

From:

Michael Donaldson
Head of Dental Services

By email to:

All NI GDPs

Strategic Planning and Performance
Group
182 Galgorm Road
Ballymena
BT42 1QB

3 December 2025

Dear Colleagues

Re: Adrenaline in Dental Practice Emergency Drug Kits for the treatment of Anaphylaxis

The appropriate treatment of anaphylaxis is detailed in:

- Resuscitation Council (UK) Guidelines:
<https://www.resus.org.uk/library/additional-guidance/guidance-anaphylaxis/emergency-treatment>
- The British National Formulary (BNF): <https://bnf.nice.org.uk/medicines-guidance/prescribing-in-dental-practice/#medical-emergencies-in-dental-practice>
- Drug Prescribing for Dentistry SDCEP:
<https://www.sdcedentalprescribing.nhs.scot/guidance/medical-emergencies/anaphylaxis/>

Ampoules

It is a requirement that all dental practices must stock adrenaline ampoules in the practice emergency drug kit for the treatment of anaphylaxis. Stock should be in the form and strength outlined in the dental section of the BNF i.e. adrenaline 1:1000 (adrenaline 1mg/ml) 1 ml ampoules. Both the Resuscitation Council UK and the BNF recommend that adrenaline ampoules are stocked. The doses required for various age groups are noted in Table 1.

Sufficient stock should be kept to allow for further doses of adrenaline where there is no response by the patient to the initial dose, as per Resuscitation Council UK guidelines for healthcare providers on 'Emergency treatment of anaphylaxis'.

Dentists should ensure that they are confident in using adrenaline ampoules as part of their training in medical emergencies. Syringes and needles as outlined in Resuscitation Council UK guidelines for healthcare providers on 'Emergency treatment of anaphylaxis' should be stocked for this administration.

Table1 – Resuscitation Council UK recommended doses of Intramuscular Adrenaline for the treatment of anaphylaxis

Intramuscular (IM) adrenaline

Use adrenaline at **1 mg/mL (1:1000)** concentration

Age	Dose required
Adult and child >12 years	500 micrograms IM (0.5 mL)
Child 6–12 years	300 micrograms IM (0.3 mL)
Child 6 months to 6 years	150 micrograms IM (0.15 mL)
Child <6 months	100–150 micrograms IM (0.1–0.15 mL)

Pre –Filled Syringe (PFS)

This administration device for adrenaline may be considered for inclusion in dental practice emergency drug kits after appropriate advice and training. The advantages of pre-filled syringes are:

- The dose is pre-measured
- Administration time is quicker
- Reduces the risk of operator injury when opening glass ampoules

Syringes should be ordered and stocked only after consulting Table 1 above for the doses recommended by Resuscitation Council UK. Refer to the SDCEP guidance for further advice on the use of pre-filled syringes.

Auto-injector (AI)

Resuscitation Council UK guidelines for healthcare providers on 'emergency treatment of anaphylaxis' provides the following advice regarding the use of auto injectors.

In all healthcare settings, giving adrenaline from an ampoule by syringe and needle is preferred in an emergency, since auto-injectors will not allow delivery of an age/weight-

appropriate dose in most patients. Adrenaline Auto-injectors are primarily for self-use by patients in case of anaphylaxis.

Resuscitation Council UK do not specifically recommend auto-injectors for use by healthcare providers for several reasons:

- Auto-injectors are relatively expensive with a limited shelf life compared with the cost of an ampoule of adrenaline and syringe and needle.
- The recommended dose of adrenaline in teenagers and adults is 500 micrograms, however most auto-injectors prescribed for adults deliver a 300 microgram dose.
- Auto-injectors come with standard length needle which may not be long enough to give intramuscular (IM) adrenaline for some patients.
- Most healthcare providers likely to deal with anaphylaxis in the healthcare setting should have the skills to draw up adrenaline and give an intramuscular injection of adrenaline.

If dentists decide to keep adrenaline auto-injectors alongside the recommended adrenaline ampoules, **they should ensure that they stock the correct strengths to cover doses noted in Table 1.**

Practices may wish to seek further advice from their indemnifiers in relation to the use of adrenaline in medical emergencies.

If you have any concerns or queries in relation to this please contact

David Marshall, SPPG Dental Adviser at David.Marshall@hscni.net

Yours sincerely



Michael Donaldson
Head of Dental Services SPPG