# Adrenaline Auto-Injectors for Treating Anaphylaxis in Primary Care

## Hertfordshire Medicines Management Committee (HMMC)

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<th>Name:</th>
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<td>Adrenaline auto-injectors</td>
<td>Emerade®, Epipen® and Jext® Devices containing adrenaline in various strengths</td>
<td>Self-treatment of severe anaphylaxis</td>
<td>September 2017</td>
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<td>MHRA June 2014 BSACI July 2016 MHRA August 2017</td>
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**EMERADE® – GREEN (RECOMMENDED FOR USE IN PRIMARY AND SECONDARY CARE)**

**EPIPEN® – GREEN (RECOMMENDED FOR USE IN PRIMARY AND SECONDARY CARE)**

**JEXT® – GREEN (RECOMMENDED FOR USE IN PRIMARY AND SECONDARY CARE)**

- All three brands are recommended. Order above does not denote preference.
- Clinicians should use clinical discretion when choosing the most appropriate dose and type of auto-injector device, taking individual factors such as age, gender, body weight and skin-to-muscle distance into account.
- Prescribe by brand – this will ensure patients are able to use the device they have received training on.
- GPs to annotate prescriptions to include ‘carry two pens at ALL times’ on label dosage instruction.

**Quantities to prescribe:**

- All patients, including children, to be prescribed TWO adrenaline pens ONLY
- MHRA: Patients must carry TWO devices at ALL times ON THEIR PERSON
- Schools can now hold spare adrenaline pens, without prescription

"**Schools are reminded that they are required to date check all medicines kept on site and that this should be part of their medicine policy(ies).**" All the adrenaline auto-injector brands have reminder facilities to support with expiry dates – these can be accessed via the following links: Emerade®, Epipen®, Jext®.

**Education/training:**

*Essential:* Patients should carry their TWO devices at all times, should be trained in how and when to use their specific device and to use it promptly when adrenaline is indicated. At annual review it is recommended that the healthcare professional checks that the patient knows how to administer their adrenaline. There is evidence that identification of triggers, appropriate advice on future prevention and training in use of the adrenaline auto-injectors reduces the risk of further reactions but no clear evidence that issuing more than TWO pens saves lives (4).

See link to a standard operating procedure on how to administer AAs: [http://www.bsaci.org/_literature_133226/AAI-SOP](http://www.bsaci.org/_literature_133226/AAI-SOP)

**Supporting information (MHRA Drug Safety Update, August 2017):**

**Advice for health care professionals**

- Ensure that people with allergies and their carers have been trained to use the particular auto-injector that they have been prescribed. Injection technique varies between injectors. Patients may obtain free trainers devices from manufacturers.
- The needle length of the device is now stated in the product information because this may be an important factor for the prescriber to consider when choosing a suitable auto-injector.

**Advice to give to people with allergies and their carers:**

- Carry two adrenaline auto-injectors at all times. This is particularly important for people who have allergic asthma as they are at increased risk of a severe anaphylactic reaction.
- Use the adrenaline auto-injector at the first sign of a severe allergic reaction.
- Take the following actions immediately after every use of an adrenaline auto-injector:
  1. Call 999, ask for an ambulance and state “anaphylaxis”, even if symptoms are improving.
  2. Lie flat with the legs raised in order to maintain blood flow. If you have breathing difficulties sit up to make breathing easier.
  3. Seek help immediately after using the auto-injector and if at all possible ensure the patient has company while waiting for the ambulance so that action can be taken if another dose is needed.
  4. If the patient does not start to feel better, the second auto-injector should be used 5 to 15 minutes after the first.
  5. Check the expiry date of the adrenaline auto-injectors and obtain replacements before they expire. Expired injectors may be less effective but if nothing else is available may still save a life when used.

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This HMMC recommendation is based upon the evidence available at the time of publication. The recommendation will be reviewed upon request in the light of new evidence becoming available.
**British Society for Allergy & Clinical Immunology (BSACI) – When to prescribe adrenaline for patient administration**

Diagnosis of anaphylaxis and identification of putative triggers
OR
Assessment of allergic reactions with anaphylaxis risk

Continuing risk of anaphylaxis*

‘Avoidable’
e.g. parenteral drug, oral prescription-only drug, some occupational, some foods

Not [reliably] avoidable
Risk of further episode, e.g. with food, sting, latex, idiopathic, mastocytosis

Severity grading & risk assessment

Mild, e.g. urticaria without airway involvement or lip swelling

Moderate*, e.g. generalised urticaria with mild airway involvement

Severe, e.g. airway involvement or hypotension

No asthma and more than trace exposure

With risk factor e.g. asthma, trace exposure, raised

No asthma and more than trace exposure

With risk factor e.g. asthma, trace exposure, raised baseline tryptase

AAI not required

AAI recommended

Consider AAI

AAI recommended

* in the absence of additional risk factors, GI symptoms in infants and young children do not usually require adrenaline auto-injectors.

**References:**
1. SPC link for product specific information: [https://www.medicines.org.uk/emc/](https://www.medicines.org.uk/emc/)
3. NICE Quality standards: [https://www.nice.org.uk/guidance/qs119](https://www.nice.org.uk/guidance/qs119)

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