PATIENT ASSESSMENT — PROTOCOL A1

PRIMARY ASSESSMENT

D

DANGER
- ensure scene safety
- wear appropriate PPE

R

RESPONSE? (AVPU)

UNRESPONSIVE

RESPONDS TO VOICE
RESPONDS TO PAIN

ALERT

S

send for HELP (1)

A

AIRWAY
- clear mouth of obvious material, and do head tilt / chin lift prior to checking breathing
- implement other airway management as required
- protect C-spine if indicated

AIRWAY
- implement airway management as required
- protect C-spine if indicated

AIRWAY
- consider the potential for airway compromise
- protect C-spine if indicated

B

BREATHING? look listen & feel for 10 secs

BREATHING
absent OR agonal (2)

BREATHING
present
- count rate (15 sec x 4)
- assess effectiveness
- note signs of distress
- SpO_2
- O_2 therapy or IPPV as required

BREATHING
- count rate (15 sec x 4)
- note signs of distress
- SpO_2
- O_2 therapy as required

C

COMPRESSIONS / CPR
- chest compressions and IPPV (Protocol R2)

CIRCULATION
- count pulse (15 sec x 4)
- peripheral perfusion / capillary refill
- BP
- control bleeding (3)

D

DEFIBRILLATION
- apply AED pads

POSTURE
- as required based on LOC, respiratory distress and/or poor perfusion

HISTORY

Pre-Arrival
- details over radio; from bystander etc.

On Arrival
- scene assessment
- initial details from bystanders

Initial History
- ask basic questions e.g. "what happened?" "how can I help you?" "where does it hurt?"
- a detailed history is taken during the secondary assessment

VITAL SIGNS
- during the primary assessment, determine if vital signs are within the yellow or red zone and escalate management as appropriate
- see Protocol A2

Explanatory Notes

1. Send for help (triple zero for ambulance, and HCP if available) *immediately* if patient unresponsive.
2. Agonal breathing means abnormal, gasping breaths. (common in the first few minutes following cardiac arrest)
3. *Torrential* haemorrhage should be managed prior to airway & breathing.

Authorised by Dr David Fahey, Assistant Commissioner (Clinical)

SECONDARY ASSESSMENT

1) VITAL SIGNS

A full set of vital signs must be recorded for all patients. Any patient requiring further medical assessment (via ambulance, hospital or GP) must have at least two sets of vital signs documented.
A set of vital signs includes:

- level of consciousness
- respiratory rate
- SpO_2
- pulse rate
- blood pressure

In addition:

- if any YELLOW zone criteria are present → perform vital signs at minimum of 15 minute intervals
- if any RED zone criteria are present → perform vital signs at minimum of 5 minute intervals

Other observations may be indicated, including:

- temperature
- blood glucose level (BGL)

2) HISTORY

a) medical problem
- what is the presenting / chief complaint?
- history of presenting complaint – the mnemonic OPQRST is helpful
  - onset
  - provoking / relieving factors
  - quality – the patient's own description of the nature of the symptom(s)
  - radiation
  - severity
- associated symptoms (e.g. with abdominal pain, ask about vomiting or diarrhoea)

b) trauma
- determine the mechanism of injury
- location and nature of any pain
- possibility of head / spinal injury
- NB: trauma may have *resulted from* a medical problem (e.g. LOC or seizure causing a fall or traffic accident)

c) all patients
- in addition to the above, always check
  - past medical history
  - medications
  - allergies
- this may be remembered within the mnemonic AMPLE (allergies, medications, past medical history, last meal, events leading to present problem)
- medi-alert bracelets or cards may be helpful

3) EXAMINATION

This will be determined by the patient's condition:

a) full head-to-toe examination
- this is indicated in very few patients, e.g. multi-trauma, or unconscious

b) examination of injured body part / region
- this approach is appropriate for most patients with an isolated injury
- always check for the possibility of other injuries

c) no examination
- patients presenting with a medical problem usually don't require a physical examination by a FR

VITAL SIGNS – ADULT

vital sign	level of response	adult (> 16 years)
respiratory rate (breaths/min)	red	>30
	yellow	25 – 30
		10 – 25
	yellow	5 – 10
	red	< 5
SpO_2 %		95 – 100
	yellow	90 – 94
	red	< 90
pulse rate (beats/min)	red	> 140
	yellow	120 – 140
		50 – 120
	yellow	40 – 50
	red	< 40
systolic blood pressure (mmHg)	red	> 200
	yellow	180 – 200
		100 – 180
	yellow	90 – 100
	red	< 90
conscious level (AVPU)		A
	yellow	V
	red	P or U
temperature (°C)	yellow	> 38.5
		35.5 – 38.5
	yellow	< 35.5

***ADDITIONAL* ADULT YELLOW AND RED ZONE CRITERIA**	
YELLOW	**RED**
• confusion • oxygen required to normalise SpO_2 • poor peripheral circulation • BGL 2 – 4 mmol/L • increasing or uncontrolled pain • concern by any staff member • concern by patient or family	• cardiac arrest • respiratory arrest • airway obstruction or stridor • seizures • decrease in level of consciousness • BGL < 2 mmol/L • patient deteriorates while awaiting assistance • 3 or more yellow criteria • serious concern by any staff member

VITAL SIGNS – PAEDIATRIC

vital sign	level of response	< 1 month	1 – 3 months	3 – 12 months	1 – 4 years	5 – 11 years	12 – 16 years
resp rate (breaths/min)	red	> 80	> 75	> 65	> 60	> 50	> 40
	yellow	60 – 80	65 – 75	55 – 65	50 – 60	35 – 50	30 – 40
	blue		55 – 65	45 – 55	40 – 50	30 – 35	20 – 30
		30 – 60	30 – 55	30 – 45	20 – 40	20 – 30	15 – 20
	blue		25 – 30	25 – 30		15 – 20	10 – 15
	yellow	25 – 30	20 – 25	15 – 25	15 – 20	10 – 15	5 – 10
	red	< 25	< 20	< 15	< 15	< 10	< 5
resp distress *	red	severe	severe	severe	severe	severe	severe
	yellow	moderate	moderate	moderate	moderate	moderate	moderate
	blue	mild	mild	mild	mild	mild	mild
SpO_2 %		95 – 100	95 – 100	95 – 100	95 – 100	95 – 100	95 – 100
	yellow	90 – 94	90 – 94	90 – 94	90 – 94	90 – 94	90 – 94
	red	< 90	< 90	< 90	< 90	< 90	< 90
pulse rate (beats/min)	red	> 190	> 190	> 180	> 170	> 160	> 150
	yellow	160 – 190	170 – 190	170 – 180	150 – 170	140 – 160	130 – 150
	blue		160 – 170	160 – 170	140 – 150	120 – 140	100 – 130
		110 – 160	110 – 160	100 – 160	90 – 140	80 – 120	60 – 100
	blue	90 – 110	100 – 110	90 – 100	80 – 90	70 – 80	50 – 60
	yellow	70 – 90	80 – 100	80 – 90	70 – 80	60 – 70	40 – 50
	red	< 70	< 80	< 80	< 70	< 60	< 40
capillary refill time (seconds)		< 3	< 3	< 3	< 3	< 3	< 3
	yellow	≥ 3	≥ 3	≥ 3	≥ 3	≥ 3	≥ 3
systolic blood pressure (mmHg)	red		> 120	> 130	> 150	> 160	> 200
	yellow		100 – 120	110 – 130	120 – 150	130 – 160	160 – 200
	blue				110 – 120	110 – 130	120 – 160
			60 – 100	70 – 100	90 – 100	90 – 110	90 – 120
	blue				80 – 90		
	yellow		50 – 60	60 – 70	70 – 80	80 – 90	80 – 90
	red		< 50	< 60	< 70	< 80	< 80
conscious level (AVPU)		A	A	A	A	A	A
	yellow	V	V	V	V	V	V
	red	P or U	P or U	P or U	P or U	P or U	P or U
temperature (°C)	red	> 39.5	> 41	> 41	> 41	> 41	> 41
	yellow	37.5 – 39.5	38.5 – 41	38.5 – 41	38.5 – 41	38.5 – 41	38.5 – 41
		36 – 37.5	35.5 – 38.5	35.5 – 38.5	35.5 – 38.5	35.5 – 38.5	35.5 – 38.5
	yellow	34.5 – 36	34.5 – 35.5	34.5 – 35.5	34.5 – 35.5	34.5 – 35.5	34.5 – 35.5
	red	< 34.5	< 34.5	< 34.5	< 34.5	< 34.5	< 34.5

VITAL SIGNS – PAEDIATRIC (continued)

* ASSESSMENT OF PAEDIATRIC RESPIRATORY DISTRESS			
	MILD	**MODERATE**	**SEVERE**
Airway			• stridor • partial or imminent airway obstruction
Behaviour & Feeding	• talks in sentences	• some / intermittent irritability • difficulty talking or crying • difficulty feeding or eating	• agitated / confused • drowsy • unable to talk or cry • unable to feed or eat
Respiratory Rate	• mildly increased	• resp rate in yellow zone	• resp rate in red zone • resp rate decreasing (exhaustion)
Work of Breathing & Accessory Muscle Use	• minimal	• moderate recession • tracheal tug • nasal flaring	• severe recession • gasping • grunting • extreme pallor • cyanosis • absent breath sounds
Apnoeic Episodes			• apnoeic episodes
Oxygen	• no oxygen requirement	• SpO_2 in yellow zone when breathing air, but corrected by oxygen	• SpO_2 in red zone when breathing air • SpO_2 in yellow or red zone on oxygen

ADDITIONAL **PAEDIATRIC YELLOW AND RED ZONE CRITERIA**	
YELLOW	**RED**
• confusion • oxygen required to normalise SpO_2 • poor peripheral circulation • reduced urine output (no urine passed for 8 hrs) • BGL 2 – 4 mmol/L • increasing or uncontrolled pain • inconsolable • concern by any staff member • concern by patient or family	• cardiac arrest • respiratory arrest • seizures • decrease in level of consciousness • BGL < 2 mmol/L • patient deteriorates while awaiting assistance • 3 or more yellow criteria • serious concern by any staff member