

☐ Hospice Palliative Care Program Symptom Guidelines

# Dyspnea



#### □ Rationale

This guideline is adapted for inter-professional primary care providers working in various settings in Fraser Health, British Columbia and the Fraser Valley Cancer Center and any other clinical practice settings in which a user may see the guidelines as applicable.

Up to 95% of COPD patients, 78.6% of advanced cancer patients and 75% of patients with advanced disease of any cause experience dyspnea.<sup>(1-10)</sup>

# Scope

This guideline provides recommendations for the assessment and symptom management of adult patients (age 19 years and older) living with advanced life threatening illness and experiencing the symptom of dyspnea. This guideline does not address disease specific approaches in the management of dyspnea.

#### Definition of Terms

**Dyspnea** (shortness of breath) is a term used to characterize a subjective experience of breathing discomfort that consists of qualitative distinct sensations that vary in intensity. The experience derives from interactions among multiple physiological, psychological, social and environmental factors, and may induce secondary histological and behavioural responses. (10), (1-20) Dyspnea may or may not be associated with hypoxemia, tachypnea or orthopnea.

## ☐ Standard of Care

- 1. Assessment
- 2. Diagnosis
- 3. Education
- 4. Treatment: Nonpharmacological
- 5. Treatment: Pharmacological
- 6. Crisis Intervention



# **Recommendation 1** Assessment of Dyspnea

Ongoing comprehensive assessment is the foundation of effective dyspnea management, including interview (*see Table 1*), physical assessment, appropriate diagnostics, medication review, medical and surgical review, psychosocial review and review of physical environment. Assessment must determine the cause, effectiveness and impact on quality of life for the patient and their family. (1-3, 9, 10, 12, 14, 19, 21-25)

Because dyspnea is subjective, the patient's self report of symptoms should be acknowledged and accepted. Use a numeric rating scale (NRS) or visual analog scale (VAS) for dyspnea to rate shortness of breath from 0 to 10, with 0 being no shortness of breath and 10 being shortness of breath as bad as can be. (1-4, 8, 10, 12, 15, 17, 19, 20, 23, 24, 26-28)

Table 1: Dyspnea Assessment using Acronym O, P, Q, R, S, T, U and V

Onset	When did it begin? How long does it last? How often does it occur?	
Provoking / Palliating	What brings it on? What makes it better? What makes it worse?	
Quality	What does it feel like? Can you describe it?	
Region / Radiation	Where is it? Does it spread anywhere?	
Severity	What is the intensity of this symptom (On a scale of 0 to 10 with 0 being none and 10 being worst possible)? Right Now? At Best? At Worst? On Average? How bothered are you by this symptom? Are there any other symptom(s) that accompany this symptom?	
Treatment	What medications and treatments are you currently using? How effective are these? Do you have any side effects from the medications and treatments? What have you used in the past?	
Understanding / Impact on You	What do you believe is causing this symptom? How is this symptom affecting you?	
<b>V</b> alues	What is your goal for this symptom? What is your comfort goal or acceptable level for this symptom (On a scale of 0 to 10 with 0 being none and 10 being worst possible)? Are there any other views or feelings about this symptom that are important to you or your family?	

<sup>\*</sup> Physical Assessment (as appropriate for symptom)



# **Recommendation 2** Diagnosis

Management should include treating reversible causes where possible and desirable according to the goals of care. The most significant intervention in the management of dyspnea is identifying underlying cause(s) and treating as appropriate *(see Table 2)*. While underlying cause(s) may be evident, treatment may not be indicated, depending on the stage of the disease. (1-5, 7-14, 16, 17, 21-25, 29, 30)

Whether or not the underlying cause(s) can be relieved or treated, <u>all</u> patients will benefit from management of the symptom using education, energy conservation and breath control, airflow and medications.

Table 2: Underlying Causes of Dyspnea & Treatment of Choice

<b>Underlying Causes</b>	Treatment of Choice	
Airway obstruction	Radiotherapy/steroids/stenting	
Anemia - severe	Transfusion may be indicated	
Anxiety	Benzodiazepines and nonpharmacological interventions	
Chronic obstructive pulmonary disease (COPD)/Asthma	Conventional inhalers/nebulizers/steroids/anticholinergic. Many smokers live with undiagnosed and untreated COPD, which exacerbates malignancy-related dyspnea <sup>(29) (31)</sup>	
Congestive Heart Failure (CHF)/ Coronary Artery Disease (CAD) Arrhythmias	Treat with conventional medications <sup>(32)</sup>	
Effusions – pleural, pericardial, peritoneal	Drain –if clinically significant with respect to the patient's dyspnea; pleurodesis or indwelling pleural catheter for recurrent pleural effusion; pericardial window	
Fatigue/deconditioning, weakness	Activity to tolerance, pulmonary rehabilitation exercises may be helpful	
Infection: Pneumonia, pericarditis	Antibiotics, antifungal, antiviral if appropriate	
Lung damage from chemotherapy, radiation or surgery	Consult oncologist (full dose may not yet have been given), steroids for radiation pneumonitis	
Lymphangitic carcinomatosis	Corticosteroids, diuretics	
Neuromuscular (ALS, CVA, poliomyelitis, myasthenia gravis)	No specific therapy; apply the non-pharmacological and pharmacological suggestions outlined below. For Amyotrophic Lateral Sclerosis (ALS) patients – BiPap if appropriate	
Pulmonary emboli	Anti-coagulation, filter if appropriate	
Pain	Often exacerbates dyspnea – appropriate analgesia	
Primary or metastatic tumour (hepatomegaly, phrenic nerve lesion)	Chemotherapy may be indicated – reduces the incidence of ascites/ pleural effusions in ovarian cancer and ascites in intra-abdominal cancer. As above, radiotherapy may relieve airway obstruction	
Pulmonary fibrosis	Steroids; reassessment of oxygen requirements with disease progression	
Superior vena cava (SVC) obstruction	Steroids; consult oncologist for treatment of underlying tumour, radiotherapy	



# **Recommendation 3 Education**

Dyspnea is a distressing symptom to experience and to witness. Providing information and education is foundational to enhance the patient and family's ability to cope<sup>(2, 4-6, 8, 10, 12, 14, 19, 25, 29)</sup>

- Explain to the patient and family what is understood about the multiple triggers of dyspnea (i.e., restriction of respiratory movement, obstructions, and muscle weakness). It is not simply related to oxygenation and therefore many different strategies together can make a difference. **Reinforce that this is a symptom that can be managed**. (2, 10)
- Develop a clear plan for the patient and family to address the pattern of shortness of breath and the patient's way of coping. (2, 3, 10)
- Teach the purpose of each medication, particularly opioids, as families often do not understand the role of these medications. Ensure an understanding of using regular and breakthrough medications. This is a key to effective management. (3)
- Known COPD patients often use inhalers incorrectly. Consider the use of nebulisers and spacers. Ensure patient's compliance.<sup>(1)</sup>
- Review Shortness of Breath teaching pamphlet with patient and family (see Appendix B).

# **Recommendation 4** Treatment: Nonpharmacological

#### **Energy conservation and breath control**

- Explain how to incorporate pacing and planning. (1, 2, 4, 12)
- Teach relaxation training and breath control. (1-6, 8-10, 14, 15, 18, 20, 24)
- Encourage activity to tolerance and assist with energy conservation. Refer to Occupational Therapy (OT) for energy conservation and Physiotherapy (PT) for breath control, when patient situations are highly complex. (1, 2, 5, 13, 24, 33)

#### Air flow

 Open windows and air movement, such as a fan, can be very helpful. Cool air blowing on the face likely triggers reflexes in trigeminal nerve, providing a sense of relief from dyspnea. (1-7, 9-14, 16, 18, 19, 25)

#### **Environment**

• Cool and humidify dry air, eliminate irritants in air. (2, 4, 7, 12, 18, 19, 25, 34)



#### **Positioning**

• Avoid compression of abdomen or chest when positioning. (2, 3, 5-7, 10-13, 19)

#### **Support**

- Offer psychosocial support and/or counseling. (1, 3, 4, 8, 13, 19, 20)
- Alternative therapies for relaxation include: massage, therapeutic touch, visualization, music therapies. (1-3, 6, 9, 10, 14, 19)
- Acupuncture or acupressure. (2, 4, 9, 13, 15, 28)

#### **Recommendation 5**

### **Treatment: Pharmacological**

#### **Opioids**

- Opioids are the drug of first choice in the palliation of dyspnea in advanced disease of any cause. (1-6, 8-14, 16, 18, 19, 21, 22, 24, 25, 27, 29, 30, 34, 35)
- When dyspnea occurs with most/any activity or for dyspnea at rest, initiate opioids while continuing with non-pharmacological strategies. (1, 3, 25)
- Dose is individualized and titrated until patient states they are comfortable or until restlessness, agitation or apparent breathlessness are controlled in non-verbal/confused patients. (1-4, 8, 12, 19, 22, 27, 30, 36) Continued titration may be necessary as tolerance develops.
- Nebulized opioids have NOT been shown to be superior to oral opioids and are therefore not recommended. (1-4, 6, 10-13, 21, 22, 24, 30, 34)
- Relief occurs in the absence of significant changes in blood gases or oxygen saturation. (1, 3)
- Respiratory depression from opioids is  $rare^{(1-4, 9, 11, 12, 14, 22, 34, 36)}$  and they do not hasten death if appropriately titrated.  $^{(1, 3, 4, 9, 12, 13)}$
- Provide access to prophylactic anti-emetic and introduce palliative care bowel protocol to avoid iatrogenic symptoms when initiating opioids. (1, 6, 11, 18, 22)
- If using parenteral route remember S.C. and I.V. =  $\frac{1}{2}$  PO dose (for example 10 mg I.V. or S.C. = 20 mg PO).
- Opioid naïve protocol<sup>(2, 4, 6, 11, 12)</sup>
  - Morphine 2.5 to 5 mg PO q4h. (1-3) Use lower dose in the elderly.
  - Hydromorphone 0.5 to 1 mg PO q4h. (2) Use lower dose in the elderly.
  - Oxycodone 5mg PO. Titrate dose q4h.
  - Consider hydromorphone in the elderly and if there is decreased renal function.
  - Breakthrough ½ of q4h dose ordered q1h p.r.n. (27)
- Opioid tolerant increase current dose by 25% to 50%. (2-4, 9, 22, 27)



#### **Corticosteroids**

- Corticosteroids are particularly indicated in the presence of bronchial obstruction, SVC or lymphangitic carcinomatosis. They may also be useful in pulmonary fibrosis for brief periods. (5, 7, 13, 16, 29) Taper and avoid long-term use if possible (increased risk of proximal myopathy which can be very debilitating). (1, 3, 10, 13, 16, 29)
- Initiate dexamethasone at 8 to 24 mg PO or S.C. or I.V. daily depending on severity of dyspnea. (2, 3)

#### **Neuroleptics**

- Neuroleptics can be a useful adjuvant in chronic dyspnea.<sup>(4)</sup>
- Methotrimeprazine: starting dose 2.5 to 5 mg q8h and titrate to effect. Start low to test tolerance as wide variation in patient response; may require much higher doses to 25 mg q4h. (2)

#### **Benzodiazepines**

- Prescribe on a p.r.n. rather than regular dosing schedule, for severe anxiety and respiratory "panic attacks".(1-7, 10, 13, 14, 16, 17, 19, 25, 29, 34)
- Lorazepam 0.5 to 2 mg SL q2-4h p.r.n. (2, 4, 6)

#### Oxygen

- There are multiple triggers contributing to the sensation of dyspnea. Hypoxemia is only one. Measure oxygen saturation to determine if hypoxemia is a factor in the patient's experience of dyspnea.
- Careful selection is necessary to identify those people who will benefit from oxygen therapy. Individualized care is paramount. (1-4, 6, 7, 16, 19, 21, 24, 25, 37)

## **Hypoxic patients:**

- There is low-grade scientific evidence that both oxygen and airflow improve dyspnea in hypoxic patients with advanced disease at rest. (2-6, 9, 11-14, 16, 25, 27, 29, 37)
- Provide supplemental oxygen therapy for hypoxic patients according to the Home Oxygen Program guidelines (see Appendix A).

## Non-hypoxic patients:

- A systematic review showed that there is insufficient evidence that supplemental oxygen is beneficial for non-hypoxic patients. (37, 38)
- Use other interventions as first line to manage dyspnea with non-hypoxic patients.
- The Home Oxygen Program guidelines will not fund supplemental oxygen at home for non-hypoxic patients. (39)
- If dyspnea is not managed with maximum treatment and medications, refer for hospice palliative care consultation.



'fraser**health** 

#### **Dyspnea**



Diagnosis of acute severe dyspnea occurring during the last hours of life requires crisis intervention

- Treat aggressively with opioids as well as sedatives until comfort is achieved. (2,4)
- Opioid naïve use morphine 5 mg I.V. or S.C. bolus q5 to 10 min. Double dose if no effect every three doses. (2)
- Opioid tolerant give full regular dose S.C. or I.V. q5 to 10 min. I.V. or q10 to 15 min. S.C. If ineffective double dose as above.
- Use **one** of the following sedatives with an opioid: (4,40,41,42,43,44,45,46,47,48,49)
  - Midazolam 2.5 to 5 mg S.C. q5 to 15 min. p.r.n.
  - Lorazepam 5 mg I.V. or S.C. q5 to 15 min. p.r.n.
  - Methotrimeprazine 25 mg PO or S.C. or I.V. q5 to 15 min. p.r.n.
  - Phenobarbital 90 to 120 mg PO or S.C. or I.V. q5 to 15 min. p.r.n.
  - Diazepam 5 to 10 mg PO or I.V. q5 to 15 min. p.r.n.
- Ensure that dosing recommendations permit a clear understanding that opioids are first line and are to be titrated to effect; that midazolam may provide dyspnea relief as a second line, adjunct therapy. (40) The dose provided is for severe dyspnea in advanced illness.
- Use incremental titration until patient comfortable, determined by subjective as well as objective means. (4)
- For consultation contact your local Hospice Palliative Care Physician **or** after hours contact the on call Palliative Care Physician through your local emergency department.



# References

Information was compiled using the CINAHL, Medline (1996 to March 2006) and Cochrane DSR, ACP Journal Club, DARE and CCTR databases, limiting to reviews/systematic reviews, clinical trials, case studies and guidelines/protocols using respiratory terms in conjunction with palliative/hospice/end of life/dying.

- Leach R. Palliative medicine and non-malignant, end-stage respiratory disease. In: Doyle D, Hanks G, Cherny NI, Calman K, editors. Oxford Textbook of Palliative Medicine. 3rd ed. New York, New York: Oxford University Press Inc., New York; 2005. p. 895 - 916.
- 2. Gallagher R. Dyspnea. In: Downing GM, Wainwright W, editors. Medical Care of the Dying. Victoria, B.C. Canada: Victoria Hospice Society Learning Centre for Palliative Care; 2006. p. 365 75.
- 3. Chan K-S, Sham M, M. K., Tse DMW, Thorsen AB. Palliative medicine in malignant respiratory diseases. In: Doyle D, Hanks G, Cherny NI, Calman K, editors. Oxford Textbook of Palliative Medicine. 3rd ed. New York, New York: Oxford University Press Inc., New York; 2005. p. 587 618.
- 4. Gallagher R. An approach to dyspnea in advanced cancer. Canadian Family Physician. 2003 December 2003;49:1611 6.
- 5. Cox C. Non-pharmacological treatment of breathlessness. Nursing Standard. 2002 January 16, 2002;16(24):33 6.
- 6. Davis CL. ABC of palliative care: Breathlessness, cough, and other respiratory problems. British Medical Journal. 1997 October 1997;315:931 - 4.
- 7. Esper P, Heidrich D. Symptom Clusters in Advanced Illness. Seminars in Oncology Nursing. 2005 February 2005;21(1):20 8.
- 8. Kvale PA, Simoff M, Prakash UBS. Palliative care. Chest 2003 Jan; 123(1): Suppl: 284S-311S (216 ref). January 2003.
- 9. Dudgeon D. Managing dyspnea and cough. Hematology Oncology Clinics of North America. 2002;16:557 77.
- 10. ATS. Dyspnea. Mechanisms, assessment and management: a consensus statement of the American Thoracic Society. American Journal of Respiratory Critical Care Medicine. 1999 January 1, 1999;159(1):321 40.
- 11. Frozena C. Easing End-stage Respiratory Symptoms in Dying Patients. Home Healthcare Nurse. 1998 April 1998;16(4):256 60.
- 12. Winn PAS, Dentino AN. Quality palliative care in long-term care settings. Journal of the American Medical Directors Association 2004 May-Jun; 5(3): 197-206.
- 13. Jacobs LG. Managing respiratory symptoms at the end of life. Clinics in Geriatric Medicine 2003 Feb; 19(1): 225-39.
- 14. Wheeler MS. Palliative Care is more than Pain Management. Home Healthcare Nurse. 2004 April 2004;22(4):250 5.
- 15. Pan CX, Morrison SR, Ness J, Fugh-Berman A, Leipzig RM. Complementary and Alternative Medicine in the Management of Pain, Dyspnea, and Nausea and Vomiting Near the End of Life: A Systematic review. Journal of Pain and Symptom Management. 1999 December 13, 1999;20(5):374 87.
- 16. Rousseau P. Nonpain symptom management in the dying patient. Hospital Physician 2002 Feb; 38(2): 51-6.
- 17. Dudgeon D. Physiological Changes and Clinical Correlations of Dyspnea in Cancer Outpatients. Journal of Pain and Symptom Management. 2001 May 5 2001;21(5):373 9.
- 18. Abernethy AP, Currow DC, Frith P, Fazekas BS, McHugh A, Bui C. Randomised, double blind, placebo controlled crossover trial of sustained release morphine for the management of refractory dyspnoea. British Medical Journal. 2003 September 6, 2003;327:523 8.
- 19. Ross DD, Alexander CS. Management of Common Symptoms in Terminally Ill Patients: Part II Constipation, Delirium and Dyspnea. American Family Physician. 2001 September 15, 2001;64(6):1019 26.



#### Hospice Palliative Care Program • Symptom Guidelines

- Bredin M, Corner J, Krishnasamy M, Plant H, Bailey C, A'Hern R. Multicentre randomised controlled trial of nursing intervention for breathlessness in patients with lung cancer. British Medical Journal. 1999 April 3, 1999;318:901 - 5.
- 21. Dudgeon D. Dyspnoea. In: MacDonald N, Oneschuk D, Hagen N, Doyle D, editors. Palliative Medicine A case based manual 2nd ed. New York: Oxford University Press Inc.; 2005.
- 22. LeGrand SB, Khawam EA, Walsh D, Rivera NI. What's new in therapeutics? Opioids, respiratory function, and dyspnea. American Journal of Hospice and Palliative Care 2003 Jan-Feb;. 1p;20(1):57-61.
- 23. Sorenson HM. Dyspnea assessment. Respiratory Care. 2000 November 2000;45(11):1331 41.
- 24. ONS. Measuring Oncology Nursing Sensitive Patient Outcomes: Evidence-Based Summary Dyspnea. 2006 [cited May 2006]; Available from: http://www.ons.org/outcomes/Clinical/pdf/DyspneaEvidenceSummary.pdf
- 25. NCCN. Clinical Practice Guidelines in Oncology Palliative Care. 2005 2005 [cited April 2005]; Version 2: Available from: http://www.nccn.org/professionals/physician\_gls/PDF/palliative.pdf
- 26. Gift AG, Narsavage G. Validity of the numeric rating scale as a measure of dyspnea. American Journal of Critical Care. 1998 May 1998;7(3):200 4.
- 27. Allard P, Lamontagne C, Bernard P, Tremblay C. How Effective are Supplementary Doses of Opioids for Dyspnea in Terminally Ill Cancer Patients? A Randomized Continuous Sequential Clinical Trial. Journal of Pain and Symptom Management. 1999 April 1999;17(4):256 65.
- 28. Lewith GT, Prescott P, Davis CL. Can a standardized acupuncture technique palliate disabling breathlessness: a single-blind, placebo-controlled crossover study. Chest 2004 May; 125(5): 1783-90.
- 29. O'Donnell DE, Aaron S, Bourbeau J, Hernandez P, Marciniuk D, Balter M, et al. Canadian Thoracic Society recommendations for management of chronic obstructive pulmonary disease. Canadian Respiratory Journal. 2003 May/June 2003;10(Supplement A):11A 33A.
- 30. Jennings AL, Davies AN, Higgins JPT, Broadley K. Opioids for the palliation of breathlessness in terminal illness [Systematic Review]. Cochrane Database of Systematic Reviews. 2006(1).
- 31. British Columbia Medical Association, Guidelines and Protocols Advisory Committee. Chronic Obstructive Pulmonary Disease (COPD). 2005 [cited July 31st, 2006];

  Available from: http://www.healthservices.gov.bc.ca/msp/protoguides/gps/copd.pdf
- British Columbia Medical Association, Guidelines and Protocols Advisory Committee. Heart Failure Care Guidelines and Protocols. 2003 [cited July 31, 2006];
   Available from: http://www.healthservices.gov.bc.ca/msp/protoguides/gps/heartfailure.pdf
- 33. Registered Nurses' Association of Ontario. Nursing Best Practice Guideline: Nursing Care of Dyspnea: The 6th Vital Sign in Individuals with Chronic Obstructive Pulmonary Disease (COPD). Nursing Best Practice Guidelines Program 2005 [cited 2006 July 31st, 2006];
  - Available from: http://www.rnao.org/Storage/11/604\_BPG\_COPD.pdf
- 34. Manning HL. Dyspnea treatment. Respiratory Care. 2000 November 2000;45(11):1342 50.
- 35. Jennings AL, Davies AN, Higgins JPT, Gibbs JSR, Broadley KE. A systematic review of the use of opioids in the management of dyspnoea. Thorax. 2002 March 20, 2002;57(11):939 44.
- 36. Boyd K. Oral morphine as symptomatic treatment of dyspnoea in patients with advanced cancer. Palliative Medicine. 1997;11:277 81.
- 37. Booth S, Anderson H, Swannick M, Wade R, Kite S, Johnson M. The use of oxygen in the palliation of breathlessness. A report of the expert working group of the scientific committee of the association of palliative medicine. Respiratory Medicine. 2004 August 21, 2003;98:66 77.



#### Hospice Palliative Care Program • Symptom Guidelines

- 38. Gallagher R, Roberts D. A systematic review of oxygen and airflow on relief of dyspnea at rest in patients with advanced disease of any cause. Journal of Pain and Palliative Care Pharmacotherapy. 2004;18(4):3 15.
- 39. Fraser Health Authority. Home and Community Care, Community Respiratory Services, Home Oxygen Program, Guidelines. 2002 [cited July 13th, 2009];

  Available from: http://www.fraserhealth.ca/Services/HomeandCommunityCare/HomeOxygenProgram/Pages/default.aspx
- 40. Navigante AH, Leandro CA, Cerchietti MD, Castro MA, Lutteral MA, Cabalar ME. Midazolam as adjunct therapy to morphine in the alleviation of severe dyspnea perception in patients with advanced cancer. Journal of Pain and Symptom Management 2006;31(1):38-47.
- 41. Nauck F, Alt-Epping B. Crisis in palliative care a comprehensive approach. Lancet Oncology 2008;9:1086-91.
- 42. Booth S, Moosavi SH, Higginson IJ. The etiology and management of intractable breathlessness in patients with advanced cancer: a systematic review of pharmacological therapy. Nature Clinical Practice Oncology 2008;5(2):90-100.
- 43. Davis CL. ABC of palliative care: Breathlessness, cough and other respiratory problems. British Medical Journal 1997;315:931-4.
- 44. Twycross R, Wilcock A. Hospice and Palliative Care Formulary USA 2nd Ed 2008. www.palliativedrugs.com Oxford UK.
- 45. Man GC, Hsu K, Sproule BJ Effect of alprazolam on exercise and dyspnea in patients with chronic obstructive pulmonary disease. Chest 1986;90:832-836.
- 46. Zakko SF, Seifert HA, Gross JB. A comparison of midazolam and diazepam for conscious sedation during colonscopy in a prospective double-blind study. Gastrointestional Endoscopy 1999;49(6):684-9.
- 47. National Patient Safety Agency National Reporting and Learning Service Rapid Response report NPSA/2008/RRR011: Reducing risk of overdose with midazolam injection in adults December 9, 2008. [Cited March 9, 2009] Available from: http://www.npsa.nhs.uk/nrls/alerts-and-directives/rapidrr/reducing-risk-of-overdose-with-midazolam-injection-in-adults/
- 48. Beh-Aharon I, Gafter-Gvili A, Leibovici L, Stemmer SM. Interventions for alleviating cancer-related dyspnea:a systematic review. Journal of Clinical Oncology 2008;26:2396-2404.
- 49. Beh-Aharon I, Gafter-Gvili A, Leibovici L, Stemmer SM Author's reply to comment on Interventions for alleviating cancerrelated dyspnea:a systematic review. Journal of Clinical Oncology. 2008;26(25):4226.

Revision, page 7: March 13, 2009
Bruce Kennedy, Fraser Health Clinical Pharmacy Specialist, Palliative Care
Barbara McLeod, Fraser Health Clinical Nurse Specialist, Hospice Palliative Care
Dr. Doris Barwich, Medical Director, Fraser Health Hospice Palliative End-Of-Life Care

Approved by: Hospice Palliative Care, Clinical Practice Committee, November 24, 2006
Approved by: Hospice Palliative Care, Practice Advisory Council, May 11, 2009



**Hospice Palliative Care Program • Symptom Guidelines** 

#### FHA Home Oxygen Program (HOP) Subsidy:(39)

http://www.fraserhealth.ca/Services/HomeandCommunityCare/HomeOxygenProgram/Pages/default.aspx

The clinical eligibility criteria for the Home Oxygen Program (HOP) apply to the palliative patients:

- Arterial blood gas on room air showing a PaO2 ≤ 55 mmHg in a steady state reflecting a chronic condition (Chronic Obstructive Pulmonary Disease or Interstitial Lung Disease), OR
- Steady state daytime hypoxemia with oxygen saturation sustained continuously for 6 minutes,

OR

- PaO2 = 56 to 60 mmHg with evidence of cor pulmonale, pulmonary hypertension, or congestive heart failure (with ejection fraction less than 20%)
- Exercise limited by hypoxemia and documented to improve with supplemental oxygen (exercise in this instance may mean activities of daily living)
- Nocturnal hypoxemia

In the case of palliative patients in their last few months of life when an arterial blood gas is an inappropriately invasive procedure, application for the HOP subsidy without an ABG, requires a resting room air oxygen saturation below 88% for 6 minutes. This can be documented in the home by homecare nursing staff.

 The home oxygen program is very willing to accept referrals for dyspnea assessment and recommendations

**Hospice Palliative Care Program • Symptom Guidelines** 



# **Shortness of Breath**

# Shortness of breath, breathlessness, or dyspnea are terms used to describe awareness of difficulty in breathing.

Like pain, it is a sensation that can be felt only by the person experiencing it and its causes are many and varied.

You may be short of breath only with activity, and be comfortable at rest. Or you may be aware of the effort of breathing even at rest. When this is the case, demands you may not think of as work can make your breathing worse: eating and digesting food after eating; dealing with discomfort such as constipation, pain, or a fever; even laughing. Simply anticipating some event can increase the work of breathing.

# What can you do to keep your breathing at a comfortable level?

- Move slowly and pace your activities within your breathing tolerance. Slight shortness of breath is easier to recover from than extreme shortness of breath from rushing or overexertion.
- Rest before and after an activity (including eating).
- Use relaxation techniques in your daily routine such as visualization, selfhypnosis, and deep slow breathing.
- Be aware of the role anxiety may play in your shortness of breath. Getting ready for an activity that will require effort can make you more short of breath in anticipation. To avoid this, think about your breathing and slow it down to a comfortable level before beginning an activity.
- Take medications prescribed for your shortness of breath before activities that are particularly difficult, e.g., dressing or bathing.

- Plan ahead about what you can do if you become short of breath.
- Use fans to move air in your environment.
- Avoid holding your breath during an activity. When getting out of a chair or bending over to put on your shoes, breathe out as you bend and continue to breathe at your normal pace. Do not hold your breath while climbing the stairs.
- Be aware of your breathing pattern.
  When first feeling short of breath, slow
  down your activity, concentrate on your
  breathing and slow it down. Slow your
  breath by breathing in through your nose,
  and out very gently through lips loosely
  pursed as if you are going to whistle.
- Tell family or friends what helps you manage your breathing. For example, turning a fan on; staying with you but staying quiet; putting their hand gently on your shoulder; reminding you to breathe more slowly.



**Hospice Palliative Care Program • Symptom Guidelines** 

## Are there medications to help?

- Medications such as morphine and hydromorphone are often very effective in decreasing the feeling of shortness of breath. These medications are used in the same way as when treating pain. A regular dose is given for constant relief, with "breakthrough" or "rescue" doses for times of when shortness of breath feels worse.
- People who are short of breath often don't want to use morphine or hydromorphone medications because of worries about addiction or overdosing. These concerns are common, but these medications are very safe. Addiction is rare and side effects can be easily managed.
- If you feel a great deal of anxiety due to shortness of breath, anti-anxiety drugs can be used on a regular or as needed basis. Methotrimeprazine may be useful as a regular anti-anxiety drug. For acute, sudden episodes of shortness of breath, lorazepam may be helpful.

# Do you need oxygen?

Not usually. Oxygen can help decrease shortness
of breath for those people whose lungs cannot
move enough oxygen into their bloodstream.
But, for many people who are short of breath,
the lungs do take in enough oxygen. In this case,
oxygen may not help. Other strategies such as air
blown on the face by fans, medications and other
techniques will often be more helpful.

# What can you do when your shortness of breath gets worse?

- 1. Stop your activity.
- 2. Get supported in a relaxed position.
- 3. Concentrate on your breathing, gradually slowing the rate and deepening your breaths. In your mind say "slower breath in, longer breath out" until you feel your breathing responding to your message.
- 4. If your shortness of breath does not ease to a tolerable level with these strategies, call your physician and discuss adjusting your medication.



Patient Teaching Handout Fraser Health

Approved by: HPC, Clinical Practice Committee • July 17, 2006

Pamphlet adapted from Vancouver Coastal Authority with permission.

Hospice Palliative Care Program • Symptom Guidelines



ਸਾਹ ਚੜਨਾ, ਸਾਹੋ–ਸਾਹੀ ਹੋਣਾ, ਜਾਂ ਸੁਆਸ ਕਿਰਿਆ ਦੀਆਂ ਔਕੜਾਂ ਨੂੰ ਸਾਂਹ ਲੈਣ ਵਿਚ ਮੁਸ਼ਕਿਲ ਦੀਆਂ ਹਾਲਤਾਂ ਦਾ ਵਰਨਵ ਕਰਨ ਲਈ ਵਰਤਿਆ ਜਾਂਦਾ ਹੈ।

ਦਰਦ ਦੀ ਤਰਾਂ, ਇਹ ਇਕ ਸੰਵੇਦਨਾ ਹੈ ਜਿਸ ਨੂੰ ਸਿਰਫ ਅਨੁਭਵ ਕਰਨ ਵਾਲਾ ਵਿਅਕਤੀ ਹੀ ਮਹਿਸੂਸ ਕਰ ਸਕਦਾ ਹੈ ਅਤੇ ਇਸ ਦੇ ਅਨੇਕਾਂ ਅਤੇ ਭਿੰਨ-ਭਿੰਨ ਕਾਰਣ ਹੁੰਦੇ ਹਨ।

ਹੋ ਸਕਦਾ ਹੈ ਕਿ ਤੁਹਾਨੂੰ ਕੁਝ ਕਰਨ ਦੇ ਨਾਲ ਹੀ ਸਾਹ ਚੜ੍ਹੇ ਅਤੇ ਆਰਾਮ ਕਰਨ ਨਾਲ ਸੁਖਾਲੇ ਹੋ ਜਾਵੋ। ਜਾਂ ਤੁਹਾਨੂੰ ਆਰਾਮ ਕਰਦੇ ਹੋਏ ਵੀ ਸਾਹ ਲੈਣ ਵਿਚ ਔਖਿਆਈ ਮਹਿਸੂਸ ਹੋਵੇ। ਜਿਥੋ ਤੱਕ ਵੀ ਹੋਵੇ, ਅਜਿਹੇ ਕੰਮ ਜਿੰਨਾਂ ਨੂੰ ਤੁਸੀਂ ਕੰਮ ਨਹੀਂ ਸਮਝਦੇ ਉਹ ਵੀ ਤੁਹਾਡੇ ਸਾਹ ਲੈਣ ਨੂੰ ਔਖਾ ਕਰ ਸਕਦੇ ਹਨ: ਭੋਜਨ ਖਾਣਾ ਅਤੇ ਖਾਣ ਦੇ ਬਾਅਦ ਭੋਜਨ ਹਜ਼ਮ ਹੋਣਾ: ਬੇਆਰਾਮੀ ਨੂੰ ਨਜਿੱਠਣਾ ਜਿਵੇਂ ਕਿ ਕਬਜ਼, ਦਰਦ ਜਾਂ ਬੁਖਾਰ: ਭਾਵੇਂ ਹੱਸਣਾ ਵੀ ਹੋਵੇ। ਕੁਝ ਵੀ ਆਮ ਜਿਹਾ ਕੰਮ ਕਰਨਾ ਸਾਹ ਲੈਣ ਦੇ ਕੰਮ ਨੂੰ ਵਧਾ ਸਕਦੇ ਹਨ।

# ਆਪਣੇ ਸਾਹ ਨੂੰ ਠੀਕ ਰੱਖਣ ਲਈ ਤੁਸੀਂ ਕੀ ਕਰ ਸਕਦੇ ਹੋ What can you do to keep your breathing at a comfortable level?

- ਆਪਣਾ ਸਾਹ ਲੈਣਾ ਬਰਦਾਸ਼ਤ ਕਰ ਸਕਣ ਅਨੁਸਾਰ ਆਪਣੀਆਂ ਕਾਰਜਵਿਧੀਆਂ ਨੂੰ ਹੌਲੀ ਕਰੋ ਅਤੇ ਵਕਤ ਦਿਉ। ਤੇਜ਼ੀ ਜਾਂ ਹਦੋਂ ਵੱਧ ਕੰਮ ਕਰਨ ਨਾਲ ਜ਼ਿਆਦਾ ਸਾਹ ਚੜਨ ਨਾਲੋਂ ਥੋੜ੍ਹਾ ਸਾਹ ਚੜਨ ਤੋਂ ਰਾਜ਼ੀ ਹੋਣਾ ਆਸਾਨ ਹੁੰਦਾ ਹੈ।
- ਕਾਰਜਵਿਧੀ ਤੋਂ ਪਹਿਲਾਂ ਅਤੇ ਬਾਅਦ ਵਿਚ ਆਰਾਮ ਕਰੋ (ਭੋਜਨ ਖਾਣ ਸਮੇਤ)।
- ਆਪਣੀ ਨਿਤ ਦੇ ਕੰਮਾਂ ਜਿਵੇਂ ਕਿ ਸੁਰਤੀ ਵਿਚ ਵੇਖਣਾ, ਆਪਣੇ ਅੰਤਰ-ਧਿਆਨ ਅਤੇ ਹੌਲੀ-ਹੌਲੀ ਡੂੰਘੇ ਸਾਹ ਲੈਣ ਵਿਚ ਨਿੱਸਲ (relax) ਹੋਣ ਦੀਆਂ ਤਕਨੀਕਾਂ ਵਰਤੋ।
- ਤੁਹਾਡੇ ਸਾਹ ਚੜਨ ਵਿਚ ਬੇਚੈਨੀ ਦੇ ਦਖ਼ਲ ਤੋਂ ਵੀ ਸੁਚੇਤ ਰਹੋ। ਕਾਰਜਵਿਧੀ ਕਰਨ ਲਈ ਤਿਆਰ ਹੋਣ ਲਈ ਕੋਸ਼ਿਸ਼ ਦੀ ਲੋੜ ਹੋਵੇਗੀ ਜਿਸ ਦੀ ਅਗੇਤਰੀ ਤਿਆਰੀ ਲਈ ਤੁਹਾਨੂੰ ਸਾਹ ਚੜ ਸਕਦਾ ਹੈ। ਇਸ ਤੋਂ ਬਚਣ ਲਈ, ਆਪਣੇ ਸਾਹ ਲੈਣ ਬਾਰੇ ਸੋਚੋ ਅਤੇ ਕੋਈ ਵੀ ਕਾਰਜਵਿਧੀ ਸ਼ੁਰੂ ਕਰਨ ਤੋਂ ਪਹਿਲਾਂ ਆਪਣੇ ਸਾਹ ਨੂੰ ਹੌਲੀ ਹੌਲੀ ਆਰਾਮਦਾਇਕ ਹਾਲਤ ਤੱਕ ਲਿਆਉ।
- ਖਾਸ ਮੁਸ਼ਕਿਲਾਂ ਵਾਲੀਆਂ ਕਾਰਜਵਿਧੀਆਂ ਜਿਵੇਂ ਕਿ ਕਪੜੇ ਪਾਉਣਾ ਜਾਂ ਨਹਾਉਣਾ ਸ਼ੁਰੂ ਕਰਨ ਤੋਂ ਪਹਿਲਾਂ ਆਪਣੇ ਸਾਹ ਚੜਨ ਲਈ ਦੱਸੀਆਂ ਗਈਆਂ ਦਵਾਈਆਂ ਲਉ।

- ਆਪਣੇ ਸਾਹ ਚੜਨ ਦੀ ਹਾਲਤ ਵਿਚ ਤੁਸੀਂ ਕੀ ਕਰ ਸਕਦੇ ਹੋ, ਬਾਰੇ ਸਮੇਂ ਤੋਂ ਪਹਿਲਾਂ ਯੋਜਨਾ ਬਣਾਉ।
- ਆਪਣੇ ਵਾਤਾਵਰਣ ਵਿਚ ਹਵਾ ਦੇ ਆਉਣ-ਜਾਣ ਲਈ ਪੱਖੇ ਦੀ ਵਰਤੋਂ ਕਰੋ।
- ਕਾਰਜਵਿਧੀ ਕਰਨ ਦੌਰਾਨ ਆਪਣੇ ਸਾਹ ਨੂੰ ਰੋਕਣ ਤੋਂ ਸੰਕੋਚ ਕਰੋ। ਕੁਰਸੀ ਤੋਂ ਉਠਣ ਵੇਲੇ ਜਾਂ ਆਪਣੀਆਂ ਜੁੱਤੀਆਂ ਪਾਉਣ ਲਈ ਅੱਗੇ ਨੂੰ ਝੁਕਦੇ ਵੇਲੇ ਸਾਹ ਬਾਹਰ ਕੱਢੋ ਅਤੇ ਆਪਣੇ ਸਾਧਾਰਨ ਤਰੀਕੇ ਨਾਲ ਸਾਹ ਲੈਣਾ ਜਾਰੀ ਰੱਖੋ। ਪੌੜੀਆਂ ਚੜਦੇ ਸਮੇਂ ਆਪਣੇ ਸਾਹ ਨੂੰ ਨਾ ਰੋਕੋ।
- ਸਾਹ ਲੈਣ ਦੀ ਤਰਤੀਬ ਤੋਂ ਸੁਚੇਤ ਰਹੋ। ਜਦੋਂ ਪਹਿਲੀ ਵਾਰ ਸਾਹ ਚੜਦਾ ਮਹਿਸੂਸ ਹੋਵੇ ਤਾਂ ਆਂਪਣੀ ਕਾਰਜਵਿਧੀ ਨੂੰ ਹੌਲੀ ਕਰੋ, ਆਪਣੇ ਸਾਹ ਲੈਣ ਤੇ ਧਿਆਨ ਦਿਉ ਅਤੇ ਹੌਲੀ ਹੌਲੀ ਸਾਹ ਲਵੋ। ਆਪਣੇ ਨੱਕ ਰਾਹੀਂ ਸਾਹ ਅੰਦਰ ਲੈ ਕੇ, ਅਤੇ ਸੀਟੀ ਮਾਰਨ ਵਾਗ ਬੁਲਾਂ ਰਾਹੀਂ ਸਾਹ ਬਾਹਰ ਕੱਢ ਕੇ ਆਪਣੇ ਸਾਹ ਲੈਣ ਨੂੰ ਹੌਲੀ ਕਰੋ।
- ਸਾਹ ਲੈਣ ਤੇ ਕਾਬੂ ਪਾਉਣ ਵਿਚ ਤੁਹਾਨੂੰ ਕਿਹੜੀ ਗੱਲ ਮਦਦ ਕਰਦੀ ਹੈ, ਦੇ ਬਾਰੇ ਆਪਣੇ ਪਰਿਵਾਰ ਅਤੇ ਮਿਤਰਾਂ ਨੂੰ ਦੱਸੋ। ਉਦਾਹਰਣ ਦੇ ਤੌਰ ਤੇ, ਪੱਖਾ ਚਲਾਉਣ ਤੇ; ਤੁਹਾਡੇ ਕੋਲ ਪਰ ਚੁਪ-ਚਾਪ ਰਹਿਣ ਤੇ; ਤੁਹਾਡੇ ਮੋਢਿਆਂ ਤੇ ਨਰਮੀ ਨਾਲ ਹੱਥ ਰੱਖਣ ਤੇ; ਤੁਹਾਨੂੰ ਹੌਲੀ ਸਾਹ ਲੈਣ ਲਈ ਯਾਦ ਕਰਵਾਉਣਾ ਆਦਿ।



Hospice Palliative Care Program • Symptom Guidelines

# ਕੀ ਮਦਦ ਲਈ ਕੋਈ ਦਵਾਈਆਂ ਹਨ? Are there medications to help?

- ਸਾਹ ਚੜਨ ਨੂੰ ਘੱਟ ਕਰਨ ਲਈ ਦਵਾਈਆਂ ਜਿਵੇਂ ਕਿ ਮੋਰਫਿਨ ਅਤੇ ਹਾਈਡਰੋਮੋਰਫੋਨ ਅਕਸਰ ਬਹੁਤ ਅਸਰਦਾਰ ਹੁੰਦੀਆਂ ਹਨ। ਇਹ ਦਵਾਈਆਂ ਉਸੇ ਤਰੀਕੇ ਨਾਲ ਵਰਤੀਆ ਜਾਂਦੀਆਂ ਹਨ ਜਿਵੇਂ ਕਿ ਦਰਦ ਦਾ ਇਲਾਜ ਕੀਤਾ ਜਾਂਦਾ ਹੈ। ਲਗਾਤਾਰ ਆਰਾਮ ਦਵਾਉਣ ਲਈ ਜਦੋਂ ਕਿ ਸਾਹ ਲੈਣਾ ਬਹੁਤ ਮੁਸ਼ਕਿਲ ਲਗੇ ਤਾਂ "ਬਚਾਉਣ" ਲਈ ਨਿਯਮਕ (regular) ਡੌਜ਼ ਲਗਾਤਾਰ ਦਿੱਤੀ ਜਾਂਦੀ ਹੈ।
- ਜਿੰਨਾਂ ਲੋਕਾਂ ਨੂੰ ਸਾਹ ਚੜ੍ਹਦਾ ਹੋਵੇ ਉਹ ਅਕਸਰ ਮੋਰਫਿਨ ਅਤੇ ਹਾਈਡਰਮੋਰਫੋਨ ਦਵਾਈਆਂ ਨਹੀਂ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹਨ ਕਿਉਂ ਕਿ ਉਹਨਾਂ ਨੂੰ ਅਮਲ ਹੋ ਜਾਣ ਜਾਂ ਜ਼ਿਆਦਾ ਮਿਕਦਾਰ (ਡੌਜ਼) ਲੈ ਲੈਣ ਬਾਰੇ ਚਿੰਤਾ ਹੁੰਦੀ ਹੈ। ਅਜਿਹੇ ਫ਼ਿਕਰ ਆਮ ਹਨ, ਪਰ ਇਹ ਦਵਾਈਆਂ ਕਾਫੀ ਸੁੱਰਖਿਅਤ ਹੁੰਦੀਆਂ ਹਨ। ਅਮਲ ਲਗਣਾ ਬਹੁਤ ਘੱਟ ਹੁੰਦਾ ਹੈ ਅਤੇ ਗੌਣ ਅਸਰਾਂ ਤੇ ਆਸਾਨੀ ਨਾਲ ਕਾਬੂ ਪਾਇਆ ਜਾ ਸਕਦਾ ਹੈ।
- ਜੇਕਰ ਤੁਹਾਨੂੰ ਸਾਹ ਚੜ੍ਹਨ ਨਾਲ ਬਹੁਤ ਜ਼ਿਆਦਾ ਬੇਚੈਨੀ ਹੁੰਦੀ ਹੈ ਤਾਂ ਬੇਚੈਨੀ ਨੂੰ ਹਟਾਉਣ ਵਾਲੀਆਂ ਦਵਾਈਆਂ ਦੀ ਨਿਯਮਕ (regular) ਜਾਂ ਲੋੜ ਪੈਣ ਦੇ ਆਧਾਰ ਤੇ ਵਰਤੋਂ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ। ਬੇਚੈਨੀ ਨੂੰ ਹਟਾਉਣ ਵਾਲੀ ਨਿਯਮਕ ਦਵਾਈ ਲਈ ਮੈਥੋਟਾਈਮੈਪਰਾਜ਼ਿਨ ਲਾਭਕਾਰੀ ਹੋ ਸਕਦੀ ਹੈ। ਗੰਭੀਰ, ਅਚਾਨਕ ਸਾਹ ਚੜਨ ਦੀਆਂ ਹਾਲਤਾਂ ਲਈ ਲੋਰਾਜ਼ੀਪੈਮ ਮਦਦਗਾਰ ਹੋ ਸਕਦੀ ਹੈ।

# ਕੀ ਤੁਹਾਨੂੰ ਆਕਸੀਜਨ ਦੀ ਲੋੜ ਹੈ? Do you need oxygen?

 ਆਮ ਕਰਕੇ ਨਹੀਂ। ਜਿੰਨਾਂ ਵਿਅਕਤੀਆਂ ਦੇ ਫੇਫੜੇ ਉਹਨਾਂ ਦੇ ਖੂਨ ਵਿਚ ਲੋੜ ਮੁਤਾਬਕ ਆਕਸੀਜਨ ਨਹੀਂ ਭੇਜ ਸਕਦੇ, ਉਹਨਾਂ ਨੂੰ ਸਾਹ ਚੜਨਾ ਘੱਟ ਕਰਨ ਵਿਚ ਆਕਸੀਜਨ ਮਦਦ ਕਰ ਸਕਦੀ ਹੈ। ਪਰ, ਬਹੁਤ ਸਾਰੇ ਲੋਕ ਜਿੰਨਾਂ ਨੂੰ ਸਾਹ ਚੜਦਾ ਹੈ, ਉਹਨਾਂ ਦੇ ਫੇਫੜੇ ਲੋੜ ਅਨੁਸਾਰ ਆਕਸੀਜਨ ਲੈ ਲੈਂਦੇ ਹਨ। ਅਜਿਹੀ ਹਾਲਤ ਵਿਚ, ਆਕਸੀਜਨ ਮਦਦ ਨਹੀਂ ਕਰ ਸਕਦੀਙ ਹੋਰ ਢੰਗ ਜਿਵੇਂ ਕਿ ਪੱਖੇ ਨਾਲ ਮੂੰਹ ਤੇ ਹਵਾ ਪਾਉਣਾ, ਦਵਾਈਆਂ ਅਤੇ ਹੋਰ ਤਕਨੀਕਾਂ ਅਕਸਰ ਜ਼ਿਆਦਾ ਮਦਦਗਾਰ ਹੋ ਸਕਦੀਆਂ ਹਨ।

# ਜਦੋਂ ਤੁਹਾਡਾ ਸਾਹ ਚੜਨਾ ਮਾੜੀ ਹਾਲਤ ਵਿਚ ਹੋ ਜਾਵੇ ਤਾਂ ਤੁਸੀਂ ਕੀ ਕਰ ਸਕਦੇ ਹੋ? What can you do when your shortness of breath gets worse?

- 1. ਆਪਣੀ ਕਾਰਜਵਿਧੀ ਨੂੰ ਬੰਦ ਕਰ ਦਿਉ।
- 2. ਨਿਸਲ (ਆਰਾਮਦਾਇਕ) ਹਾਲਤ ਵਿਚ ਸਹਾਰਾ ਲਉ।
- 3. ਆਪਣੇ ਸਾਹ ਲੈਣ ਤੇ ਧਿਆਨ ਕੇਂਦਰਿਤ ਕਰੋ, ਹੌਲੇ-ਹੌਲੇ ਰਫਤਾਰ ਨੂੰ ਹੋਲੀ ਕਰੋ ਅਤੇ ਆਪਣੇ ਸਾਹਾਂ ਨੂੰ ਡੂੰਘਾ ਕਰੋ। ਜਦੋਂ ਤੱਕ ਤੁਸੀਂ ਆਪਣੇ ਮਨ ਦੇ ਸੁਨੇਹੇ ਅਨੁਸਾਰ ਆਪਣਾ ਸਾਹ ਮਹਿਸੂਸ ਨਹੀਂ ਕਰਦੇ, ਉਦੋਂ ਤੱਕ ਆਪਣੇ ਮੰਨ ਵਿਚ ਇਹ ਕਹੋ "ਹੌਲੀ ਸਾਹ ਅੰਦਰ ਲੈਣਾ ਲੰਬਾ ਕਰਕੇ ਬਾਹਰ ਕੱਢਣਾ"।
- ਜੇਕਰ ਇਹਨਾਂ ਢੰਗਾਂ ਨਾਲ ਤੁਹਾਡਾ ਸਾਹ ਲੈਣਾ ਆਰਾਮਦਾਇਕ ਹਾਲਤਾਂ ਤੱਕ ਆਸਾਨ ਨਹੀਂ ਹੁੰਦਾ, ਆਪਣੇ ਡਾਕਟਰ ਨੂੰ ਫੋਨ ਕਰੋ ਅਤੇ ਆਪਣੀਆਂ ਦਵਾਈਆਂ ਅਨੁਕੂਲ ਕਰਨ ਲਈ ਵਿਚਾਰ-ਵਟਾਂਦਰਾ ਕਰੋ।



- ਸਾਹ ਚੜਨਾ ਇੱਕਲਾ, ਡਰਾਉਣਾ ਅਤੇ ਜ਼ੋਰਦਾਰ ਤਜਰਬਾ ਹੋ ਸਕਦਾ ਹੈ। ਇਸ ਨਾਲ ਨਜਿੱਠਣ ਲਈ, ਉਪਰ ਦੱਸੀਆਂ ਕਈ ਕੋਸ਼ਿਸ਼ਾਂ ਦੀ ਵਰਤੋ ਕਰਨ ਦੀ ਲੋੜ ਹੋ ਸਕਦੀ ਹੈ।
- ਸਾਹ ਚੜਨਾ ਇਕ ਲੱਛਣ ਹੈ ਜਿਸ ਤੇ ਕਾਬੂ ਪਾਇਆ ਜਾ ਸਕਦਾ ਹੈ। ਆਪਣੇ ਡਾਕਟਰ, ਨਰਸ, ਫਾਰਮਾਸਿਸਟ ਅਤੇ ਥੇਰੈਪਿਸਟ ਨਾਲ ਮਿਲ ਕੇ ਸਾਹ ਚੜਨ ਨੂੰ ਆਸਾਨ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ ਅਤੇ ਤੁਸੀਂ ਜ਼ਿਆਦਾ ਆਰਾਮਦਾਇਕ ਮਹਿਸੂਸ ਕਰ ਸਕਦੇ ਹੋ।

ਮਰੀਜ਼ਾਂ ਨੂੰ ਸਿਖਲਾਈ ਦਾ ਹੈਂਡਆਉਟ ਫਰੇਜ਼ਰ ਹੈਲਥ

ਮਨਜ਼ੂਰ ਕੀਤਾ ਗਿਆ: ਐਚ ਪੀ ਸੀ, ਕਲੀਨਿਕਲ ਪਰੈਕਟਿਸ ਕਮੇਟੀ ● ਜੁਲਾਈ, 2006 Punjabi version March 26, 2007

ਇਹ ਪੈਮਫਲਿਟ ਵੈਨਕੂਵਰ ਕੋਸਟਲ ਅਥਾਰਟੀ ਤੋਂ ਆਗਿਆ ਪ੍ਰਾਪਤ ਕਰਕੇ ਬਣਾਇਆ ਗਿਆ ਹੈ