Sunderland Paediatric Resuscitation Charts

Get Help.

Start the Clock.

Dry / Keep Warm.

Assess ABCDEs.

Use coloured tape to choose chart colour Or Calculate:

<u>Age</u>

0-12 month

1 – 5 years

6 - 12 years

Estimated weight

(0.5x Age in months) + 4

 $(2 \times Age) + 8$

 $(3 \times Age) + 7$

Additional information at very back of document

Calculated Weights

AGE	WEIGHT	APPROX SPARC WEIGHT	
Newborn	3.5kg	3.5kg	
1 month	4.5kg	5kg	
3 months	5.5kg	5kg	
6 months	7kg	7.5kg	
1 year	10kg	10kg	
2	12kg	10kg	
3	14kg	15kg	
4	16kg	15kg	
5	18kg	20kg	
6	25kg	25kg	
7	28kg	30kg	
8	31kg	30kg	
9	34kg	35kg	
10	37kg	35kg	
11	40kg	40kg	
12	43kg	45kg	

Newborn Life Support

~3.5 Kg

Phone neonatal unit for help! If preterm, you will also need a neonatal consultant

Make sure the cord is securely clamped.

Dry the baby; Remove wet towels; Cover baby with dry towels Or put inside roasting bag and put on hat.

Assess Colour, Tone, Breathing, Heart Rate every 30 seconds

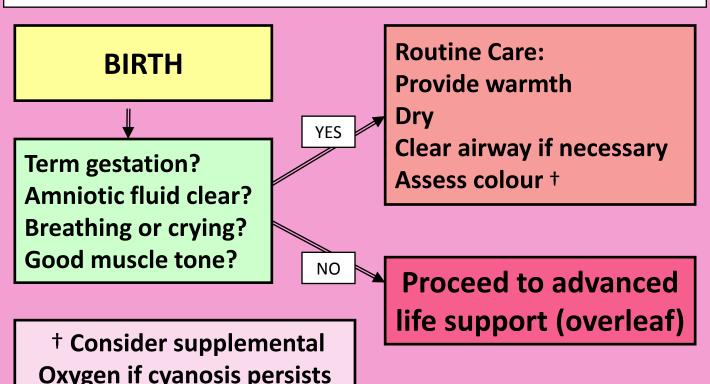
Healthy baby:

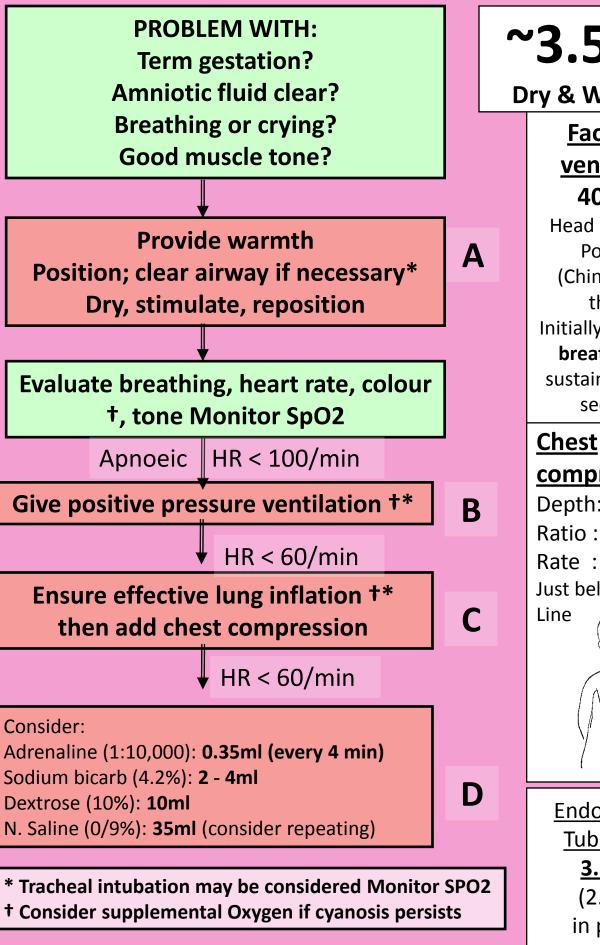
Born blue, but good tone,

Cry within a few seconds of delivery,

Heart rate ~ 120 – 150 /min,

Will become rapidly pink during the first ~90 sec.





~3.5 Kg

Dry & Wrap up

Face mask ventilation:

40/min Head in Neutral

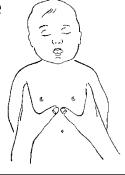
Position. (Chin lift / jaw thrust) Initially 5 inflation breaths (each sustained for 2-3

compressions: Depth: 1/3 rd chest

seconds)

Ratio: 3:1

Rate: 120 /min. Just below nipple Line



Endotracheal

Tube (ETT): 3.5 mm

(2.5+3.0)in prems)

NB: The outcome for a baby with no signs of life after 20 minutes of resuscitation is likely to be very poor. Discontinuation may be justified.

Umbilical arteries **DRUGS** iv, io, or uvc:

3.5 Kg

ACUTE AIRWAY OBSTRUCTION

Senior help needed (Anaesthetic/A&E)
Calm Environment.
Close Observation.

ADRENALINE(1:1000) (Neb) 1.4ml may repeat every 10 minutes BUDESONIDE (Neb):2mg

ANAPHYLAXIS

ADRENALINE(1:1000)(IM):0.03ml

consider repeat in 5 min.

If using auto injector syringe use 150mcgs

HYDROCORTISONE(IV/IO):25mg

CHLORPHENIRAMINE(IV/IO):0.9mg

do not use in neonates

(mix with 10 ml 0.9% .saline, give over 1 min.) IV Adrenaline 1microgram/Kg may be considered but **must** be discussed with Senior/Anaesthetics

WARM FLUID CHALLENGE

70 ml

(consider repeat dose)
Give in **35ml** aliquots in TRAUMA/CARDIAC

<u>DUCT-DEPENDANT CONGENITAL HEART</u> DISEASE

Alprostadil (Prostaglandin E2) (IV/IO)
Initial dose 17.5 nanograms (0.017mcg)/min may
be increased in 17.5 nanogram/min increments
up to 70 nanogram (0.07mcg) / min

Beware May Cause Apnoeas

SEPTICAEMIA

Significant volume expansion may be required, (Blood cultures, Bone, CRP, Coag, PCR, Glucose, Blood Gas)

May need ventilation & Inotropes, CEFOTAXIME(IV/IO): 175mg

ANALGESIA MORPHINE(IV/IO):0.3mg

HYPOGLYCAEMIA

10% DEXTROSE(IV/IO):7ml

Followed by an infusion of 0.9% Saline 5% Dextrose at maintenance volume; adjust dextrose content if required.

FITS/CONVULSIONS

Check Blood Sugar & Temperature

IV/IO access: LORAZEPAM(4mg/ml):0.3mg

Or DIAZEPAM (PR):1.75mg

Or BUCCAL MIDAZOLAM :1.75mg

Repeat after 10 minutes if no improvement PHENYTOIN (IV/IO):70mg over 20 minutes Consider PHENOBARBITONE (IV/IO) as an alternative: 70 mgs over 20 minutes Consider PARALDEHYDE (PR) 1.4ml mixed with

Call for anaesthetic help if still fitting when phenytoin is commenced

1.4ml olive oil

<u>Senior/ Specialist Supervision Required:</u>

Raised Intracranial Pressure:

20% Mannitol (IV/IO):**9ml** over 30 mins Or Hypertonic Saline 2.7% (IV/IO):**10ml**

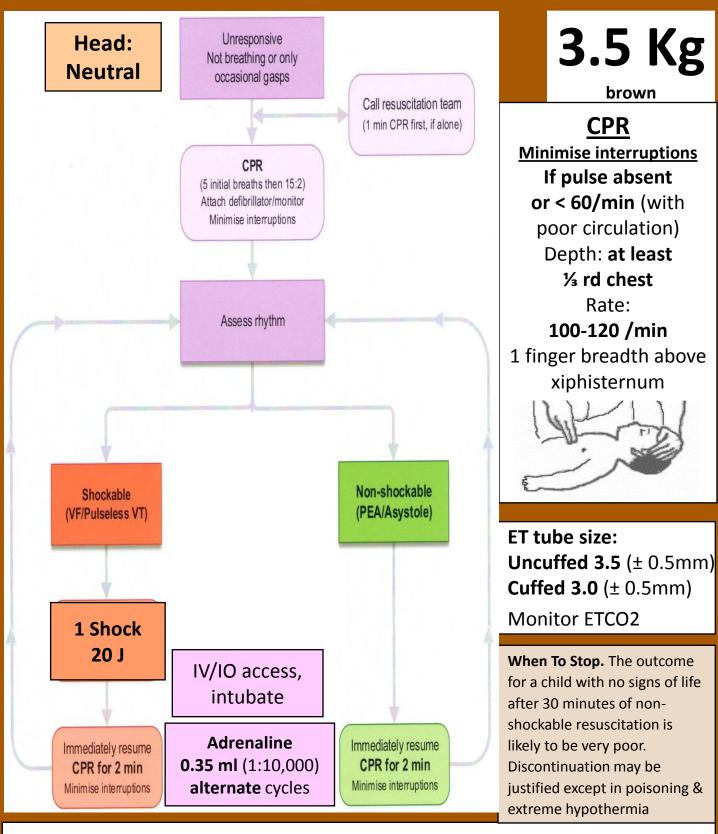
Tricyclic overdose with ECG changes:

8.4% Sodium Bicarbonate (IV/IO):3.5ml

SVT rate >220 Following vagal manoeuvres: Adenosine (3mg/ml) (IV/IO):**0.35mg** then **0.7mg**

then 1mg

VT with pulse: Amiodarone 17.5mgs over 20mins. Consider cardioversion if unstable: 4J, 4J, 8J



Consider **Amiodarone** (300mg/10ml): **0.6 ml** (after 3rd and 5th shock)

Consider **Bicarb** (8.4%): **3.5 ml** Consider **Fluid challenge**: **70 ml**

CORRECT REVERSIBLE CAUSES:

5 Kg

ACUTE AIRWAY OBSTRUCTION

Senior help needed (Anaesthetics/A&E)
Calm Environment.
Close Observation.
ADRENALINE(1:1000) (Neb) 2ml
may repeat every 10 minutes

BUDESONIDE (Neb):2mg

ANAPHYLAXIS

ADRENALINE(1:1000)(IM):0.05ml

consider repeat in 5 min.

If using auto injector syringe use 150mcgs

HYDROCORTISONE(IV/IO):25mg

CHLORPHENIRAMINE(IV/IO):1.25mg

do not use in neonates

(mix with 10 ml 0.9% .saline, give over 1 min.)

IV Adrenaline 1microgram/Kg may be considered but **must** be discussed with Senior/Anaesthetics

WARM FLUID CHALLENGE

100 ml

(consider repeat dose)
Give in **50ml** aliquots in TRAUMA/CARDIAC

DUCT-DEPENDANT CONGENITAL HEART DISEASE

Alprostadil (Prostaglandin E2) (IV/IO)
Initial dose 25 nanograms (0.025mcg)/min may
be increased in 25 nanogram/min increments
up to 100 nanogram (0.1mcg) /min
Beware May Cause Apnoeas

SEPTICAEMIA

Including? Meningococcal Sepsis,
Significant volume expansion may be required,
(Blood cultures, Bone, CRP, Coag, PCR, Glucose,
Blood Gas)

May need ventilation & Inotropes, **CEFOTAXIME**(IV/IO): **250mg**

ANALGESIA MORPHINE(IV/IO):0.5mg

HYPOGLYCAEMIA 10% DEXTROSE(IV/IO):10ml

Followed by an infusion of 0.9% Saline 5% Dextrose at maintenance volume; adjust dextrose content if required.

FITS/CONVULSIONS

Check Blood Sugar & Temperature

IV/IO access: LORAZEPAM(4mg/ml):0.5mg

Or DIAZEPAM (PR):2.5mg

Or BUCCAL MIDAZOLAM:2.5mg

Repeat after 10 minutes if no improvement PHENYTOIN (IV/IO):100mg over 20 minutes Consider PARALDEHYDE (PR) 2ml mixed with 2ml olive oil

Call for anaesthetic help if still fitting when phenytoin is commenced

<u>Senior/ Specialist Supervision Required:</u>

Raised Intracranial Pressure:

20% Mannitol (IV/IO):**12.5ml** over 30 mins Or Hypertonic Saline 2.7% (IV/IO):**15ml**

Tricyclic overdose with ECG changes:

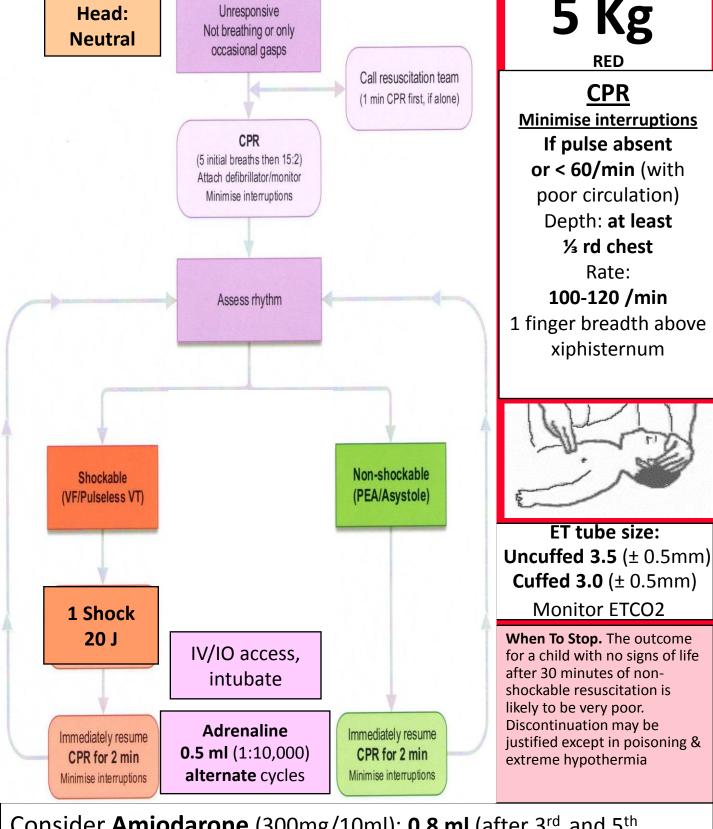
8.4% Sodium Bicarbonate (IV/IO):5ml

SVT rate >220 Following vagal manoeuvres:

Adenosine (3mg/ml) (IV/IO):0.5mg then 1mg then

1.5mg

VT with pulse: Amiodarone 25mgs over 20mins. Consider cardioversion if unstable: 5J, 5J, 10J



Consider **Amiodarone** (300mg/10ml): **0.8 ml** (after 3^{rd} and 5^{th} shock)

Consider **Bicarb** (8.4%): **5 ml**

Consider Fluid challenge: 100 ml

CORRECT REVERSIBLE CAUSES:

7.5 Kg

ACUTE AIRWAY OBSTRUCTION

Senior help needed (Anaesthetics/A&E)
Calm Environment.
Close Observation.
ADRENALINE(1:1000) (Neb):3ml
may repeat every 10 minutes
BUDESONIDE (Neb):2mg

WHEEZE

SALBUTAMOL (Neb):2.5mg
IPRATROPIUM (Neb):125mcg
PREDNISOLONE (Oral):15mg
HYDROCORTISONE (IV/IO):30mg
AMINOPHYLLINE(IV/IO):38mg
(over 20 minutes as a loading dose)
SALBUTAMOL (IV/IO):37.5mcg
over 10 mins loading dose
MAGNESIUM (IV/IO):300mg
over 20 minutes
May need ventilation,

ANAPHYLAXIS ADRENALINE(1:1000)(IM):0.075 ml

If life threatening contact Anaesthetist

consider repeat in 5 min.
using auto injector syringe use **150mcgs HYDROCORTISONE**(IV/IO):**25mg CHLORPHENIRAMINE**(IV/IO):**2.5mg**

(mix with 10 ml 0.9% saline, give over 1 min.)

IV Adrenaline 1microgram/Kg may be considered but **must** be discussed with Senior/Anaesthetics

WARM FLUID CHALLENGE

150 ml

(consider repeat dose)
Give in **75ml** aliquots in TRAUMA/CARDIAC

SEPTICAEMIA

Including? Meningoccocal Sepsis,
Significant volume expansion may be required,
(Blood cultures, Bone, CRP, Coag, PCR,
Glucose, Blood Gas)
May need ventilation & Inotropes,
CEFOTAXIME(IV/IO):375mg

ANALGESIA MORPHINE(IV/IO):0.75 mg

HYPOGLYCAEMIA

10% DEXTROSE(IV/IO):15ml
Followed by an infusion of 0.9% Saline 5% Dextrose

at maintenance volume; adjust dextrose content if required.

FITS/CONVULSIONS

Check Blood Sugar & Temperature

IV/IO access: LORAZEPAM(4mg/ml):0.75mg

Or DIAZEPAM (PR):3.75mg

Or BUCCAL MIDAZOLAM:3.75mg

Repeat after 10 minutes if no improvement PHENYTOIN (IV/IO):150mg over 20 minutes Consider PARALDEHYDE (PR) 3ml mixed with 3ml olive oil

Call for anaesthetic help if still fitting when phenytoin is commenced

Senior/ Specialist Supervision Required: Raised Intracranial Pressure:

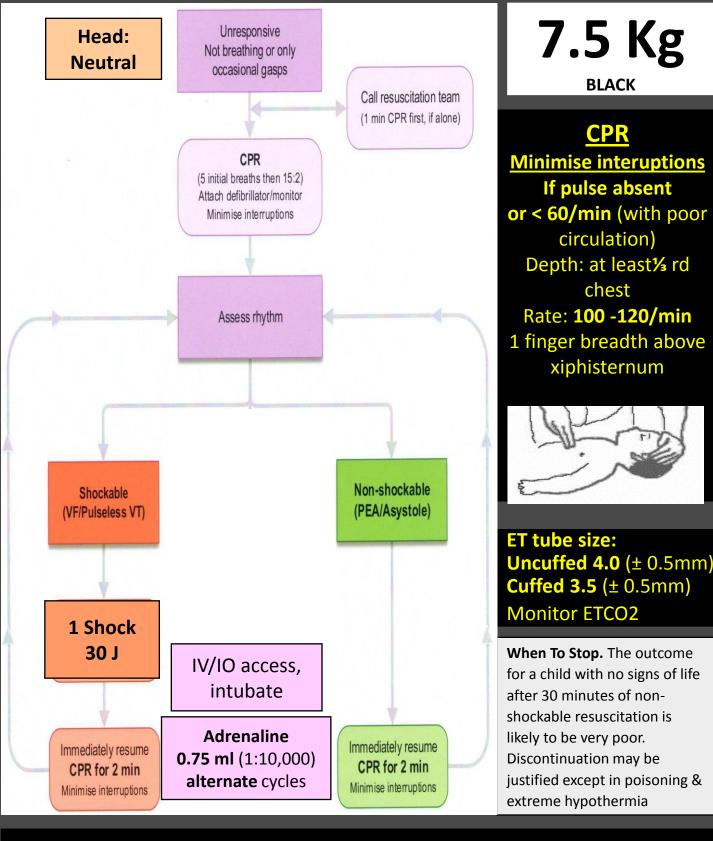
20% Mannitol (IV/IO):**19ml** over 30 mins Or Hypertonic Saline 2.7% (IV/IO):**22.5ml Tricyclic overdose with ECG changes:**

8.4% Sodium Bicarbonate (IV/IO):**7.5ml SVT rate >220** Following vagal manoeuvres:

Adenosine (3mg/ml) (IV/IO):0.75mg then 1.5mg then

2.25mg

VT with pulse: Amiodarone 37.5mgs over 20mins. Consider cardioversion if unstable: 8J, 8J, 16J



Consider Amiodarone (300mg/10ml): 1.2 ml (after 3rd and 5th shock)

Consider **Bicarb** (8.4%): **7.5 ml**

Consider Fluid challenge: 150 ml

CORRECT REVERSIBLE CAUSES:

10 Kg PURPLE

ACUTE AIRWAY OBSTRUCTION

Senior help needed (Anaesthetic/A&E) Calm Environment. Close Observation. ADRENALINE(1:1000) (Neb):4ml may repeat every 10 minutes

BUDESONIDE (Neb):2mg

SEPTICAEMIA

Including? Meningococcal Sepsis, Significant volume expansion required, (Blood cultures, Bone, CRP, Coag, PCR, Glucose, Blood Gas) May need ventilation & Inotropes, CEFOTAXIME(IV/IO):500mg

ANALGESIA MORPHINE(IV/IO):1mg

WHEEZE

SALBUTAMOL (Neb):2.5mg IPRATROPIUM (Neb):125mcg PREDNISOLONE (Oral):20mg HYDROCORTISONE (IV/IO):40mg AMINOPHYLLINE(IV/IO):50mg (over 20 minutes as a loading dose) SALBUTAMOL (IV/IO): 50mcg over 10 mins loading dose MAGNESIUM (IV/IO):400mg over 20 minutes May need ventilation, If life threatening contact Anaesthetist

HYPOGLYCAEMIA

10% DEXTROSE(IV/IO):20ml Followed by an infusion of 0.9% Saline 5% Dextrose at maintenance volume; adjust dextrose content if required.

ANAPHYLAXIS

ADRENALINE(1:1000)(im):0.1ml consider repeat in 5 min.

If using auto injector syringe use **150mcg**s HYDROCORTISONE(iv/io):50mg

CHLORPHENIRAMINE(iv/io):2.5mg

(mix with 10 ml 0.9% saline, give over 1 min.) IV Adrenaline 1microgram/Kg may be considered but must be discussed with Senior/Anaesthetics

FITS/CONVULSIONS

Check Blood Sugar & Temperature IV/IO access: LORAZEPAM(4mg/ml):1mg Or DIAZEPAM (PR):5mg Or BUCCAL MIDAZOLAM:5mg

Repeat after 10 minutes if no improvement PHENYTOIN (IV/IO):200mg over 20 minutes Consider PARALDEHYDE (PR) 4ml mixed with 4ml olive oil

Call for anaesthetic help if still fitting when phenytoin is commenced

WARM FLUID CHALLENGE

200 ml

(consider repeat dose) Give in 100ml aliquots in TRAUMA/CARDIAC

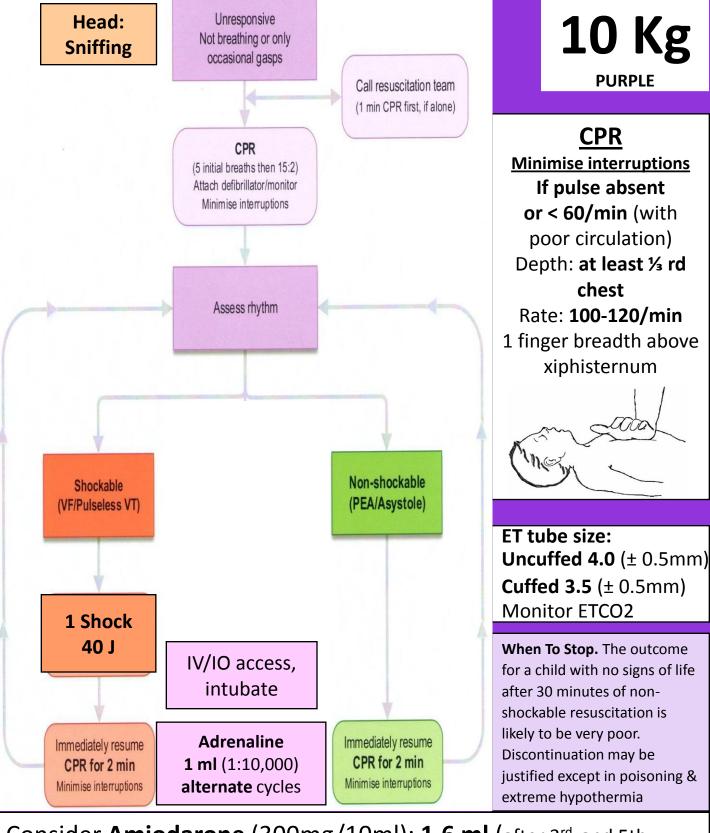
Senior/ Specialist Supervision Required: **Raised Intracranial Pressure:**

20% Mannitol (IV/IO):25ml over 30 mins Or Hypertonic Saline 2.7% (IV/IO): 30ml **Tricyclic overdose with ECG changes:**

8.4% Sodium Bicarbonate (IV/IO):10ml **SVT rate >220** Following vagal manoeuvres:

Adenosine (3mg/ml) (IV/IO): 1mg then 2mg then

VT with pulse: Amiodarone 50mgs over 20mins. Consider cardioversion if unstable: 10J, 20J, 20J



Consider **Amiodarone** (300mg/10ml): **1.6 ml** (after 3rd and 5th shock)

Consider **Bicarb** (8.4%): **10 ml**

Consider Fluid challenge: 200 ml

CORRECT REVERSIBLE CAUSES:

15 Kg

ACUTE AIRWAY OBSTRUCTION

Senior help needed (Anaesthetics/A&E)
Calm Environment.
Close Observation.
ADRENALINE(1:1000) (Neb):5ml
may repeat every 10 minutes

BUDESONIDE (Neb):2mg

WHEEZE

SALBUTAMOL (Neb):2.5mg
IPRATROPIUM (Neb):250mcg
PREDNISOLONE (Oral):30mg
HYDROCORTISONE (IV/IO):60mg
AMINOPHYLLINE(IV/IO):75mg
(over 20 minutes as a loading dose)
SALBUTAMOL (IV/IO):225mcg
over 10 mins loading dose
MAGNESIUM (IV/IO):600mg
over 20 minutes
May need ventilation,

ANAPHYLAXIS ADRENALINE(1:1000)(IM):0.15ml

If life threatening contact Anaesthetist

consider repeat in 5 min.

If using auto injector syringe use **150mcg**s **HYDROCORTISONE**(IV/IO):**50mg CHLORPHENIRAMINE**(IV/IO):**2.5mg**(mix with 10 ml 0.9% saline, give over 1 min.)

IV Adrenaline 1microgram/Kg may be considered but **must** be discussed with Senior/Anaesthetics

WARM FLUID CHALLENGE

300 ml

(consider repeat dose)
Give in **150ml** aliquots in TRAUMA/CARDIAC

SEPTICAEMIA

Including? Meningococcal Sepsis,
Significant volume expansion required,
(Blood cultures, Bone, CRP, Coag, PCR,
Glucose, Blood Gas)
May need ventilation & Inotropes,
CEFOTAXIME(IV/IO):750mg

ANALGESIA

MORPHINE(IV/IO):1.5mg

HYPOGLYCAEMIA

10% DEXTROSE(IV/IO):30ml

Followed by an infusion of 0.9% Saline 5% Dextrose at maintenance volume; adjust dextrose content if required.

FITS/CONVULSIONS

Check Blood Sugar & Temperature
IV/IO access: LORAZEPAM(4mg/ml):1.5mg
Or DIAZEPAM (PR):7.5mg
Or BUCCAL MIDAZOLAM:7.5mg

Repeat after 10 minutes if no improvement **PHENYTOIN** (IV/IO): **300mg** over 20 minutes Consider **PARALDEHYDE** (PR) **6ml** mixed with **6ml** olive oil

Call for anaesthetic help if still fitting when phenytoin is commenced

Senior/ Specialist Supervision Required:

Raised Intracranial Pressure:

20% Mannitol (IV/IO):**38ml** over 30 mins Or Hypertonic Saline 2.7% (IV/IO):**45ml Tricyclic overdose with ECG changes:**

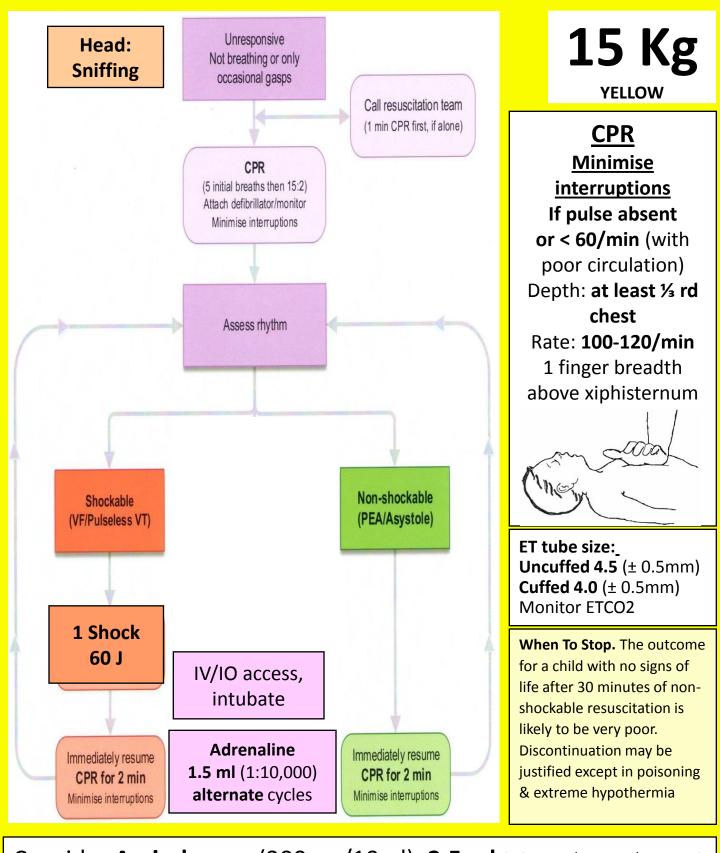
8.4% Sodium Bicarbonate (IV/IO):**15ml**

SVT rate >220 Following vagal manoeuvres:

Adenosine (3mg/ml) (IV/IO):**1.5mg** then **3mg** then

4.5mg

VT with pulse: Amiodarone 75mgs over 20mins. Consider cardioversion if unstable: 15J, 15J, 30J



Consider Amiodarone (300mg/10ml): **2.5 ml** (after 3rd and 5th shock)

Consider **Bicarb** (8.4%): **15 ml**

Consider Fluid challenge: 300 ml

CORRECT REVERSIBLE CAUSES:

20 Kg

ACUTE AIRWAY OBSTRUCTION

Senior help needed (Anaesthetics/A&E)
Calm Environment.
Close Observation.

ADRENALINE(1:1000) (Neb):5ml may repeat every 10 minutes BUDESONIDE (Neb):2mg

WHEEZE

SALBUTAMOL (Neb):5mg
IPRATROPIUM (Neb):250mcg
PREDNISOLONE (Oral):40mg
HYDROCORTISONE (IV/IO):80mg
AMINOPHYLLINE(IV/IO):100mg
(over 20 minutes as a loading dose)
SALBUTAMOL (IV/IO):250mcg

over 10 mins loading dose

MAGNESIUM (IV/IO):800mg

over 20 minutes

May need ventilation,

If life threatening contact Anaesthetist

ANAPHYLAXIS

ADRENALINE(1:1000)(IM):0.2ml consider repeat in 5 min.

If using auto injector syringe use **150mcg**s

HYDROCORTISONE(iv/io):50mg CHLORPHENIRAMINE(iv/io):2.5mg

(mix with 10 ml 0.9% saline, give over 1 min.)

IV Adrenaline 1microgram/Kg may be considered but **must** be discussed with Senior/Anaesthetics

WARM FLUID CHALLENGE

400 ml

(consider repeat dose)
Give in **200ml** aliquots in TRAUMA/CARDIAC

SEPTICAEMIA

Including? Meningococcal Sepsis,
Significant volume expansion required,
(Blood cultures, Bone, CRP, Coag, PCR,
Glucose, Blood Gas)
May need ventilation & Inotropes,
CEFOTAXIME(IV/IO):1g

ANALGESIA MORPHINE(IV/IO):2mg

HYPOGLYCAEMIA

10% DEXTROSE(IV/IO):40ml

Followed by an infusion of 0.9% Saline 5% Dextrose at maintenance volume; adjust dextrose content if required.

FITS/CONVULSIONS

Check Blood Sugar & Temperature
IV/IO access: LORAZEPAM(4mg/ml):2mg
Or DIAZEPAM (PR):10mg
Or BUCCAL MIDAZOLAM:10mg

Repeat after 10 minutes if no improvement **PHENYTOIN** (IV/IO):**400mg** over 20 minutes Consider **PARALDEHYDE** (PR) **8ml** mixed with

8ml olive oil

Call for anaesthetic help if still fitting when phenytoin is commenced

Senior/ Specialist Supervision Required:

Raised Intracranial Pressure:

20% Mannitol (IV/IO):**50ml** over 30 mins Or Hypertonic Saline 2.7% (IV/IO):**60ml**

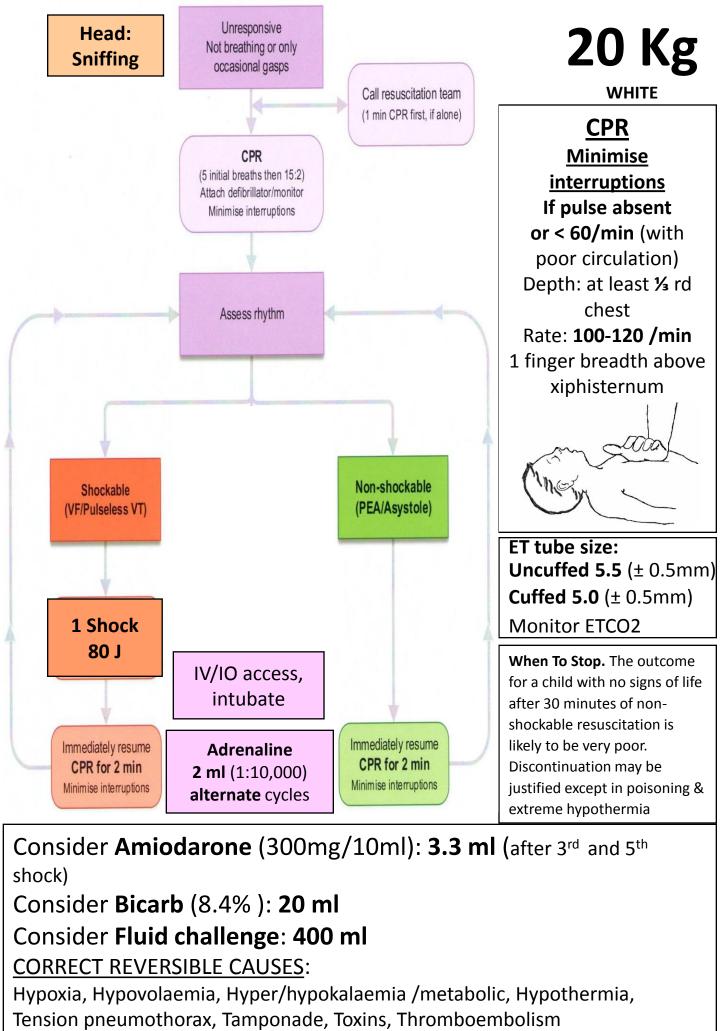
Tricyclic overdose with ECG changes:

8.4% Sodium Bicarbonate (IV/IO):**20ml SVT rate >220** Following vagal manoeuvres:

Adenosine (3mg/ml) (IV/IO): 2mg then 4mg then

6mg

VT with pulse: Amiodarone 100mgs over 20mins. Consider cardioversion if unstable: 20J, 40J, 0J



25 Kg

ACUTE AIRWAY OBSTRUCTION

Senior help needed (Anaesthetics/A&E)
Calm Environment.
Close Observation.
ADRENALINE(1:1000) (Neb):5ml
may repeat every 10 minutes

BUDESONIDE (Neb):2mg

SEPTICAEMIA

Including? Meningococcal Sepsis,
Significant volume expansion required,
(Blood cultures, Bone, CRP, Coag, PCR,
Glucose, Blood Gas)
May need ventilation & Inotropes,
CEFOTAXIME(IV/IO):1.25g

ANALGESIA

MORPHINE(IV/IO):2.5mg

WHEEZE

SALBUTAMOL (Neb):5mg
IPRATROPIUM (Neb):250mcg
PREDNISOLONE (Oral):40mg
HYDROCORTISONE (IV/IO): 100mg
AMINOPHYLLINE(IV/IO):125mg
(over 20 minutes as a loading dose)
SALBUTAMOL (IV/IO): 250mcg
over 10 mins loading dose
MAGNESIUM (IV/IO):1g
over 20 minutes
May need ventilation,
If life threatening contact Anaesthetist

HYPOGLYCAEMIA

10% DEXTROSE(IV/IO):**50ml**Followed by an infusion of 0.9% Saline 5% Dextrose at maintenance volume; adjust dextrose content if required.

ANAPHYLAXIS ADRENALINE(1:1000)(IM):0.25ml

consider repeat in 5 min.

If using auto injector syringe use **300mcg**s **HYDROCORTISONE**(IV/IO):**100mg CHLORPHENIRAMINE**(IV/IO):**5mg**(mix with 10 ml 0.9% saline, give over 1 min.)

IV Adrenaline 1microgram/Kg may be considered

FITS/CONVULSIONS

Check Blood Sugar & Temperature
IV/IO access: LORAZEPAM(4mg/ml):2.5mg
Or DIAZEPAM (PR):10mg
Or BUCCAL MIDAZOLAM :10mg

Repeat after 10 minutes if no improvement **PHENYTOIN** (IV/IO):**500mg** over 20 minutes Consider **PARALDEHYDE** (PR) **10ml** mixed with **10ml** olive oil

Call for anaesthetic help if still fitting when phenytoin is commenced

WARM FLUID CHALLENGE

but must be discussed with Senior/Anaesthetics

500 ml

(consider repeat dose)
Give in **250ml** aliquots in TRAUMA/CARDIAC

Senior/ Specialist Supervision Required:

Raised Intracranial Pressure:

20% Mannitol (IV/IO):**62ml** over 30 mins Or Hypertonic Saline 2.7% (IV/IO):**75ml**

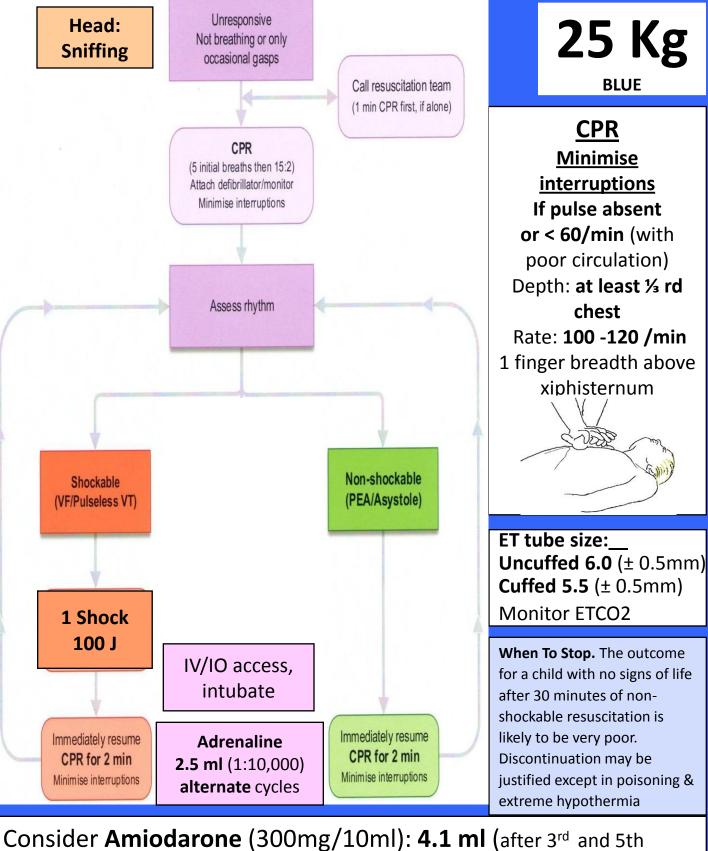
Tricyclic overdose with ECG changes:

8.4% Sodium Bicarbonate (IV/IO):**25ml SVT rate >220** Following vagal manoeuvres:

Adenosine (3mg/ml) (IV/IO): 2.5mg then 5mg then

7.5mg

VT with pulse: Amiodarone 125mgs over 20mins. Consider cardioversion if unstable: 25J, 25J, 50J



justified except in poisoning & extreme hypothermia

shock) Consider **Bicarb** (8.4%): **25 ml**

Consider Fluid challenge: 500 ml

CORRECT REVERSIBLE CAUSES:

30 Kg

ORANGE

ACUTE AIRWAY OBSTRUCTION

Senior help needed (Anaesthetics/A&E) Calm Environment. Close Observation. ADRENALINE(1:1000) (Neb):5ml may repeat every 10 minutes

BUDESONIDE (Neb):2mg

WHEEZE SALBUTAMOL (Neb):5mg

IPRATROPIUM (Neb):250mcg PREDNISOLONE (Oral):40mg HYDROCORTISONE (IV/IO):100mg AMINOPHYLLINE(IV/IO):150mg (over 20 minutes as a loading dose) SALBUTAMOL (IV/IO): 250mcg over 10 mins loading dose MAGNESIUM (IV/IO):1.2g over 20 minutes May need ventilation,

ANAPHYLAXIS

If life threatening contact Anaesthetist

ADRENALINE(1:1000)(IM):0.3ml

in 1 ml syringe with 22 G needle consider repeat in 5 min.

If using auto injector syringe use **300mcg**s

HYDROCORTISONE(IV/IO):100mg CHLORPHENIRAMINE(IV/IO):5mg

(mix with 10 ml 0.9% saline, give over 1 min.) IV Adrenaline 1microgram/Kg may be considered but **must** be discussed with Senior/Anaesthetics

WARM FLUID CHALLENGE

600ml

Give in 300ml aliquots in TRAUMA/CARDIAC

SEPTICAEMIA

Including? Meningococcal Sepsis, Significant volume expansion required, (Blood cultures, Bone, CRP, Coag, PCR, Glucose, Blood Gas) May need ventilation & Inotropes, CEFOTAXIME(IV/IO):1.5g

ANALGESIA MORPHINE(IV/IO):3mg

HYPOGLYCAEMIA

10% DEXTROSE(IV/IO):60ml

Followed by an infusion of 0.9% Saline 5% Dextrose at maintenance volume; adjust dextrose content if required.

FITS/CONVULSIONS

Check Blood Sugar & Temperature IV/IO access: LORAZEPAM(4mg/ml):3mg Or DIAZEPAM (PR):10mg Or BUCCAL MIDAZOLAM:10mg

Repeat after 10 minutes if no improvement PHENYTOIN (IV/IO):600mg over 20 minutes Consider PARALDEHYDE (PR) 10ml mixed with

10ml olive oil

Call for anaesthetic help if still fitting when phenytoin is commenced

Senior/ Specialist Supervision Required:

Raised Intracranial Pressure:

20% Mannitol (IV/IO):75ml over 30 mins Or Hypertonic Saline 2.7% (IV/IO):90ml

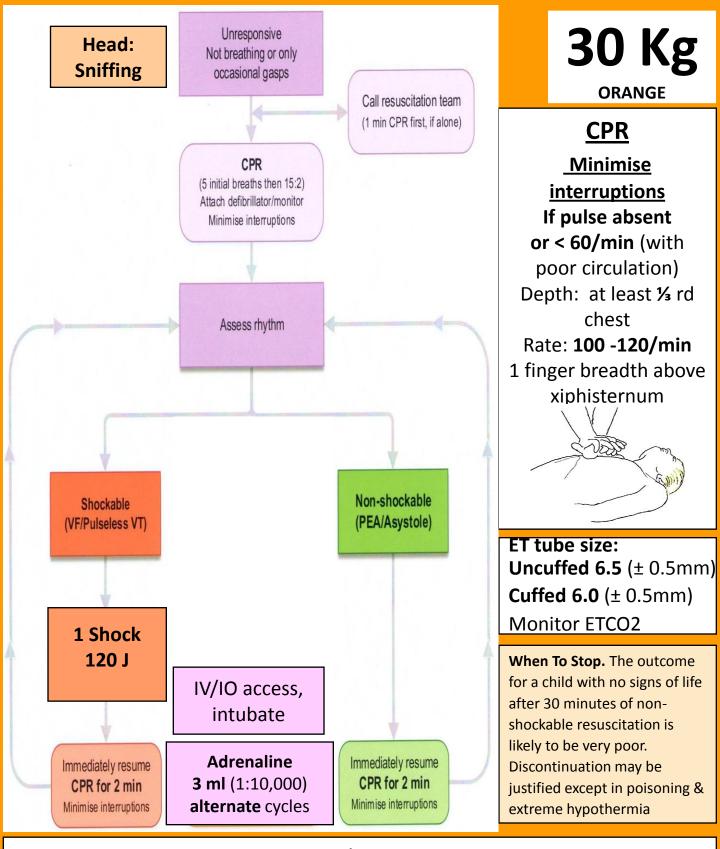
Tricyclic overdose with ECG changes:

8.4% Sodium Bicarbonate (IV/IO):30ml

SVT rate >220 Following vagal manoeuvres:

Adenosine (3mg/ml) (IV/IO): 3mg then 6mg then 9mg

VT with pulse: Amiodarone 150mgs over 20mins. Consider cardioversion if unstable: 30J, 60J, 60J



Consider Amiodarone (300mg/10ml): 5 ml (after 3rd and 5th shock)

Consider **Bicarb** (8.4%): **30 ml**

Consider Fluid challenge: 600 ml

CORRECT REVERSIBLE CAUSES:

35 Kg

GREEN

ACUTE AIRWAY OBSTRUCTION

Senior help needed (Anaesthetics/A&E)
Calm Environment.
Close Observation.
ADRENALINE(1:1000) (Neb):5ml

may repeat every 10 minutes **BUDESONIDE** (Neb):**2mg**

WHEEZE

SALBUTAMOL (Neb):5mg
IPRATROPIUM (Neb):250mcg
PREDNISOLONE (Oral):40mg
HYDROCORTISONE (IV/IO):100mg
AMINOPHYLLINE(IV/IO):175mg
(over 20 minutes as a loading dose)
SALBUTAMOL (IV/IO): 250mcg
over 10 mins loading dose
MAGNESIUM (IV/IO):1.4g
over 20 minutes
May need ventilation,
If life threatening contact Anaesthetist

ANAPHYLAXIS

ADRENALINE(1:1000)(IM):0.35ml

consider repeat in 5 min.

If using auto injector syringe use **300mcg**s

HYDROCORTISONE(IV/IO):100mg CHLORPHENIRAMINE(IV/IO):5mg

(mix with 10 ml 0.9% saline, give over 1 min.) IV Adrenaline 1microgram/Kg may be considered but **must** be discussed with Senior/Anaesthetics

WARM FLUID CHALLENGE

700 ml

Give in 350ml aliquots in TRAUMA/CARDIAC

SEPTICAEMIA

Including? Meningococcal Sepsis,
Significant volume expansion required,
(Blood cultures, Bone, CRP, Coag, PCR,
Glucose, Blood Gas)
May need ventilation & Inotropes,
CEFOTAXIME(IV/IO):1.75g

<u>ANALGESIA</u>

MORPHINE(IV/IO):3.5mg

HYPOGLYCAEMIA

10% DEXTROSE(IV/IO):70ml

Followed by an infusion of 0.9% Saline 5% Dextrose at maintenance volume; adjust dextrose content if required.

FITS/CONVULSIONS

Check Blood Sugar & Temperature

IV/IO access: LORAZEPAM(4mg/ml):3.5mg

Or DIAZEPAM (PR):10mg

Or BUCCAL MIDAZOLAM:10mg

Repeat after 10 minutes if no improvement PHENYTOIN (IV/IO): 700mg over 20 minutes Consider PARALDEHYDE (PR) 10ml mixed with 10ml olive oil

Call for anaesthetic help if still fitting when phenytoin is commenced

<u>Senior/ Specialist Supervision Required:</u>

Raised Intracranial Pressure:

20% Mannitol (IV/IO):**88ml** over 30 mins Or Hypertonic Saline 2.7% (IV/IO):**105ml**

Tricyclic overdose with ECG changes:

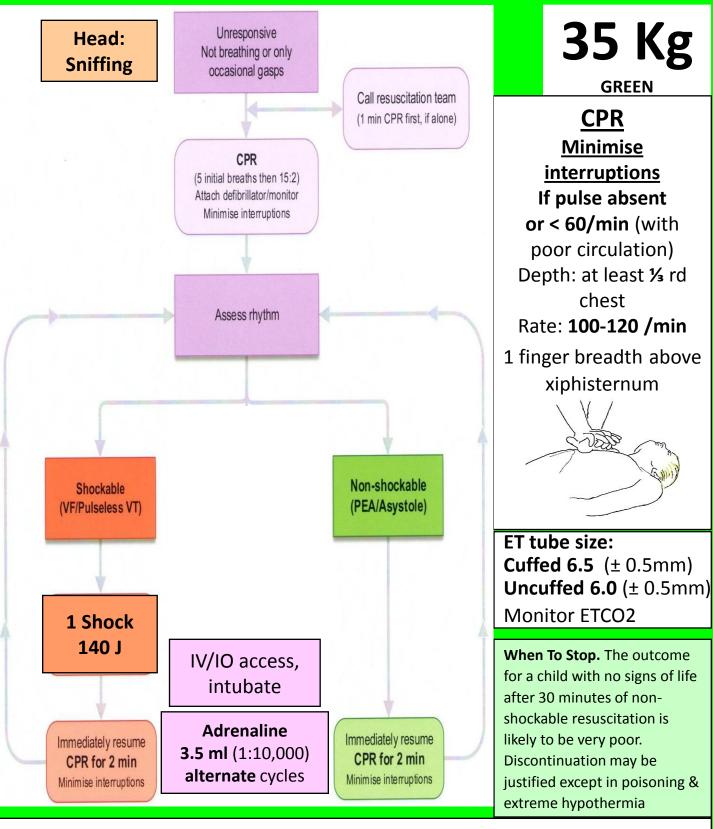
8.4% Sodium Bicarbonate (IV/IO):35ml

SVT rate >220 Following vagal manoeuvres:

Adenosine (3mg/ml) (IV/IO):**3.5mg** then **7mg** then

10.5mg

VT with pulse: Amiodarone 175mgs over 20mins. Consider cardioversion if unstable: 35J, 35J, 70J



Consider **Amiodarone** (300mg/10ml): **5.8 ml** (after 3rd and 5th shock)

Consider Bicarb (8.4%): 35 ml

Consider Fluid challenge: 700 ml

CORRECT REVERSIBLE CAUSES:

40 Kg

GREY

ACUTE AIRWAY OBSTRUCTION

Senior help needed (Anaesthetics/A&E)
Calm Environment.
Close Observation.

ADRENALINE(1:1000) (Neb):5ml may repeat every 10 minutes BUDESONIDE (Neb):2mg

SEPTICAEMIA

Including? Meningococcal Sepsis,
Significant volume expansion required,
(Blood cultures, Bone, CRP, Coag, PCR,
Glucose, Blood Gas)
May need ventilation & Inotropes,
CEFOTAXIME(IV/IO):2g

ANALGESIA

MORPHINE(IV/IO):4mg

WHEEZE

SALBUTAMOL (Neb):5mg
IPRATROPIUM (Neb):250mcg
PREDNISOLONE (Oral):40mg
HYDROCORTISONE (IV/IO):100mg
AMINOPHYLLINE(IV/IO):200mg
(over 20 minutes as a loading dose)
SALBUTAMOL (IV/IO):250mcg

over 10 mins loading dose

MAGNESIUM (IV/IO):1.6g

over 20 minutes

May need ventilation,

If life threatening contact Anaesthetist

<u>ANAPHYLAXIS</u>

ADRENALINE(1:1000)(IM):0.4ml

consider repeat in 5 min.

If using auto injector syringe use **300mcg**s **HYDROCORTISONE**(IV/IO):**100mg**

CHLORPHENIRAMINE(IV/IO):5mg

(mix with 10 ml 0.9% saline, give over 1 min.)

IV Adrenaline 1microgram/Kg may be considered but **must** be discussed with Senior/Anaesthetics

WARM FLUID CHALLENGE

800 ml

Give in 400ml aliquots in TRAUMA/CARDIAC

HYPOGLYCAEMIA

10% DEXTROSE(IV/IO):80ml

Followed by an infusion of 0.9% Saline 5% Dextrose at maintenance volume; adjust dextrose content if required.

FITS/CONVULSIONS

Check Blood Sugar & Temperature

IV/IO access: LORAZEPAM(4mg/ml):4mg

Or DIAZEPAM (PR):10mg

Or BUCCAL MIDAZOLAM:10mg

Repeat after 10 minutes if no improvement **PHENYTOIN** (IV/IO):**800mg** over 20 minutes Consider **PARALDEHYDE** (PR) **10ml** mixed with

10ml olive oil

Call for anaesthetic help if still fitting when phenytoin is commenced

Senior/ Specialist Supervision Required:

Raised Intracranial Pressure:

20% Mannitol (IV/IO):**100ml** over 30 mins Or Hypertonic Saline 2.7% (IV/IO):**120ml**

Tricyclic overdose with ECG changes:

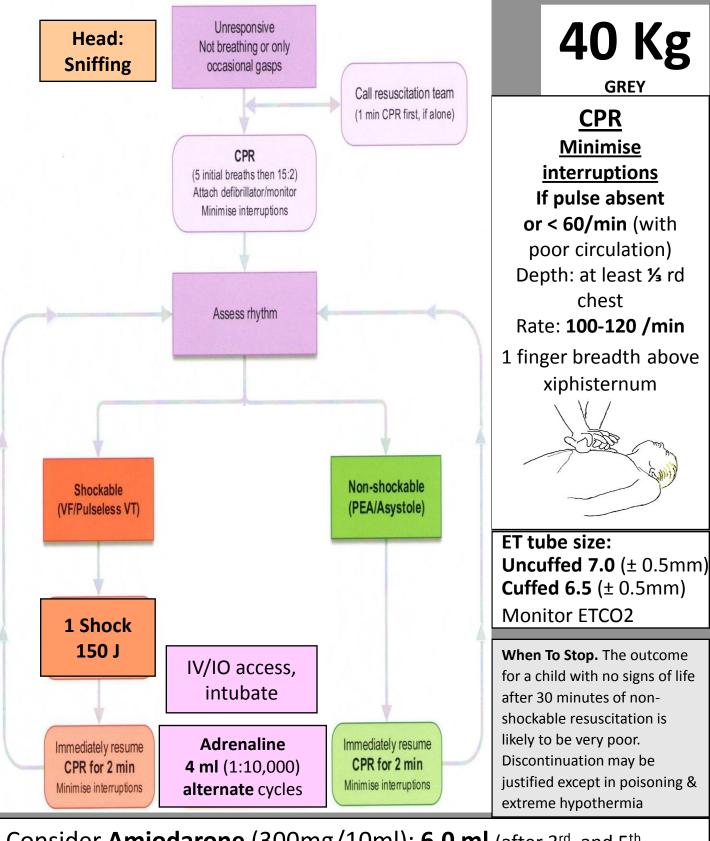
8.4% Sodium Bicarbonate (IV/IO):40ml

SVT rate >220 Following vagal manoeuvres:

Adenosine (3mg/ml) (IV/IO):4mg then 8mg then

12mg

VT with pulse: Amiodarone 200mgs over 20mins. Consider cardioversion if unstable: 40J, 80J, 80J



Consider **Amiodarone** (300mg/10ml): **6.0 ml** (after 3rd and 5th shock)

Consider Bicarb (8.4%): 40 ml

Consider Fluid challenge: 800 ml

CORRECT REVERSIBLE CAUSES:

45 Kg

ACUTE AIRWAY OBSTRUCTION

Senior help needed (Anaesthetics/A&E)
Calm Environment.
Close Observation.
ADRENALINE(1:1000) (Neb):5ml

may repeat every 10 minutes

BUDESONIDE (Neb):2mg

WHEEZE

SALBUTAMOL (Neb):5mg
IPRATROPIUM (Neb):250mcg
PREDNISOLONE (Oral):40mg
HYDROCORTISONE (IV/IO):100mg
AMINOPHYLLINE(IV/IO):225mg
(over 20 minutes as a loading dose)
SALBUTAMOL (IV/IO):250mcg

over 10 mins loading dose

MAGNESIUM (IV/IO):1.8g

over 20 minutes

May need ventilation,

If life threatening contact Anaesthetist

ANAPHYLAXIS

ADRENALINE(1:1000)(IM):0.45ml

consider repeat in 5 min.

HYDROCORTISONE(IV/IO):200mg CHLORPHENIRAMINE(IV/IO):10mg

(mix with 10 ml 0.9% saline, give over 1 min.) IV Adrenaline 1microgram/Kg may be considered but **must** be discussed with Senior/Anaesthetics

WARM FLUID CHALLENGE 900 ml

Give in 450ml aliquots in TRAUMA/CARDIAC

SEPTICAEMIA

Including? Meningococcal Sepsis,
Significant volume expansion required,
(Blood cultures, Bone, CRP, Coag, PCR,
Glucose, Blood Gas)
May need ventilation & Inotropes,
CEFOTAXIME(IV/IO):2g

<u>ANALGESIA</u>

MORPHINE(IV/IO):4.5mg

HYPOGLYCAEMIA

10% DEXTROSE(IV/IO):90ml

Followed by an infusion of 0.9% Saline 5% Dextrose at maintenance volume; adjust dextrose content if required.

FITS/CONVULSIONS

Check Blood Sugar & Temperature
IV/IO access: LORAZEPAM(4mg/ml):4mg
Or DIAZEPAM (PR):10mg

Or BUCCAL MIDAZOLAM:10mg

Repeat after 10 minutes if no improvement PHENYTOIN (IV/IO): 900mg over 20 minutes Consider PARALDEHYDE (PR) 10ml mixed with 10ml olive oil

Call for anaesthetic help if still fitting when phenytoin is commenced

Senior/ Specialist Supervision Required:

Raised Intracranial Pressure:

20% Mannitol (IV/IO):**113ml** over 30 mins Or Hypertonic Saline 2.7% (IV/IO):**135ml**

Tricyclic overdose with ECG changes:

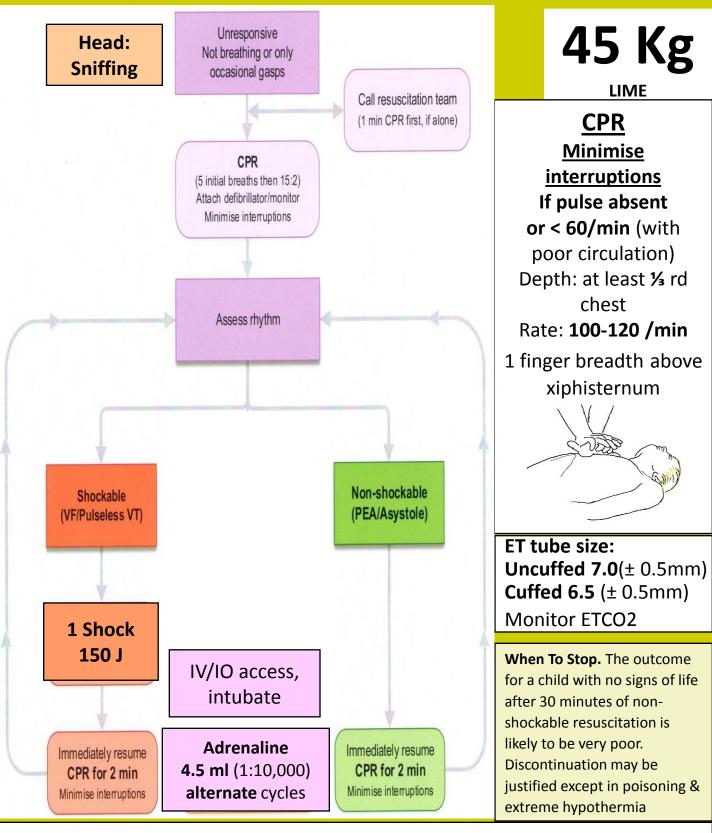
8.4% Sodium Bicarbonate (IV/IO):45ml

SVT rate >220 Following vagal manoeuvres:

Adenosine (3mg/ml) (IV/IO):**4.5mg** then **9mg** then

13.5mg

VT with pulse: Amiodarone 225mgs over 20mins. Consider cardioversion if unstable: 45J, 90J, 90J



Consider **Amiodarone** (300mg/10ml): **8.0 ml** (after 3rd and 5th shock)

Consider **Bicarb** (8.4%): **45 ml**

Consider Fluid challenge: 900 ml

CORRECT REVERSIBLE CAUSES:

Other Useful Drugs and Information

INFUSIONS:

Dopamine*:

To make standard solution: 15mg/kg in 50ml 5% dextrose

Concentration: 1ml/hr = 5 micrograms/kg/min

Dose Range: 5 – 20 micrograms/kg/min

Dobutamine*:

To make standard solution: 15mg/kg in 50ml 5% dextrose

Concentration: 1 ml/hr = 5 micrograms/kg/min

Dose Range: 5 – 20 micrograms/kg/min

Adrenaline:

To make standard solution: 0.3mg/kg in 50ml 5% dextrose

Concentration: 1 ml/hr = 0.1 micrograms/kg/min

Dose Range: 0.1 - 4 micrograms/kg/min

Noradrenaline:

To make standard solution: 0.3mg/kg in 50ml 5% dextrose

Concentration: 1 ml/hr = 0.1 micrograms/kg/min

Dose Range: 0.1 - 4 micrograms/kg/min

Morphine*:

To make standard solution: 1mg/kg in 50ml 5% dextrose

Concentration: 1 ml/hr = 20 micrograms/kg/hr

Dose Range: 10 - 40 micrograms/kg/hr

Midazolam*:

To make standard solution: 3mg/kg in 50ml 5% dextrose

Concentration: 1 ml/hr = 1 micrograms/kg/min

Dose Range: 1 - 4 micrograms/kg/min

*To be doubled for infants less than 10kg.

Use 0.9% Saline rather than 5% Dextrose to mix infusions in head injury / meningitis / encephalitis / seizure.

Other Useful Drugs and Information (continued):

Alprostadil (Prostaglandin E2):

To make standard solution: 30micrograms/kg in 50ml 5% dextrose

Concentration: 1 ml/hr = 10 nanograms/kg/min

Dose Range: 5 - 20 nanograms/kg/min

Amiodarone:

Initial loading dose 5mg/kg over 20 minutes followed by infusion.

To make standard solution: 15mg/kg in 50ml 5% Dextrose

Concentration: 1ml/hr = 5micrograms/kg/min Dose Range: 5 – 15 micrograms/kg/min/hour

Aminophylline:

Initial loading dose of 5mg/kg (maximum 500mg) over at least 20 minutes followed by infusion.

To make standard solution: 1mg/ml solution in 5% Dextrose

Concentration: 1ml/kg/hr = 1mg/kg/hr

Dose Range: 0.5 – 1mg/kg/hr

Insulin for DKA:

0.05-0.1units/kg/hour

http://www.bsped.org.uk/clinical/docs/DKAcalculator.pdf

Calcium (for hyperkalaemia, hypocalcaemia and calcium channel blocker overdose):

0.3ml/kg of 10% Calcium Gluconate (i.e. 0.1mmol/kg Ca) to maximum of 4.5mmol (20ml) over 30 minutes **OR**

0.1mls/kg of 10% Calcium Chloride to a maximum of 4.5mmol (6.5mls) over 30 minutes.

Atropine (stat dose after vagal stimulation induced bradycardia): 20 micrograms/kg iv (minimum 100mcg to maximum 600mcg)
Birth – 1 month 15 micrograms/kg iv

GLASGOW COMA SCALE

SUITABLE FOR **UNDER 4 YEARS**

Best = 15, Worst = 3

RESPONSE	SCORE
EYE OPENING	
Spontaneously	4
To verbal stimuli	3
To pain	2
No response to pain	1
BEST MOTOR RESPONSE	
Spontaneous or obeys verbal command	6
Localises to pain or withdraws to touch	5
Withdraws to pain	4
Abdominal flexion to pain (decorticate)	3
Abnormal extension to pain (decerebrate)	2
No response to pain	1
BEST VERBAL RESPONSE	
Alert, babbles, coos, words to usual ability	5
Less than usual words/ spontaneous irritable co	ry 4
Cries only to pain	3
Moans to pain	2
No response to pain	1

GLASGOW COMA SCALE

SUITABLE FOR **4 YEARS AND OVER**

Best = 15, Worst = 3

RESPONSE	SCORE
EYE OPENING	
Spontaneously	4
To verbal stimuli	3
To pain	2
No response to pain	1
BEST MOTOR RESPONSE	
Obeys verbal command	6
Localises to pain	5
Withdraws from pain	4
Abnormal flexion to pain (decorticate)	3
Abnormal extension to pain (decerebrat	e) 2
No response to pain	1
BEST VERBAL RESPONSE	
Orientated and converses	5
Disorientated and converses	4
Inappropriate words	3
Incomprehensible sounds	2
No response to pain	1

Normal fluid requirements

Body weight	Fluid req / day (ml/kg)	Fluid req /hour (ml/kg)	
First 10 kg	100 4		
Second 10 kg	50 2		
Subsequent kilograms	20	1	

Normal Paediatric Ranges

Age (Years)	Heart Rate / min	Respiratory Rate / min	Systolic BP (mmHg)
<1	110 – 160	30 – 40	80 – 90
1 – 2	100 – 150	25 – 35	85 – 95
2 – 5	95 – 140	25 – 30	85 – 100
5 – 12	80 – 120	20 – 25	90 – 110
>12	60 - 100	15 - 20	100 - 120