risk assessments (size of group, age), safety checks (equipment, playing surface)

  <https://www.youtube.com/watch?v=JdQXRQ_peow>

- **Emergency action plans** – where to go in an emergency.

Practice Exam Question

1. Describe how the following can influence the risk of injury to a sports performer:

(a) Type of activity

(b) Communication skills of a coach

(c) Playing surface

(d) Other participants
Sports injuries can be influenced by intrinsic and extrinsic factors. Which **one** of the following is an *extrinsic* factor? (Circle your chosen option to indicate your answer).

(a) Poor sitting position  
(b) Wet playing surface  
(c) Muscle imbalance  
(d) Arousal level
Intrinsic Factors

- **Physical preparation**, i.e. Training, warm-up, cool down, fitness levels, overuse of particular muscles.

- **Individual variables**, i.e. gender, age, nutrition, flexibility, sleep, previous injury.

- **Psychological factors**, i.e. motivation, aggression, arousal/anxiety levels.

- **Posture and causes**, i.e. poor stance (e.g. bending knees, hunching shoulders when standing), sitting positions (e.g. slumping/slouching on the sofa rather than sitting upright), lack of exercise (e.g. lack of core strength or being overweight which puts a strain on your muscles), clothing and footwear (e.g. high heels).


  **Sports injuries caused by poor posture:**

- Round shoulder, scoliosis, kyphosis, lordosis, pelvic tilt.
Practice Exam Question

Describe how the following might increase the risk of injury for a sports performer:

(a) Nutrition

(b) Sleep

(c) Flexibility
7 Using an example for each, explain how the following are important when planning a warm up or cool down.

(a) Size of the group

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..................................................................................................................................................................................
..................................................................................................................................................................................
.................................................................................................................................................................................. [2]

(b) Age of participants

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..................................................................................................................................................................................
..................................................................................................................................................................................
.................................................................................................................................................................................. [2]

(c) Individual fitness levels

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..................................................................................................................................................................................
..................................................................................................................................................................................
.................................................................................................................................................................................. [2]
1 Describe how the following can influence the risk of injury to a sports performer:
(a) Type of activity ................................................................. [1]

(b) Communication skills of a coach ........................................... [1]

(c) Playing surface .................................................................... [1]

(d) Other participants .................................................................. [1]

2 (a) Give one item of sports equipment which may cause injury. ................................................................. [1]

(b) Give one item of sports equipment from each of the following categories that will help to prevent injury:
   (i) Protective equipment ............................................................ [1]

   (ii) Clothing or footwear ............................................................. [1]
3 Describe two different ways that weather could influence the risk of injury.

4 Describe how the following might increase the risk of injury for a sports performer:

(a) Nutrition

(b) Sleep

(c) Flexibility
4. Identify each of the back conditions shown in the following pictures.

(a) ........................................................................

(b) ........................................................................

(c) ........................................................................
Causes of poor posture

- poor stance/gait (e.g. bending your knees or hunching your shoulders when standing)
- sitting positions (e.g. slumping/slouching on the sofa rather than sitting upright)
- physical defects (e.g. muscles weaken around an injured area)
- lack of exercise (e.g. lack of core muscle strength means less support, being overweight puts strain on posture)
- fatigue (e.g. tired muscles will be unable to support the skeleton properly)
- emotional factors (e.g. having low self-esteem/lack of confidence can influence posture)
- clothing/footwear (e.g. wearing shoes with high heels can affect posture)
- **Round shoulder**—One way to tell if you've got rounded shoulders is to stand in front of a mirror and let your arms hang naturally by your sides. If your knuckles face forward, it may indicate that you have a tight chest and a weak upper back, giving the appearance of rounded shoulders.

- **Scoliosis**—sideways curvature of the spine

- **Kyphosis**—excessive outward curvature of the spine, causing hunching of the back.

- **Lordosis**—excessive inward curvature of the spine.

- **Pelvic tilt** is the orientation of the pelvis in respect to the thighbones and the rest of the body. The pelvis can tilt towards the front, back, or either side of the body.
Learning outcome 2 - Understand how appropriate warm up and cool down routines can help to prevent injury

- Learners must be taught:
  - the physical benefits of a warm up, i.e.
    - warming up muscles/preparing the body for physical activity
    - increase in body temperature
    - increase in heart rate
    - increase in flexibility of muscles and joints
    - increase in pliability of ligaments and tendons
    - increase in blood flow and oxygen to muscles
    - increase in the speed of muscle contraction
the psychological benefits of a warm up, i.e.
- heighten or control arousal levels (e.g. 'get in the zone' or settle nerves)
  - improve concentration/focus
  - increase motivation
  - mental rehearsal
- key components of a warm up, i.e.
  - pulse raising, i.e. exercises that slowly increase heart rate and body temperature (e.g. jogging, cycling, skipping)
  - mobility, i.e. exercises that take the joints through their full range of movement (ROM) (e.g. arm swings, hip circles)
  - dynamic movements (e.g. change of speed and direction)
  - stretching (e.g. developmental stretches, dynamic stretches linked to sport – 'open and close the gate' groin walk)
  - skill rehearsal phase, i.e. rehearsing common movement patterns and skills which will be used in the activity (e.g. dribbling drills for football, passing drills for netball)
- physical benefits of a cool down, i.e.
  - helps the body’s transition back to a resting state
  - gradually lowers heart rate
  - gradually lowers temperature
  - circulates blood and oxygen
  - reduces breathing rate
  - removes waste products such as lactic acid
reduces the risk of muscle soreness and stiffness

- aids recovery by stretching muscles, i.e. lengthening and strengthening muscles for next work-out/use

**key components of a cool down, i.e.**

- pulse lowering, i.e. exercises which gradually lower heart rate and reduce temperature (e.g. easy movements, light running, stretching)
- stretching, i.e. maintenance stretches, static stretches (e.g. hamstring stretches)
- specific needs which a warm up and cool down must consider, i.e.

- **characteristics of the individual/group, i.e.**
  - size of group
  - age of participants
  - experience of participants
  - individual fitness levels
  - any medical conditions participants may have
  - suitability as preparation for a particular activity/sport
  - environmental factors (e.g. weather/temperature if outdoors, available facilities).
Learning outcome 2

Task 2 – Why warm up?

Note down all of the different jobs that a warm up should do/the reasons why we warm up. Then transfer it into Column 1 of the table below depending on whether it is a physical benefit or a psychological benefit.

Now in Column 2 suggest reasons why/how/in what way each of the reasons listed might reduce the risk of injury and in Column 3 record the possible negative consequences if a warm up does not include any of the aspects highlighted
<table>
<thead>
<tr>
<th>Reason to/benefit of a warm up</th>
<th>How this element could help to reduce the risk of injury</th>
<th>Possible negative consequences of not including this element</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Body Temp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Heart rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Sweating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Nerve impulses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Prepare muscles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Blood flow</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Psychological</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Arousal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Mental rehearsal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Motivation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Concentration</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Understand how appropriate warm up and cool down routines can help to prevent injury.

**Physical benefits of a warm up:**

- Warming up muscles/preparing the body for physical activity
- Increase in body temperature
- Increase in heart rate
- Increase in flexibility of muscles and joints
- Increase in pliability of ligaments and tendons
- Increase in blood flow and oxygen to muscles
- Increase in the speed of muscle contraction

[http://www.brianmac.co.uk/warmup.htm](http://www.brianmac.co.uk/warmup.htm)
Psychological benefits of a warm up:

- Heighten or control arousal levels (e.g. ‘get in the zone’ or settle nerves)
- Improve concentration/focus
- Increase motivation
- Mental rehearsal
Key components of a warm up:

- Pulse raising, i.e. exercises that slowly increase heart rate and body temperature (e.g. jogging, cycling, skipping)

- Mobility, i.e. exercises that take the joints through their full range of movement (ROM) (e.g. arm swings, hip circles)

- Dynamic movements (e.g. change of speed and direction)

- Stretching (e.g. developmental stretches, dynamic stretches linked to sport – ‘open and close the gate’ groin walk)

- Skill rehearsal phase, i.e. rehearsing common movement patterns and skills which will be used in the activity (e.g. dribbling drills for football, passing drills for netball)
Physical benefits of a cool down:

- Helps the body’s transition back to a resting state
- Gradually lowers heart rate
- Gradually lowers temperature
- Circulates blood and oxygen
- Reduces breathing rate
- Removes waste products such as lactic acid
- Reduces the risk of muscle soreness and stiffness
- Aids recovery by stretching muscles, i.e. lengthening and strengthening muscles for next work-out/use
Key components of a cool down:

- Pulse lowering, i.e. exercises which gradually lower heart rate and reduce temperature (e.g. easy movements, light running, stretching)

- Stretching, i.e. maintenance stretches, static stretches (e.g. hamstring stretches)
Specific needs which a warm up and cool down must consider:

- Characteristics of the individual/group, i.e.
- Size of group
- Age of participants
- Experience of participants
- Individual fitness levels
- Any medical conditions participants may have
- Suitability as preparation for a particular activity/sport
- Environmental factors (e.g. weather/temperature if outdoors, available facilities).
12 Alfie is starting to learn about warming up and cooling down as part of his coaching programme in football.

Explain three ways in which environmental factors could affect a cool down.
15+ Michelle is a competent netball player but does not understand the importance of warming up before matches.

Explain the benefits of a warm up before starting physical activity.
Describe the key components of a cool down and explain the physical benefits that a cool down provides for a sports performer.
Practice Exam Question

Explain how warming up can benefit a sports performer psychologically.

[2]
Group leaders—act as scribe and presenter
Zak, Callum, Joel, Liam H, James, Tom

1. Physical benefits of a cool down (8)
2. Specific needs which a warm up and cool down must consider (8)
3. Key components of a cool down (2)
4. Key components of a warm up (5)
5. Psychological benefits of a warm up (4)
6. Physical benefits of a warm up (7)
<table>
<thead>
<tr>
<th>Participants (age/ability/gender/number)</th>
<th>Aim/focus of session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities/environment</td>
<td>Equipment</td>
</tr>
<tr>
<td>General warm up</td>
<td>Static stretches</td>
</tr>
<tr>
<td>Activity specific</td>
<td>Dynamic stretches</td>
</tr>
<tr>
<td>What went well?</td>
<td>What would you change for next time?</td>
</tr>
</tbody>
</table>

Any new warm up activities that you have found that you want to remember for another time
Learning Outcome 3 - Know how to respond to injuries within a sporting context

- Learners must be taught about:
- **acute and chronic injuries**

  - **acute injuries, i.e.**
    - caused as a result of a sudden trauma to the body (e.g. hard rugby tackle, being hit by a ball)
    - result in immediate pain, and usually swelling with a loss of function
  
  - **chronic injuries, i.e.**
    - also known as overuse injuries and are a result of continuous stress on an area (e.g. Achilles tendonitis, shin splints or tennis elbow)
    - these injuries tend to develop gradually over a period of time
- **types, causes and treatment of common sports injuries, i.e.**
  - soft tissue injuries, i.e. sprains, strains
  - overuse injuries, i.e. tendonitis, tennis elbow, golfers elbow, shin splints
  - fractures, i.e. open, closed
  - concussion, i.e. signs and symptoms of concussion
  - abrasions, i.e. grazes and cuts
  - contusions, i.e. bruises
  - blisters (e.g. blisters on the foot due to poorly fitting footwear)
  - cramp, i.e. painful sensations caused by muscle contractions or over shortening
  - injuries related to children (e.g. severs diseases, Osgood Schlatter’s disease)
how to respond to injuries and medical conditions in a sporting context, i.e.
- SALTAPS on-field assessment routine (See, Ask, Look, Touch, Active, Passive, Strength)
- R.I.C.E. (Rest, Ice, Compress, Elevate)
- stretching and massage
- taping, bandaging, splints, slings
- hot and cold treatments (e.g. heat pack, freeze spray)
- action plan to respond to injuries and medical conditions in a sporting context i.e. emergency procedures

Emergency Action Plans (EAP) in a sporting context:
- emergency personnel, i.e. first responder, first aider, coach
- emergency communication, i.e. telephone, emergency numbers, emergency services
- emergency equipment, i.e. first aid kits, evacuation chair.
Know how to respond to injuries within a sporting context

Acute and Chronic injuries

**Acute injuries, i.e.**
- Caused as a result of a sudden trauma to the body (e.g. hard rugby tackle, being hit by a ball)
- Result in immediate pain, and usually swelling with a loss of function

**Chronic injuries, i.e.**
- Also known as overuse injuries and are a result of continuous stress on an area (e.g. Achilles tendonitis, shin splints or tennis elbow)
- These injuries tend to develop gradually over a period of time
Demba Ba-Chronic or acute?
Liam’s blister injury- Chronic or acute?
Title Types, causes and treatment of common sports injuries: Acute or Chronic-Two examples of how they happen in sport

- Soft tissue injuries, i.e. sprains, strains
- Overuse injuries, i.e. tendonitis, tennis elbow, golfers elbow, shin splints
- Fractures, i.e. open, closed
- Concussion, i.e. signs and symptoms of concussion
- Abrasions, i.e. grazes and cuts
- Contusions, i.e. bruises
- Blisters (e.g. blisters on the foot due to poorly fitting footwear)
- Cramp, i.e. painful sensations caused by muscle contractions or over shortening
- Injuries related to children (e.g. severs diseases, Osgood Schlatter’s disease)
<table>
<thead>
<tr>
<th>Sports Injury</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tendonitis</td>
<td>Inflammation of a tendon</td>
</tr>
<tr>
<td>Broken bone</td>
<td>A break in the continuity of the bone caused by high force impact</td>
</tr>
<tr>
<td>Torn ligament</td>
<td>A tear in the fibrous tissue that connects one bone to another</td>
</tr>
<tr>
<td>Jumper’s knee</td>
<td>An aching in the inferior patella region, common in athletes</td>
</tr>
<tr>
<td>Shin splints</td>
<td>Pain in the lower part of the leg due to repeated trauma to the connective muscle tissue surrounding the tibia</td>
</tr>
<tr>
<td>Stress fracture</td>
<td>Commonly occurring in weight bearing bones such as the tibia due to repeated stress and/or continuous heavy weight</td>
</tr>
<tr>
<td>Dislocation</td>
<td>An abnormal separation in the joint where two or more bones meet</td>
</tr>
<tr>
<td>Tennis elbow</td>
<td>An overuse injury causing pain in the lateral part of the elbow</td>
</tr>
<tr>
<td>Golfer’s elbow</td>
<td>A painful inflammation of the muscles on the inside of the forearm</td>
</tr>
<tr>
<td>Bruised muscles (contusions)</td>
<td>Trauma causing blood to collect around muscle tissues causing pain</td>
</tr>
<tr>
<td>Strains</td>
<td>An injury to a muscle or tendon in which the muscle fibres tear as a result of overstretching</td>
</tr>
<tr>
<td>Sprains</td>
<td>An injury in a joint caused by the ligament being stretched too far</td>
</tr>
<tr>
<td>Concussion</td>
<td>An injury to the brain caused by trauma and resulting in a temporary loss or impairment of function</td>
</tr>
<tr>
<td>Abrasions (cuts and grazes)</td>
<td>A cut or scraped area on the skin resulting from injury or irritation</td>
</tr>
<tr>
<td>Cramp</td>
<td>A sudden, involuntary, spasmodic muscular contraction causing severe pain</td>
</tr>
</tbody>
</table>
How to respond to injuries and medical conditions in a sporting context:

- **SALTAPS** on-field assessment routine *(See, Ask, Look, Touch, Active, Passive, Strength)*
  - [https://prezi.com/p8dbuqjzfhqp/sport-injuries-saltaps/](https://prezi.com/p8dbuqjzfhqp/sport-injuries-saltaps/)
  - [https://www.youtube.com/watch?v=kSSVafpdZnM](https://www.youtube.com/watch?v=kSSVafpdZnM)
- **R.I.C.E.** *(Rest, Ice, Compress, Elevate)*
- Stretching and massage
- Taping, bandaging, splints, slings
- Hot and cold treatments (e.g. heat pack, freeze spray)
- Action plan to respond to injuries and medical conditions in a sporting context i.e. emergency procedures
FIFA Guidance

S A L T A P S

S is for **Stop** play if a player goes down.

S A L T A P S

A is for **Ask** the player what happened and how they feel. Check facial expressions, and posture (position either standing or lying down).

S A L T A P S

L is for **Look** at injured limbs for obvious signs of injury: bleeding, bruising, swelling, deformity. Take the player off if there are significant signs of injury.

S A L T A P S

T is for **Touch** the injured site if the player will let you. Gently palpate to find source of pain. If you are unsure, don’t touch or move the limb until a qualified person can assess the player.

S A L T A P S

A is for **Active** movement: Can the player move the limb, with or without pain? If unable to move – take the player off.

S A L T A P S

P is for **Passive** movement: If A applies, move the limb/joint to full extent and note reaction.

S A L T A P S

S is for **Strength testing** (and play on): Is the player up and running or rather trying to “run-it-off”? Whatever the case, keep a close eye and take the player off if in doubt.
Emergency Action Plans (EAP) in a sporting context:

- Emergency personnel, i.e. first responder, first aider, coach
- Emergency communication, i.e. telephone, emergency numbers, emergency services
- Emergency equipment, i.e. first aid kits, evacuation chair.


A good way for learners to appreciate the importance of an Emergency Action Plan is to create their own. You may have a template that they can use or you could follow an example from the internet.

Key information that should be on the plan includes:
- Name and contact details for relevant roles such as first aider etc.
- Location of fire exits, fire extinguishers etc.
- Overview of evacuation procedure and muster stations
- Procedure to follow if the emergency services are required
- Any other relevant information
Maggie has been asked to complete a risk assessment in preparation for a school sports event. Complete the blank areas of the grid below.

<table>
<thead>
<tr>
<th>Injury type</th>
<th>How this might happen</th>
<th>Chronic or Acute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soft tissue injury</td>
<td>Going over on the ankle when running to catch the ball</td>
<td>Acute</td>
</tr>
<tr>
<td>Fractures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abrasions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tendonitis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Practice Exam Questions

Which one of the following is an example of an over use injury? (circle your chosen option to indicate your answer)

(a) Tendonitis
(b) Hamstring tear
(c) Bruising
(d) Strained ligaments
SALTAPS is used for on-field assessment of a sport injury.

(a) Fill in each of the missing words below to complete the acronym.

<table>
<thead>
<tr>
<th>S</th>
<th>See</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>Look</td>
</tr>
<tr>
<td>T</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Active</td>
</tr>
<tr>
<td>P</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>Strength</td>
</tr>
</tbody>
</table>
Learning outcome 4 - Know how to respond to common medical conditions

- Learners must be taught:
  - the symptoms of common medical conditions, i.e.
    - Asthma, i.e. coughing, wheezing, shortness of breath, tightness in the chest.
    - Diabetes, i.e. increased thirst, going to the toilet lots, extreme tiredness, and weight loss, differences between Type 1 (insulin-dependent) and Type 2 (non-insulin dependent).
    - Epilepsy, i.e. seizures
  - how to respond to these common medical conditions, i.e.
    - ensure awareness of any participants’ medical conditions prior to commencing physical activity
    - Asthma, i.e. reassurance, inhaler, emergency services (if needed)
    - Diabetes, i.e. insulin (or glucose) hypoglycaemia (low blood sugar), give the individual sugar (e.g. fruit juice, sugary sweets)
    - Epilepsy, i.e. emergency care plans in place for the individual
    - when to refer the performer on to a professional and how to do so.
<table>
<thead>
<tr>
<th>Fact</th>
<th>Condition you think is being described</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 points</td>
<td></td>
</tr>
<tr>
<td>5 points</td>
<td></td>
</tr>
<tr>
<td>2 points</td>
<td></td>
</tr>
<tr>
<td>Actual answer (Condition)</td>
<td>Points scored</td>
</tr>
</tbody>
</table>
Condition: 1

10 point fact  34.1 million Americans have this condition and it kills between 3,500 and 5000 Americans each year

5 point fact  Although it can be fatal this condition is easily treated with a range of drugs including Salbutamol

2 point fact  This disease makes the sufferer's airways swell and narrow making it difficult to breathe

ANSWER - ASTHMA

Condition: 2

10 point fact  This condition develops most often in young people

5 point fact  It occurs when the body’s immune system attacks cells in the pancreas

2 point fact  It is characterised by high blood glucose levels and a complete lack of insulin

ANSWER - TYPE 1 DIABETES
Condition: 3

10 point fact  Develops gradually, most often in middle aged and older adults

5 point fact  Obesity is thought to be the primary cause

2 point fact  It is characterised by high blood glucose levels due to the body’s inability to use insulin efficiently

ANSWER-TYPE 2 DIABETES

Condition: 4

10 point fact  This is actually the ‘catch all’ name for a group of syndromes

5 point fact  The different types include absence, focal, generalised, grand mal and petit mal amongst others

2 point fact  Symptoms are due to the disturbance of electrical activity in the brain

ANSWER-EPILEPSY
- **Condition: 5**
  - **10 point fact** Causes are diverse but include atherosclerosis and/or hypertension
  - **5 point fact** It is the leading cause of deaths worldwide and poor diet, inactivity and smoking are key risk factors
  - **2 point fact** This is a disease that affects the heart, blood vessels or both
  - **ANSWER**-CARDIOVASCULAR DISEASE
The symptoms of common medical conditions:

- Asthma, i.e. coughing, wheezing, shortness of breath, tightness in the chest.

- Diabetes, i.e. increased thirst, going to the toilet lots, extreme tiredness, and weight loss, differences between Type 1 (insulin-dependent) and Type 2 (non-insulin dependent)
  http://www.nhs.uk/Conditions/Diabetes-type1/Pages/Introduction.aspx
  http://www.nhs.uk/conditions/diabetes-type2/Pages/Introduction.aspx

- Epilepsy, i.e. seizures

- Cardiovascular Disease-This is a disease that affects the heart, blood vessels or both. Causes are diverse but include atherosclerosis and/or hypertension
How to respond to these common medical conditions:

Ensure awareness of any participants’ medical conditions prior to commencing physical activity

- **Asthma**, i.e. reassurance, inhaler, emergency services (if needed)

- **Diabetes**, i.e. insulin (or glucose) hypoglycaemia (low blood sugar), give the individual sugar (e.g. fruit juice, sugary sweets)

- **Epilepsy**, i.e. emergency care plans in place for the individual

**SEIZURE FIRST AID**

- Keep calm, provide reassurance, remove bystanders
- Keep airway clear, turn on side if possible, nothing in mouth
- Keep safe, remove objects, do not restrain
- Time, observe, record what happens
- Stay with person until recovered from seizure
- Other care needed: __________________________________________________________
- Cardiovascular disease-high blood pressure, overweight, possible heart attack. Call ambulance

- When to refer the performer on to a professional and how to do so.
Practice Exam Questions

(a) What are the causes of Type 2 diabetes?

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(b) Describe how to treat Type 1 diabetes.

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Practice Exam Questions

An emergency is any sudden life threatening injury or illness that requires immediate medical attention. Preparation is the key to responding to unexpected emergencies in sport. Describe the three main components of an emergency action plan.

1. 

2. 

3. 

[3]