

## Dyspnea (cancer patients)



Dyspnea Categories			
Mild (ESAS 1 - 3)	Moderate (ESAS 4- 6)	Severe (ESAS 7- 10)	
<ul style="list-style-type: none"> <li>• Usually can sit and lie without being short of breath (SOB).</li> <li>• SOB may be intermittent or persistent</li> <li>• SOB worsens with exertion.</li> <li>• No or mild anxiety during SOB</li> <li>• Breathing not observed as laboured</li> <li>• No cyanosis</li> </ul>	<ul style="list-style-type: none"> <li>• SOB usually persistent</li> <li>• SOB may be new or chronic</li> <li>• SOB worsens with walking or exertion; settles with rest</li> <li>• Pauses while talking q30 seconds</li> <li>• Breathing mildly laboured</li> <li>• No cyanosis</li> </ul>	<p>Progressive</p> <ul style="list-style-type: none"> <li>• Often an acute episode of SOB overlying chronic dyspnea.</li> <li>• Worsening SOB over days/weeks</li> <li>• Anxiety present</li> <li>• Awakens suddenly with SOB</li> <li>• +/- Cyanosis</li> <li>• +/- Onset confusion</li> <li>• Laboured breathing while awake &amp; asleep</li> <li>• Pauses while talking q5-15 seconds</li> <li>• Cough often present</li> </ul>	<p>Acute Exacerbation</p> <ul style="list-style-type: none"> <li>• Sudden onset of SOB (minutes to few hours)</li> <li>• High anxiety &amp; fear</li> <li>• Agitation with very laboured respirations</li> <li>• Air hunger</li> <li>• Pauses while talking</li> <li>• Exhausted, tries to sit and lean forward, falls back, tries again</li> <li>• Total concentration on breathing</li> <li>• Cyanosis common</li> <li>• Skin may be cold and clammy</li> <li>• +/- Noisy breathing</li> <li>• +/- Acute chest pain</li> <li>• +/- Diaphoresis</li> <li>• +/- Confusion</li> </ul>

### Actual and / or Potential Patient Problems

1. Medical emergencies related to dyspnea, e.g., superior vena cava syndrome.
2. Respiratory and / or ventilatory failure.
3. Fear and panic by patient / family.
4. Patient's assessment of SOB may differ from the caregiver's perception.

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Collaborative Care Plan for DYPSPNEA			
	Mild (ESAS 1 - 3)	Moderate (ESAS 4 - 6)	Severe (ESAS 7 - 10)
<b>1. Physical Assessment</b>	<p>Dyspnea intensity to be assessed using the ESAS (Edmonton Symptom Assessment Scale). Use ESAS daily if patient in institution or once per visit day if in community.</p> <p><b>History</b></p> <ul style="list-style-type: none"> <li>• History of underlying conditions e.g. COPD, asthma, emphysema, CHF, pneumonia, upper respiratory tract infections, pleural effusion, vascular obstruction, anxiety</li> <li>• Smoking history</li> <li>• Environmental hazards e.g. asbestos</li> <li>• Triggers: pets, scents, second hand smoke, anxiety</li> <li>• Patient's assessment of shortness of breath (SOB) using ESAS and <i>Oxygen Cost Diagram</i></li> <li>• Medication: prescribed, O<sub>2</sub> therapy, over the counter medications</li> <li>• Changes in sleep patterns</li> <li>• Use of CPAP or BiPAP</li> <li>• Coping strategies: fan, opening of window, curtains, doors, removal of environmental stimuli, other (e.g. cold cloth to face)</li> <li>• Use of complementary therapies, e.g., relaxation techniques, music therapy, etc.</li> </ul> <p><b>Physical Examination</b></p> <p>Vital signs</p> <p>Respiratory assessment qvisit/shift &amp; PRN</p> <ul style="list-style-type: none"> <li>• Chest auscultation</li> <li>• Use of accessory muscles, pursed lips, reduced capillary filling, barrel chest, clubbed fingers, ability to speak</li> <li>• Cyanosis, skin tone &amp; colour, stridor, cough, secretions, oral mucous integrity, speaks in short sentences, wheezing, vertigo.</li> <li>• Use of one pillow, two pillows, chair to sleep</li> <li>• Cognitive assessment: mood, affect, ability to concentrate and problem solve</li> <li>• Behavioral changes: e.g. agitation, restlessness</li> </ul> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>Signs of superior vena cava obstruction</b> - swelling &amp; redness of face, distended vessels of neck, arms &amp; upper chest, SOB, coughing, tachypnea. It is a <b>MEDICAL EMERGENCY</b> – consider hospital admission, +/- chemotherapy, radiotherapy depending on diagnosis, +/- steroids</p> </div>		

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<b>1. Tests</b>	<ul style="list-style-type: none"> <li>• +/- Chest X-Ray</li> <li>• +/- Pulmonary Function Test – stable &amp; transitional patients</li> <li>• +/- Oxygen sats</li> <li>• +/- Blood gases – May have to do blood gases for home oxygen patient if prognosis &gt; 3 months</li> </ul>	<ul style="list-style-type: none"> <li>• +/- Chest X-Ray</li> <li>• +/- Pulmonary Function Test – stable &amp; transitional patients</li> <li>• +/- Oxygen sats</li> <li>• +/- Blood gases – May have to do blood gases for home oxygen patient if prognosis &gt; 3 months</li> </ul>	<ul style="list-style-type: none"> <li>• +/- Chest X-Ray</li> <li>• +/- Pulmonary Function Test – stable &amp; transitional patients</li> <li>• +/- Oxygen sats</li> <li>• +/- Blood gases – Consider for stable &amp; transitional patients.</li> </ul>
<b>2. Medications</b>	<ul style="list-style-type: none"> <li>• See <i>Dyspnea Guidelines</i></li> </ul>		
<b>3. Activity</b>	<ul style="list-style-type: none"> <li>• Encourage rest periods as needed</li> <li>• Maintain normal activities as tolerated &amp; desired</li> <li>• +/- Elevated head of bed for rest or sleep.</li> <li>• +/- Use reclining chair with foot rest</li> <li>• +/- Assistive devices e.g. wheelchair, walker</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage regular rest periods alternating with periods of activity</li> <li>• +/- Elevated head of bed for rest or sleep</li> <li>• Support &amp; position patient with pillows as necessary.</li> <li>• +/- Use reclining chair with foot rest</li> <li>• +/- Assistive devices e.g. wheelchair, walker</li> <li>• +/- Assistance with activities of daily living</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage rest periods as needed.</li> <li>• +/- Elevated head of bed for rest or sleep</li> <li>• Support &amp; position patient with pillows.</li> <li>• +/- Use reclining chair with foot rest</li> <li>• +/- Overbed table + pillows for support</li> <li>• +/- Assistive devices e.g. wheelchair, walker</li> <li>• Assistance with feeding, hygiene, toileting and ambulation may be required</li> </ul>
<b>4. Treatment</b>	<ul style="list-style-type: none"> <li>• +/- Treat underlying conditions.</li> <li>• +/- Thoracentesis, pleurodesis, radiotherapy, chest tube</li> <li>• +/- Fan or open window, doors, curtains</li> <li>• +/- Complimentary therapies e.g., imagery, massage, music, relaxation techniques, available as per policies &amp; procedures for each organization</li> </ul>		
<b>5. Physical Environment</b>	<ul style="list-style-type: none"> <li>• Check with patient about irritants &amp; triggers (e.g., scents from perfume, flowers; emotional triggers).</li> <li>• Caution against smoking in patient's room/house.</li> <li>• Encourage a clean &amp; orderly environment.</li> <li>• Check with patient about opening of windows, curtains, doors.</li> </ul>		

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<b>6. Psycho-Social Issues Assessment &amp; Care</b>	<ul style="list-style-type: none"> <li>• Have essential supplies available when traveling e.g. medications, O<sub>2</sub> if needed, emergency phone numbers</li> <li>• Identify &amp; address patient / family fear &amp; anxiety</li> <li>• Assess meaning of SOB</li> <li>• Plan social activities to allow for periods of rest.</li> <li>• Caution family and others against smoking in patient's environment</li> <li>• Avoid triggers, e.g. perfume, flowers, pets etc.</li> <li>• +/- Implement coping strategies</li> <li>• Remain calm in the presence of patient / family, give reassurance.</li> <li>• Provide a calm, relaxed environment</li> </ul>	<ul style="list-style-type: none"> <li>• Have essential supplies available e.g. medications, O<sub>2</sub> if needed.</li> <li>• Have resource / contact numbers readily available</li> <li>• Identify &amp; address patient / family fear &amp; anxiety</li> <li>• Identify fears e.g. fear of suffocation or drowning</li> <li>• Assess meaning of SOB</li> <li>• Plan social activities to allow for periods of rest.</li> <li>• Pace number of social activities</li> <li>• Caution family and others against smoking in patient's environment.</li> <li>• Avoid triggers, e.g. perfume, flowers, pets</li> <li>• +/- Implement coping strategies.</li> <li>• Remain calm in the presence of patient / family, give reassurance.</li> <li>• Provide a calm, peaceful environment</li> </ul>	<ul style="list-style-type: none"> <li>• Have essential supplies available at all times e.g. medications, O<sub>2</sub> if needed,</li> <li>• Have resource / contact numbers readily available</li> <li>• Remain calm in the presence of patient/family, give reassurance</li> <li>• Identify &amp; address patient / family fear &amp; anxiety</li> <li>• Encourage short visits from other than immediate family and caregivers</li> <li>• Caution family and others against smoking in patient's environment</li> <li>• Avoid triggers, e.g., perfume, flowers, pets</li> <li>• +/- Implement coping strategies</li> <li>• Provide a calm, peaceful environment</li> </ul>
<b>7. Referrals</b>	<ul style="list-style-type: none"> <li>• Regular follow-up visits with family physician (FP), specialists, e.g. oncologist, respirologist, palliative care.</li> <li>• +/- Physiotherapy (PT) assessment for energy and respiratory intervention</li> <li>• +/- Respiratory Therapy (RT) for assessment, equipment needs</li> <li>• +/- Lung Association</li> <li>• +/- Canadian Cancer Society</li> </ul>	<ul style="list-style-type: none"> <li>• Regular follow-up visits with FP, specialists, e.g. oncologist, respirologist, palliative care.</li> <li>• +/- RT for assessment, equipment needs</li> <li>• +/- PT assessment for energy and respiratory intervention</li> <li>• +/- Lung Association</li> <li>• +/- Canadian Cancer Society</li> </ul>	<ul style="list-style-type: none"> <li>• +/- Specialists e.g. respirology, oncology, palliative care for symptom management</li> <li>• +/- Respiratory Therapy for assessment, equipment needs</li> </ul>

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<b>8. Patient / family education</b>	<ul style="list-style-type: none"> <li>• Inform about signs &amp; symptoms requiring medical assistance</li> <li>• Provide information on medications &amp; O<sub>2</sub> therapy</li> <li>• Inform about importance of remaining calm.</li> <li>• Teach coping techniques, e.g. positioning, fan, relaxation.</li> <li>• Identify triggers, control environmental irritants, smoking, pets</li> <li>• Educate/inform re: progression of symptoms, disease, diagnostic test results &amp; future management plans</li> <li>• Ensure patient/family at home have resource &amp; contact numbers &amp; an emergency plan in place</li> </ul>	<ul style="list-style-type: none"> <li>• Inform about signs &amp; symptoms requiring medical assistance</li> <li>• Provide information on medications &amp; O<sub>2</sub> therapy</li> <li>• Inform about importance of remaining calm</li> <li>• Teach coping techniques, e.g. positioning, fan, relaxation, pacing activities</li> <li>• Identify triggers, control environmental irritants, smoking, pets</li> <li>• Educate/inform re progression of symptoms, disease, diagnostic test results &amp; future management plans</li> <li>• Ensure patient/family at home have resource &amp; contact numbers &amp; an emergency plan in place</li> </ul>	<ul style="list-style-type: none"> <li>• Inform about signs &amp; symptoms requiring medical assistance</li> <li>• Ensure patient/family at home have resource &amp; contact numbers &amp; an emergency plan in place</li> <li>• Provide information on medications &amp; O<sub>2</sub> therapy</li> <li>• Inform about importance of remaining calm</li> <li>• Teach coping techniques, e.g. positioning, fan, relaxation</li> <li>• Identify triggers, control environmental irritants, smoking, pets</li> <li>• Educate/inform re progression of symptoms &amp; disease.</li> </ul>
<b>9. Planning</b>	<ul style="list-style-type: none"> <li>• Discuss with FP +/- specialists +/- CCAC goals</li> <li>• Emergency plan e.g. choking, acute respiratory distress, when to use acute care facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss with FP +/- specialists , +/- CCAC goals</li> <li>• How to assess &amp; manage deterioration, e.g., reduction in activity level, frequent rests available help,</li> <li>• Emergency plan e.g. choking, acute respiratory distress, when to use acute care facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss with FP +/- specialists +/- CCAC goals e.g., to stay at home or not, available help,</li> <li>• Emergency plan e.g. choking, acute respiratory distress, when to use acute care facilities</li> </ul>

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	Mild (ESAS 1 - 3)	Moderate (ESAS 4 - 6)	Severe (ESAS 7 - 10)
<b>10. Expected Patient Outcomes</b>	<ul style="list-style-type: none"> <li>• Early detection and treatment of dyspnea</li> <li>• Patient expresses decreased dyspnea and increased comfort and/or indicates</li> <li>• Decreased scores on ESAS dyspnea scale</li> <li>• Patient activity tolerance increased as indicated on <i>Oxygen Cost Diagram</i></li> <li>• Patient / family verbalizes understanding of reducing environmental triggers.</li> <li>• Patient / family verbalizes understanding of signs and symptoms that require medical intervention</li> <li>• Patient/family show understanding of expected progression of symptoms, disease &amp; future management</li> </ul>	<ul style="list-style-type: none"> <li>• Patient expresses decreased dyspnea and increased comfort and/or indicates</li> <li>• Decreased score on ESAS dyspnea scale</li> <li>• Patient activity tolerance increased / maintained as indicated on <i>Oxygen Cost Diagram</i></li> <li>• Patient / family verbalizes understanding of reducing environmental triggers.</li> <li>• Patient / family verbalizes understanding of signs and symptoms that require medical intervention</li> <li>• Patient/family show understanding of expected progression of symptoms, disease &amp; future management</li> </ul>	<ul style="list-style-type: none"> <li>• Patient expresses decreased dyspnea and increased comfort and/or indicates decreased severity on ESAS dyspnea scale</li> <li>• Patient / family verbalizes understanding of reducing environmental triggers</li> <li>• Patient / family demonstrate understanding of signs and symptoms that require medical intervention</li> <li>• Family can distinguish between expected end-of-life respiratory changes and need for appropriate comfort measures vs symptoms requiring medical emergency attention</li> </ul>