

# Guidelines for adrenaline autoinjector prescription

## 1. RECOMMENDED

**History of anaphylaxis\* (if patient is considered to be at continuing risk)**

## 2. MAY BE RECOMMENDED

**History of a generalised\* allergic reaction with one or more of the following factors:**

- Asthma** - concurrent or past history
- Age** - Adolescents and young adults have a greater risk of fatal food anaphylaxis. The majority of recorded fatal reactions to foods (~90%) occur in children over the age of 5 years. Adults have a greater risk of fatal stinging insect anaphylaxis than children.
- Specific allergic triggers**
  - Nut allergy (to peanuts or other nuts) - Most deaths from food anaphylaxis occur from nuts. Generalised allergic reactions can be triggered by exposure to trace or small amounts of nuts, which can be difficult to avoid. Subsequent allergic reactions to nuts may be unpredictable.
  - Stinging insect allergy (Bees, wasps, Jumper ants) in adults
- Co-morbid conditions** - Ischaemic heart disease
- Limited access to emergency medical care** - In remote locations early administration of adrenaline may not be possible unless an adrenaline autoinjector is available.

**These factors should be considered when deciding whether an adrenaline autoinjector is prescribed, as they are known risk factors for more severe or fatal reactions.**

## 3. NOT NORMALLY RECOMMENDED

- Asthma** - in patients with asthma without anaphylaxis or generalised allergic reactions
- Elevated specific IgE only (positive RAST and/or skin test)** without a history of clinical reactions - Positive test results alone do not necessarily mean there is allergic disease. These patients may be referred to an allergy specialist for assessment of their risk of allergy and anaphylaxis. This may include further investigations such as challenge testing.
- Family (rather than personal) history of anaphylaxis or allergy**  
Whilst the risk for allergic disease is inherited, anaphylaxis is not inherited.
- Local reactions to insect stings in adults and children**
- Generalised skin rash (only) to bee or wasp stings in children**  
Prospective follow-up studies of subsequent bee stings in children presenting with local reactions or generalised skin rash (only) show that these children are at a very low risk of experiencing anaphylaxis with subsequent stings.
- Resolved food allergy**

## ADRENALINE AUTOINJECTORS

**Adrenaline autoinjectors available in Australia are EpiPen, EpiPen Jr, Anapen, Anapen Jr:**

- Adrenaline autoinjectors are not usually recommended for children less than 10kg
- EpiPen Jr or Anapen Jr are recommended for children between 10 and 20kg\*\*
- EpiPen or Anapen are recommended for adults and children over 20kg\*\*

\* Refer to definitions on page 2

\*\* These dosage recommendations are based on expert opinion, which is currently at variance with the approved product information

**IMPORTANT: An adrenaline autoinjector should only be prescribed within the context of a comprehensive ANAPHYLAXIS MANAGEMENT PLAN (see page 2).**

## ANAPHYLAXIS MANAGEMENT PLAN

An adrenaline autoinjector should only be prescribed within the context of a comprehensive anaphylaxis management plan that includes the following:

- REFERRAL TO AN ALLERGY SPECIALIST
- IDENTIFICATION OF THE ANAPHYLAXIS TRIGGER(S)

This should include a comprehensive history, clinical examination, appropriate use and interpretation of allergy testing.

- EDUCATION ON THE AVOIDANCE OF TRIGGER(S)

This is particularly important with food anaphylaxis.

- PROVISION OF AN ANAPHYLAXIS ACTION PLAN

This should document the following;

- o Name of child/adult
- o Allergic triggers
- o Carer contact details
- o Symptoms and signs indicating when to use the adrenaline autoinjector
- o Instructions on how to use the adrenaline autoinjector

Anaphylaxis action plans for adrenaline autoinjectors can also be located at [www.allergy.org.au](http://www.allergy.org.au)

- APPROPRIATE FOLLOW-UP

Review by an allergy specialist should occur to;

- o Ascertain if the correct trigger(s) have been identified
- o Determine whether the allergy persists
- o Provide re-education on adrenaline autoinjector use
- o Renew action plan
- o Ensure the adrenaline autoinjector has not expired.

## DEFINITIONS

### # 1 - ANAPHYLAXIS

Anaphylaxis is a rapidly evolving generalised multi-system allergic reaction characterized by one or more symptoms or signs of respiratory and/or cardiovascular involvement and involvement of other systems such as the skin and/or the gastrointestinal tract. Symptoms/signs of respiratory/cardiovascular involvement are:

#### Respiratory:

- Difficulty/noisy breathing
- Swelling of tongue
- Swelling/tightness in throat
- Difficulty talking and/or hoarse voice
- Wheeze or persistent cough

#### Cardiovascular:

- Loss of consciousness
- Collapse
- Pale and floppy (in young children)
- Hypotension

### # 2 - GENERALISED ALLERGIC REACTION

A generalised allergic reaction is characterized by one or more symptoms or signs of skin and/or gastrointestinal tract involvement without respiratory and/or cardiovascular involvement.

#### Skin:

- Generalised pruritus
- Urticaria / Angioedema
- Erythema

#### Gastrointestinal:

- Abdominal pain
- Vomiting
- Loose stools

### # 3 – ADRENALINE AUTOINJECTOR

Adrenaline autoinjectors are pre-loaded injector 'pens' containing an exact dose of adrenaline.

Adrenaline rapidly to reverse the effects of anaphylaxis and should be considered "First Aid" for its treatment.

Adrenaline autoinjectors available in Australia are EpiPen, EpiPen Jr, Anapen and Anapen Jr .