## Queensland Paediatric Emergency Care

Skill Sheets

# **Primary Survey**

A primary survey should be commenced immediately on the patient's arrival to the emergency department (ED), with resuscitation measures as appropriate. The following skil sheet gives a broad overview of the primary survey process. The method of primary assessment has it's foundation in trauma care. Where an issue is found, it should be rectified prior to moving onto the next step in the assessment. Using this process of assessment helps to quickly identify and assist to treat life threatening conditions.

# C control bleeding

# Address exsanguinating haemorrhage

#### Assessment:

· Identify uncontolled haemorrhage.

#### Interventions as required:

- Apply manual pressure to site of bleeding. Utilise specialised haemostatic dressings where available.
- Consider initiating massive transfusion protocol according to local policy and procedure.
- In facilities with a 'red blanket protocol', urgently facilitate transfer to the operating theatre where surgical control of bleeding is required.



# Assess patency, consider C-spine protection

#### **Assessment:**

- Look, listen and feel for air movement.
- Observe if any abnormal sounds stridor, gurgling, hoarseness.
- Check for secretions or presence of foreign body do not attempt to remove foreign body if child is able to breathe adequately and maintain oxygen saturations.

#### Interventions as required:

- Maintain in-line cervical immobilisation if required. If available, consider the use of a soft collar.
- Where required, simple <u>airway manoeuvres</u> such as chin lift (where no c-spine concern) or jaw thrust can be attempted.
- Consider the use of airway adjuncts (<u>nasopharyngeal</u>) as appropriate.
- · Suction airway where required.

When airway issues have been addressed, move on to "B - Breathing".



# Confirm efficacy

#### **Assessment:**

- Expose the chest to observe the chest rise and fall.
- Assess work of breathing such as nasal flaring, retractions, position of comfort and altered respiratory rate.
- Auscultate the lungs to assess for the quality of breath into the lungs.

## Interventions as required:

- Where hypoxic, give oxygen via a non-rebreather mask (NRBM).
- Where breathing inadequate, assist ventilation with <u>bag-valve-mask</u> or T-piece circuit.

When breathing issues have been addressed, move on to "C - Circulation".







# Confirm adequate perfusion

#### **Assessment:**

- Observe for abnormal skin colour such as pallor, mottling or cyanosis.
- Check central capillary refill.
- Assess pulse rate and quality.
- · Look for bleeding.
- Commence blood pressure monitoring.

#### Interventions as required:

- Where no signs of life, commence cardiopulmary resuscitation (CPR).
- Control bleeding with external pressure.
- Arterial tourniquets may be used where appropriate.

When airway issues are addressed, move on to "D- Disability".



# Confirm neurological status

#### **Assessment:**

- AVPU is a quick measure of level of alertness.
  - A Alert
  - V responds to Voice
  - P responds to Pain
  - U Unresponsive
- Use the least amount of stimulation on first attempt to gain a response, then increase stimuli to illicit a response.
- Check pupils bilaterally for size, shape and reaction to light.
- Assess upper and lower limb tone and strength.
- Obtain blood glucose level (BGL)

#### Management:

- Correct hypoglycemia.
- Commence Neuroprotection Checklist as clinically indicated.

When breathing issues have been addressed, move on to "E - Exposure".



# Assess and maintain body temperature

#### **Assessment:**

• Check temperature.

#### Interventions as required:

- Minimise heat loss limit exposure time.
- Utilise ambient room heaters where available.
- Apply overhead heaters, warm blankets or a warming blanket system.

When all aspects of primary survey completed and addressed, proceed to secondary survey.





# Other key points:

A rapid assessment can be performed visually with no or minimal actual physical contact with the child. A distressed child is difficult to assess. Rapport needs to be built with the child to gain their trust. A smile, peek-a-boo game and a calm, slow approach may help with rapport building

Where appropriate ask the parent to assist you in preparing thier child for assessment.

- Ask the caregiver to lift the child's shirt to observe airway/breathing assessment.
- Clarify the child's baseline behaviour with their caregiver.
- Children who are reluctant to interact may be more comfortable answering questions asked with the help of thier caregiver.

# For further information:

Clinical Assessment of the Paediatric Patient - Rapid Assessment / Primary and Secondary Survey / Vital Signs (QH only)

Children's Health Queensland: Primary Survey (QH only)

Children's Resuscitation Emergency Drug Dosage (CREDD)

#### Videos:

**Primary Survey** 

**Bag Valve Mask Ventilation** 

T-piece ventilation with anaesthetic bag

Neopuff<sup>TM</sup> Ventilation

Oropharyngeal Airway

Nasopharyngeal Airway

#### **Related Skill Sheets:**

Airway Manoeuvres

Oropharyngeal Airway

Nasopharyngeal Airway

**Bag Valve Mask Ventilation** 

**Respiratory Assessment** 

Cardiovascular Assessment

**Neurological Assessment** 

**Neuroprotection Checklist** 

How to Obtain a Blood Glucose Level (BGL)





# **References:**

Children's Health Queensland Hospital and Health Service. (2017, June 21). Clinical Assessment of the Paediatric Patient – Rapid Assessment / Primary and Secondary Survey / Vital Signs. <a href="https://qheps.health.qld.gov.au/">https://qheps.health.qld.gov.au/</a> data/assets/pdf file/o019/724240/ns 00241.pdf

Children's Health Queensland Hospital and Health Service. (n.d.). Primary Survey. Retrieved April 30, 2020, from <a href="https://gheps.health.qld.gov.au/childrenshealth/html/lcch/trauma/primary">https://gheps.health.qld.gov.au/childrenshealth/html/lcch/trauma/primary</a>

Queensland Health State-wide ED Nurse Educator Committee, Cooper, E., Wilson, K., Humphries, J., & Jackson, K. (2016). Unit 1 - Major Trauma. In L. Wall & N. Pearson (Eds.), Program - Emergency. Management of the Critically Ill Patient in the Emergency Department (4th ed., pp. 10–17). State of Queensland (Queensland Health).

This Queensland Paediatric Emergency Skill Sheet was developed and revised by the Emergency Care of Children working group Initial work was funded by the Queensland Emergency Department Strategic Advisory Panel.

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- Providing care within the context of locally available resources, expertise, and scope of practice.
- Supporting consumer rights and informed decision making in partnership with healthcare practitioners including the right to decline intervention or ongoing management.

- Advising consumers of their choices in an environment that is culturally appropriate and which enables comfortable and confidential discussion.
  This includes the use of interpreter services where necessary.
- Ensuring informed consent is obtained prior to delivering care.
- Meeting all legislative requirements and professional standards.
- Applying standard precautions, and additional precautions as necessary, when delivering care.
- Documenting all care in accordance with mandatory and local requirements.

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