



ADRENALINE AUTO-INJECTORS & REVIEW OF PATIENTS WHO CARRY THEM

Please note that this guideline is not intended to provide full guidance on the management of anaphylaxis. It is designed to provide information about adrenaline auto-injectors and annual review of patients at risk of anaphylaxis. For detailed information on the management of anaphylaxis, see Resuscitation Council Guidance.

Anaphylaxis & Adrenaline Auto-injectors (AAIs)?

- Anaphylaxis is a severe, life-threatening generalised or systemic allergic reaction which can develop very rapidly. It can involve the airway (pharyngeal or laryngeal oedema), breathing (bronchospasm/tachypnoea) and circulation (hypotension /tachycardia). There are usually associated skin and mucosal changes.
- An Adrenaline Auto-injector (AAI) is an injection device filled with adrenaline.
- An early intramuscular injection of adrenaline using an AAI in the side in the middle of the thigh is the best emergency, on- the-spot treatment for an anaphylactic reaction.

When should AAIs be prescribed?

- Adrenaline auto-injectors should only be initiated in an allergy clinic.
- Children and young people who have had a severe allergic reaction in the community should be referred to a specialist in allergy for an assessment, including an assessment of the need for an AAI.

Local arrangements for the Annual Review of patients (seen at West Suffolk Hospital Allergy Clinic)

- Children and young people who have had a severe allergic reaction in the community should be seen in an allergy clinic where a diagnosis and plan are made. This may include an AAI prescription.
- When the patient is stable, an **annual review** at the time of renewal of the AAI prescription is all that is needed. This can be done in **primary care**. It is the responsibility of the carer of the CYP to make this appointment. They will have been informed of this in allergy clinic.
- Patients are kept on the clinic 'books' until adulthood and will have a clinic review at transition points e.g. at 5 years, 11 years and 16 years. They can also go back to clinic at the request of the patient, carer or GP without a formal re-referral and have open access to the clinic for advice via the consultant's secretary or email.

What should be covered at Review?

- AAI prescriptions should only be provided after an annual review, which should include the following:
- 1) Ask if there have been any allergic reactions, accidental exposure or difficulties with diet.
 - 2) Talk through the treatment plan provided by clinic. Check it is used at nursery, school and home.
 - 3) Check that the CYP and carer recognise the signs of anaphylaxis.
 - 4) Check the dose of the AAI is appropriate for weight and age. AAIs currently licensed for use in the UK are **Emerade, Epipen** and **Jext** (see 'BNF for Children' for doses).
 - 5) Check the CYP and carer know how to use their particular AAI - they should be able to demonstrate its use with a **trainer device** (available free from manufacturers' websites).
 - 6) Check the CYP and carer know what else should be done in an emergency (see below).

How should AAIs be used in an emergency- advice for Children, Young People and their Carers

- 1) At the first signs of a severe allergic reaction inject yourself/the child in the outer thigh (through the clothes). If you are in doubt about whether yours or the child's reaction is severe or not, use the adrenaline auto-injector.
- 2) **Immediately after EVERY USE of an AAI call 999**, ask for an ambulance and state '**anaphylaxis**', even if you/they are starting to feel better.
- 3) Lie yourself/the child flat with legs up to keep the blood flowing. If you/they are having difficulty breathing, sit/sit them up to make breathing easier.
- 4) If you are on your own, seek help immediately after using your auto-injector and stay with someone while waiting for the ambulance/stay with your child until the ambulance arrives.
- 5) If you/they do not start to feel better after the first injection, use the second AAI **5 to 15 minutes after the first**.



Other important points for Children, Young People and their Carers

- You **MUST ALWAYS call an ambulance** and go to hospital after using an AAI. This is because symptoms can recur and you/the child may need to be monitored or receive further treatment.
- You should carry two AAIs with you at all times.
- Check the expiry date of the AAIs and ask for replacements if necessary.
- Make sure you have been trained to use the type of AAI that you have been prescribed. You could order and practice using a trainer device (available free from the manufacturer's websites).

References

MHRA: Adrenaline auto-injectors: a review of clinical and quality considerations (June 2014).

MHRA: Adrenaline auto-injector advice for patients: after every use, an ambulance should be called even if symptoms are improving, the individual should lie down with legs raised and, if at all possible, should not be left alone. Drug Safety Update Vol 7, Issue 10 May 2014.

MHRA: Adrenaline auto-injectors: advice on use (May 2014)

NICE Guidelines CG 134 Anaphylaxis

Emergency treatment of anaphylactic reactions Guideline for healthcare providers Working Group of the Resuscitation Council (UK)

BNF for Children July 2014- July 2015