

Assessment: Primary Survey

The primary assessment and resuscitation should take place over the first 5-10mins, following arrival of a patient in the emergency department. By following the universally taught A, B, C, D and E process of paediatric trauma care, you can quickly identify and assist to treat life threatening conditions. Please note if exsanguinating haemorrhage is identified on initial presentation the algorithm should be used in the following order: A, B, C, D and E.

Airway - assess patency, consider C-spine protection

Assessment:

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

Interventions as required:

- Maintain in-line cervical immobilisation if required. If available consider the use of a soft collar.
- If required, simple airway manoeuvres such as chin lift or jaw thrust can be attempted.
- Consider the use of airway adjuncts (NPA/OPA) if appropriate and required.
- Suction airway to remove excess secretions or blood.

Breathing – confirm efficacy

Assessment:

- Expose the chest to observe the chest rise and fall.
- Assess work of breathing such as nasal flaring, retractions, abnormal airway sounds, position of comfort and altered respiratory rate.
- Auscultate the lungs to assess for the quality of gas flow into each of the lung fields.

Interventions as required:

- Give oxygen via a Non-rebreather mask at 10 L/min
- Assist ventilation with bag-valve-mask/Neonatal T-Piece resuscitator

Circulation – confirm adequacy

Assessment:

- Identify exsanguinating haemorrhage. Consider potential internal uncontrolled bleeding if abnormal observations with nil external source of bleeding.
- Observe for abnormal skin colour such as pallor, mottling or cyanosis.
- Check central capillary refill.
- Assess pulse rate and quality.

Interventions as required:

- Control bleeding with external pressure.
- Arterial tourniquets may be used in trauma patients (if competent / experienced to do so)
- Cardiopulmonary resuscitation

PTO



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 garner a response.
- Check pupils bilaterally for size, shape and reaction to light.

Management:

- Ensure optimal management of A, B and C.

Exposure – assess and maintain body temperature.

Assessment:

- Check skin temperature.

Interventions as required:

- Remove all clothing and perform a log roll if required. Be mindful of patient privacy and dignity.
- Minimise heat loss - Limit exposure time.
- Apply overhead heaters, warm blankets or a warming blanket system.

Tips and Tricks

- A rapid assessment can be performed visually with no or minimal actual physical contact with the child. If the child becomes distressed on approach, it becomes difficult to gain an accurate assessment. A rapport needs to be built with the child to gain their trust – a smile, peek-a-boo game, a calm and slow approach, will help.
- Where appropriate ask the parent to assist you:
 - Ask the care giver to lift the child's shirt to observe airway/breathing assessment.
 - Ask the care giver if the child's behaviour is normal if you are concerned about their LOC.
 - Some children may feel more comfortable answering questions from their care givers, it may work best to have the care givers ask questions on your behalf.



ALERT

Any serious abnormality found should be addressed and escalated to a medical officer prior to moving onto the next stage of assessment.

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 \(QH only\)](#)

Video:

[Primary Survey](#)



References:

This Queensland Paediatric Emergency Nursing Skill Sheet was developed by the Emergency Care of Children working group (funded by the Queensland Emergency Department Strategic Advisory Panel) with the help of the following resources:

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. https://qheps.health.qld.gov.au/_data/assets/pdf_file/0019/724240/ns_00241.pdf

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

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).

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- 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.
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