**Aim:**
- Early identification and treatment of life threatening causes of shortness of breath and escalation of care for patients at risk.
- Early initiation of treatment / clinical care and symptom management within benchmark time.

**Assessment Criteria:** On assessment the patient should have increased shortness of breath plus one or more of the following signs / symptoms:
- Patent airway
- Mild dyspnoea
- SpO₂ > 95%
- Mild use of accessory muscles
- Talking in short sentences
- Wheeze / coughing

**Escalation Criteria:** Immediate life-threatening presentations that require escalation and referral to a Senior Medical Officer (SMO):
- Severe asthma/COPD
- Foreign body / aspiration
- Acute pulmonary oedema
- Anaphylaxis
- Trauma Criteria* 
- Acute respiratory failure
- Sepsis Pathway Criteria*

**Primary Survey:**
- Airway: patency
- Breathing: resp rate, accessory muscle use, air entry, SpO₂
- Circulation: perfusion, BP, heart rate, temperature
- Disability: GCS, pupils, limb strength

**Notify CNUM and SMO if any of the following red flags is identified from Primary Survey and Between the Flags criteria:**

**Airway – at risk**
- Partial / full obstruction
- Disability – decreased LOC
- GCS ≤ 14 or a fall in GCS by 2 points

**Breathing – respiratory distress**
- RR < 5 or >30 /min
- SpO₂ < 90%

**Exposure**
- Temperature <35.5°C or >38.5°C
- BGL < 3mmol/L or > 20mmol/L

**Circulation – shock / altered perfusion**
- HR < 40bpm or > 140bpm
- BP < 90mmHg or > 200 mmHg
- Postural drop > 20mmHg
- Capillary return > 2 sec

**History:**
- Presenting complaint
- Allergies
- Medications: and any recent change to medications
- Past medical past surgical history relevant
- Last ate / drank & last menstrual period (LMP)
- Events and environment leading to presentation
- Pain Assessment / Score: PQRST (Palliating/ provoking factors, Quality, Region/radiation, Severity, Time onset)
- Associated signs / symptoms: e.g. dizziness, chest pain, syncope, fevers, cough
- History: family, trauma and travel

**Systems Assessment: Focused respiratory assessment:**
- Inspection: rate and rhythm of breathing, quality and work of breathing, level of consciousness, chest wall abnormalities, face/neck swelling
- Palpation: assess degree and location of tenderness, note any restriction to chest expansion, is the trachea midline?
- Auscultation: listen for bilateral air entry, wheezes (expiratory), crackles (inspiratory).
- Percussion: observe for dullness or hyper-resonance on percussion.

**Notify CNUM and Senior Medical Officer (SMO) if any of the following red flags is identified from History or Systems Assessment:**

**Sudden acute onset**
- Cyanosis
- Decreased breath sounds
- Elderly > 60 years
- Recent travel / infectious

**Previous intubation/ ICU admissions**
- Confusion / disorientated
- Inspiratory / expiratory stridor
- Co-morbidities – COPD, CCF
- Trauma to chest

**Syncope**
- Oedema – central / peripheral
- Tachycardia
- Pregnancy
- Allergies

**Laboratory / Radiology:**
- Pathology: Refer to local nurse initiated STOP
- BGL, FBC, UEC, LFTs (suspected Pneumonia)
- FBC, UEC, LFTs & Troponin (suspected Pul Oedema)
In life threatening presentations, call for help, consider early intubation.

Maintain close observation and provide reassurance- breathless patients are usually anxious which further increases myocardium force and contraction and oxygen demand.

Isolate patients screened as infectious preferably in negative pressure rooms, the use of PPE including full droplet/airborne precautions is necessary when attending to potentially infectious patients.

Consider application of BIPAP/CPAP to decreased the work of breathing and improve gas exchange in the management of acute respiratory failure.

Oxygen therapy for most patients with COPD will not produce significant CO$_2$ retention, oxygen delivery should provide minimal saturations in most cases of 90% corresponding with a PaO$_2$ of 60-70mmHg.

Further Reading / References:


Acknowledgements: SESLHD Adult Emergency Nurse Protocols were developed & adapted with permission from:

- Murphy, M (2007) Emergency Department Toolkits. Westmead Hospital, SWAHS
- Hodge, A (2011) Emergency Department, Clinical Pathways. Prince of Wales Hospital SESLHD.

Revision & Approval History

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision No.</th>
<th>Author and Approval</th>
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<tbody>
<tr>
<td>December 2013</td>
<td>0</td>
<td>Developed by Kylie Howes - Nurse Educator, Emergency Prince of Wales Hospital.</td>
</tr>
<tr>
<td>August 2014</td>
<td>1</td>
<td>Edited by Leanne Horvat - Clinical Stream Nurse Manager, Emergency / Critical Care &amp; Emergency Stream CNC/ NE Working Group SESLHD</td>
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<tr>
<td>December 2014</td>
<td>2</td>
<td>Endorsed by: SESLHD Emergency Clinical Stream Committee on 11 December 2014</td>
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<tr>
<td>February 2015</td>
<td>3</td>
<td>Approved: SESLHD Drug &amp; Quality Use Medicines Committee on 12 February 2015</td>
</tr>
<tr>
<td>March 2015</td>
<td>4</td>
<td>Endorsed by: SESLHD District Clinical &amp; Quality Council meeting on 11 March 2015</td>
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