

# EMERGENCY MANAGEMENT OF ADULT & CHILD ANAPHYLAXIS

## 1 RECOGNIZE THE SUDDEN ONSET OF EITHER:



### EXPOSURE TO KNOWN OR UNKNOWN ALLERGEN



**SKIN/MUCOSAL INVOLVEMENT**  
(rash, swelling) **AND ANY OF:**



**RESPIRATORY COMPROMISE**  
(dyspnoea, wheeze), **OR**



**CARDIOVASCULAR DYSFUNCTION, OR**



**SEVERE GASTROINTESTINAL SYMPTOMS**  
(abdominal pain, repetitive vomiting)

### AFTER EXPOSURE TO KNOWN ALLERGEN



**RESPIRATORY DIFFICULTY**  
(stridor, voice change, wheeze, hypoxaemia, distress)

**AND/OR:**



**CARDIOVASCULAR DYSFUNCTION**  
(shock, hypotension, syncope, collapse)

(No need for skin or mucous membrane involvement)

## 2 IMMEDIATE TREATMENT:

- REMOVE EXPOSURE
- CALL FOR HELP

## ADRENALINE

**1mg/ml (1:1000) - 0.01mg/kg IM (Max 0,5ml IM)** anterolateral aspect of thigh  
**Repeat every 5-15 minutes if no improvement** or use an **auto-injector**  
<6yrs - 0,15ml IM; 6-12 yrs - 0,3ml IM; >12 yrs - 0,5ml IM

## 3

## ASSESS VITAL SIGNS: OXYGEN - MONITORS - IV ACCESS

High flow oxygen, maintain patent airway (Intubate/Cricothyrotomy if necessary)  
High flow IV line, BP, Sats, ECG monitoring  
Lie patient supine with legs elevated if hypotensive

## 4 ADJUNCTIVE TREATMENT IF NECESSARY

### H1 ANTIHISTAMINE Promethazine

2-6 yrs - 6,25mg IM or slow IV  
6-12 yrs - 12,5mg IM or slow IV  
>12 yrs - 25mg IM or slow IV  
(Avoid if <2yrs old and low BP)

### CRYSTALLOID (e.g. Ringers/Balsol)

Rapid infusion of 20ml/kg (max 1-2 litres)  
Repeat IV infusion as necessary  
Adrenaline infusion (0,1 - 1 ug/kg/min)  
ONLY if unresponsive to IM adrenaline & fluids

### NEBULISED BRONCHODILATORS

Every 15-20 mins if severe bronchospasm  
Salbutamol 5mg  
WITH  
Ipratropium 0,5mg

### H2 RECEPTOR ANTAGONIST Cimetidine

IM or Slow IV  
5mg/kg (Max - 300mg)  
Diluted in 20ml over 2 min

### CORTICOSTEROIDS Hydrocortisone

IM or Slow IV  
<1 yr - 25mg; 1-6 yrs - 50mg;  
6-12 yrs - 100mg; >12 yrs - 200mg

### GLUCAGON

20ug/kg (Max 1-2mg)  
IM or slow IV every 5 mins if unresponsive to adrenaline (Look out for vomiting and hyperglycaemia)

## RISK REDUCTION STRATEGIES

- Only discharge patient if clinically stable 4-6 hours after resuscitation (may need longer if at risk of biphasic reaction)
- Provide a written anaphylaxis emergency action plan, including how to administer IM adrenaline
- Refer to specialist for investigation and management
- Provide patient education ([www.allergyfoundation.co.za](http://www.allergyfoundation.co.za)) and medic-alert bracelet

## FAQ's:

### When is it appropriate to initiate treatment for Anaphylaxis?

Treat anaphylaxis at diagnosis with IM adrenaline even if severe respiratory or cardiovascular symptoms are not (yet) present.

### Why are Antihistamines considered adjunctive treatment?

H1-antihistamines may relieve itching and urticaria but do not prevent or relieve life-threatening symptoms of anaphylaxis. Antihistamines should not be used alone, or instead of adrenaline, for anaphylaxis.