

1 Admission by A&E

Scrub up

- 1** Label the equipment that goes into the ambulance.

cardiac monitor	oxygen regulator
defibrillator	drug box
bag-valve mask	ramp
IV pump	stretcher
bags of blood	suction unit
oxygen cylinders	ambulance chair

- 2** Explain to a partner what each item of equipment is for.

EXAMPLE

A cardiac monitor shows what the heart is doing.

- 3** An elderly man has collapsed in a supermarket and an ambulance is sent out. Discuss which items of equipment will probably be needed.

- 4** You arrive at an accident in an ambulance with a driver and find four seriously ill people who all need to go to hospital. There are no other ambulances available and there is only room for three people in your ambulance. Discuss what you should do.

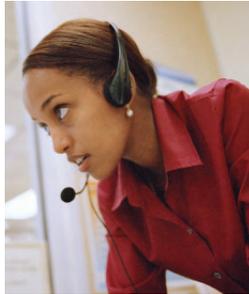


In this unit

- emergency equipment
- abbreviations
- narrative tenses
- language of triage

Listening

An emergency call



- 1 Work in pairs. Discuss what questions an emergency operator asks when a call comes through and in what order the questions are asked.
- 2 Listen to an emergency ambulance call-out. Compare your answers to 1 with what you hear.
- 3 Listen again and complete this record of the telephone call.

CITY HOSPITAL Emergency call log

Time of call: 01.26 hours

Code number: (1 = non-serious, 4 = emergency) _____¹

Caller's number: _____²

Caller's name: _____³

Location of incident: _____⁴

Type of incident: (✓)⁵

Fall from height

RTA (Road Traffic Accident)

Public transport accident

Fire

Assault

Self-harm (accidental and intentional)

Illness unknown

Obstetric

INFORMATION ABOUT VICTIMS

Number of injured: _____⁶

Extent of injuries:

Patient 1 _____⁷ Patient 2 _____⁸

Toxic or inflammatory materials involved in incident _____⁹

- 4 Discuss what is an emergency and what isn't. (Think of examples of when someone should call for an ambulance and when they should not.)

Vocabulary

Abbreviations

- 1 Use the abbreviations key to read the information sent to the ambulance paramedics in *Listening*.

AMBO	ambulance
AMI	acute myocardial infarction (heart attack)
ATA	actual time of arrival
BHT	blunt head trauma
C	critical
Cat	category
CPR	cardiopulmonary resuscitation
CVA	cerebrovascular accident (stroke)
DoA	dead on arrival
Dx	diagnosis
ETA	estimated time of arrival
Fx	fracture
ICU	Intensive Care Unit
N/A	not appropriate
pos	possible
pt	patient
RTA	Road Traffic Accident
SHO	Senior House Officer
S/N	Staff Nurse
UNK	unknown



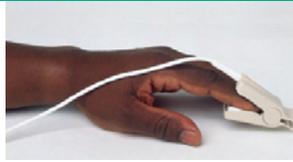
- 2 Complete this written version using full words.

The ambulance was called out on the fifteenth of March at _____¹ to a serious _____² after someone had made an emergency call. A tanker carrying petrol had crashed into the wall of a shop. The ambulance's _____³ was 1.40 a.m. but its _____⁴ was earlier.

There were two casualties. _____⁵ was a male. He was not moving and possibly suffering an _____⁶. He was categorized _____⁷. _____⁸ was a female. Blood from her head indicated that she was suffering a _____⁹.

A **pulse oximeter** is a probe attached to a patient's finger or ear lobe and linked to a small computer. It displays the percentage of oxygen in the patient's haemoglobin, gives a beep for each pulse beat, and calculates heart rate.

In what situation(s) would a pulse oximeter be unreliable?



Tests

Triage assessment

1 Complete the description of triage categories with the words and phrases below.

- | | |
|--------------------------|----------------------|
| a grave | e satisfactory |
| b immediately threatened | f seriously impaired |
| c inappropriate | g stable |
| d life-threatening | h worsening |

Critical (cannot wait)

Patient is dying or in a _____¹ condition

A very _____² situation that requires top priority

Urgent (see within thirty minutes)

Acute disorders, but patient is in a _____³ condition at the moment

Requires attention soon or risks _____⁴ body functions and parts

Semi-urgent (see within one hour)

Suffering from minor illnesses, but life is not _____⁵

Will need to re-triage later in case of _____⁶ condition

Non-urgent (discharge)

_____⁷ condition which does not present cause for concern

_____⁸ attendance in emergency department

2 Use the triage categories in 1 to classify these patients who are all in A&E at the same time.

- Male found lying face-up on the pavement. Not able to speak. No bleeding. Vomited in ambulance several times. Deeply unconscious
- Woman (30s) 'splitting' headache after party the previous day
- Boy (15), arm very twisted and out of shape. No pain, but numbness
- Woman (20s) has taken ten paracetamol. Very depressed and tearful
- Man (20s) black eye after a fight, alcohol intoxication
- Child requiring inoculation
- Female (50s) overweight, drove to hospital, severe pains in chest that come and go, breathlessness, back pain
- Elderly woman (90s) chief complaint: constipation – abdominal pains for several hours

Language spot

Narrative tenses

1 Match sentences a–h with descriptions 1–4.

- | | |
|--|--|
| a It's crashed into a shop. | 1 A past event that is still relevant now |
| b There was this terrible noise. | 2 A complete event in the past |
| c A tanker carrying petrol had crashed into the wall of a shop. | 3 Something in progress at a point in the past |
| d He was not moving . | 4 An event before a point in the past |
| e Blood from her head indicated that she was suffering a ... | |
| f A wall has fallen on her. | |
| g The emergency call was timed at 1.26 a.m. | |
| h ... someone had made an emergency call. | |

- A past event that is still relevant now
- A complete event in the past
- Something in progress at a point in the past
- An event before a point in the past

2 Underline the correct form of the verb.

- When the ambulance arrived, he *had already taken / already took* twelve painkillers.
- She *had / has had / was having* a baby last year.
- He *saw / has seen* fifteen patients already, and it's only ten o'clock.
- The family *were sitting / sat / have sat* around his bed when he woke up.
- He recovered consciousness on Tuesday, but for the previous two days everyone *has been / had been / were* really worried.
- The pain *has spread / spread* to my arms, and I thought I was having a heart attack.
- The man *has woken up / woke up / was waking up* and is asking where he is.
- The emergency call *had made / was made* and the ambulance sent to the scene of the accident.

» Go to **Grammar reference p.116**

A triage nurse usually assigns each patient with a **chief complaint** rather than a diagnosis.

Which of the following is a **chief complaint**?

- a loss of consciousness
- b overdose
- c stable condition

Writing

Accident report



- 1 Listen to a police officer talk to a nurse about the RTA in *Listening*. Take notes about what happened.
- 2 Write a report about the accident. Describe what happened (draw a diagram if necessary).

Include in the report your own opinion about whether or not the driver should have been driving. Say what, if anything, could have been done to avoid the accident. Make recommendations for what should be done to reduce the number of RTAs in your country.

It's my job

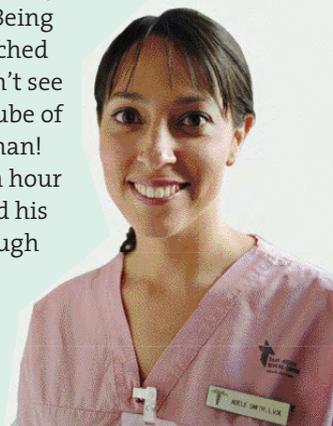
- 1 Without looking at the list of abbreviations in *Vocabulary* on p.5, say which of these abbreviations are medical problems and which are medical staff.
Fx SHO S/N CVA
- 2 Read the text and answer the questions.
 - 1 Why does Heidi not mind the stress of her job?
 - 2 Why is 'triage nurse' a suitable job title?
 - 3 What is Heidi's rank?
 - 4 What is the A&E doctor's rank?
 - 5 What does Heidi like best about the job?
 - 6 Why will the patient with the eye problem not be keeping his medicines in his desk drawer in future?
- 3 Have you heard any stories of strange or stupid accidents and emergencies? Tell your partner.

Heidi Vettrano

A repetitive job is my idea of a nightmare, which is why I work in A&E. It's stressful, sometimes shocking, and often very upsetting, but I wouldn't change it for anything.

I specialize in emergency triage. 'Triage' means sorting and that's what I do. I sort out patients in A&E according to the nature and severity of their illness so that the doctors see the most severe cases first and we don't waste precious time on non-emergencies. You could say that's like specializing in everything. You don't know what's going to pop up next – it could be an accident with multiple fx, a sick baby, or a CVA. The day before yesterday a farming accident came in – a man had cut his hand off with a chainsaw. When the ambulance brought the patient in, he was haemorrhaging badly and we had to open up an airway and get him on a ventilator immediately. He's OK. He's in ICU, but not on the critical list any more. That was the same day a woman came in complaining of terrible pain in her feet. I was the S/N on duty and I categorized her as a non-emergency. She sat waiting for four hours before finally seeing the SHO. You'll never guess what the problem was. Her shoes were too tight!

The best thing about A&E work is the people you work with. Everyone pulls together, we're all equal, and everyone shares the same sense of humour, which is essential. Sometimes you've got to see the funny side or give up all hope for human beings. Last week, for example, an ambulance brought a man in who was unable to open his eyes. Being short-sighted, he had reached for his eye drops and didn't see that he had picked up a tube of superglue instead. Poor man! We bathed his eyes for an hour and very slowly separated his eyelids. He was able to laugh about it with the A&E staff afterwards, but in the future he won't be keeping his medicines in his desk drawer.



In 1917, an Australian outback farmer seriously injured himself in a fall. Because the nearest doctor was 3,000 km away, the local postmaster operated on the farmer's bladder using a penknife whilst receiving Morse code instructions by telegraph. The patient survived the operation, but not the journey to hospital later.

What famous Australian medical service was created because of incidents like this?



Reading

Air ambulance

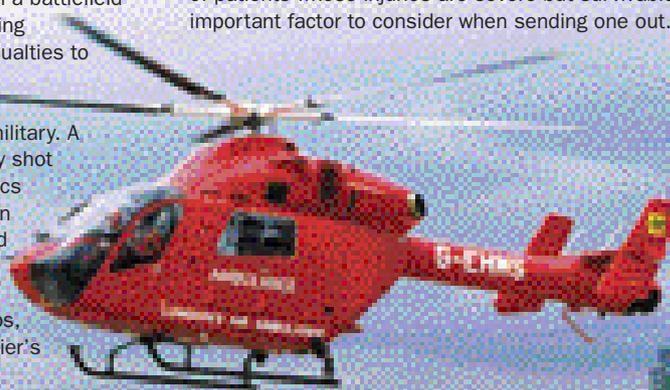
- Discuss with a partner the advantages of air ambulances like the one in the picture.
- Read the text and compare your ideas with what the article says.
- Read the text again and choose the correct answer.
 - The idea of an air ambulance came from the need to
 - limit a patient's movements
 - move treatment fast to sick people
 - move patients fast but gently.
 - Letting wounded soldiers die is
 - cheaper than evacuating them by helicopter
 - economically necessary
 - inefficient.
 - The first medical rescue by helicopter was
 - a response to an accident
 - a military exercise
 - after a battle.
 - The equipment in a Sikorsky YR-4 helicopter is
 - elementary
 - sophisticated
 - complex.
 - The main problem for helicopter pilots is that they
 - cannot see where they are flying
 - cannot fly when they cannot see
 - cannot use VFR.
 - Air ambulances are best employed for patients who
 - are non-emergencies
 - will probably die
 - may live.

RESCUE FROM THE AIR

When you cannot move treatment fast to sick people, you have to move sick people fast to treatment. The problem is that when someone is severely injured, movement can kill and so anything that can both speed up the journey and minimize the shock is a life-saver. This is why, over a hundred years ago, a long time before the development of aircraft, someone came up with a design for an 'air ambulance'. The idea was to put wounded people on a stretcher which was held in the air by balloons and pulled along by horses.

Warfare has encouraged progress in ambulance technology. It is expensive and wasteful to let soldiers die on a battlefield and saving their lives justifies the expense of using aircraft (particularly helicopters) to transport casualties to hospital. In fact, the first time a helicopter was used for a medical rescue was in Burma in 1945 by the American military. A soldier on a jungle-covered mountain accidentally shot himself with a machine gun. There were no medics and the area was so wild that it would have taken ten days for a rescue party to reach the wounded man. A Sikorsky YR-4 helicopter – very basic by modern standards – was sent out. It had no radio and navigated by flying low over the treetops, but the pilot completed his mission and the soldier's life was saved.

Even today, helicopters are limited by weather and darkness. Unlike aeroplanes, which have radar and computers, many helicopters have only essential flight equipment and pilots have to fly VFR (Visual Flight Rules) which means they can only fly when they can see. However, the great value of a helicopter is that it can land and take off vertically and provide speed and comfort, which are not luxuries when it comes to saving lives and a helicopter can make a huge difference in a rural area where response time is normally slow. Air ambulances can increase the chances of survival of patients whose injuries are severe but survivable; an important factor to consider when sending one out.

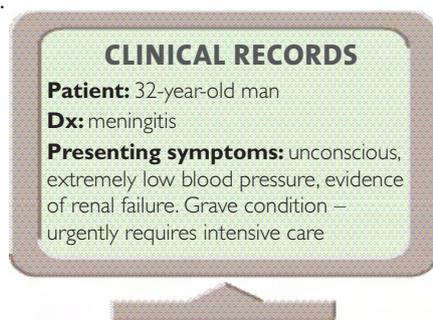


Speaking

Triage dilemmas

Work in pairs. Read the scenarios and answer the questions. Then compare your opinions and decisions with other students in your class.

- 1 You are about to save a patient's life with a large dose of a scarce drug – the patient will *certainly* die without it. It is the only supply of the drug that the hospital has. Suddenly three more patients are brought in to A&E. Each one needs one third of the drug and without it they will *probably* (though not definitely) die. Who should have the drug?
- 2 The ICU is full, but there is one patient who is relatively stable though still requiring ICU for optimum care. A new patient is brought in. These are his notes.



There is a bed in an ICU in another hospital 80 kilometres away but moving a patient from an ICU early increases risk of complications and death. Should you transfer the new patient to the other hospital or move the existing patient out of ICU?

- 3 In a high-speed car chase, a criminal crashes into a police car. The police officer suffers a fractured femur. The criminal hits the windscreen with his head – a serious BHT. The air ambulance has room for one. Who should it be?

Project

Research one of the following subjects and give a short presentation to the other students.

- START (Simple Triage And Rapid Treatment)
- advanced triage
- what to do when there are mass casualties
- battlefield triage

Checklist

Assess your progress in this unit. Tick (✓) the statements which are true.

- I can name emergency equipment
- I can understand some medical abbreviations
- I can complete a written report about an emergency call-out
- I can discuss triage

Key words

Adjectives

blunt
critical
grave
optimum
semi-urgent
stable
survivable

Nouns

casualty
complaint
ramp
self-harm
stress
witness

Verbs

collapse
haemorrhage

Look back through this unit. Find five more words or expressions that you think are useful.