



## PAEDIATRIC ACUTE CARE GUIDELINE

### Anaphylaxis

<b>Scope (Staff):</b>	All Emergency Department Clinicians
<b>Scope (Area):</b>	Emergency Department

This document should be read in conjunction with this DISCLAIMER  
<http://kidshealthwa.com/about/disclaimer/>

## Anaphylaxis

An IgE mediated potentially life-threatening severe allergic reaction which may progress to shock and severe airway compromise

### Background

The most common causes of anaphylaxis in children include:

- **Foods:** Peanut, tree nut, egg, cow's milk, soy, wheat, sesame seeds, fish and seafood
- **Insect stings and bites:** Bees, wasps, hornets, jack jumper ants, fire ants
- **Latex**
- **Drugs:** Penicillin, NSAIDS, Aspirin, anaesthetic agents, radiographic contrast media
- **Exercise**, also in combination with certain foods, heat, cold, pressure



### Risk factors

- Asthma

### Assessment

- Asthma: asthmatics are more likely to have more severe respiratory problems during anaphylaxis. In particular in combination with food allergy (especially to peanuts and

- tree nuts)
- The severity of past allergic reactions does **not** reliably predict the severity of future reactions

## Examination

Symptoms of allergic reactions are categorised as mild, moderate or as anaphylaxis (= severe):

	Clinical Features
Mild/moderate allergic reaction	Swelling of the lips, face, eyes Tingling mouth Hives or welts Abdominal pain – abdominal pain and vomiting can be a sign of anaphylaxis in insect allergy
Anaphylaxis(Only one feature may manifest)	Difficulty breathing Tongue swelling Swelling / tightness in the throat Difficulty speaking / hoarse voice Wheeze or persistent cough Persistent dizziness Pale and floppy (in young children) In insect allergy: abdominal pain and vomiting

## Management

- Ensure the allergen is removed
- Assess ABC and take the blood pressure
- Give high flow oxygen
- Lay the patient flat, if there is respiratory distress then the patient can sit upright
- Do not allow the patient to stand or walk

### Initial management

#### Anaphylaxis:

- Give intramuscular (IM) Adrenaline (1:1000 strength = 1mg/mL)
  - Dose: 0.01mg/kg
  - Maximum dose: 0.5mg

#### Shock:

- Insert two large IV cannulas and give 20mL/kg of 0.9% saline bolus. Repeat as necessary.
- Consider starting an Adrenaline infusion if the patient remains hypotensive after 40mL/kg of 0.9% saline
- PICU referral

**Upper Airway Obstruction:**

- Give 5mL of nebuliser Adrenaline (strength 1:1000 = 1mg/mL)
- Consider need for intubation and prepare equipment
- Consider Adrenaline infusion
- PICU referral

**Persistent Wheeze:**

- Give Salbutamol via spacer:
  - 6 puffs < 6 years
  - 12 puffs ≥ 6 years
- Consider Adrenaline infusion
- PICU Referral

**Further management**

- Consider antihistamines for itch and urticaria 0.15mg/kg Loratadine (maximum 10mg)
- Consider prescribing a 2 day course of Prednisolone (1mg/kg) to reduce the risk of symptom recurrence after a severe reaction
- Prescribe 2 Epipens (autoinjector) to all patients > 10kg
  - Use PBS script pad and get authorisation from Canberra.
  - Contact number: 1800 888 333 (available 24 hours)
- Educate parents on the use of the Epipen and provide [ASCIA Action Plans for Anaphylaxis](#)

**Admission criteria**

- If the child is hypotensive or hypoxic admit to the ward, consider PICU referral
- If the child is not hypotensive or hypoxic admit to the ED Observation Ward (4E) for a minimum of 4 hours post Adrenaline
- Do not discharge overnight

**Observe for a longer period of time if there is:**

- History of asthma
- Protracted anaphylaxis
- > 1 dose of Adrenaline required

- Other concomitant illness


## Referrals and follow-up

- Refer to a specialist allergy clinic – either a Private Immunologist or Immunology Outpatient Clinic at PMH

## Tags

abdominal pain, adrenaline, allergic, allergy, anaphylaxis, antihistamine, ascia, bronchospasm, epipen, food, hives, hypotension, latex, peanuts, rash, reaction, severe allergic reaction, steroids, stings, swelling, tingling, urticarial, vomiting, wheeze

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