

Ambulance Tasmania

Clinical Field Protocols for Volunteer Ambulance Officers (VAO)



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Clinical Field Protocols

for Volunteer Ambulance Officers (VAO)

April 2014

Ambulance Tasmania

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Ambulance Tasmania

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Ambulance Tasmania



Ambulance Tasmania aims to develop and implement Clinical Practice Guidelines, Clinical Field Protocols and supporting work instructions that promote and facilitate the delivery of effective pre-hospital care.

The Clinical Field Protocols for Volunteer Ambulance Officers (VAO) describe the level of patient care that can be provided by accredited volunteers. They are to be interpreted as positive instructions; if a protocol, procedure or action is not specified, it is prohibited

Foreword

The Ambulance Tasmania Clinical Field Protocols for Volunteer Ambulance Officers have undergone a major revision to ensure contemporary, evidence-based practice in an easy to read format.

This revised format incorporates a flow chart style, colour coding for individual management steps and follows the style adopted for the Ambulance Tasmania Clinical Practice Guidelines (CPG) for Paramedics and Intensive Care Paramedics which was originally developed by the Ambulance Victoria (AV) CPG Working Group with specialist advice from the AV Corporate Communications Department, and provided to Ambulance Tasmania (AT) for conceptualisation to AT practice. The design provides greater clarity within each guideline to assist clinical practice. The reformat highlights key details and decision pathways within each Field Protocol and is intended to reduce risk in clinical practice through an improved clarity of the VAO Field Protocols.

There is a new “language” associated with these field protocols that is illustrated in the Abbreviations / Colour Chart. It is based on contemporary designs in industry that highlight key information with colour-cognitive triggering, the intention being to remind the user of important details within the field protocol. For example, a red colour is to highlight an aspect of the Field Protocols that may place the patient at risk or requires an immediate intervention prior to proceeding.

These Field Protocols have been recommended by the Tasmanian Ambulance Clinical Council (TACC) and approved by the Chief Executive Officer for use by Volunteer Ambulance Officers when working for AT. The field protocols represent a multi disciplinary consensus based on the best available evidence on the management of common emergency medical problems encountered by Volunteer Ambulance Officers which they are expected to follow. They are to be interpreted as positive instructions and define what a Volunteer Ambulance Officer must do; if a protocol, procedure or action is not specified, it is not permitted. There is no provision for Volunteer Ambulance Officers to apply alternative methods of treatment or vary the Field Protocols with or without medical consultation.

It is important to note that not all Volunteer Ambulance Officers are credentialed to practise all the clinical interventions defined within the VAO Field Protocols. Staff are responsible for ensuring they only operate within their individually approved scope of practice and should contact the Clinical Services Division for clarification regarding practice approvals if required.

Any printed version of the Field Protocols is uncontrolled and is for convenience of the staff. VAO are personally responsible for ensuring any printed material is appropriately altered when a notification of change has been forthcoming and is indicated on the approved version, which is stored on the DHHS Intranet.

AT would like to acknowledge the support from Ambulance Victoria in developing these field protocols. In addition, it is important to note the exceptional work done by AT staff to convert the previous VAO Field Protocols to this new format. Every effort has been made to ensure the accuracy of these field protocols. They are under constant review in light of changes to evidence based practice. Feedback is welcome as these field protocols are an evolving product and can be forwarded to the Director of Clinical Services, Ambulance Tasmania. Proposals for change to the VAO Field Protocols are subject to the New Interventions Policy and will be forwarded to the relevant committee.

Title	Version	Number
Field Protocols		
Allergies, Bites and Stings		VAO CFP01
Cardiac Arrest		VAO CFP02
Pain Relief		VAO CFP03
Decreased Conscious State		VAO CFP04
Diving Emergency		VAO CFP05
Environmental Emergencies		VAO CFP06
Obstetrics		VAO CFP07
Respiratory		VAO CFP08
Foreign Body Choking		VAO CFP09
Trauma - Chest Injuries		VAO CFP10
Trauma - Burns		VAO CFP11
Trauma - Fracture / Amputation Management		VAO CFP12

Title	Version	Number
Drug Presentation		
Adrenaline		CPG D003
Acetylsalicylic Acid (Aspirin)		CPG D005
Glucagon		CPG D012
Glucose Paste		CPG D015
Glyceryl Trinitrate (GTN)		CPG D016
Ipratropium Bromide (Atrovent)		CPG D017
Methoxyflurane		CPG D021
Oxygen		CPG D029
Salbutamol		CPG D032

Guide to Abbreviations

@	'At' relating to time intervals between dose/action/intervention	CPAP	Continuous Positive Airway Pressure	IN	Intranasal
AAA	Abdominal Aortic Aneurysm	CPG	Clinical Practice Guideline	I/O	Intraosseous
ACS	Acute Coronary Syndrome	D5W	5% Dextrose	IPPV	Intermittent Positive Pressure Ventilation
ADLs	Activities of Daily Living	DCCS	Direct Current Counter Shock	IU	International Unit
AF	Atrial Fibrillation	DCR	Direct Current Reversion	IV	Intravenous
AIVR	Accelerated Idioventricular Rhythm	DKA	Diabetic Ketoacidosis	J	Joules
AMI	Acute Myocardial Infarction	dpm	Drops per minute	kg	kilograms
AP	Ambulance Paramedic	ECC	External Cardiac Compression	LMA	Laryngeal Mask Airway
APH	Antepartum haemorrhage	ECG	Electrocardiogram	Lpm	litres per minute
APO	Acute Pulmonary Oedema	EtCO ₂	End-tidal carbon dioxide	LVF	Left Ventricular Failure
A-V	Atrioventricular	ETT	Endotracheal tube	max.	maximum
AVRT	Atrioventricular re-entry tachycardia	FG	French Gauge	MVA	Motor Vehicle Accident
AVNRT	A-V nodal re-entry tachycardia	FHR	Foetal Heart Rate	mcg	microgram/s
BGL	Blood Glucose Level	g	gram/s	mg	milligram/s
BLS	Basic Life Support	GCS	Glasgow Coma Score	min	minutes
BP	Blood Pressure	GIT	Gastrointestinal Tract	ml	millilitres
bpm	beats per minute	GR	Grade	ml/hr	millilitres per hour
BVM	Bag-Valve-Mask	GTN	Glyceryl trinitrate	mmHg	millimetres of Mercury (Hg)
C/I	Contraindication	hr	hour	mmol/l	millimoles per litre
CBR	Chemical / Biological / Radiation	HR	Heart Rate	MOI	Mechanism of Injury
CCF	Congestive Cardiac Failure	Hx	History	MTS	Major Trauma Service
C.O.	Cardiac Output (L/min.)	ICP	Intensive Care Paramedic	MV	Minute Ventilation
COPD	Chronic Obstructive Pulmonary Disease	IFS	Intubation Facilitated by Sedation	Mx	Management
		IM	Intramuscular	NB	Note well

Guide to Abbreviations

NEPT	Non Emergency Patient Transport	ROSC	Return of Spontaneous Circulation	VF	Ventricular Fibrillation
NFR	Not For Resuscitation	RSA	Respiratory Status Assessment		
NG	Nasogastric	RSI	Rapid Sequence Intubation		
NPA	Nasopharyngeal Airway	RTA	Road Traffic Accident	Vol	Volume
NSTEMI	Non-ST Elevation Myocardial Infarction	R/V	Rendezvous		
O ₂	Oxygen	Rx	Treatment		
OD	Overdose	S Rural	Selected AV Rural APs permitted to perform skill	VSS	Vital Signs Survey
ODD	Oesophageal Detector Device	SCI	Spinal Cord Injury		
OG	Orogastric	sec.	second		
OPA	Oropharyngeal Airway	SIMV	Synchronous Intermittent Mandatory Ventilation	V _T	Tidal Volume
PCI	Percutaneous Coronary Intervention	S/L	Sublingual		
PCR	Pt Care Record	SOB	Short of Breath	VT	Ventricular Tachycardia
PEA	Pulseless Electrical Activity	SpO ₂	Saturation of haemoglobin with O ₂ measured by Pulse Oximetry		
PEEP	Positive End-Expiratory Pressure	SV	Stroke volume		
PHx	Past History	SVT	Supraventricular tachycardia	Wt	Weight (kg)
PIP	Peak Inspiratory Pressure	STEMI	ST Elevation Myocardial Infarction		
pMDI	Pressurised Metered Dose Inhaler	TBI	Traumatic Brain Injury		
PSA	Perfusion Status Assessment	TCA	Tricyclic Antidepressant		
PPE	Personal Protective Equipment	TKVO	To Keep Vein Open	x/60	x minutes e.g. 5/60 = 5 minutes
PSV	Pressure Support Ventilation	TPT	Tension Pneumothorax		
Pt	Patient	Tx	Transport		
PV	Per Vagina	UA	Unstable Angina	@ x/60	e.g. @ 5/60 = at 5 minutely intervals
QRS	QRS complex of ECG				

Graphic Guide

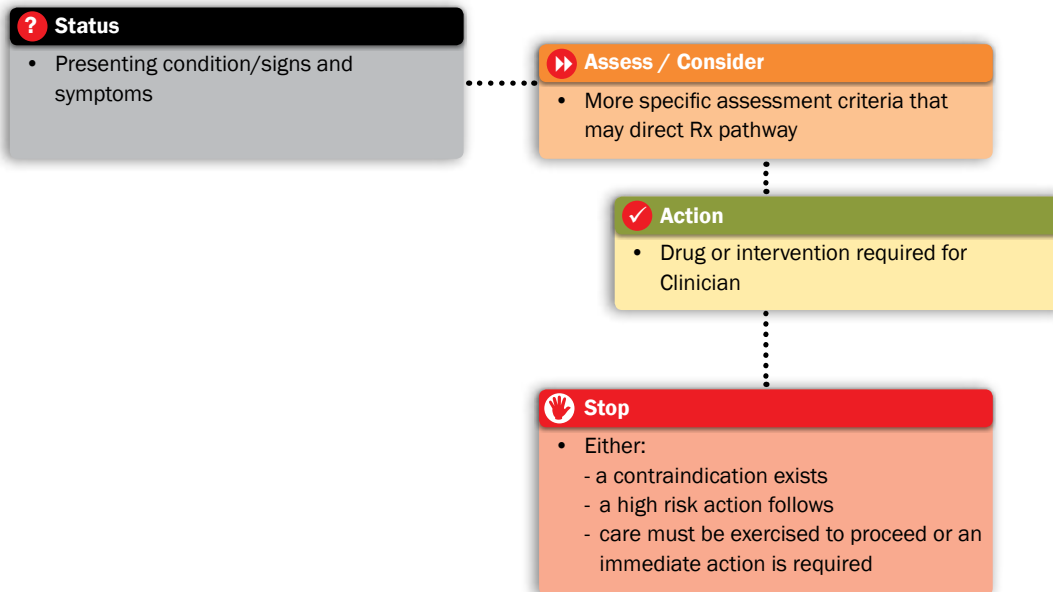
Special Notes

- Information to support the Field Protocols and improve the user's understanding of a concept.

General Care

- Provides supporting information or care related to the Field Protocol. e.g. administration of Methoxyflurane

Graphic Guide



Clinical Approach to a Patient

Stop	Primary Survey / Life Threat Status	
	<p>Standard Precautions: Gloves, safety glasses, helmet, mask, vest, other PPE as supplied</p> <p>Dangers</p> <p>Response</p> <p>Airway Cervical spine immobilisation if required</p> <p>Breathing Assist ventilations</p> <p>Circulation Commence CPR if required</p> <p>Haemorrhage Control life threatening haemorrhage</p>	<p>Immediate Mx + Sitrep required (Utilise ETHANE mnemonic)</p>
Action		
	<p>Rapport, Rest and Reassurance</p> <p>Posture / Position of comfort</p> <p>Oxygen as required (e.g. hypoxia, respiratory distress)</p>	<p>In order of clinical need</p> <p>If clinically applicable, assess Hx prior to physical contact with Pt e.g. Vital Signs Survey, applying monitor, exposing chest</p>
Assess	History	
	<p>Brief clinical Hx</p> <p>Event prior to Ambulance call</p> <p>Past medical Hx</p> <p>Pain – assessment</p> <p>Medications</p> <p>Allergies</p>	<p>Accurate Hx + assessment essential for problem recognition</p>

Clinical Approach to a Patient

Assess	Vital Sign Survey	
	PSA RSA Pattern / mechanism of injury / medical condition	Determine time criticality to Mx accordingly Accurate body system assessment in all Pts
	Assessment Tools / Secondary Survey	
	Secondary Survey Temp BGL - Blood Glucose Level More detailed Hx	Thorough physical examination - Head to toe - Inspection, palpation, auscultation
Determine Main Presenting Problem		
	The combination of subjective (PHx, Hx, Med's) and objective (physical) data allows identification of clinical problems Multiple problems may be identified and prioritised to provide treatment order Some overlap in treatment may address multiple problems	Confirm clinical reasoning with assessment data

Clinical Approach to a Patient

Action		
	<p>Further Sitrep / Resource requirements as required</p> <p>Specific treatment - appropriate CFP applied to Mx clinical problems</p> <p>Consult with Clinical Coordinator regarding transport method and ongoing management</p> <p>Transport to back up crew or appropriate facility</p> <p>Reassess frequently and adapt Mx as appropriate</p> <p>Final assessment at destination / handover</p>	

This Clinical Approach is to be applied to all Pts as a basic level of care. There is an assumption in each CFP that this is the minimum level of care that the Pt will receive prior to the application of the Protocols. The exception to this rule is the Pt in immediate life threat that requires intervention during the Primary Survey.

Allergies, Bites and Stings

VAO CFP01

Special Notes

- Anaphylaxis - Is the acute onset of respiratory distress associated with bronchospasm and / or an acute onset of less than adequate perfusion or altered conscious state **AND** presents with
 - Laryngeal oedema and/or
 - Urticarial Rash and/or
 - Abdominal pain, nausea, vomiting or diarrhoea

General Care

- Pressure bandages are preferred over crepe bandages, if neither available clothing or other material may be used
- Bandages should remain firm and tight. It should be difficult to slide a finger between the bandage and the skin
- Bandages are to be applied over the top of existing clothes if possible
- Ensure to check peripheral circulation

Confirm Paramedic back-up has been dispatched

Allergies, Bites and Stings

VAO CFP01

? Status

- Evidence of exposure to allergen
- Evidence of allergic reaction / anaphylaxis

▶▶ Assess - Systemic Response

- Altered Conscious State with oedema / facial swelling and rash
AND / OR
- Altered Respiratory Status - Respiratory Distress
AND / OR
- Altered Perfusion Status - Inadequate Perfusion

? Initial Treatment

✓ Action

Severe allergic reaction/anaphylaxis

- **If age > 5 or > 20kg administer EpiPen Adult Adrenaline Auto Injector 0.3mg**
- **If age < 5 or < 20kg administer EpiPen Jnr Adrenaline Auto Injector 0.15mg**
- **If no or limited response after 5 minutes repeat dose x1**

? If evidence of Respiratory Distress

✓ Action

- Sit patient up
- **Salbutamol pMDI and spacer**
 - Deliver **1 puff** followed by **4-5 breaths**, repeating process **5 more times** over **5 minutes. Repeat** this process **every 5 minutes** as required
 - If pMDI not available, utilise **nebulised Salbutamol**

? Bites

✓ Action

- **Fish spine stings** - Place the site of the sting in hot water
- **Jelly fish** - Wash site with hot water
- **Red Back / White tail Spider** - Ice packs, **Do Not** apply pressure
- **Bee / Wasp** - Remove sting and apply ice pack

? Snake / Blue Ringed Octopus bites

✓ Action

- Apply two broad (10-15cms apart) pressure bandages as follows:
 - First Bandage is applied directly over the site and mark bite site
 - Second Bandage is applied peripherally covering as much of the limb as possible
 - Immobilise / splint affected area
 - Do not elevate, keep the patient and limb at rest

Allergies, Bites and Stings VAO CFP01

Principles of CPR

CPR

- Assumption that CPR is commenced immediately and continued throughout cardiac arrest
- Interruptions to chest compressions must be minimised
- Change operators every 2 mins to improve CPR performance and reduce fatigue
- Compress to 1/3 chest depth
- Rhythm / Pulse check every 2 mins
- CPR commenced immediately after defibrillation and pulse check after 2 mins
- Remember to push hard and fast

Ratios of Compressions to Ventilations (Adult/Child)

Not Intubated

- 30:2 Rate: Approximately 100 compressions per minute
- Pause for ventilation

Intubated/Supraglottic airway

- 15:1 Rate Approximately 100 compressions per minute
- 8/10 ventilations/min
- No pause for ventilations

Ratios of Compressions to Ventilations (New born)

- 3:1 Rate: Approximately 120 events per minute
- No change in ratio if intubated/supraglottic airway

Adjustment for Temperature

- **> 30°C**
 - Standard Cardiac Arrest protocol
- **<30°C**
 - One defibrillation shock only
 - Continue CPR and rewarming until temp >30°C

Principles of CPR (Paediatric)

Causes and Resuscitation Principles

- Cardio-respiratory arrest in infants and children is most commonly caused by hypoxaemia, hypotension or both, and should be suspected when the child or infant loses consciousness, appears pale or cyanosed or is apnoeic or pulseless. Examples of conditions causing cardiac arrest in infants and children are trauma, drowning, septicaemia, sudden infant death syndrome, asthma, upper airway obstruction and congenital abnormalities of the heart and lungs.
- Resuscitation is directed at adequate airway control, ventilation and chest compressions.

Airway and Breathing

- To assess an airway in a new born, infant or child, the positioning and technique are similar to those for an adult with the exception that care should be taken to avoid over extension of the neck and head.
- To position the head and neck to maintain an open airway:
 - New born and infant: head and neck should be placed in the neutral position, avoiding additional neck flexion and head extension.
 - Children: Use neck flexion and head extension with caution in the younger child
- If spontaneous ventilation is not present, an appropriate size OPA should be inserted and assisted ventilation should be commenced immediately.
- **Effective airway control and adequate ventilation with oxygen supplementation is the keystone of paediatric resuscitation**

External Cardiac Compressions

- Commence (ECC) if:
 - Unconscious and not adequately breathing (e.g. agonal respirations)
 - Unconscious and HR < 60 (infants) or
 - Unconscious and HR < 40 (Adults/Children)

New born and Infant Technique:

- Two fingers or by two thumb technique. In this latter technique, the hands encircle the chest and the thumbs compress the sternum. This is considered a more effective technique and is the preferred option for two rescuers. However care should be taken to avoid restricting chest expansion during inspiration

Child Technique:

- Two handed technique as for adults

Adult/Child Cardiac Arrest

VAO CFP02

✓ Action

- Immediately commence CPR 30:2 (Child/Adult) at approximately 100 compressions per minute.

✓ Adult/Child Cardiac Arrest

✓ Action

- Attach AED and follow the prompts
- Confirm paramedic backup has been dispatched
- If child < 8yrs or < 25kg, insert paediatric key and/or attach paediatric pads

✓ Cardiac Arrest persists

✓ Action

- Insert Supraglottic Airway
- Change CPR ratio to 15:1

✓ Return of circulation

✓ Action

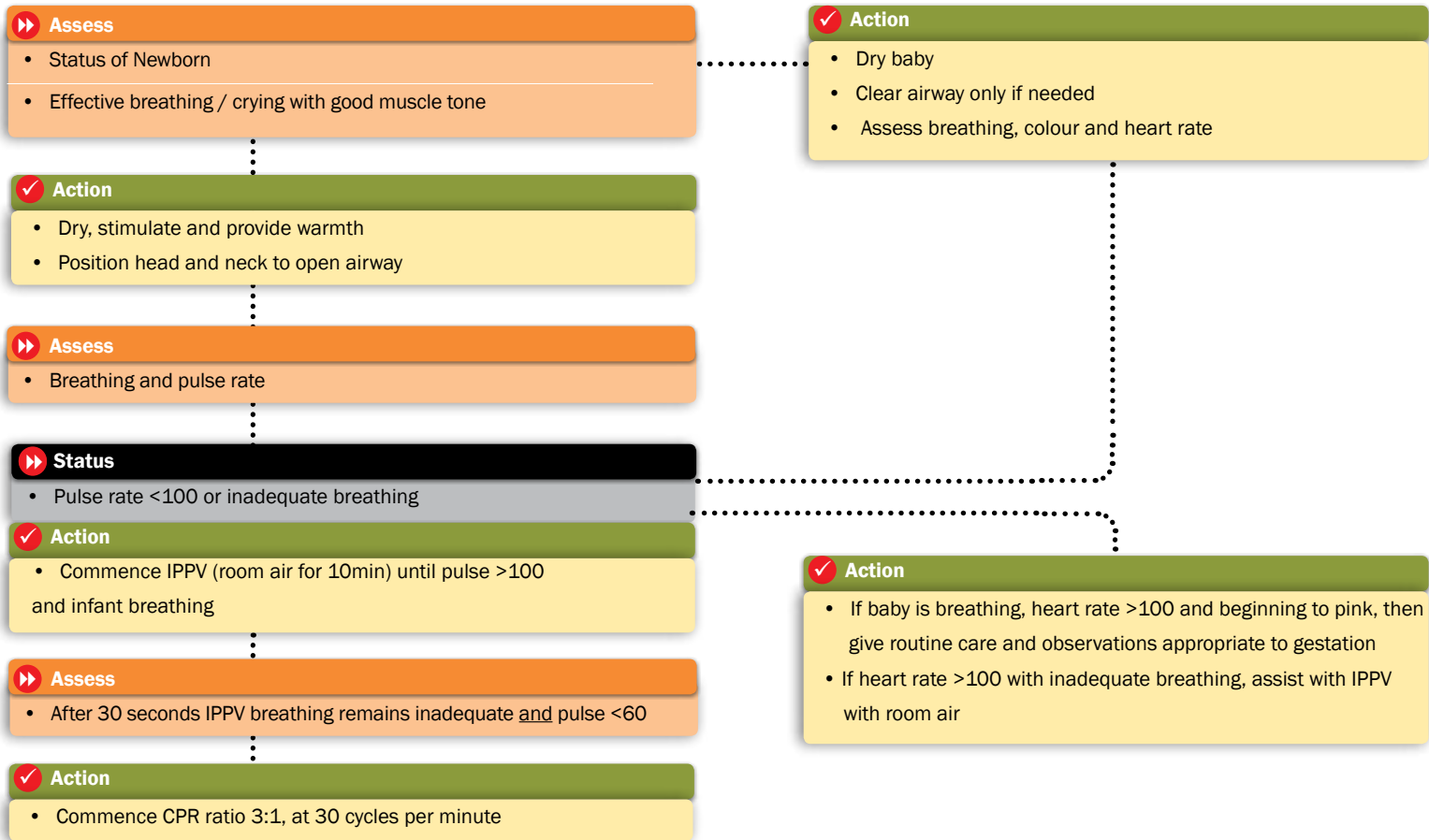
- Treat as per appropriate guidelines if condition changes
- Consult Clinical Coordinator regarding evacuation without delay to meet Paramedic backup en route

Confirm Paramedic back-up has been dispatched

Cardiac Arrest VAO CFP02

Assessment and Management of Newborn Baby

VAO CFP02



Confirm Paramedic back-up has been dispatched

Cardiac Arrest VAO CFP02

Special Notes - Chest Pain

- **GTN** is a potent vasodilator that causes a reduction in blood pressure
- As such GTN is **contraindicated if systolic blood pressure is less than 110mmHg.**
- GTN is also **contraindicated in bradycardia (HR <50)** or **tachycardia HR >150** due to the patients inability to compensate to a decrease in blood pressure.

Special Notes - Pain Relief

- Methoxyflurane is to be self-administered and only used for patients who are able to understand instructions, this includes children.
- Methoxyflurane should not be administered in confined spaces unless a Scavenger filter is fitted.

Special Note: Onset of effect is approximately after 8-10 deep breaths and offset of effect is 3 – 5 minutes after ceasing use.

Maximum dose: 6mls in 24 hours and 15mls in 7 days.

Confirm Paramedic back-up has been dispatched

Pain Relief

VAO CFP03

? Status

- Complaint of Pain

▶▶ Assess

- Pain Score > 2
- Ensure appropriate position, reassurance and splinting

⊘ Stop

The following pts **SHOULD NOT** have Methoxyflurane:

- Pre-existing renal disease / renal impairment
- Concurrent use of tetracycline antibiotics
- Exceeding total dose of 6ml in a 24 hour period
- Family history of anaesthetic induced malignant hyperthermia

✓ General Care

✓ Action

- Ensure adequate oxygenation
- Administer **Methoxyflurane 3ml**
 - Repeat **3ml** if required (**max. 6ml**)

Confirm Paramedic back-up has been dispatched

Pain Relief VAO CFP03

Pain Relief - Chest Pain

VAO CFP03

▶▶ Status

- Acute Coronary Syndrome (ACS)

▶▶ Assess

- Pain relief
- Oxygen therapy
- Positioning (systolic BP <100mmHg) recumbent legs elevated

? Suspected Acute Myocardial Infarction

✓ Action

- Administer **Aspirin 300mg** if not contraindicated
- Pain relief as per VAO CFP03
- Attach AED if severely compromised
- If **Active Chest Pain AND Systolic BP > 110mmHg**
- Apply GTN 50mg Transdermal Patch (0.4mg/hr) - if not contraindicated
- **Remove patch** if Systolic BP falls below 110mmHg or patch becomes contraindicated

Confirm Paramedic back-up has been dispatched

Chest Pain VAO CFP03

Decreased Conscious State

VAO CFP04

Special Notes

- Airway Management is the first priority in these patients
 - Consider positioning
 - Consider suctioning
 - Consider airway adjunct OPA, NPA
 - Supraglottic airways are only to be utilised in cardiac arrest
- High concentration oxygen
- Commence IPPV if:
 - Inadequate respirations
 - Deteriorating conscious level
- All patients with a decreased conscious state or stroke (CVA) like symptoms require a blood sugar level taken.

Note: As for all decreased conscious state patients, if unable to speak, be mindful that the patient may still be able to understand what is being said and you should explain what you are doing. Also, the patient may be able to communicate by hand or eye signals.

Cerebral Vascular Accident (CVA)

- The most common signs of CVA include:
 - Facial weakness
 - Arm weakness
 - Difficulty with speech

Other symptoms may include one, or a combination of:

- Syncope or fainting
- Weakness or numbness or paralysis of the face, arm or leg on either or both sides of the body
- Difficulty speaking or understanding
- Dizziness, loss of balance or an unexpected fall
- Loss of vision, sudden blurring or decreased vision in one of both eyes
- Headache, unusually severe and abrupt onset or unexplained change in the pattern of headaches
- Difficulty swallowing

Confirm Paramedic back-up has been dispatched

Decreased Conscious State

VAO CFP04

? Status

- Reduction in conscious state
- Continuous or recurrent seizures
- Cerebral Vascular Accident (CVA)
- Diabetic Problems
- Overdose

▶▶ Assess - Systemic Response

- Airway Management
- Ensure appropriate oxygenation and ventilation
- Assess Blood Glucose Level and Temperature

? Initial Treatment

✓ Action

- Treat symptomatically
- Ensure airway management
 - Posture
 - Suctioning
 - Airway adjunct (NPA, OPA)
 - Supraglottic Airways are only to be utilised in cardiac arrest
- Commence IPPV with high concentration oxygen if:
 - Inadequate respirations
 - Deteriorating conscious state
- Ensure a BGL and Temp has been taken, treat accordingly

? Stroke/CVA

✓ Action

- Treat systematically
- Consult Clinical Coordinator regarding commencement of transport without delay to rendezvous with paramedic backup

? Seizures

✓ Action

- Protect patient from injury by removing dangerous objects
- Place patient in recovery position to maintain airway
- Place on high concentration O2 mask

? Overdose

✓ Action

- Do not try and induce vomiting
- Contact poisons information centre via Comms for consult

? Diabetic Problem

✓ Action

- If BGL > 12.0mmol**
- Basic care until paramedic arrival
- If BGL < 4.0mmol, AND**
- The patient is conscious **AND** not at risk of choking
 - Administer Oral Glucose Paste
- Or**
- The patient is unconscious **OR** at risk of choking
 - Administer IM Glucagon
 - < 25kg 0.5ml Glucagon IM
 - > 25kg 1.0ml Glucagon IM

Diving Emergencies

VAO CFP05

Special Notes

Barotrauma / Gas embolus

- Arises from rapid gas expansion in body cavities
- Check for pneumothorax
- Assess for Cerebral Artery Gas Embolus (CAGE) - Sudden LOC or other CNS symptoms at surface after rapid ascent

Decompression Sickness (DCS)

- DCS arises from dissolved gases coming out of solution into bubbles inside the body on depressurisation.
- More gradual onset, usually post dive. Consider this for any pt developing symptoms within 0-36hrs of diving.
- Patients may present with: generalised aches, headache; SOB, rash, joint pain, paraesthesia, paralysis, seizures, unconscious

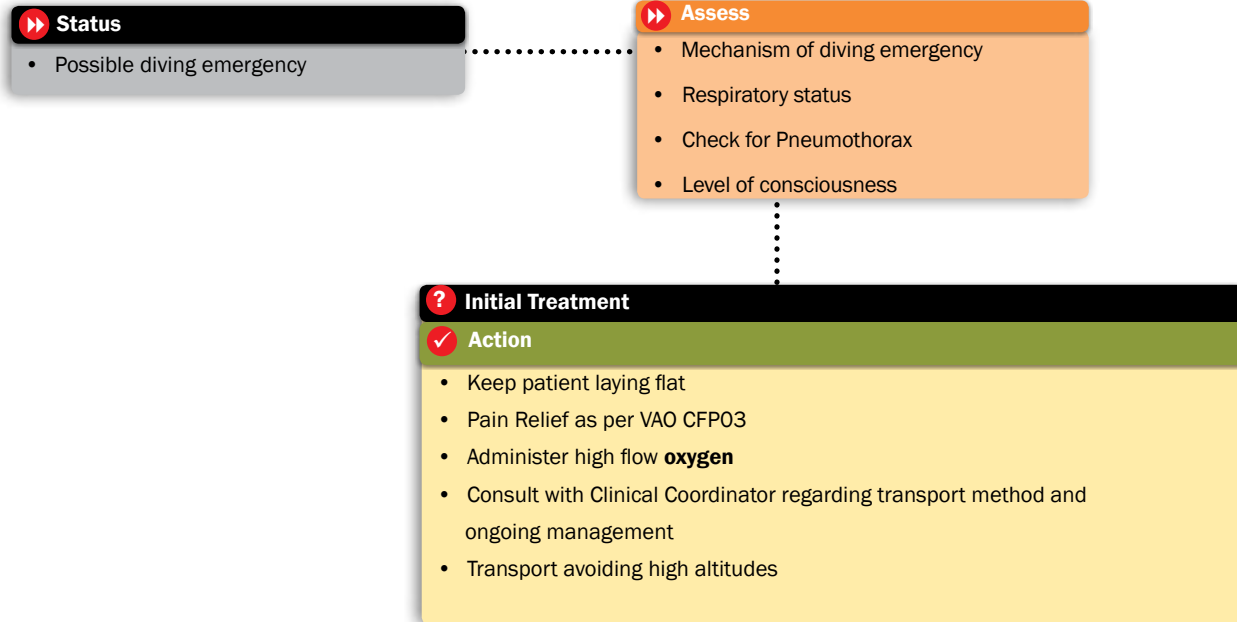
Special notes

- Assess all other divers on scene

Confirm Paramedic back-up has been dispatched

Diving Emergency

VAO CFP05



Confirm Paramedic back-up has been dispatched

Environmental Emergencies

VAO CFP06

Hypothermia

- Hypothermia is insidious and rarely occurs in isolation. Where the patient is in a group environment other members of the group should be carefully assessed for signs of hypothermia.
- Gentle handling of patients is essential. Position flat or lateral and avoid head up position

Hyperthermia

- During cooling patient should be monitored for the onset of shivering. Shivering may increase heat production and cooling measures should be adjusted to avoid its onset.

Confirm Paramedic back-up has been dispatched

Environmental Emergencies

VAO CFP06

▶▶ **Status**

- Hypothermia

▶▶ **Assess**

- Mild hypothermia 32-35°C
- Moderate hypothermia 28-32°C
- Severe hypothermia < 28°C

? **Hypothermia**

✓ **Action**

- General Care
 - Shelter from wind in heated environment
 - Remove all damp or wet clothing
 - Gently dry patient with towels/blankets
 - Wrap in warm sheet / Blankets
 - Cover head with towel/blanket
 - Use thermal/space/plastic blankets if available
 - Assess Blood Glucose Level if altered conscious state

? **Cardiac Arrest**

✓ **Action**

Adjustment for Temperature

- > 30°C
 - Standard Cardiac Arrest protocol
- <30°C
 - One defibrillation shock only
 - Continue CPR and rewarming until temp >30°C

▶▶ **Status**

- Hyperthermia

▶▶ **Assess**

- Accurately assess temperature
- BGL if altered conscious status
- Perfusion assessment

? **Hyperthermia**

✓ **Action**

- Cooling techniques - initiated and maintained until temp <38°C
 - Shelter/remove from heat source
 - Ensure airflow over patient
 - Remove all clothing except underwear
 - Apply tepid water using spray bottle or wet towels
- Assess Blood Glucose Level if altered conscious state
- Airway and ventilation support with 100% oxygen as required

▶▶ **Poor response after 10 minutes**

- Severe cases - Temp > 39.5°C
- Unconscious

✓ **Action**

- Consult Clinical Coordinator regarding commencement of transport without delay to rendezvous with paramedic backup

Environmental Emergencies VAO CFP06

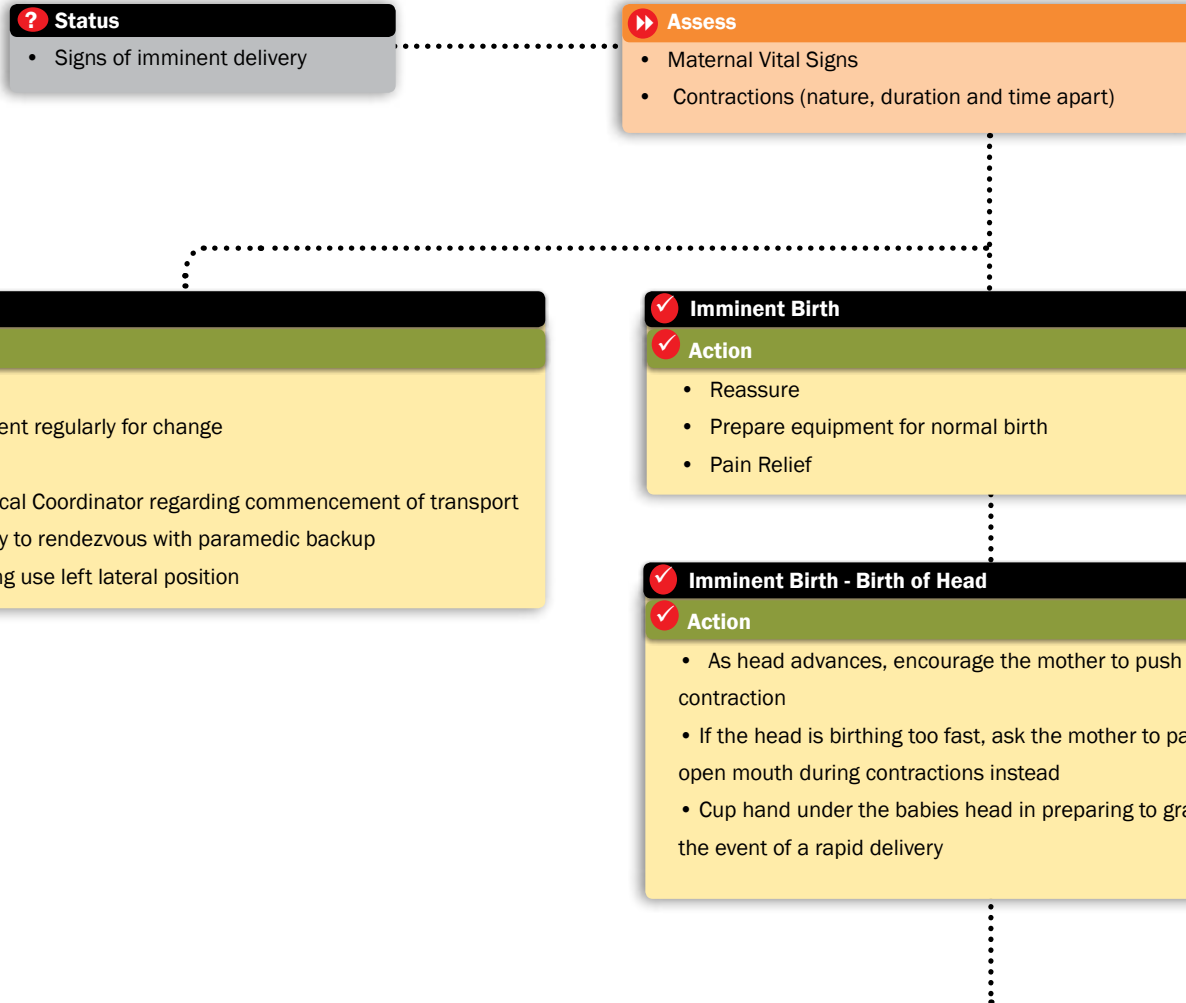
Normal Birth - Expected Management

- The cord can be cut at a convenient time over 1-3 minutes – The cord should stop pulsing. If the new born requires resuscitation, the cord may need to be cut earlier
- Triple clamp cord and ensure secure (Clamp at 10, 15 and 20cm from the baby)
- Cut between the second and third clamps
- Allow placental separation to occur spontaneously without intervention
- This may take 15mins to 1 hour
- Position mother sitting or squatting to allow gravity to assist expulsion
- Breast feeding may assist separation or expulsion
- Do not pull on cord – wait for signs of separation
 - Lengthening of the cord
 - Uterus becomes rounded, firmer, smaller
 - Trickle or gush of blood from vagina
 - Cramping/Contractions return
- Note the time of birth of the placenta
- Place the placenta and blood clots into a container and transfer
- Inspect that the fundus is firm, contracted and central
- Continue to monitor the fundus though don't massage once firm.

Unusual Birth - Management

- **If any presentation other than head first delivery (examples include umbilical cord or limp presentation) Immediately consult with Clinical Coordinator for management advice**
- Post Partum Haemorrhage is a PV Blood loss >600ml in 24hrs.
- In the event of Post Partum Haemorrhage **Immediately consult with Clinical Coordinator** for management advice.

Confirm Paramedic back-up has been dispatched



✓ Imminent Birth - Head Rotation

✓ Action

- With the next contraction the head will turn to face one of the mother's thighs (indicating internal rotation of the shoulders in preparation of birthing of body)

✓ Imminent Birth - Birthing of Shoulders and Body

✓ Action

- May be passive or guided birth
- Support baby's head, neck and shoulders as it is delivered
- Support the baby, dry and take APGAR 1 and 5 minutes after birth
- Note time of birth
- Pass the baby to the mother to facilitate breast feed unless baby requires resuscitation

Confirm Paramedic back-up has been dispatched

Special Notes

- Asthmatic patients are dynamic and can show initial improvement with treatment then deteriorate rapidly
- Beware of patients presenting with a wheeze associated with heart failure and no asthma/COPD Hx
- pMDI = Pressurised Metered Dose Inhaler
- pMDI must be shaken at each puff to ensure that the medication is mixed with the propellant
- For every 1 puff the patient should take 4-5 breaths through the spacer.

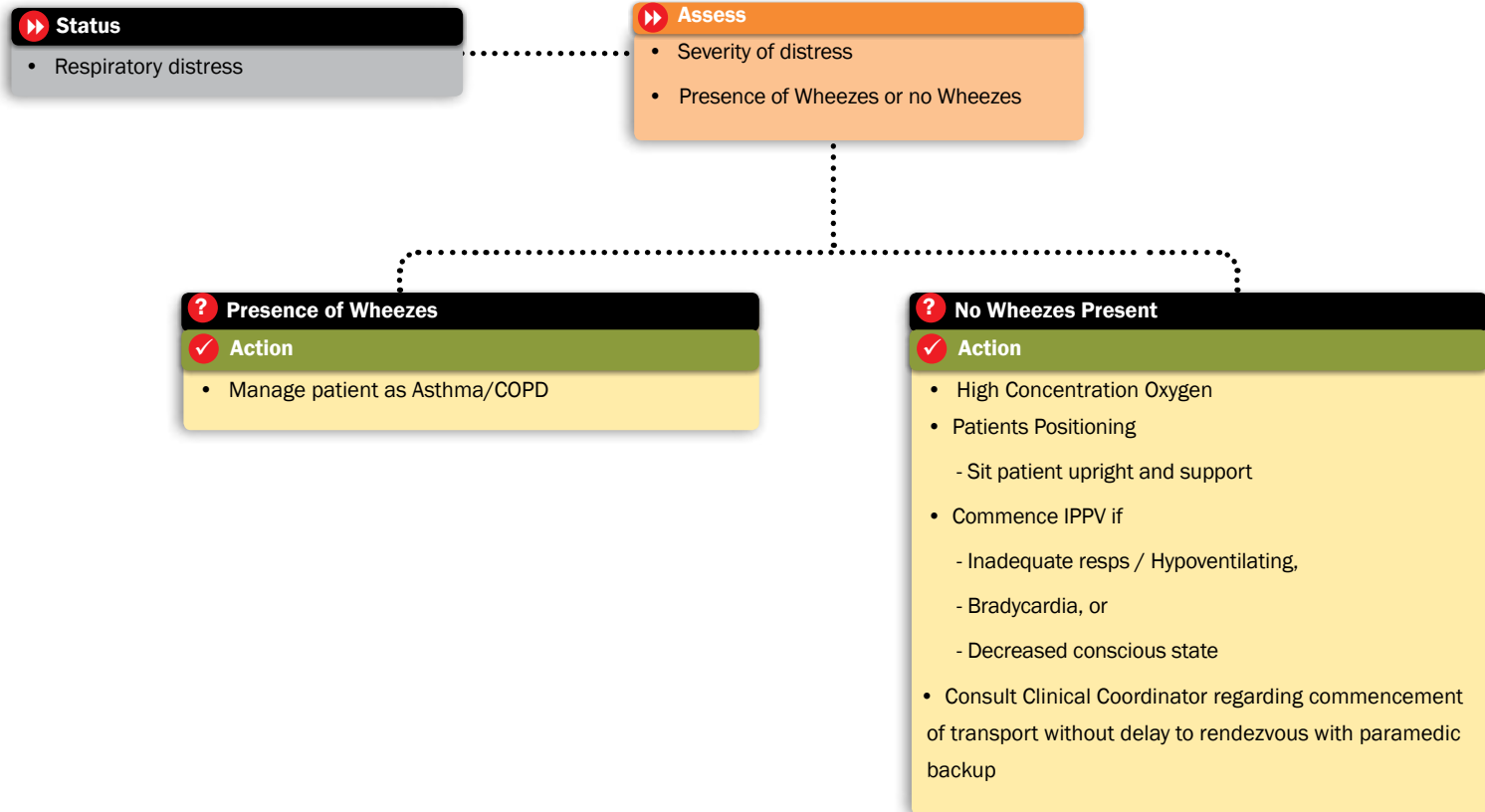
IPPV Management

- If IPPV is required in suspected Asthma ventilate at:
 - Adult 6-8 breaths per minute
 - Large Child 8-12 breaths per minute
 - Small Child 10-15 breaths per minute
 - Infant 15-20 breaths per minute

Confirm Paramedic back-up has been dispatched

Respiratory

VAO CFP08

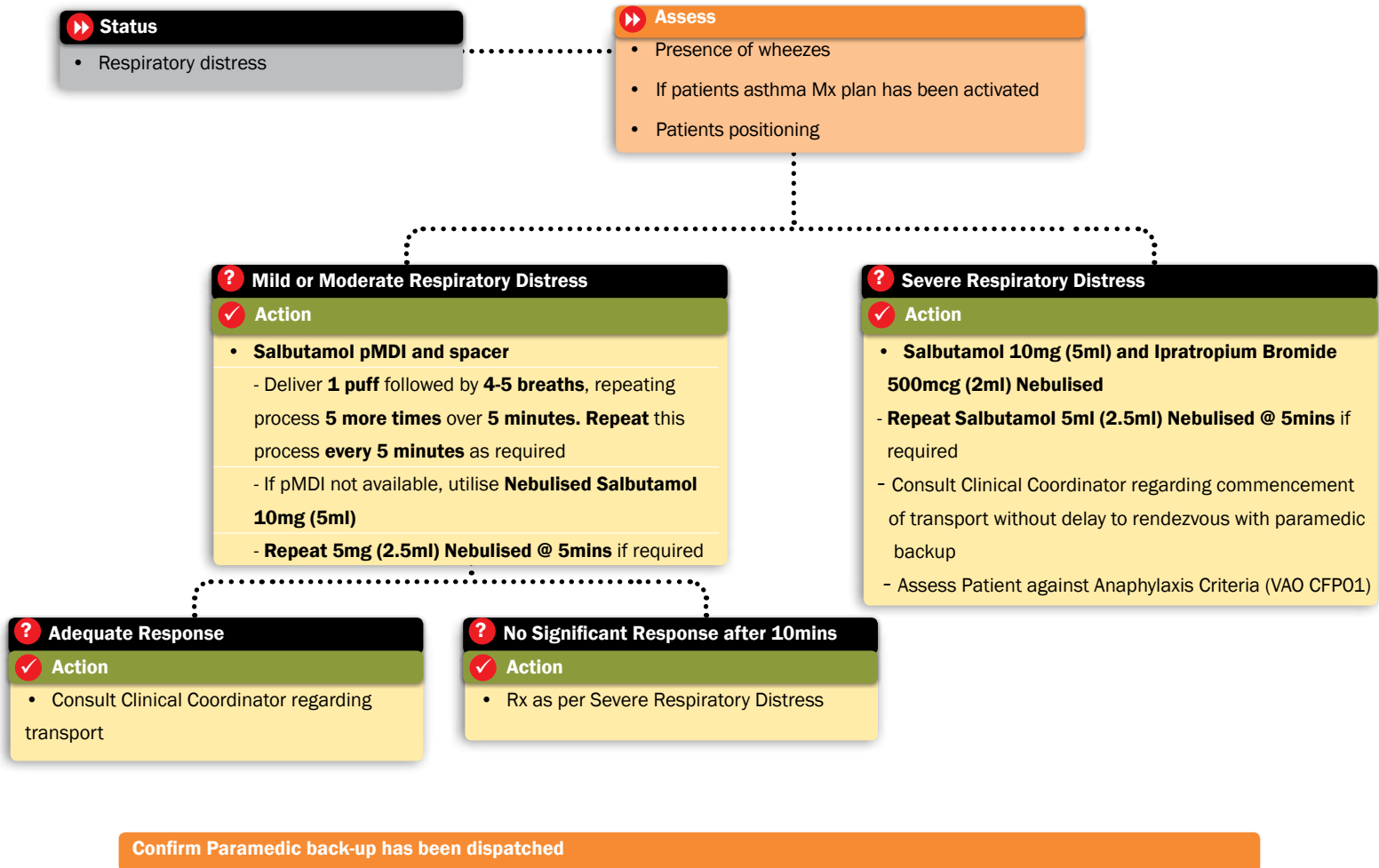


Confirm Paramedic back-up has been dispatched

Respiratory VAO CFP08

Respiratory - Asthma/COPD

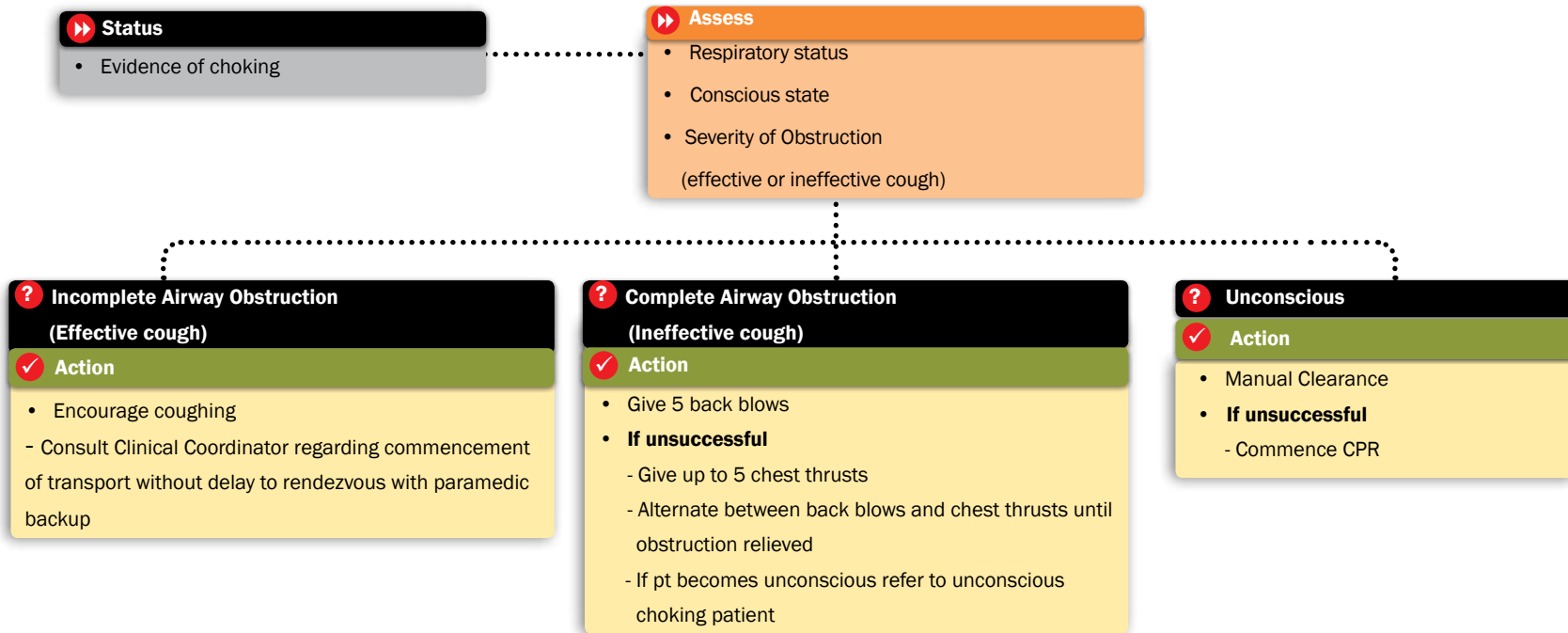
VAO CFP08



Respiratory VAO CFP08

Foreign Body Choking

VAO CFP09

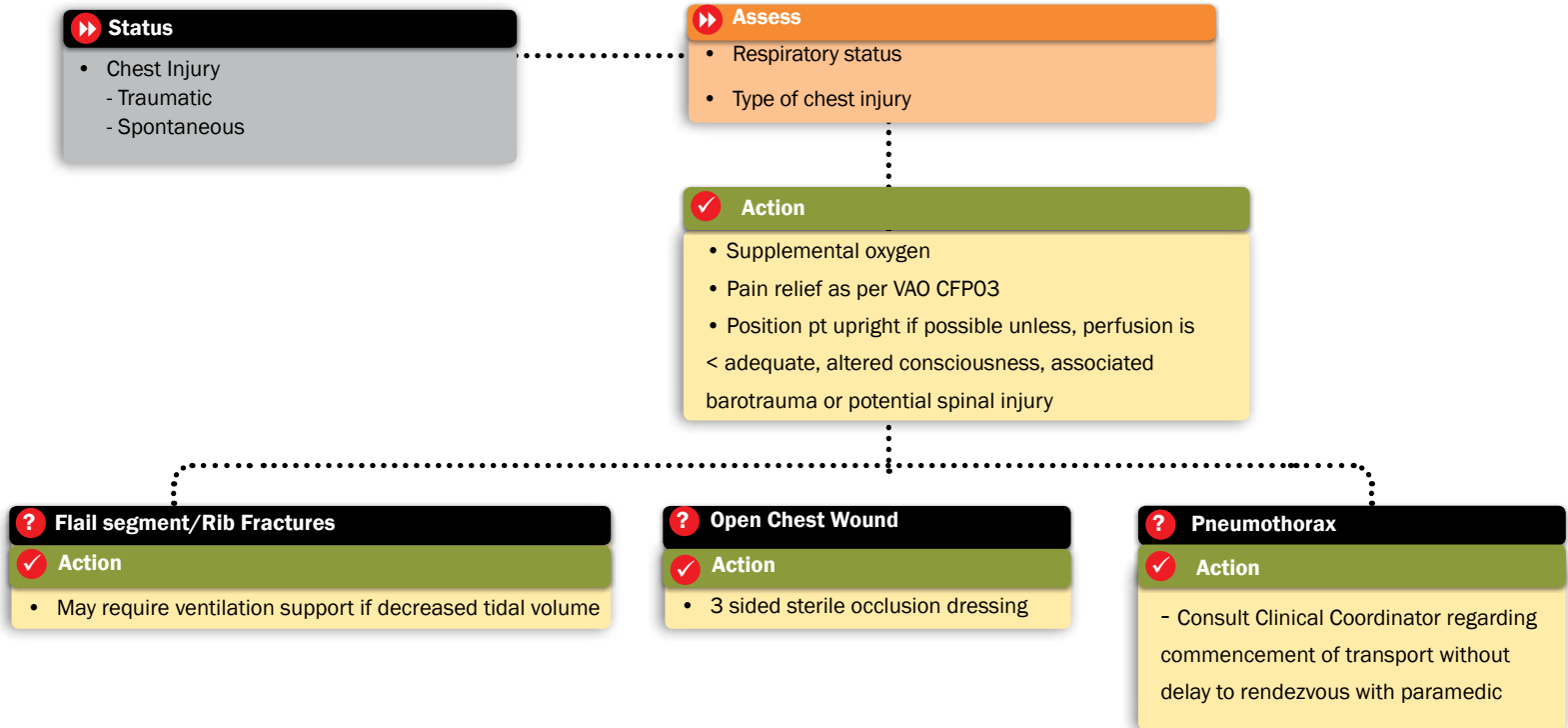


Confirm Paramedic back-up has been dispatched

Foreign Body Choking VAO CFP09

Trauma - Chest Injuries

VAO CFP10



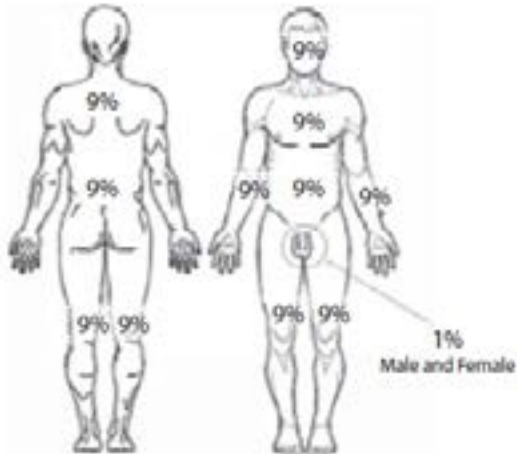
Confirm Paramedic back-up has been dispatched

Trauma - Chest Injuries VAO CFP10

Trauma - Burns

VAO CFP11

Wallace Rule of Nines



- The victim's palm surface (palm and fingers) is equal to 1 per cent of the body surface area

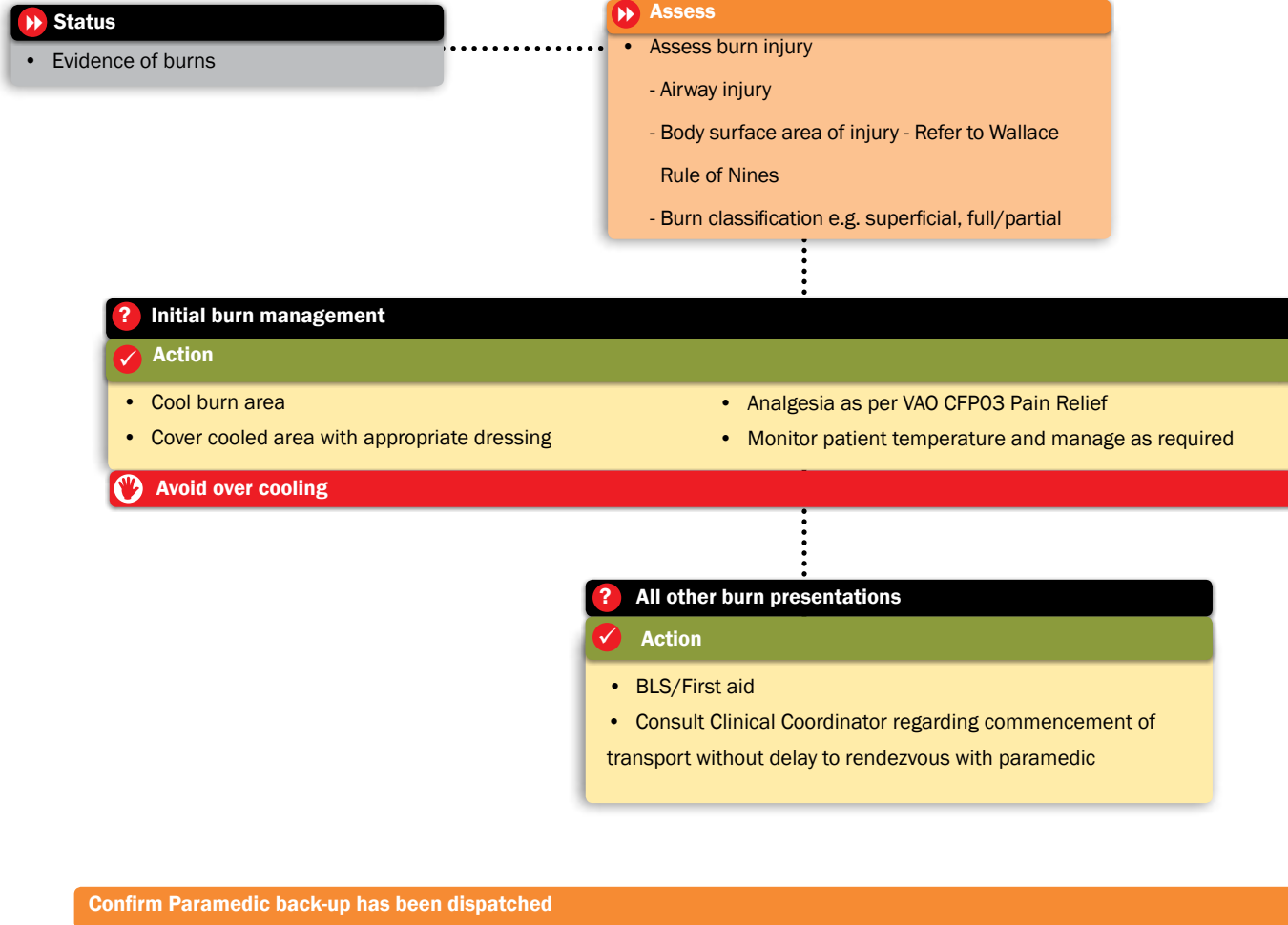
General Care

- Cool burn area for preferably up to 20 mins
 - Running water if possible
 - Normal Saline or wet combine as substitute
 - Avoid/Eliminate shivering
 - Avoid Ice or Ice water
 - **AVOID OVER COOLING**
- Cover cooled area with appropriate dressing
 - Ensure cling wrap is applied longitudinally to allow for swelling
- Assess patients temp and manage as required
- If any of the following, consult Clinical Coordinator regarding commencement of transport without delay to rendezvous with Paramedic backup:
 - 10% burns or more
 - Facial burn (consider possible airway obstruction)
 - Possible smoke inhalation
 - Infant or elderly patient
 - Uncontrolled pain

Confirm Paramedic back-up has been dispatched

Trauma - Burns

VAO CFP11



Trauma - Burns VAO CFP11

Trauma - Fracture/Amputation Management

VAO CFP12

Principles of Fracture Management

- **General principles for Fracture Management**

- Control external haemorrhage
- Support the injured area
- Immobilise the joint above and below the fracture site
- Evaluate and record neurovascular condition distal to the fracture site

- Provide appropriate pain relief

- Appropriate splinting can assist in pain reduction and arrest of haemorrhage

- **General principles for Fracture Management**

- Realign long bone fractures in as close to normal position as possible
- Open fractures with exposed bone should be irrigated with **Normal Saline** prior to realignment and splinting
- If joints are involved there is an increased possibility of neurovascular impairment and reduction is not recommended
- Femoral shaft fractures and fractures of the upper 2/3 of the tibia and fibula should be managed with a traction splint unless there are distal dislocations or fractures.
- In suspected fractures of the pelvis the legs should be anatomically splinted together (to internally rotate the feet) and the pelvis splinted with a sheet wrap or other appropriate device

Principles of Amputation Management

- **General principles for Amputation Management**

- Severed part should be covered in saline soaked gauze and placed in a water tight plastic bag
- Place the plastic bag containing the severed part into a second plastic bag containing ice and water
- Transport amputated part with patient

Drug Presentation

VAO D000

The drug section of these field protocols has been specifically written to focus on the pharmacology relevant to selected medical emergencies. It is not intended that the pharmacology section of this booklet be seen as a standard text on pharmacology. Thus, the content has been restricted to Ambulance practice.

Presentation	<p>In many instances, drugs may be available in presentations other than those listed. However, this booklet indicates only those presentations that are currently carried on Ambulance vehicles.</p> <p>Drug Presentations as written can only be varied by the Chief Executive Officer (CEO) on the statutory role as Director of Ambulance Service. This will only be done through the release of a Clinical Services Update authorised by the CEO. This is the only circumstance where drug variations are permitted in ambulance service practice.</p>
Pharmacology	A statement is included as to the nature of the drug followed by a list of specific actions related to the Ambulance use of that drug.
Metabolism	A single statement has been included to indicate the fate of the particular drug within the body.
Primary Emergency Indication	The indications to those emergency situations for which the drug is primarily used within Ambulance practice. The drug however, may have other indications within health care.
Contraindications	If there are absolute contraindications to the use of a particular drug, these are indicated in this section.
Precautions	Where there are relative contraindications or precautions in the administration of a drug, these are included in this section.
Route of Administration	Most drugs can be administered through a variety of routes. However, this section includes only those routes of administration considered appropriate for use in Ambulance practice. As a general principle, drugs should not be mixed in the same syringe or solution before administration.
Side Effects	Common side effects attributed to the use of the drug are included in this section.
Special Notes	In this section a variety of additional information, in particular the time that the drug takes to have its effect, has been included as background information.

Adrenaline

VAO D003

Presentation	Epi-pen Adult Auto-Injector (0.3mg) Epi-pen Child Auto-Injector (0.15mg)
Pharmacology	A naturally occurring Adrenergic stimulant <i>Actions:</i> - Increases heart rate - Increases force of contraction - Causes bronchodilation - Causes blood vessel constriction
Metabolism	By enzymes in blood, liver and nerves
Primary Emergency Indications	1. Anaphylactic reactions
Contraindication	Nil
Precautions	1. Elderly Pts 2. Pts with heart disease
Route of Administration	Intramuscular
Side Effects	Increased heart rate Hypertension Feeling of "anxiety/palpitations" Muscle tremor
Special Notes	<i>Intramuscular effects:</i> Onset: 30 – 90sec Peak: 4 – 10min Duration: 5 – 10min

Aspirin (Acetylsalicylic Acid)

VAO D005

Presentation	300mg chewable tablets 300mg soluble or water dispersible tablets
Pharmacology	Used to reduce the progression of heart attacks
Metabolism	In the intestines and liver, excreted mainly by the kidneys
Primary Emergency Indication	To minimize platelet aggregation and thrombus formation in order to retard the progression of coronary artery thrombosis in acute coronary syndrome
Contraindications	<ol style="list-style-type: none"> 1. Hypersensitivity to aspirin/salicylates 2. Actively bleeding peptic ulcers 3. Bleeding disorders 4. Suspected dissecting aortic aneurysm 5. Chest pain associated with psychostimulant overdose if BP > 160 6. Children less than 12 years old
Precautions	<ol style="list-style-type: none"> 1. Peptic ulcer 2. Asthma 3. Pts on anti-coagulants, e.g. Warfarin
Route of Administration	Oral
Side Effects	<ul style="list-style-type: none"> • Heartburn, nausea, gastrointestinal bleeding • Increased bleeding time • Hypersensitivity reactions
Special Notes	<p>Aspirin reach peak levels within 15 mins and has a half-life of approximately 30 mins.</p> <p>It is important to administer Aspirin for suspected AMI even if patient is on daily dose</p>

Glucagon

VAO D012

Presentation	1mg (IU) in 1ml Hypokit
Pharmacology	Causes an increase in blood glucose concentration by converting stored liver glycogen to glucose
Metabolism	Mainly by the liver, also by the kidneys
Primary Emergency Indication	Diabetic hypoglycaemia in patients with an altered conscious state who are unable to self-administer oral glucose paste
Contraindication	Nil significance in the above indication
Precautions	Nil significance in the above indication
Route of Administration	Intramuscular
Side Effects	Nausea and vomiting (rare)
Special Notes	<p>Not all Pts will respond to Glucagon, for example those with inadequate glycogen storage in the liver – alcoholics, malnourishment.</p> <p><i>Intramuscular effects:</i></p> <p>Onset: 3 – 5min</p> <p>Peak:</p> <p>Duration: 12 – 25min</p>

Glucose Paste

VAO D015

Presentation	15g Glucose paste
Pharmacology	A hypertonic sugar solution for oral use
Metabolism	<i>Glucose:</i> - Broken down in most tissues - Stored in liver and muscle as glycogen
Primary Emergency Indication	Diabetic hypoglycaemia in Pts who are conscious and able to self-administer oral glucose
Contraindication	Nil significance in the above indication
Precautions	Nil significance in the above indication
Route of Administration	Oral
Side Effects	Nil significance in the above indication
Special Notes	

Glyceryl Trinitrate (GTN)

VAO D016

Presentation	50mg Transdermal Patch (0.4mg/hr)
Pharmacology	- Arterial Dilation (reduces afterload) - Venous Dilation (reduces preload)
Metabolism	Liver
Primary Emergency Indication	1. Chest pain
Contraindication	<ol style="list-style-type: none"> 1. Known hypersensitivity 2. Systolic blood pressure < 110 mmHg (VAO Specific Contraindication) 3. Sildenafil Citrate "VIAGRA" or Vardenafil "LEVITRA" administration in the previous 24 hours or Tadalafil "CIALIS" administration in the previous 4 days (PDE5 inhibitors) 4. Heart rate > 150 per min 5. Heart rate < 50 per min
Precautions	<ol style="list-style-type: none"> 1. No previous administration 2. Elderly patients 3. Recent heart attack
Route of Administration	Transdermal Patch
Side Effects	<p>Increased heart rate Hypotension Headache Skin flushing (uncommon) Decreased heart rate (occasionally)</p>

Glyceryl Trinitrate (GTN)

VAO D016**Special Notes***Storage:*

Since both men and women can be prescribed Sildenafil Citrate "VIAGRA" or Vardenafil "LEVITRA" or Tadalafil "CIALIS" all patients should be asked if and when they last have had the drug to determine if Glyceryl Trinitrate is contraindicated.

Should the patient start to become light headed, or GTN becomes contraindicated the GTN patch is to be immediately removed and symptoms are to be managed accordingly.

GTN Patch MUST be removed prior to defibrillation as it can cause damage to the pads and burn the patient.

Ipratropium Bromide (Atrovent)

VAO D017

Presentation	500mcg in 1ml polyamp
Pharmacology	Bronchodilator working by different mechanisms to Salbutamol
Metabolism	Excreted by the kidneys
Primary Emergency Indication	Severe respiratory distress associated with bronchospasm
Contraindication	Known hypersensitivity to Atropine or its derivatives
Precautions	<ol style="list-style-type: none"> 1. Glaucoma 2. Avoid contact with eyes
Route of Administration	Nebulised in combination with Salbutamol
Side Effects	<p>Headache Nausea Dry mouth Skin Rash Increased heart rate (rare) Palpitations (rare) Acute angle closure glaucoma secondary to direct eye contact (rare)</p>

Ipratropium Bromide (Atrovent)

VAO D017**Special Notes**

The nebuliser mask must be fitted properly during inhalation and care taken to avoid Ipratropium Bromide solution entering the eyes

Ipratropium Bromide must be nebulised in conjunction with Salbutamol and is to be administered as a single dose only

Onset:	3 - 5min
Peak	1.5 - 2hrs
Duration:	6hrs

Methoxyflurane

VAO D021

Presentation	3 ml glass bottle with plastic seal
Pharmacology	Inhalational analgesic agent at low concentrations
Metabolism	By the liver
Primary Emergency Indication	Pre-hospital pain relief
Contraindication	<ol style="list-style-type: none"> 1. Pre-existing renal disease / renal impairment 2. Concurrent use of tetracycline antibiotics 3. Exceeding total dose of 6ml in a 24 hr period 4. Family history of anaesthetic induced Malignant Hyperthermia
Precautions	<ol style="list-style-type: none"> 1. The "Pentrox"[™] inhaler must be hand-held by the patient so that if unconsciousness occurs it will fall from the patient's face. Occasionally the operator may need to assist but must continuously assess the level of consciousness 2. Pre-eclampsia
Route of Administration	Self-administration under supervision using the hand held "Pentrox" [™] Inhaler
Side Effects	<p>Drowsiness</p> <p>Decrease in blood pressure and slowing in heart rate (rare)</p> <p>Exceeding the maximum total dose of 6ml in a 24 hr period may lead to Kidney toxicity</p>

Methoxyflurane

VAO D021**Special Notes**

The max initial priming dose for Methoxyflurane is 3ml. This will provide approximately 25 min of analgesia and may be followed by one further 3ml dose once the initial dose has expired if required. Analgesia commences after 8-10 breaths and lasts for approximately 3-5 min once discontinued.

If supplemental oxygen is required while utilising Methoxyflurane, commence oxygenation with nasal catheters between 2-4L/min.

Methoxyflurane should not be administered in confined spaces (eg. In road and air ambulances) unless the 'Pentrox Analgiser' is fitted with a scavenging system.

Oxygen

VAO D029

Presentation	High pressure "Medical Oxygen" - "C" size cylinders 440 litres - "D" size cylinders 1500 litres
Pharmacology	A chemical element that is essential to tissues for sustaining life.
Metabolism	N/A
Primary Emergency Indication	<ol style="list-style-type: none"> 1. Treatment of hypoxaemia / hypoxia 2. To assist organ perfusion in patients with poor perfusion
Contraindications	<ol style="list-style-type: none"> 1. Known paraquat poisoning 2. Lung disease secondary to bleomycin therapy
Precautions	<ol style="list-style-type: none"> 1. Prolonged administration to premature neonates 2. High concentrations given to COPD patients 3. Fire and / or Explosive hazard
Route of Administration	Inhalation via: <ul style="list-style-type: none"> - Nasal cannula - Non-rebreathing therapy mask - Bag-valve-mask
Side Effects	Hypoventilation in some COPD patients with hypoxic drive Drying of the mucous membranes of the airways
Special Notes	In acutely hypoxic patients supplemental oxygen must take precedence over the concern that in rare circumstances a patient's hypoxic drive may be lost if high concentrations of oxygen are given.

Salbutamol

CPG D032

Presentation	5mg in 2.5ml nebule/polyamp 100mcg in 5ml pMDI per spray
Pharmacology	Causes bronchodilation by relaxing bronchial smooth muscle
Metabolism	By the liver and excreted by the kidneys
Primary Emergency Indication	Respiratory distress with suspected bronchospasm: - asthma - severe allergic reactions - COPD
Contraindications	Nil of significance in the above indications
Precautions	<ol style="list-style-type: none"> 1. Diabetes 2. Cardiac disease 3. Pregnancy/lactating mothers 4. Between doses, oxygen must be administered continuously
Route of Administration	Nebulised at 6-8lmp Pressurised Metered Dose Inhaler (pMDI) and spacer

Salbutamol

VAO D032

Side Effects	Sinus tachycardia Muscle tremor (common)
Special Notes	<p>Tolerance to the bronchodilator effect may occur with prolonged or excessive use.</p> <p>Salbutamol Nebules/Polyamps have a shelf life of one month after the wrapping is opened. The date of opening of the packaging should be recorded and the drug should be stored in an environment of < 30 °C.</p> <p>Diabetes is a precaution due to Salbutamol having been reported to have caused cases of high insulin levels and high blood sugar levels.</p> <p>Administration with pregnancy is a precaution due to there being no conclusive evidence of effects upon the foetus</p> <p>Salbutamol administration with patients with a history of cardiac disease can lead to increased heart rate and hypotension</p> <p><i>Nebulised effects:</i></p> <p>Onset: 5 - 15min</p> <p>Peak:</p> <p>Duration: 15 - 50min</p>

Reference Material

VAO RM01

Perfusion Status Assessment

1. Normal Blood Volume

Newborn – approximately 80ml/kg

Infant and child – approximately 70ml/kg

2. Definition and Observations

Same as for adults

3. Criteria

a) Adequate Perfusion

Age	Pulse	Blood Pressure
Newborn	120 – 160	N/A
Infant	100 – 160	> 70mmHg systolic
Small child	80 – 120	> 80mmHg systolic
Large child	80 – 100	> 90mmHg systolic
Adult	60 – 100	> 100mmHg systolic

- Skin – warm, pink, dry
- Conscious, alert, active

Reference Material

VAO RM01

Perfusion Status Assessment

b) Inadequate Perfusion

Age	Pulse	Blood Pressure
Newborn	<100/ or > 170	N/A
Infant	< 90/ or > 170	< 60mmHg systolic
Small child	< 75/ or > 130	< 70mmHg systolic
Large child	< 65/ or > 100	< 80mmHg systolic
Adult	< 50/ or > 100	< 80mmHg systolic

- Skin – cool, pale, clammy, peripheral cyanosis.
- Altered conscious state, restless

c) No Perfusion

- Absence of palpable pulses
- Skin – cool, pale
- Unrecordable blood pressure
- Unconscious

Reference Material

VAO RM01

Respiratory Status Assessment

1. Normal Respiratory Rates

Newborn	40 – 60 breaths/min
Infant	20 – 50 breaths/min
Small child	20 – 35 breaths/min
Large child	15 – 25 breaths/min
Adult	12 – 16 breaths/min

2. Definition and Observations

Same as for adults

3. Criteria

a) Signs of respiratory distress include:

- tachypnoea
- use of accessory muscles
- grunting
- pallor
- wheezing
- cyanosis (late sign)

Reference Material

VAO RM01

Respiratory Status Assessment

b) Signs of Hypoxia include:

Infants

- lethargy
- bradycardia
- hypotension
- apnoea
- pallor

Children

- restlessness
- tachypnoea
- tachycardia (bradycardia late sign)
- cyanosis

c) Carbon dioxide retention is manifested by:

- sweating (uncommon in infants)
- tachycardia
- pupillary dilatation
- hypertension
- bounding pulse
- eventually leading to cardiovascular and central nervous system depression

Respiratory failure is common in the first two years of life. Small calibre airways are prone to obstruction. Respiratory distress may reflect disorder of other body systems – cardiac failure, abdominal distension, neurological problems.

Reference Material

VAO RM01

Sensory and Motor Examination

- The level at which sensation is altered or absent is the level of injury
- It is vital to carry out motor as well as sensory exams as the patient may have motor damage without sensory damage and vice versa.

Sensory Examination

- Examine by light touch and response to pain
- Use the forehead as your guide to what is normal sensation
- Remember to examine both sides of the upper/lowers limbs, including hands and feet.

Motor Examination

- The level at which weakness or absent movement is noted is the level of injury

Upper Body

- Shrugs shoulder = C4
- Bend elbow = C5
- Push wrist back = C6
- Open/close hands = C8

Lower Body

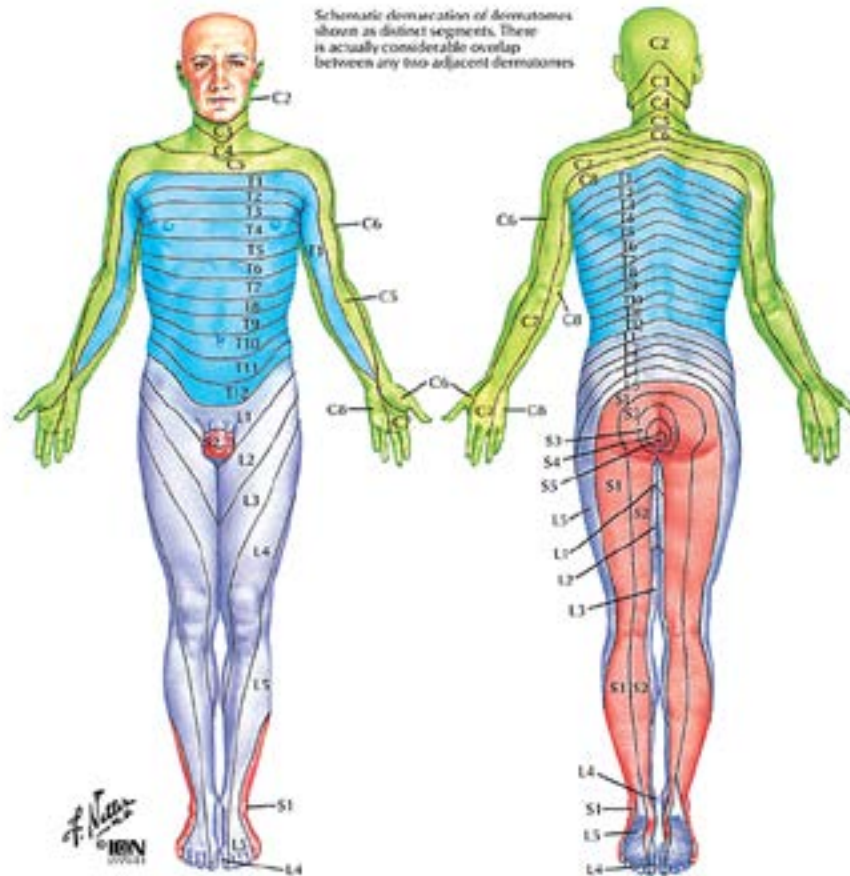
- Flex Hip = L1 & L2
- Extend Knee = L3
- Pull foot up = L4
- Push foot down = L5 & S1

Spinal Cord Injury in the Unconscious Patient

- Look for paradoxical respiration (a quadriplegic has lost intercostal muscles so relies on the diaphragm to breath)
- Flaccid limbs
- Loss of response to pain – full stimuli below the level of the lesion
- Loss of reflexes below level of lesion
- Erection in the unconscious male
- Low BP (systolic) less than 100 associated with a normal pulse or bradycardia indicates patient may be quadriplegic

Reference Material

VAO RM01



Levels of principal dermatomes

C5	Clavicles
C5, 6, 7	Lateral parts of upper limbs
C8, T1	Medial sides of upper limbs
C6	Thumb
C6, 7, 8	Hand
C8	Ring and little fingers
T4	Level of nipples

T10	Level of umbilicus
T12	Inguinal or groin regions
L1, 2, 3, 4	Anterior and inner surfaces of lower limbs
L4, 5, S1	Foot
L4	Medial side of great toe
S1, 2, L5	Posterior and outer surfaces of lower limbs
C8	Lateral margin of foot and little toe
S2, 3, 4	Perineum

Reference Material

VAO RM01

APGAR Scoring System

The APGAR score should be conducted 1 minute after delivery and repeated at 5 minutes after delivery. A score of:

7 – 10 Satisfactory

4 – 6 Moderate depression and may need respiratory support

0 – 3 Newborn requiring resuscitation

	0 points	1 point	2 points
Appearance	Blue, pale	Body pink, extremities blue	Totally pink
Pulse	Absent	< 100	> 100
Grimace	None	Grimaces	Cries
Activity	Limp	Flexion of extremities	Active motion
Respiratory effort	Absent	Slow and weak	Good strong cry

Reference Material

VAO RM02

Paediatric Pain Assessment

Paediatric pain assessment should be appropriate to the developmental level of the child. Pain can be communicated by words, expressions and behaviour such as crying, guarding a body part or grimacing. The QUESTT principles of pain (Baker and Wong, 1987) may be helpful in assessing paediatric pain.

Question the child

Use pain rating scales

Evaluate behaviour and physiological changes

Secure parent's involvement

Take cause of pain into account

Take action and evaluate results

The following pain rating scales may be useful when assessing pain in children.

FLACC Scale

This is a behaviour scale that can be used for children less than 3 years of age or who are unable to communicate. Each of the five categories below is scored from 0 – 2 and the scores are added to get a total from 0 – 10. Behavioral pain scores need to be considered within the context of the child's psychological status, anxiety and other environment factors.

Reference Material

VAO RM02

Paediatric Pain Assessment

Face	0 No particular expression or smile	1 Occasional grimace or frown, withdrawn, disinterested	2 Frequent to constant frown, clenched jaw, quivering chin
Legs	0 Normal position or relaxed	1 Uneasy, restless, tense	2 Kicking or legs drawn up
Activity	0 Lying quietly, normal position, moves easily	1 Squirming, shifting back and forth, tense	2 Arched, rigid or jerking
Cry	0 No cry (awake or asleep)	1 Moans or whimpers, occasional complaints	2 Crying steadily, screams or sobs, frequent complaints
Consolability	0 Content, relaxed	1 Reassured by occasional touching, hugging or "talking to", distractible	2 Difficult to console or comfort

The FLACC is a behaviour pain assessment scale which is reproduced with permission of University of Michigan Health System and Ambulance Victoria for clinical use by Ambulance Tasmania.

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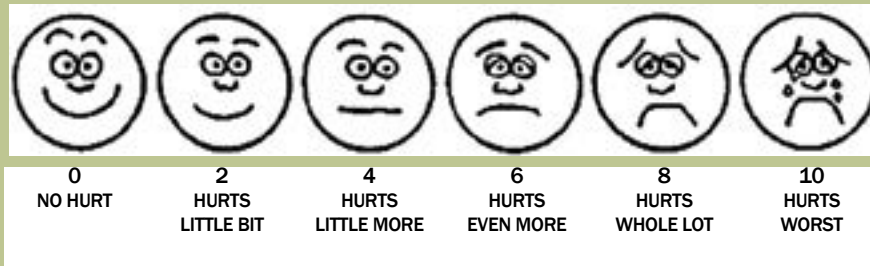
Reference Material

VAO RM02

Paediatric Pain Assessment

Wong – Baker Faces Pain Rating Scale

This scale can be used with young children aged 3 years and older and may also be useful for adults and those from a non-English-speaking background. Point to each face using the words to describe the pain intensity. Ask the child to choose the face that best describes their own pain and record the appropriate number.



From Wong D.L., Hockenberry-Eaton M., Wilson D., Winkelstein M.L., Schwartz P.: Wong's Essentials of Pediatric Nursing, ed. 6, St. Louis, 2001, p. 1301. Copyrighted by Mosby, Inc. Reprinted by permission.

Verbal Numerical Rating Scale

This scale asks the Pt to rate their pain from “no pain” (0) to “worst pain possible” (10) and is suitable for use in children over 6 years of age who have an understanding of the concepts of rank and order. Avoid using numbers on this scale to prevent the Pt receiving cues. Some Pt’s are unable to use this scale with only verbal instructions but may be able to look at a number scale and point to the number that describes the intensity of their pain.

Reference Material

VAO RM03

Initiating and continuation of resuscitation attempts

Guidelines for the non-initiation of CPR

- Where the physician has documented no CPR.
- Where there are obvious clinical signs of death: decapitation, incineration, decomposition, rigor mortis or dependent lividity and overwhelming trauma.
- Where CPR places the responder at significant risk of injury due to environmental hazards.
- Where triaging in an emergency setting has determined more appropriate utilization of resources.
- The patient is pulseless, not breathing, with fixed dilated pupils, and collapse is known to have occurred >30 minutes prior to arrival with no institution of CPR.

CPR should be continued until one of the following occurs

- Appropriate Basic Life Support (BLS) and Advanced Life Support (ALS) has been instituted without restoration of breathing and circulation (including adequate airway, IV access and treatment of rhythm disturbances) ie. Asystole or agonal rhythm for >20 minutes with no reversible causes identified.
- Care is transferred to other medical professionals.
- A physician determines CPR should be discontinued.
- CPR jeopardizes the life of the responder.
- The responder can no longer continue due to physical exhaustion.
- Information in regard to medical futility, or physician orders come to light.
- CPR should always be continued until handover of care to a physician in cases of
 - hypothermia, drug overdoses, children, poisonings, drowning, unusual circumstances
- If doubt exists in any case there should always be presumption in favour of treatment.
- The limitation of resuscitation orders does not mean abandonment of the patient.
- Do not resuscitate orders, unless otherwise stated, do not mean the withholding of other modes of treatment eg. Oxygen, bronchodilators in end-stage COPD.

Ambulance practitioners must clearly record full details of the information given to them in the Patient Care Record and also the basis for their decision on resuscitation.