

## Use of epinephrine auto injectors in the immediate management of anaphylaxis

Epinephrine is recommended to be given intramuscularly (IM) in the immediate management of anaphylaxis.

The recommended needle length for IM injections in the anterolateral thigh is 25mm and 38-40 mm for those weighing more than 100kg.

Three epinephrine autoinjectors are marketed in Ireland

- i. Anapen 150, 300, 500 micrograms. Needle length is 10mm in all.
- ii. Epipen 150, 300 micrograms. Needle length is 15mm in 300 micrograms  
Needle length is 13mm in 150 micrograms.
- iii. Jext 150, 300 micrograms. Needle length is 15mm in both.

Needles which are 16mm or shorter will enter the subcutaneous (SC) layer.

Needles of 25mm may not enter the muscle in those weighing more than 100kg.

Absorption from the SC layer is significantly slowed compared to IM injection and is biphasic. This is likely to lead to lower plasma levels in the first 10 minutes after injection.

**Therefore, epinephrine autoinjectors should not be used by health professionals for the immediate management of anaphylaxis or suspected anaphylaxis unless they are the only source of epinephrine available.**

This is consistent with the [Emergency treatment of anaphylaxis: Guidelines for healthcare providers 2021 from the Resuscitation Council UK](#)

National Immunisation Advisory Committee  
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