

Emergency treatment of anaphylaxis

Anaphylaxis

Assess for:

Upper airway obstruction

(stridor, oral swelling)

or

Lower airway obstruction

(wheeze, respiratory distress)

or **Shock**

(dizziness, pale, clammy)

Call for help

Remove trigger / causative agent
Position flat or sitting, not walking or standing

NO Cardiac arrest?

Adrenaline IM

Use auto injector if available (preferred injection site upper outer thigh)

Adults: 0.5mg (0.5ml of 1:1,000)
Children: 10mcg/kg (0.01mL/kg of 1:1,000)

(min dose 0.1mL, max dose 0.5mL)

Repeat every 5 minutes as needed

Attach cardiac monitoring
High flow oxygen
IV access

For shock:

0.9% saline rapid infusion Adults: 1,000mL Children: 20mL/kg Observe (4 hours min)

YES

Refer Advanced Life

Support algorithm

Monitor vital signs, reassess ABC

Consider **steroids** and oral **antihistamine**

Call for specialist advice Consider:

RESOLUTION

- Transfer to advanced care setting
- Further 0.9% saline
- Nebulised adrenaline for upper airway obstruction
- Adrenaline infusion
- Inotropic support
- Nebulised salbutamol for lower airway obstruction



January 2019





APLS Guidelines: drugs in anaphylaxis

Drugs in anaphylaxis	Dosage by age			
	Less than 6 months	6 months to 6 years	6–12 years	More than 12 years
Adrenaline IM – pre-hospital practitioners	150 micrograms (0.15 ml of 1:1000		300 micrograms (0.3 ml of 1:1000)	500 micrograms (0.5 ml of 1:1000)
Adrenaline IM – in-hospital practitioners	10 micrograms / kg 0.1 ml/kg of 1:10,000 (infants and young children) OR 0.01 ml/kg of 1:1000 (older children) ¹			
Adrenaline IV	Titrate 1 microgram / kg*			
Crystalloid	20 ml/kg			
Hydrocortisone (IM or slow IV)	25 mg	50 mg	100 mg	200 mg

^{* 1} microgram / kg given over 1 minute (range 30 seconds to 10 minutes), e.g. according to local protocol, one of these adrenaline doses can be diluted in saline to a volume of 10 ml, giving a solution of 1 mcg/kg/ml.

¹The strength of IM adrenaline is not intended to be prescriptive, 1:1000 or 1:10,000 could be used depending on what is practicable. The problem with sticking solely to 1:1000 is that when used in infants and small children, you are then drawing up very small volumes.