

## Level 1

1. Scene management and personal protection

*By the end of the course, the student will:*

  - a. Know that personal safety is the first aider's primary concern
  - b. Know the risk posed by body fluids, and measures for self protection
2. Legal considerations

*By the end of the course, the student will:*

  - a. Be able to explain the concept of consent to treatment
  - b. Know the necessity to work within the first aider's level of training
3. ABCDE

*By the end of the course, the student will:*

  - a. Know the importance of following a logical procedure for managing a first aid incident (e.g. DR, ABCDE)
  - b. Be able to describe a logical procedure for managing a first aid incident
4. Airway

*By the end of the course, the student will:*

  - a. Know how to recognise a blocked or partially blocked airway
  - b. Be able to demonstrate the head tilt, chin lift technique to open an airway
5. Safe Airway Position

*By the end of the course, the student will:*

  - a. Know the indications for the use of the Safe Airway Position
  - b. Know how to place a patient into the Safe Airway Position
6. Choking

*By the end of the course, the student will:*

  - a. Know the signs and symptoms of foreign body airway obstruction, both partial and full
  - b. Know the difference between a partial and full obstruction of the airway
  - c. Demonstrate correct management of foreign body airway obstruction, both partial and full, in accordance with local protocols (e.g. UK Resuscitation Council, American Heart Association)
7. Assessment of Breathing

*By the end of the course, the student will:*

  - a. Demonstrate the ability to competently assess breathing, noting presence or absence, rate, rhythm and depth
  - b. Know the signs of agonal respirations, and discuss their implications
8. Serious Bleeding

*By the end of the course, the student will:*

  - a. Be able to demonstrate a technique for checking for major bleeds
  - b. Be able to demonstrate appropriate techniques for controlling major bleeds using direct pressure, elevation and indirect pressure where indicated
  - c. Know the need for personal protection while treating bleeding
9. Burns

*By the end of the course, the student will:*

  - a. Be able to list the major causes of burns
  - b. Know how to cool and dress thermal and chemical burns
  - c. Be able to describe how to decide whether further medical assistance is required
10. Spinal Injuries

*By the end of the course, the student will:*

  - a. Be able to list generic causes of spinal injuries, giving specific examples
  - b. Know to keep the patient still if the potential for spinal injury exists
11. Communicating for help

*By the end of the course, the student will:*

  - a. Be able to explain why there is a need for clear communication with the emergency services
  - b. Be able to explain the importance of pre-planning how to communicate with the emergency services when in remote areas
12. Chain of survival

*By the end of the course, the student will:*

  - a. Be able to list the links in the chain of survival for sudden cardiac arrest, and discuss the importance of each
13. CPR

*By the end of the course, the student will:*

  - a. Have performed competent CPR on a manikin for two minutes, in accordance with local protocols (e.g. UK Resuscitation Council, American Heart Association)

## Level 2

*In addition to level 1 competencies above:*

### 1. Patient assessment

*By the end of the course, the student will:*

- a. Be able to perform a competent patient assessment including examination of the skull, eyes, ears, mouth, nose, neck, spine, trunk, chest, abdomen, shoulders, limbs, skin, alert tags
- b. Be able to discuss the concept that elements of patient examination may be inappropriate in certain circumstances (e.g. patient position, mechanism of injury, time to professional care) and that potential for benefit must outweigh potential for harm
- c. Be able to take a SAMPLE history

### 2. Effectiveness of CPR

*By the end of the course, the student will:*

- a. Be able to discuss the effects of protracted evacuation on chance of survival following sudden cardiac arrest
- b. Be able to discuss the potential arguments for and against undertaking CPR in wilderness settings

### 3. Shock

*By the end of the course, the student will:*

- a. Be able to demonstrate a basic understanding of the causes of shock
- b. Be able to list the signs and symptoms of hypovolaemic shock
- c. Be able to list common causes, signs and symptoms of internal abdominal bleeds
- d. Be able to demonstrate first aid measures for treating hypovolaemic shock

### 4. Vital signs

*By the end of the course, the student will:*

- a. Be able to explain the importance of monitoring a patient's vital signs where evacuation is delayed
- b. Demonstrate how to locate and measure a patient's radial and carotid pulse
- c. Demonstrate how to measure a patient's respiratory rate
- d. Be able to explain the significance of pink, blue, pale and grey mucous membrane colour
- e. Explain and demonstrate the AVPU scale of consciousness

### 5. Spinal injuries

*By the end of the course, the student will:*

- a. Demonstrate the ability to effectively immobilise a patient's spine in a supine and sitting position
- b. Be able to list indications for performing a log roll
- c. Be able to demonstrate a correct log roll and explain its principles

### 6. Head injuries

*By the end of the course, the student will:*

- a. Be able to list causes, signs and symptoms of concussion
- b. Be able to list causes, signs and symptoms of skull fractures (including basal skull)
- c. Know that a possible life-threatening complication of concussion is compression
- d. Be able to discuss the management of a patient who has hit their head (with and without injury) in various outdoor settings

### 7. Fracture management

*By the end of the course, the student will:*

- a. Be able to list signs and symptoms of a long bone fracture
- b. Be able to explain the principles of fracture immobilisation
- c. Demonstrate the ability to effectively splint a fracture of the arm (upper arm, forearm or wrist)
- d. Be able to explain the implications of lower limb fractures on evacuation
- e. Be able to list some of the potential complications of femoral and pelvic fractures

### 8. Sprains and strains

*By the end of the course, the student will:*

- a. Be able to list causes, signs and symptoms of strains and sprains
- b. Know simple rest, ice, compression, elevation treatment for sprains and strains
- c. Demonstrate strapping a sprained ankle using inelastic tape to facilitate self-evacuation

### 9. Management of dislocations

*By the end of the course, the student will:*

- a. Be able to list some of the potential complications of dislocations
- b. Know to immobilise a serious joint injury in the position found

### 10. Wound Management

*By the end of the course, the student will:*

- a. Be able to demonstrate irrigation of a wound using water under high pressure
- b. Be able to list common signs and symptoms of wound infections
- c. Know the size limitations for closing a wound

## 11. Hypoglycaemia and diabetes

*By the end of the course, the student will:*

- a. Be able to describe the signs and symptoms of, and basic first aid for, hypoglycaemia
- b. Know that all patients in the outdoors should be assumed to be hypoglycaemic
- c. Be able to explain the basic disease process in diabetes mellitus

## 12. Hypothermia

*By the end of the course, the student will:*

- a. Be able to list the causes, signs and symptoms of hypothermia
- b. Be able to list basic measures for the prevention of hypothermia
- c. Be able to demonstrate basic first aid measures for the treatment of mild hypothermia
- d. Know that all patients in mild or cold outdoor environments should be assumed to be hypothermic

## 13. Hyperthermia

*By the end of the course, the student will:*

- a. Be able to list the causes, signs and symptoms of hyperthermia
- b. Be able to list basic measures for the prevention of hyperthermia
- c. Be able to list basic first aid measures for the treatment of hyperthermia

## 14. Dehydration

*By the end of the course, the student will:*

- a. Be able to explain the importance of adequate hydration
- b. Know that all patients in the outdoors should be assumed to be dehydrated
- c. Be able to explain the principles of effective oral rehydration

## 15. Heart Disease

*By the end of the course, the student will:*

- a. Be able to explain the basic disease processes of angina and heart attack
- b. Be able to list the signs and symptoms of a heart attack
- c. Be able to describe basic first aid procedures for dealing with a heart attack patient
- d. Be able to describe the correct protocol for the administration of a single dose of aspirin (UK only)

## 16. Asthma

*By the end of the course, the student will:*

- a. Be able to explain the basic disease process of asthma
- b. Be able to explain the difference between blue and other-coloured inhalers
- c. Be able to describe the basic first aid procedures for managing a patient experiencing a severe asthma attack
- d. Be able to describe the difference between asthma and hyperventilation

## 17. Seizures

*By the end of the course, the student will:*

- a. Be able to describe the basic first aid procedures for managing a patient experiencing a seizure

## 18. Stroke

*By the end of the course, the student will:*

- a. Be able to list the common signs and symptoms of stroke
- b. Be able to describe the basic first aid procedures for managing a stroke patient

## 19. Drowning

*By the end of the course, the student will:*

- a. Be able to demonstrate the adaptation to the CPR protocol for victims of drowning (UK only)
- b. Be able to describe the potential complications of near-drowning
- c. Know that all victims of near drowning must be referred to further medical care

## **Level 3 (not UK HSE First Aid at Work – for UK HSE First Aid at Work see the “First Aid at Work” series)**

*In addition to the levels 1 and 2 competencies above*

### 1. Automated External Defibrillation

*By the end of the course, the student will:*

- a. Demonstrate correct use of an AED, in accordance with local protocols (e.g. UK Resuscitation Council, American Heart Association)

### 2. Eye injuries

*By the end of the course, the student will:*

- a. Be able to describe how to flush a small, mobile foreign body from the surface of the cornea
- b. Be able to demonstrate how to patch an eye
- c. Be able to describe how to prevent snow blindness/arc eye

### 3. Chest Injuries

*By the end of the course, the student will:*

- a. Be able to describe how to recognise a serious chest injury

- b. Be able to describe how to manage an open chest wound
  - c. Be able to demonstrate how to optimally position a patient with a chest injury
4. Shock
- By the end of the course, the student will:*
- a. Be able to list the signs and symptoms of anaphylaxis
  - b. Be able to list the indications for using an adrenaline autoinjector
  - c. Demonstrate the correct technique for using an EpiPen adrenaline autoinjector
5. Triage
- By the end of the course, the student will:*
- a. Be able to describe a simple triage system

#### **Level 4 Common Content**

*In addition to the levels 1, 2 and 3 competencies above*

1. Vital signs
 

*By the end of the course, the student will:*

  - a. Demonstrate an ability to accurately take pulse and breathing rates
  - b. Demonstrate an ability to measure blood pressure by auscultation and palpation
  - c. Be able to explain the significance of blood pressure measurements as they relate to stages of hypovolaemic shock
2. Fracture management
 

*By the end of the course, the student will:*

  - a. Be able to demonstrate how to safely and effectively apply traction to a fractured long bone
  - b. Be able to list the indications and contraindications for fracture realignment
  - c. Be able to describe how to safely and effectively realign a fracture, where indicated
  - d. Demonstrate the ability to effectively splint arm and leg fractures using a variety of commercial splints and improvisation
3. CSM check
 

*By the end of the course, the student will:*

  - a. Demonstrate good circulation, sensation and movement when managing wounds, fractures and burns
4. Spinal injuries
 

*By the end of the course, the student will:*

  - a. Demonstrate correct application of the jaw thrust technique
  - b. Be able to describe the principles and practical complications of transportation of spinal patients
5. AED use in the wilderness
 

*By the end of the course, the student will:*

  - a. Be able to discuss the complications and realities of AED use in wilderness settings
6. Hypothermia
 

*By the end of the course, the student will:*

  - a. Have a good level of understanding of mild and profound hypothermia, its signs, symptoms, prevention and management
7. Communication, monitoring and recording
 

*By the end of the course, the student will:*

  - a. Demonstrate an ability to effectively communicate with an outside agency
  - b. Demonstrate an ability to accurately monitor and record events
8. MCQ test
 

*By the end of the course, the student will:*

  - a. Have successfully completed a written MCQ

#### **Level 4 Rescue**

*In addition to the levels 1, 2, 3 and 4 Common Content competencies above*

1. Airway adjuncts
 

*By the end of the course, the student will:*

  - a. Be able to list the indications for and limitations of oropharyngeal and nasopharyngeal airways
  - b. Be able to assist a paramedic in the sizing and insertion of an oropharyngeal or nasopharyngeal airway
2. Bag Valve Mask
 

*By the end of the course, the student will:*

  - a. Demonstrate the ability to correctly use a BVM
  - b. Know the indications for use of a BVM

### 3. Cervical Collar application

*By the end of the course, the student will:*

- a. Demonstrate the ability to correctly size and apply a cervical collar
- b. Be able to describe the limitations of a cervical collar for c-spine immobilisation
- c. Be able to describe how the use of the cervical collar fits in combination with other spinal immobilisation techniques and equipment

### 4. Helmet removal

*By the end of the course, the student will:*

- a. Demonstrate the ability to safely remove a variety of helmets encountered in the outdoors with minimal movement of the cervical spine
- b. Know the indications for helmet removal

### 5. Medical Gases

*By the end of the course, the student will:*

- a. Demonstrate the ability to check, assemble and disassemble oxygen and entonox equipment for use
- b. Demonstrate the ability to assist a paramedic in the administration of oxygen and entonox
- c. Be able to describe the indications and contraindications for the administration of oxygen and entonox

### 6. Use of drugs

*By the end of the course, the student will:*

- a. Be able to describe the basic principles and difficulties of drug selection, including dose and route
- b. Be able to list the names of different routes of drug administration
- c. Demonstrate the correct administration of subcutaneous and intramuscular injections under the direct or indirect supervision of a doctor or paramedic
- d. Know how to accurately record drug administration
- e. Know the legal framework and protocols that must be followed when administering drugs

## Level 4 Expedition

*In addition to the levels 1, 2, 3 and 4 Common Content competencies above*

### 1. Altitude illness

*By the end of the course, the student will:*

- a. Be able to explain the difference between AMS, HAPE and HACE
- b. Be able to list the common signs and symptoms of AMS, HAPE and HACE
- c. Be able to describe the basic rules of managing altitude illness
- d. Have an awareness of the different drugs available to treat altitude illness
- e. Be able to list measures to prevent altitude illness

### 2. Animal-related illness

*By the end of the course, the student will:*

- a. Be able to describe how rabies is transmitted, the nature of the disease, and the prevention and management of mammal bites
- b. Be able to demonstrate how to manage a patient who has been bitten by a snake
- c. Be able to describe the basics of snakebite prevention
- d. Know the dangers of various mosquito-borne diseases
- e. Be able to list the early signs and symptoms of malaria, and describe how to manage a potential malaria patient
- f. Be able to list measures to prevent mosquito bites
- g. Be able to describe the risks posed by ticks
- h. Be able to describe how and when to correctly remove ticks

### 3. Food and hygiene-related illness

*By the end of the course, the student will:*

- a. Be able to list the routes of transmission of Traveller's Diarrhoea
- b. Be able to list basic food and hygiene precautions for the prevention of Travellers' Diarrhoea
- c. Be able to describe how to manage a patient with Travellers' Diarrhoea

### 4. Frostbite

*By the end of the course, the student will:*

- a. Be able to list the signs and symptoms of frostbite
- b. Be able to describe how to manage a patient with frostbite
- c. Be able to describe how to prevent frostbite

### 5. Snow blindness

*By the end of the course, the student will:*

- a. Be able to describe the cause of snow blindness
- b. Be able to describe how to prevent snow blindness, including improvisation of eye protection

- c. Be able to describe how to manage a patient with snow blindness
6. Wound care
- By the end of the course, the student will:*
- a. Demonstrate an ability to effectively clean and close a small laceration using high pressure irrigation and steristrips
  - b. Know that larger wounds should be cleaned and left open
  - c. Be able to list the common signs and symptoms of wound infections
7. Hyperthermia
- By the end of the course, the student will:*
- a. Be able to discuss hyperthermia in reasonable detail, including its prevention, recognition, complications and treatment
  - b. Be able to describe the basics of the process of acclimatisation to heat

### **Level 5 Common Content**

*In addition to the levels 1, 2, 3 and 4 Common Content competencies above*

1. Reduction of shoulder dislocations
 

*By the end of the course, the student will:*

  - a. Demonstrate the ability to accurately follow a doctor's protocol for identification and safe reduction of an anterior dislocation of the shoulder
  - b. Be able to list benefits and potential complications of shoulder reduction in the field
2. Ankle assessment
 

*By the end of the course, the student will:*

  - a. Demonstrate the ability to accurately apply the Ottawa Ankle Rules as set out by a doctor's protocol
  - b. Be able to discuss the application of the Ottawa Ankle Rules in a wilderness setting
3. Fluid therapy
 

*By the end of the course, the student will:*

  - a. Be able to describe oral, rectal, subcutaneous and intravenous routes of fluid therapy and the pros and cons of each
4. Communication to an on-call doctor
 

*By the end of the course, the student will:*

  - a. Demonstrate effective communication with an on-call doctor when managing an incident in a wilderness setting
  - b. Be able to discuss how best to make use of an on-call doctor when managing an incident in a wilderness setting
5. Incident management
 

*By the end of the course, the student will:*

  - a. Demonstrate effective incident management when dealing with multiple-patient scenarios
6. Patient packaging
 

*By the end of the course, the student will:*

  - a. Demonstrate how to comfortably and effectively package a patient for evacuation using commercial packaging equipment or improvisation
7. Long term care
 

*By the end of the course, the student will:*

  - a. Be able to describe the needs of the patient during long evacuations, and their management
  - b. Know the importance of regular monitoring during long evacuations

### **Level 5 Rescue**

*In addition to the levels 1, 2, 3, 4 and 5 Common Content and Level 5 Rescue competencies above*

1. Intravenous cannulation
 

*By the end of the course, the student will:*

  - a. Be able to effectively assist a paramedic or doctor in intravenous cannulation
2. Advanced airway management
 

*By the end of the course, the student will:*

  - a. Be able to effectively assist a paramedic or doctor in endotracheal intubation and insertion of a laryngeal mask airway
3. Pulse oximetry
 

*By the end of the course, the student will:*

  - a. Demonstrate how to use a pulse oximeter for measurement of oxygen saturation
  - b. Be able to discuss the indications and limitations of pulse oximetry

## Level 5 Expedition

*In addition to the levels 1, 2, 3, 4 and 5 Common Content and Level 5 Expedition competencies above*

### 1. Cervical Collar application

*By the end of the course, the student will:*

- f. Demonstrate the ability to correctly size and apply a cervical collar
- g. Be able to describe the limitations of a cervical collar for c-spine immobilisation
- h. Be able to describe how the use of the cervical collar fits in combination with other spinal immobilisation techniques and equipment

### 2. Helmet removal

*By the end of the course, the student will:*

- a. Demonstrate the ability to safely remove a variety of helmets encountered in the outdoors with minimal movement of the cervical spine
- b. Know the indications for helmet removal

### 3. Medical Gases

*By the end of the course, the student will:*

- a. Demonstrate the ability to check, assemble and disassemble oxygen and entonox equipment for use
- b. Demonstrate the ability to assist a paramedic in the administration of oxygen and entonox
- c. Be able to describe the indications and contraindications for the administration of oxygen and entonox

### 4. Use of drugs

*By the end of the course, the student will:*

- a. Be able to describe the basic principles and difficulties of drug selection, including dose and route
- b. Be able to list the names of different routes of drug administration
- c. Demonstrate the correct administration of subcutaneous and intramuscular injections under the direct or indirect supervision of a doctor or paramedic
- d. Know how to accurately record drug administration
- e. Know the legal framework and protocols that must be followed when administering drugs