

## Anaphylaxis & Vasovagal Episodes

**Anaphylaxis** is a rapidly evolving generalised multi-system allergic reaction characterised by one or more symptoms or signs of respiratory and/or cardiovascular involvement AND involvement of other systems such as skin or GI tract.

- (a) Respiratory: Difficulty/noisy breathing, swelling of the tongue, swelling/tightness in throat, difficulty talking/hoarse voice, wheeze or persistent cough.
- (b) Cardiac: loss of consciousness, collapse, pale & floppy (babies), hypotension.

**Vasovagal** (fainting episode) is relatively common after vaccination of adults and adolescents, but infants and children rarely faint. Sudden loss of consciousness in young children should be presumed to be an anaphylactic reaction, particularly if a strong pulse is absent. A strong central pulse (eg carotid) persists during a faint or convulsion.

***Anaphylaxis following routine vaccination is very rare,  
but can be fatal.***

	Vaso-vagal episode	Anaphylaxis
<b>Onset</b>	Immediate- usually within minutes of vaccine administration	Usually after 5 minutes and within hours of vaccine administration
<b>Skin</b>	Generalised pallor, cool clammy skin	Skin itchiness, generalised skin erythema (redness), urticaria (wheals) or angioedema (localised oedema of the deeper layers of the skin or subcutaneous tissues)
<b>Respiratory</b>	Normal respiration; may be shallow, but not laboured	Cough, wheeze, stridor, or signs of respiratory distress (tachypnoea, cyanosis, rib recession)
<b>Cardiovascular</b>	Bradycardia, but with strong central pulse (eg carotid) Hypotension – usually transient and corrects in supine position.	Tachycardia, weak/absent central pulse Hypotension – sustained and no specific improvement without specific treatment

## Management of Anaphylaxis

*Rapid administration of adrenaline is the cornerstone of treatment of anaphylaxis*

- If the patient is unconscious, lie them down on their left side to keep airway clear
- Give adrenaline by deep intramuscular injection (unless there is a strong central pulse and the patient's condition is good)
- If no improvement in patient's condition by 5 minutes, repeat doses of adrenaline should be given until improvement occurs.
- Call for an ambulance, dial "000". Never leave the patient alone
- Begin expired air resuscitation for apnoea, check for a central pulse. If no central pulse present, begin cardio pulmonary resuscitation (CPR)
- All cases must be transferred to hospital for further observation and possible treatment

### ADRENALINE ADMINISTRATION:

ADRENALINE 1:1000 = 0.01 ml/kg (0.01mg/kg) deep intramuscular

4-6 years (approx 20 kg)	0.2 mL
7-10 years (approx 30 kg)	0.3 mL
11-12 years (approx 40 kg)	0.4 mL
13 years and over	0.5 mL