

Anaphylaxis Recognition and Emergency First Aid Treatment

Anaphylaxis

This is a severe allergic reaction affecting the whole body. It may develop within seconds or minutes of contact with a trigger and is potentially fatal. In an anaphylactic reaction, chemicals (e.g. histamines) are released into the blood that widen (dilate) blood vessels. This causes blood pressure to fall and air passages to narrow (constrict), resulting in breathing difficulties. In addition, the tongue and throat can swell, obstructing the airway. The amount of oxygen reaching the vital organs can be severely reduced, causing hypoxia (diminished availability of oxygen to the body organs/tissues). Common triggers include: nuts, shellfish, eggs, wasp and bee stings, latex and certain medications.

Recognition

- Red, itchy rash or raised areas of skin (weals).
- Red, itchy, watery eyes.
- Swelling of hands, feet and/or face.
- Abdominal pain, vomiting and diarrhoea.
- Difficulty in breathing, ranging from a tight chest to severe difficulty causing the casualty to wheeze and gasp for air.
- Pale or flushed skin.
- Visible swelling of tongue and throat with puffiness around the eyes.
- Feeling of terror.
- Confusion and agitation.
- Signs of shock, leading to collapse and loss of consciousness.

Your casualty would not necessarily experience all of these symptoms. It is possible that they may experience only two or three.

Emergency First Aid Treatment

1. Call 999 for emergency assistance and tell ambulance control that you suspect anaphylaxis.
2. If the casualty has an adrenaline auto-injector, help them to use it. If you have been trained to do so and the casualty is unable to administer the adrenaline auto-injector:
 - Pull off the safety cap.
 - Hold the auto-injector in your fist.
 - Push the tip firmly against the casualty's thigh (through clothing, avoiding seams) until it clicks, releasing the medication.
 - Hold in position for 10 seconds, remove then massage the injection site for 10 seconds.



3. Help the casualty to sit up in the position that best relieves any breathing difficulty. However, if they feel faint or dizzy, get them to lie flat and raise their legs.
4. Ask a colleague to wait outside the building for the ambulance to escort the paramedics to you and the casualty.
5. Monitor their breathing and level of response and be prepared to resuscitate whilst waiting for the ambulance to arrive.
6. If after 5 -15 minutes the casualty still feels unwell, a second injection should be given. This should be given in the opposite thigh. A second dose may also be required if the symptoms reoccur.

Resuscitation

RESPONSE: Do they respond when you ask them: 'Are you alright?' or if you say: 'Open your eyes!'

If they don't respond, then you can presume they're unresponsive and move on to the next stage.

AIRWAY: Open the airway by supporting their forehead with one hand and tilting it back by placing 2 fingers under their chin and gently lifting it. Support the head in this position in order to perform a breathing check.

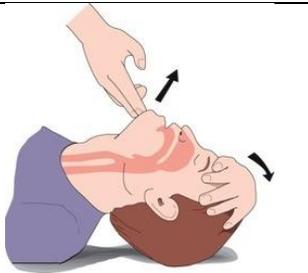
BREATHING: Look, listen and feel for normal breathing for no more than 10 seconds.

If your casualty is not breathing normally, then you must summon an ambulance immediately (if you haven't already done so) and commence CPR without delay.

CPR:

1. Start with chest compressions.
 - The heel of one hand must be placed in the centre of the chest – the bottom half of the sternum or breastbone.
 - If in doubt of this position because of outer clothing, then remove or undo the outer clothing.
 - Place your other hand on top and clasp them together with your arms locked straight.
 - Push at a depth of at least 5cms but no more than 6cms and at a speed of 100–120 compressions per minute.
2. After 30 chest compressions, give your casualty 2 rescue breaths.
 - The recognised methods for this action are either by mouth to mouth or mouth to nose.
 - Do not interrupt compressions by more than 10 seconds to deliver two breaths.
 - Repeat the process of 30 chest compressions followed by 2 rescue breaths.

If you are unable or unwilling to give 2 breaths, you must continue with chest compressions continuously and without delay.

RESPONSE	AIRWAY	BREATHING CHECK	CPR
			

Adrenaline auto-injector

Adrenaline is the gold standard in the treatment of anaphylaxis, and its administration should not be delayed. In a First Aid situation, adrenaline will normally be delivered by an auto-injector. If available, an injection of adrenaline should be given as soon as possible. If after 5 -15 minutes the casualty still feels unwell, a second injection should be given. This should be given in the opposite thigh. A second dose may also be required if the symptoms reoccur. When treating a potential anaphylaxis casualty, it should be noted that there are NO contraindications (reasons) for the use of adrenaline.

Whilst adrenaline auto-injectors are often referred to as Epi-Pens it should be noted that Epi-Pen is a brand name and one of three adrenaline auto-injectors that can be prescribed. The other two are Jext and Emerade.



What the law says

Medicines legislation restricts the administration of injectable medicines. Unless self-administered, they may only be administered by or in accordance with the instructions of a doctor (e.g. by a nurse). However, in the case of adrenaline there is an exemption to this restriction, which means in an emergency a layperson is permitted to administer it by injection for the purpose of saving a life. Therefore, first-aiders may administer an adrenaline auto-injector if they are dealing with a life-threatening emergency involving a casualty, who has been prescribed and is in possession of an adrenaline auto-injector, and where the first-aider is trained to use it.

How to summon further help

You must call Security on 3333 to inform them that an ambulance has been requested. Ask them to send someone to meet the ambulance, and help direct it to you. Security will also facilitate the opening of gates where required or gaining entry to a building which has staff only access.

Building Based First Aiders can also be requested by calling Security on 3333.

Further information on first aid, the QMUL First Aid Policy document, the role and responsibilities of first aiders, first aid stock and training can be found on the QMUL HSD topic web page <http://hsd.qmul.ac.uk/A-Z/First%20Aid/index.html>