



CPD4dentalnurses

YOUR FUTURE IN YOUR HANDS

First Aid Part 2: Delivering First Aid in Dental Practice During a Medical Emergency

Aims: To give an overview on how to administer first aid in dental practice during a medical emergency. This CPD article should be completed alongside First Aid parts 1 and 3.

Objectives: On completion of this verifiable CPD article the participant will be able to demonstrate, through completion of a questionnaire, the ability to:

- Demonstrate knowledge of the guidelines provided by the GDC in respect of medical emergency equipment.
- Be able to identify the symptoms of angina, myocardial infarction, anaphylaxis, hypoglycaemia, stroke, asthma attack and seizures.
- Be able to identify the drugs required from the emergency drugs kit and how to administer first aid for angina, cardiac arrest, anaphylaxis, hypoglycaemia, seizures, stroke and asthma.

Introduction

In dental practice, the employer has a legal responsibility under Health and Safety law, to ensure that employees, patients, and visitors to the practice, are safe. This includes the requirement to ensure that first aid provision in the workplace is sufficient. Under the Health and Safety (First Aid) Regulations 1981, this includes the requirement to ensure that there is adequate first aid provision for employees in the workplace. The Health and Safety Executive (HSE) state, "The employer should ensure that an employee who is injured or taken ill at work receives immediate attention. HSE will prosecute in cases where there is a significant risk, a disregard for established standards, or persistent poor compliance with the law."¹

This article will give an overview of how to administer first aid during a medical emergency and should be read in conjunction with First Aid Parts 1 and 3.

Medical Emergencies Guidance and Drugs

All registrants must follow guidance on medical emergencies and training updates issued by the Resuscitation Council UK. The General Dental Council state that "A patient could collapse on any premises at any time, whether they have received treatment or not. It is therefore essential that all registrants must be trained in dealing with medical emergencies, including resuscitation, and possess up to date evidence of capability."²

In addition:

- There must be at least two people available to deal with potential medical emergencies when treatment is planned to take place.
- All members of staff, not just the registered team members, should know their role if a patient collapses or if there is another kind of medical emergency.
- All members of staff who might be involved in dealing with a medical emergency are trained and prepared to deal with such an emergency at any time, and practise together regularly in a simulated emergency so they know exactly what to do.

The General Dental Council endorse the Resuscitation Council's guidance that clinical dental settings staffed by dentists, hygienists, and therapists, are to have an emergency drugs kit.²

The Care Quality Commission will consider drugs and equipment for a medical emergency when they review if the practice is safe. This relates to:

- Regulation 12 (safety of care and treatment)
- Regulation 17 (good governance)

The medicines and equipment should be in an accessible and central location known to all staff.

Contents of the Drug Kit

Even though, as Dental Care Professionals, we may not necessarily be the ones to actually administer the emergency drugs, practising as part of a team will allow all staff to identify roles and responsibilities in terms of getting the drug kit, phoning for an ambulance, assisting with CPR and other medical emergencies. The minimum recommended content of the drug kit is as follows:

- Adrenaline/epinephrine Injection, adrenaline 1 in 1000, (adrenaline 1 mg/mL as acid tartrate), 1 mL amps.
- Aspirin Dispersible Tablets 300 mg.
- Glucagon Injection, glucagon (as hydrochloride), 1- unit vial (with solvent).
- Glucose (for administration by mouth).
- Glyceryl trinitrate Spray.
- Midazolam Oromucosal Solution.
- Oxygen.
- Salbutamol Aerosol Inhalation, salbutamol 100 micrograms/ metered inhalation.³

(A full CPD article on the emergency drug kit is available on the website)

First Aid Arrangements and Equipment



The regulations covering the provision of first aid and contents of the first aid kit have been covered in the first part of the series of first aid articles. The drugs detailed above should be kept separate to the general first aid kit.

The HSE state that additional first aid training may need to be undertaken as appropriate to the circumstances of the workplace. One such example of additional first aid training appropriate to dental practices is training to recognise the presence of major illness and provide appropriate first aid (including heart attack, stroke, epilepsy, asthma and diabetes).

Angina and Cardiac Arrest



Cardiovascular disease (CVD) - also known as heart and circulatory disease has been described as the biggest killer in the UK.⁴ The September 2025, statistics from the British Heart Foundation state there are 480 deaths from heart or circulatory disease each day in the UK and that there are 270 hospital admissions daily due to a heart attack.⁵

CVD can include numerous problems, many of which are related to atherosclerosis. Atherosclerosis can occur over a period of time when the arteries naturally begin to harden and get narrower. This process can be accelerated by plaque buildup (cholesterol, fatty substances) in the inner linings of artery.⁶ This may lead to a diagnosis of coronary artery disease which may lead to chest pain, heart arrhythmias, heart failure and heart attacks.

Although it can be attributed to other causes, coronary heart disease refers to the heart's inability to provide sufficient circulation to surrounding tissues and the cardiac muscle. Conditions caused by coronary heart disease are myocardial Infarction (heart attack) and angina pectoris.

Symptoms of Angina Pectoris

Overview

In the UK each year, an estimated 200,000 people are investigated for angina related chest pain.⁷

Signs and Symptoms of Angina Include:

- Chest pain.
- A feeling of pressure or heaviness in the chest.
- Pain can extend into the stomach, back or jaw.
- Sweating.
- Nausea.
- Breathlessness.

Treatment

The patient should stop what they are doing and sit down to rest. If there is a history of angina the patient will probably carry glyceryl trinitrate spray or tablets (or isosorbide dinitrate tablets) and should be allowed to use them. Hospital admission is not necessary if symptoms are mild and resolve rapidly with the patient's own medication.

Arrhythmias may lead to a sudden reduction in cardiac output with loss of consciousness. Medical assistance should be summoned.

The pain of myocardial infarction is similar to that of angina but generally more severe and more prolonged.⁸

Symptoms of Myocardial Infarction (Heart Attack)

Symptoms and signs of myocardial infarction:

- Progressive onset of severe, crushing pain across front of chest; pain may radiate towards the shoulder and down arm, or into neck and jaw.
- Skin becomes pale and clammy.
- Nausea and vomiting are common.
- Pulse may be weak and blood pressure may fall.

- Breathlessness.

Treatment

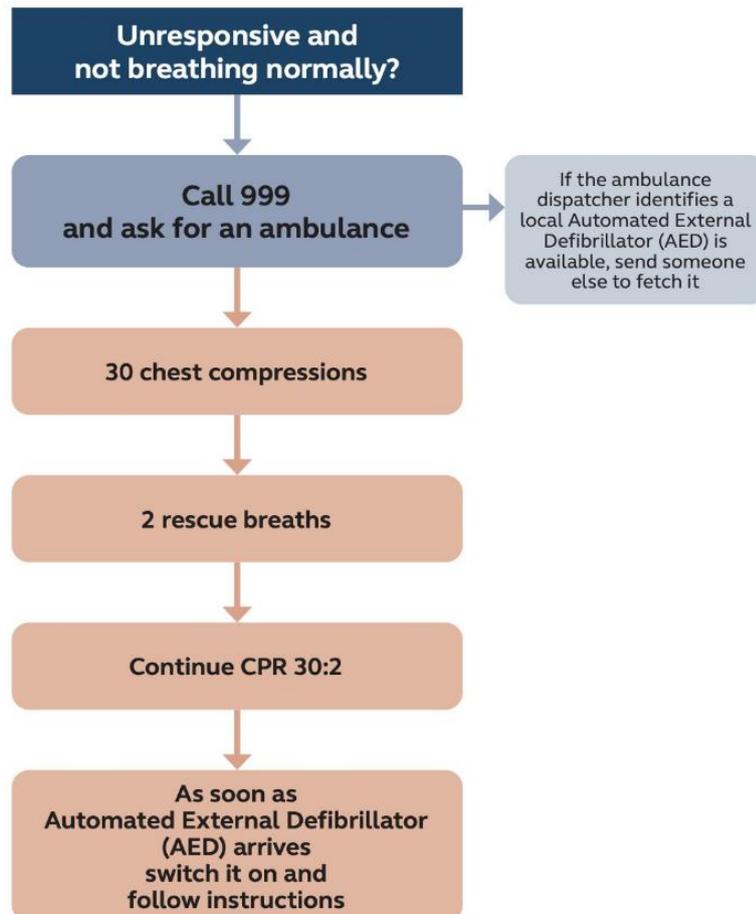
Initial management of myocardial infarction:

- ✓ Call immediately for medical assistance and an ambulance, as appropriate.
- ✓ Allow the patient to rest in the position that feels most comfortable; in the presence of breathlessness this is likely to be a sitting position, often an intermediate position (dictated by the patient) will be most appropriate. **Oxygen may be administered**, but always with the use of a pulse oximeter.
- ✓ Sublingual glyceryl trinitrate may relieve pain. Intramuscular injection of drugs should be avoided because absorption may be too slow (particularly when cardiac output is reduced) and pain relief is inadequate. Intramuscular injection also increases the risk of local bleeding into the muscle if the patient is given a thrombolytic drug.
- ✓ Reassure the patient as much as possible to relieve further anxiety. If available, aspirin in a single dose of 300 mg should be given unless contraindicated. A note (to say that aspirin has been given) should be sent with the patient to the hospital.
- ✓ If the patient collapses, loses consciousness, and is not breathing at all or not breathing normally (i.e. agonal breathing) attempt standard resuscitation measures.⁹

CPR Procedure

The following flow chart outlines the Resuscitation Council guidelines for adult CPR⁹

Adult basic life support in community settings



Stroke

Overview

A Cerebrovascular accident (CVA) or stroke is caused by the interruption of blood supply to a portion of the brain. Brain cells begin to die in minutes.¹⁰

Symptoms

The signs and symptoms of a stroke vary but usually have a sudden onset. The main symptoms of a stroke can be remembered with the acronym FAST:

Face: Can the person smile? Has their face fallen on one side?

Arms: Can the person raise both arms and keep them there?

Speech problems: Can the person speak clearly and understand what you say? Is their speech slurred?

Time: If you see any of these signs. It is time to dial 999

Act **FAST** and call 999.



Facial
weakness



Arm
weakness



Speech
problems



Time
to call 999

The expanded acronym BE FAST aims improve detection of strokes, especially in the fast recognition of acute ischaemic stroke, by including balance and vision problems:

Balance: Sudden loss of balance or coordination.

Eyes: Sudden vision changes in one or both eyes.

Face: Can the person smile? Has their face fallen on one side?

Arms: Can the person raise both arms and keep them there?

Speech problems: Can the person speak clearly and understand what you say? Is their speech slurred?

Time: If you see any of these signs, it is time to dial 999.

BE FAST



BALANCE



EYES



FACE



ARMS



SPEECH



TIME

Treatment

- ✓ A patient with a suspected stroke should be assessed and monitored using the ABCDE approach and an ambulance should be called. High flow oxygen (15 litre per minute) may be required (The use of a pulse oximeter is advised to record normal levels). The patient should be sat with head and shoulders raised, the airway should be maintained, and the patient carefully monitored for signs of deterioration until the ambulance arrives.
- ✓ If the patient is unconscious and breathing normally, they should be placed into the recovery position.
- ✓ If the patient is not breathing, or not breathing normally then CPR should be started immediately.

Diabetes



Overview

Diabetes is a long-term (chronic) condition caused by too much glucose in the blood. The latest 2023-2024 prevalence figures, show that diabetes affects over 5.8 million people in the UK, which is an all-time high. In addition, it is estimated that 6.3 million people are at risk of type 2 diabetes based on blood sugar levels.¹¹

Acute complications can happen at any time, and they can lead to other complications too. A diabetic medical emergency could happen in the dental practice.

Acute complications include:

- ✚ **Hypoglycaemia** - Blood sugars are too low (below 4mmol/L (72mg/dl)).
- ✚ **Hyperglycaemia** - Blood sugars are too high (above 7.0 mmol/L (126 mg/dl) when fasting and greater than 11.0 mmol/L (200mg/dl) 2 hours after meals.
- ✚ **Hyperosmolar Hyperglycaemic State** - A life threatening emergency that only occurs in people with type 2 diabetes. It is caused by severe dehydration and very high blood sugars.
- ✚ **Diabetic ketoacidosis** - A life threatening emergency where the lack of insulin and high blood sugars lead to a build-up of ketones. It mainly affects people with type 1 diabetes but can affect some people with type 2 diabetes that are dependent on insulin. The risk of ketoacidosis is significant if the blood glucose levels rise above 15 mmol/l (270 mg/dl).^{12,13}

Hypoglycaemia

This is the most likely diabetic emergency that will occur in the dental surgery. Hypoglycaemia occurs when blood sugar levels fall too low. Very occasionally, it can also happen in people who do not have diabetes. Insulin dependent diabetic patients attending for dental treatment under local anaesthesia should inject insulin and eat meals as normal.¹⁴ The main causes of hypoglycaemia are:

- Taking too much Insulin (or other diabetic medication).
- Skipping or delaying a meal.
- Eating less carbohydrate containing food than usual.
- Exercise or activity- especially if it is intense or unplanned.
- Binge drinking or drinking alcohol on an empty stomach.

Patients can often recognise the symptoms themselves and may tell the dental team that they are about to have a “hypo”.

Symptoms include:

- Shaking / trembling.
- Sweating.
- Pins and needles in the lips and tongue.
- Headache.
- Double vision.
- Palpitations.
- Difficulty in concentration / vagueness.
- Slurring of speech.
- Aggression and confusion / Seizures.
- Skin pale and clammy.
- Change of behaviour.
- Convulsions.
- Unconsciousness.¹⁴

Treatment

- ✓ Initially **glucose** 10–20 g is given by mouth either in liquid form or as granulated sugar or sugar lumps. Approximately 10 g of glucose is available from non-diet versions of Lucozade® Energy Original 110 mL, Coca-Cola® 100 mL (although this is subject to change so labels should always be checked), 2 teaspoons of sugar or 3 sugar lumps.
- ✓ **GlucoGel** can be given if the patient is co-operative and has an intact gag reflex. Twist off the cap and squeeze the gel into the mouth and ask the patient to swallow. Alternatively, GlucoGel can be squeezed inside the cheek, and the outside of the cheek then gently rubbed to aid absorption. If necessary, this may be repeated in 10–15 minutes.
- ✓ **Glucagon** is given when the patient is uncooperative / does not have an intact gag reflex / is unable to swallow safely / has an impaired level of consciousness. Glucagon 1mg (1 unit) should be given by intramuscular (or subcutaneous) injection; a child under 8 years or of body-weight under 25 kg should be given 500 micrograms.
- ✓ Once the patient regains consciousness oral glucose should be administered as above. If glucagon is ineffective or contra-indicated, the patient should be transferred urgently to hospital. The patient must also be admitted to hospital if hypoglycaemia is caused by an oral antidiabetic drug.¹⁴

Hyperglycaemia

Hyperglycaemia occurs when blood sugar levels are too high and the most likely cause of this is:

- If a patient misses a dose of diabetic medication, tablets or insulin.
- If the patient eats more carbohydrates than the patient or medication can manage.
- Being mentally or emotionally stressed.
- Contracting an infection.¹⁵

The symptoms of hyperglycaemia tend to develop slowly over a few days or a week. Due to this, it is more likely that the dental professional will encounter hypoglycaemia in the dental surgery rather than hyperglycaemia. However, in some cases, there may be no symptoms until the blood sugar level is very high.

Symptoms include:

- **Increased thirst and a dry mouth.**
- **Increased urination.**
- **Increased hunger.**
- Weakness or feeling tired.
- Blurred vision.
- Unintentional weight loss.
- Recurrent infections.

- Stomach pain.
- Feeling or being sick.
- Breath that smells fruity.¹⁶

(The three main symptoms are highlighted above in red.)

Treatment

Treatment for Hyperglycaemia would normally be delivered by the patients' diabetic care team and can include:

- ✓ Dietary advice – for example, avoiding foods that cause blood sugar levels to rise, such as cakes or sugary drinks.
- ✓ Drinking plenty of sugar-free fluids – this can help if dehydrated.
- ✓ Exercise more often – gentle, regular exercise such as walking can often lower blood sugar level, particularly if it helps with weight loss.
- ✓ If a patient uses insulin it may be necessary to adjust the dose – the patients care team can give them specific advice about how to do this.
- ✓ The Patient may be advised to monitor their blood sugar level more closely, or test their blood or urine for substances called ketones (associated with diabetic ketoacidosis).

Until the patient's blood sugar level is back under control, they will be advised to monitor for additional symptoms that could be a sign of a more serious condition.¹⁷

Seizures/Epilepsy

Overview

Epilepsy is a symptom of an underlying neurological disorder rather than a condition in its own right.¹⁸ An epileptic seizure is the result of a sudden burst of excess electrical activity with the brain in which an individual's awareness of the surroundings may be impaired and their behaviour altered. It can be as discernible to the person experiencing it or to an observer.¹⁹ Epilepsy is usually considered active if a person is taking anti-epileptic medication and has had a seizure in the last 2 years.

Symptoms

Signs and symptoms of a **tonic-clonic** seizure are:

- The body stiffens (tonic stage).
- If standing, the person may fall (usually backwards).
- The muscles relax and contract rhythmically, causing the convulsion (clonic stage).
- Breathing may become laboured (i.e. difficult or noisy) and may stop for up to 40 seconds. The person may become cyanosed.

- Generally, a seizure has a sudden onset and a specific end point.
- Seizures are usually brief lasting from a few seconds to a few minutes.
- They are frequently followed by a period of drowsiness and confusion.

Treatment

- ✓ Time the seizure - note the time the seizure started and stopped.
- ✓ Protect the individual from further injury by clearing their mouth of all instruments and moving equipment out of reach.
- ✓ Recline the dental chair to the supine position as near to the floor as possible.
- ✓ Avoid putting your fingers in the person's mouth.
- ✓ Most seizures are self-limiting and the individual will recover quite rapidly.
- ✓ Some people will sleep quite deeply after a seizure and they should be placed in the recovery position.¹⁹
- ✓ Phone 999 or 112 if:
 - ❖ The seizure was atypical.
 - ❖ **The seizure has already lasted 5 minutes, and is continuing.**
 - ❖ **The person has repeated generalised seizures without recovery in between that have already lasted 5 minutes and are continuing.**
 - ❖ There is a slow recovery or you have any concerns.
 - ❖ It is the person's first seizure.
 - ❖ The person is injured.
- ✓ Oxygen - 15 litres per minute with a non-rebreather mask and reservoir (during an active convulsion).
- ✓ Buccal Midazolam – for a tonic-clonic seizure that fits the criteria highlighted in red above.

Age	Dose
Adult	10 milligrams (mg)
Above 10 years	10 milligrams (mg)
Child 5 to 10 years	7.5 milligrams (mg)
Child 1 to 5 years	5 milligrams (mg)

Single dose only (even if the patient vomits) into the buccal sulcus.

Asthma

Overview

Asthma is a chronic respiratory disease which affects a person's airways, the tubes that carry air into and out of their lungs (bronchi or bronchioles). People who suffer from this medical condition are sensitive to certain triggers or substances which can cause their bronchioles to become inflamed and swollen which reduces the amount of air that can pass through them. Sticky mucous or phlegm may also be produced resulting in the person coughing, wheezing and being unable to breathe. During an asthma attack the patient suffers from constriction of the bronchioles of the lungs.²⁰

Symptoms

During an asthma attack breathing becomes difficult for the patient and they become distressed. The diagram below shows the difference between a normal and an asthmatic bronchiole (Figure 5). The attack may be mild, moderate or severe. If the attack is severe, cyanosis may occur with the lips becoming blue.

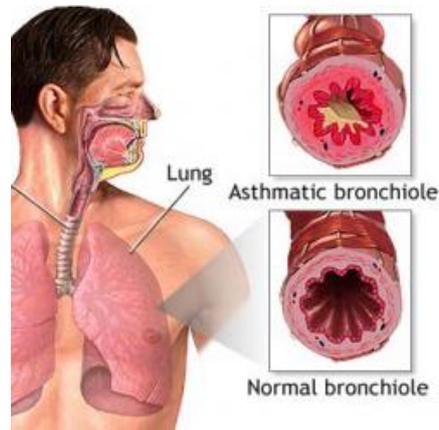


Fig. 5 Asthmatic and normal Bronchioles²¹

The signs and symptoms of a patient who is suffering from an asthma attack could include:

- Breathlessness.
- Complaining of a tight chest.
- Wheezing or coughing.
- Agitated.
- Increased pulse.
- Talking may become difficult.
- Lips and fingernails can turn blue.
- Skin around neck and chest may appear tightened.
- Nostrils may flare as patient attempts to breathe.²²

Clinical features of a **moderate asthma** attack in adults include:

- Increasing symptoms.
- No features of acute severe asthma.

Clinical features of **acute severe asthma** in adults include any one of the following:

- Inability to complete sentences in one breath.
- Respiratory rate > 25 per minute.
- Tachycardia (heart rate > 110 per minute).²⁰

Clinical features of **life-threatening asthma** in adults include any one of the following:

- Arterial oxygen saturation (SpO₂) < 92%.
- Silent chest.

- Cyanosis or respiratory rate < 8 per minute.
- Poor respiratory effort.
- Arrhythmia.
- Exhaustion.
- Altered conscious level.
- Hypotension.^{23,24}

Treatment

If a patient suffers from an asthma attack the following steps should be taken:

- ✓ Offer them their reliever inhaler (usually blue). Most attacks will respond after a few activations. If the patient does not have their inhaler the Salbutamol inhaler (100micograms/dose) should be used from the emergency drug kit.
- ✓ Loosen any tight clothing.
- ✓ Allow the patient to sit down but do not lie them down.
- ✓ If the patient is unable to use the inhaler effectively, additional doses should be given through a large-volume spacer device.
- ✓ **If the patient does not respond rapidly, or any of the features of severe asthma are present, an ambulance should be called.**
- ✓ If bronchospasm is part of a more generalised anaphylactic reaction and there are 'life-threatening' signs, an intramuscular injection of adrenaline should be given.
- ✓ Whilst awaiting ambulance transfer, oxygen (15 litres per minute); up to 10 activations of salbutamol inhaler using a spacer device should also be given (repeated every 10 minutes if necessary).
- ✓ If the patient becomes unresponsive be ready to start CPR procedures as necessary.²⁴

Ideally, oxygen saturation should be maintained at 94-98% in most people (88-92% in individuals with type 2 respiratory failure). Although a pulse oximeter is not listed in the Resuscitation Council UK primary dental care minimum equipment list, it is recommended by the British Thoracic Society. If available, a pulse oximeter can be used to guide oxygen administration.

Anaphylaxis

Overview

A severe life-threatening generalised or systemic hypersensitivity reaction – the extreme end of the spectrum, occurring when the body's immune system reacts inappropriately to the presence of a substance that it wrongly perceives as a threat. In dentistry anaphylactic reactions may follow the administration of a drug or contact with substances such as latex. In general, the more rapid the onset of the reaction the more profound it tends to be. Symptoms may develop within minutes and rapid treatment is essential.

Symptoms

USE THE ABCDE APPROACH

- **Airway**

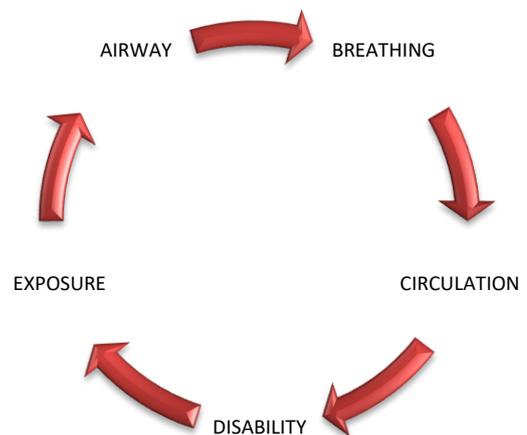
- A feeling that the throat is closing up.
- Swelling of the throat or tongue.
- Hoarse voice.
- Stridor.
- Difficulty swallowing (dysphagia).

- **Breathing**

- Shortness of breath (dyspnoea).
- Increased respiratory rate.
- Wheezing.
- Respiratory arrest.

- **Circulation**

- Signs of shock.
- Increased heart rate (tachycardia).
- Feeling faint.
- Collapse.
- Myocardial ischaemia / angina (bradycardia is usually a late sign, often preceding cardiac arrest).
- Low blood pressure (the person may be fine when supine, but may go into **cardiac arrest** if sat up or stood up - blood pools in the legs).
- Cardiac arrest.



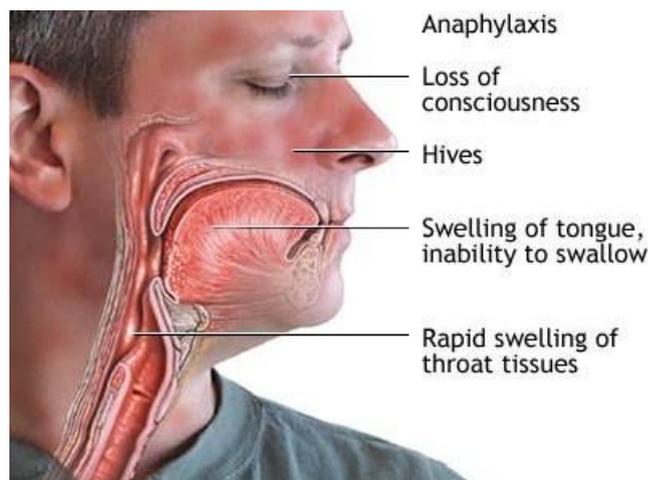
- **Disability (neurological problems – decreased brain perfusion)**

- A sense of impending doom.
- Tiredness, Weakness.
- Reduced level of consciousness.
- Confusion.

- **Exposure (skin and/or mucosal changes)**

Skin changes are often the first feature, and are present in over 80% of anaphylactic reactions:

- Skin changes can be subtle or dramatic.
- There may be erythema (a patchy or generalised red rash).
- Urticaria (also known as hives, nettle rash, weal or welts).
- Angioedema (similar to urticaria but involves swelling of the deeper tissues .such as the eyelids, lips, mouth or throat).
- Cyanosis – a late sign.



Some potential signs and symptoms of anaphylaxis:

The Resuscitation Council Guidelines state the following:

“Anaphylaxis is likely when all of the following 3 criteria are met:

- Sudden onset and rapid progression of symptoms.
- Life-threatening Airway and/or Breathing and/or Circulation problems.
- Skin and/or mucosal changes (flushing, urticaria, angioedema)” (remember though that skin and/or mucosal changes may be absent in up to 20% of cases).²⁵

Treatment

Patients should be placed in a comfortable position. However, fatality can occur if a patient stands, walks, or sits up suddenly or too soon.

Lay the patient flat with or without legs elevated. If breathing is difficult, the patient’s head and shoulders can be raised just enough to make breathing easier. A semi-recumbent position – 45 degrees from the horizontal – might be enough. The patient should lay flat again as soon as breathing is easier. Keep the patient in that position until the ambulance service arrives and takes over.

- ✓ Patients who are breathing and unconscious should be placed on their side (recovery position).
- ✓ Pregnant patients should lie on their left side to prevent caval compression.”²⁶

This video is a really useful, particularly the section on positioning:

<https://www.youtube.com/watch?v=4vNR5N1-iBw&t=16s>

- ✓ Intramuscular adrenaline (table1 provides information on intramuscular adrenaline dosage) **The Resuscitation Council advise that training should be given to all healthcare workers on how to draw up adrenaline and give an intramuscular injection of adrenaline.**
- ✓ Repeat Intramuscular adrenaline after 5 minutes if the **Airway/Breathing/Circulation** problems persist.
- ✓ Oxygen (highest flow rate with a non-rebreather mask and reservoir).
- ✓ 999/112 and say "anaphylaxis" (The patient must go to hospital, even if apparently recovered).

INTRAMUSCULAR ADRENALINE (IM doses of 1 :1000 Adrenaline)	
Adult	500 micrograms IM (0.5ml)
Child over 12 years	500 micrograms IM (0.5ml)
Child 6-12 years	300 micrograms IM (0.3ml)
Child under 6 year	150 micrograms IM (0.15ml)
Child under 6 months	100-150 micrograms IM (0.1 to 0.15ml)

The dose should be repeated if there is no improvement in the patient's condition. Further doses can be given at about 5-minute intervals according to the patient's response.²

Table 1: Intramuscular adrenaline dosage

Conclusion

Under the Health and Safety (first aid) regulations 1981 (as amended 2018 and 2024), there is the requirement to ensure that there is adequate first aid provision for employees in the workplace. The employer should ensure that an employee who is injured or taken ill at work receives immediate attention.

In addition to the requirements for general first aid, the HSE recognise that additional training may need to be undertaken as appropriate to the circumstances of the workplace. One such example of additional training appropriate to dental practices is training to recognise the presence of major illness and provide appropriate first aid (including heart attack, stroke, epilepsy, asthma and diabetes).

© 2025 Nicky Gough BSc (hons) RDH First Aid at Work Trained

With thanks to Paul Lane IHCD AMIOSH Resuscitation Council Associate Member, for his advice and help. www.abcworkplace.co.uk. For hands on training enquiries, delivered in your practice, email: paul@abcworksafe.co.uk

Personal Development Plan and Reflective Learning

This CPD is linked to the following GDC Enhanced CPD Development Outcomes:

C. Maintenance and development of knowledge and skill within your field of practice.

D. Maintenance of skills, behaviours and attitudes which maintain patient confidence in you and the dental profession and put patients' interests first.

Reflective learning is now a requirement of the GDC Enhanced Professional Development Scheme. As such, you will now be given the option to answer some reflective learning questions, before your certificate is generated.

Please remember that you can fill this in on completion of the exam, but you can also update this at any time from your CPD log. If you take a few moments to write your reflection on completion, you will have fulfilled the Enhanced CPD requirements.

Further Reading

[Resuscitation Council \(UK\) 2021. Adult BLS sequence](#)

References

1. The Health and Safety Executive (First Aid) Regulations 1981 Available at: <https://www.hse.gov.uk/pubns/priced/l174.pdf> (accessed 19/09/2025)
2. The General Dental Council (2019) Medical Emergencies. Available at: <https://www.gdc-uk.org/standards-guidance/standards-and-guidance/gdc-guidance-for-dental-professionals/medical-emergencies#:~:text=A%20patient%20could%20collapse%20on,to%20date%20evidence%20of%20capability>. (accessed 19/09/2025)
3. BNF/NICE (2025) Prescribing in Dental Practice. Available at: <https://bnf.nice.org.uk/medicines-guidance/prescribing-in-dental-practice/> (accessed 219/09/2025)
4. British Heart Foundation (2024) <https://www.bhf.org.uk/information-support/how-a-healthy-heart-works> (accessed 19/09/2025).
5. British Heart Foundation (2025) UK Fact Sheet 2025. Available at: <https://www.bhf.org.uk/-/media/files/for-professionals/research/heart-statistics/bhf-cvd-statistics-uk-factsheet.pdf> (accessed 19/09/2025)
6. Mayo Clinic (2024) Atherosclerosis/atherosclerosis. Available at: <https://www.mayoclinic.org/diseases-conditions/arteriosclerosis-atherosclerosis/symptoms-causes/syc-20350569> (accessed 19/09/2025)
7. British Heart Foundation (2022) Heart Matters. Available at: <https://www.bhf.org.uk/information-support/heart-matters-magazine/research/research-funding-best-test-chest-pain> (accessed 19/09/2025).
8. BNF (n.d) Prescribing in Dental Practice. Available at: <https://bnf.nice.org.uk/medicines-guidance/prescribing-in-dental-practice/> (accessed 19/09/2025)

9. Resuscitation Council (UK) 2021. Adult BLS Guidelines. Available at: <https://www.resus.org.uk/library/2021-resuscitation-guidelines/adult-basic-life-support-guidelines> (accessed 19/09/2025)
10. Mayo Clinic (2020) Strokes. Available at: <https://www.mayoclinic.org/diseases-conditions/stroke/symptoms-causes/syc-20350113> (19/09/2025)
11. Diabetes UK (n.d) How many people in the UK have Diabetes?. Available at: How many people in the UK have diabetes 2023-2024? Available at: <https://www.diabetes.org.uk/about-us/about-the-charity/our-strategy/statistics#:~:text=Our%20data%20shows%20that%20more,by%20148%2C591%20from%202020%2D2021.> (19/09/2025)
12. Diabetes UK (n.d) Complications of diabetes. Available at: <https://www.diabetes.org.uk/guide-to-diabetes/complications> (Accessed 19/09/2025)
13. Diabetes.co.uk (2019) Diabetes and hyperglycemia, Diabetes and Hypoglycemia. Available at: <https://www.diabetes.co.uk/Diabetes-and-Hyperglycaemia.html> (Accessed 19/09/2025)
14. BNF/NICE (2024) Prescribing in Dental Practice. Available at: <https://bnf.nice.org.uk/medicines-guidance/prescribing-in-dental-practice/> (accessed 19/09/2025)
15. Diabetes.co.uk (2019) Diabetes and hyperglycemia, Diabetes and Hypoglycemia. Available at: <https://www.diabetes.co.uk/Diabetes-and-Hyperglycaemia.html> (Accessed 19/09/2025)
16. NHS (2025) Hyperglycemia. Available at: <https://www.nhs.uk/conditions/high-blood-sugar-hyperglycaemia/> (accessed 19/09/2025)
17. NHS (2022) Available at: <https://www.nhs.uk/conditions/high-blood-sugar-hyperglycaemia/> (accessed 19/09/2025).
18. NCBI (n.ed) Available from: <https://pocketdentistry.com/12-examples-of-specific-medical-emergency-situations/> (accessed 19/09/2025).
19. Greenwood, M. (2009) Medical Emergencies in Dental Practice: 2. Management of Special Medical Emergencies. Dental Update. 36. pp. 262-268
20. NHS Choices (2025) Available from: <https://www.nhs.uk/conditions/asthma/> (accessed 19/09/2025).
21. Bronchiole image. Available from: <http://www.asthamedication.org/wpcontent/uploads/2009/01/bronchial-asthma-250x250.png> (accessed 19/09/2025).
22. British Thoracic Society (2019) Updated BTS/SIGN national Guideline on the management of asthma. Available at: <https://www.brit-thoracic.org.uk/news/2019/btssign-british-guideline-on-the-management-of-asthma-2019/#:~:text=Updated%20BTS%2FSIGN%20national%20Guideline%20on%20the%20management%20of%20asthma&text=Health%20professionals%20advised%20to%20assess,be%20referred%20for%20specialist%20care.> (accessed 19/09/2025)
- 23 BNF (2019) Asthma. Available at: <https://bnf.nice.org.uk/treatment-summary/asthma-acute.html> Accessed (19/09/2025)
- 24 BDJ Team (2019) Updated posters to help manage medical emergencies in the dental practice. Available at: <https://www.nature.com/articles/bdjteam201655> (accessed 19/09/2025)
24. 2. Resuscitation Council UK (2008) Emergency treatment of anaphylactic reactions Guidelines for healthcare providers available at: <https://www.resus.org.uk/anaphylaxis/emergency-treatment-of-anaphylactic-reactions/> (accessed 20/09/2025)