



The difference is clear

CoughAssist clears airways with the force of a natural cough

PHILIPS

RESPIRONICS

When only a real cough will do

CoughAssist is a noninvasive therapy that safely and consistently removes secretions in patients with an ineffective ability to cough (peak cough flow <270 l/m)



Automatic

Typical CoughAssist patients include those with the following conditions:

- Amyotrophic lateral sclerosis
- Spinal muscular atrophy
- Muscular dystrophy
- Myasthenia gravis
- Spinal cord injuries

CoughAssist clears secretions by gradually applying a positive pressure to the airway, then rapidly shifting to negative pressure. The rapid shift in pressure produces a high expiratory flow, simulating a natural cough.

Benefits of CoughAssist

- Removes secretions from the lungs
- Reduces the occurrence of respiratory infections
- Safe, noninvasive alternative to suctioning
- Easy for patients and caregivers to operate

CoughAssist flexibility

- Can be used with a face mask, mouthpiece or with an adapter to a patient's endotracheal or tracheostomy tube
- Approved for home use in adults and children
- Available in automatic and manual models



Manual



“... chest vibration techniques, no matter how effective in mobilizing peripheral secretions, will not result in their expulsion without an effective cough flow.”²

-Bach JR. Eur Respir J. 2003;21:385-386.

CoughAssist—not just another “phlegmsy” excuse for a cough

CoughAssist is the only therapy that expels tracheobronchial secretions¹

Modality	Expels secretions
CoughAssist	Yes
Intermittent positive pressure	No
Breathing (IPPB) devices intrapulmonary percussive ventilation	No
High frequency chest wall oscillation	No
Handheld mobilization devices	No

CoughAssist—the benefits are clear



“Cough augmentation with mechanical insufflation-exsufflation produces a significant increase in peak cough flow and facilitates airway secretion clearance in neuromuscular disorders. It has been reported to be successful in avoiding hospitalizations, pneumonias, episodes of respiratory failure, and tracheotomy for patients with Duchenne muscular dystrophy, spinal muscular atrophy, and ALS.”⁸

-Winck JC, et al. Chest.
2004;126:774-780.

CoughAssist can prevent complications in patients with an ineffective cough

- Respiratory tract infections are the most common cause of hospital admission in patients with neuromuscular disease⁴
- More than 90% of acute respiratory failure episodes in neuromuscular disorder (NMD) patients are caused by ineffective coughing during chest colds⁵

American Thoracic Society (ATS) clinical practice guidelines strongly recommend CoughAssist to prevent respiratory complications in patients with neuromuscular disease³

- ATS Consensus Statement

Physician testimonial

I recently found myself in the unenviable position of being unable to cough or swallow after emergency cervical spine surgery. As a pediatric pulmonologist, I was aware of the CoughAssist device, and requested treatment with it. I experienced immediate relief with the first use. My lungs cleared and my oxyhemoglobin saturation rose. After a few days, I was able to clear secretions on my own. I am convinced that if it were not for my use of the CoughAssist, I would have developed atelectasis and pneumonia and would have wound up in the ICU—something that would not have done at all for a pulmonologist.⁹

- Jonathan D. Finder, MD

“In addition to the medical benefits of enhanced airway clearance, the importance of the psychological benefits to patients with NMD should be considered as well.”⁷

- Miske LJ, et al. Chest. 2004;125:1406-1412.

An effective cough with CoughAssist is critical to keeping airways clear

- CoughAssist has been clinically proven to:
 - Increase peak cough expiratory flows by more than fourfold⁶
 - Reduce recurrent respiratory infections in patients with respiratory weakness from neuromuscular disease^{2,4,7,8}

Keeping airways clear makes patients feel better

- CoughAssist can lead to improvement in perceived quality of life due to fewer acute illness-related episodes⁷
- Patients report that it feels “easier to breathe” after the use of CoughAssist⁷
- Wide range of available accessories ensure comfort for better compliance

CoughAssist is readily reimbursed

- CoughAssist has been assigned HCPCS Code E0482
- Covered by most private insurance providers
- Covered under a number of Medicaid plans

HCPCS code	Description	Payment category
E0482	Cough stimulating device; alternating positive and negative airway pressure	Capped rental



Clinical references

1. Finder J. Overview of airway clearance technologies. July 2006. Available at: http://www.rtmagazine.com/issues/articles/2006-07_06.asp. Accessed August 12, 2007.
2. Bach JR. Mechanical insufflation/exsufflation: has it come of age? A commentary. *Eur Respir J.* 2003;21:385-386.
3. Finder JD, Birnkrant D, Farber CJ, et al. Respiratory care of the patient with Duchenne muscular dystrophy: ATS consensus statement. *Am J Respir Crit Care Med.* 2004;170:456-465.
4. Chatwin M, Ross E, Hart N, Nickol AH, Polkey MI, Simonds AK. Cough augmentation with mechanical insufflation/exsufflation in patients with neuromuscular weakness. *Eur Respir J.* 2003;21:502-508.
5. Tzeng AC, Bach JR. Prevention of pulmonary morbidity for patients with neuromuscular disease. *Chest.* 2000;118:1390-1396.
6. McCool DF, Rosen MJ. Nonpharmacologic airway clearance therapies: AACP evidence-based clinical practice guidelines. *Chest.* 2006; 129:250-259.
7. Miske LJ, Hickey EM, Kolb SM, Weiner DJ, Panitch HB. Use of the mechanical in- exsufflator in pediatric patients with neuromuscular disease and impaired cough. *Chest.* 2004;125:1406-1412.
8. Winck JC, Goncalves MR, Lourenco C, Viana P, Almeida J, Bach JR. Effects of mechanical insufflation-exsufflation on respiratory parameters for patients with chronic airway secretion encumbrance. *Chest.* 2004;126:774-780.
9. Data on file, Philips Respironics

CoughAssist specifications

	CA-3000, automatic	CM-3000, manual
Positive pressure	Settable from 5 to 60 cm of H ₂ O	Settable from 5 to 60 cm of H ₂ O
Negative pressure	Settable from 5 to 60 cm of H ₂ O	Settable from 5 to 60 cm of H ₂ O
Typical inhalation flow	3.3 liters/sec when set to minimum; equals exhalation flow when set to maximum	3.3 liters/sec when set to minimum; equals exhalation flow when set to maximum
Typical exhalation flow	10 liters/sec (actual flow depends on set pressure and patient airway resistance)	10 liters/sec (actual flow depends on set pressure and patient airway resistance)
Pressure gauge	-70 to 0 to +70 cm H ₂ O (accuracy 6 cm H ₂ O)	-70 to 0 to +70 cm H ₂ O (accuracy 6 cm H ₂ O)
Mode of operation	Automatic and manual timing	Manual timing
Inhalation, exhalation and pause times	0-5 sec or user variable	User variable
Blower type	Two-stage centrifugal blower with AC/DC universal motor	Two-stage centrifugal blower with AC/DC universal motor
Input voltage	100-120 VAC, 60 Hz	100-120 VAC, 60 Hz
Input power	300 VA	300 VA
Dimensions (h x w x d)	292 mm x 279 mm x 419 mm (11.5" x 11" x 16.5")	292 mm x 279 mm x 419 mm (11.5" x 11" x 16.5")
Weight	11 kg (24 lbs)	9.3 kg (20.6 lbs)

Ordering information

Item	
CoughAssist MI-E, automatic model	CA-3000
CoughAssist MI-E, manual model	CM-3000
CoughAssist, MI-E, patient, circuit	1007106
Replacement power cord hospital grade	1008149
CoughAssist user manual	1008172
Stand for CoughAssist	2-ST
Patient circuit, CA medium	325-9234
Patient circuit, CA small	325-9235
Patient circuit, CA toddler	325-9236
Patient circuit, CA infant	325-9237
Patient circuit, CA trachea	325-9238



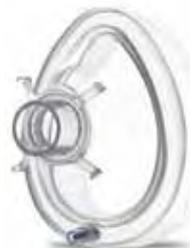
Trachea tube



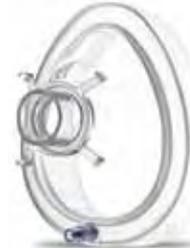
Toddler mask



Small adult mask



Medium adult mask



Large adult mask

**Philips Healthcare is part of
Royal Philips Electronics**

How to reach us

www.philips.com/healthcare
fax: +31 40 27 64 887

Asia
+852 2821 5888

Europe, Middle East, Africa
+31 40 27 87246

Latin America
+55 11 2125 0764

North America
+1 425 487 7000
800 285 5585
(toll free, US only)

Philips Respironics
1010 Murry Ridge Lane
Murrysville, PA 15668

Customer Service
+1 724 387 4000
800 545 9667 (toll free)

Respironics Europe,
Middle East, Africa
+33 1 47 52 30 00

Respironics Asia Pacific
+852 3194 2280

www.philips.com/respironics

Respironics and CoughAssist are trademarks of Respironics, Inc. and its affiliates.



© 2009 Koninklijke Philips Electronics N.V. All rights are reserved.

Philips Healthcare reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.

CAUTION: US federal law restricts these devices to sale by or on the order of a physician.

Geyer WMB 4/13/09 MCI 4102298 PN 1048825