

# AIR PHYSIO

Airway Physiotherapy for Naturally Better Breathing



www.airphysio.com

BREATHE BETTER LIVE BETTER



RespiWise  
breathe better

## AIRPHYSIO LOW LUNG CAPACITY

### OPEP Mucus Clearance and Lung Expansion Medical Device

For Treatment of COPD, Asthma, Bronchitis, Bronchiectasis & Cystic Fibrosis

**\$109.95**  
RRP AUD



Vibration & positive pressure helps clear mucus naturally



PEP assists in lung expansion & opens up blocked or semi closed airways



Prevents pulmonary complications after surgery & increases lung volume



It is reliable hand held & portable



Approx. 5-10 mins  
1-2 times per day



Multiple user filter  
available separately



Australian made  
High Quality



Includes multi  
resistance settings

## AIRPHYSIO AVERAGE LUNG CAPACITY OPEP

### Mucus Clearance and Lung Expansion Medical Device

For the improvement of day-to-day breathing and treatment of mild COPD, Asthma, Bronchitis, Bronchiectasis, Cystic Fibrosis & Smokers Relief

**\$99.95**  
RRP AUD



Vibration & positive pressure helps clear mucus naturally



PEP assists in lung expansion & opens up blocked or semi closed airways



Prevents pulmonary complications after surgery & increases lung volume



It is reliable hand held & portable



Approx. 5-10 mins  
1-2 times per day



Multiple user filter  
available separately



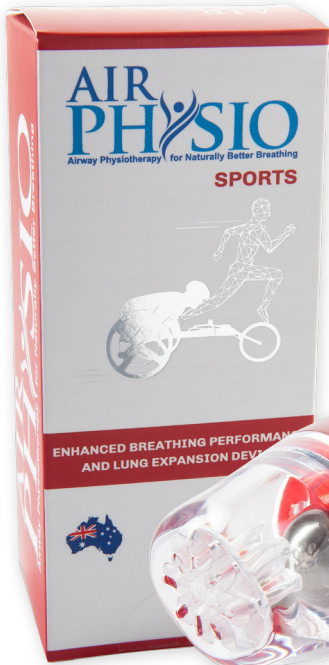
Australian made  
High Quality

## AIRPHYSIO SPORTS AND LUNG EXPANSION OPEP DEVICE

Enhanced Breathing Performance and Lung Expansion Device

For Assisting Lung Expansion, Improving O2 and CO2 Transfer,  
Improve Workout Times and Reduce Recovery Times

**\$99.95**  
RRP AUD



Increase exercise time  
Reduce recovery time



Designed for  
professional & elite  
sports people



It is reliable hand  
held & portable



Easy to use up to  
1-3 minutes



Gain split second  
advantage



Multiple user filter  
available separately



Australian made  
High Quality

## AIRPHYSIO CHILDRENS LUNG CAPACITY

### OPEP Mucus Clearance Device

For Treatment of COPD, Asthma, Bronchitis, Bronchiectasis & Cystic Fibrosis

**\$99.95**  
RRP AUD



Vibration & positive pressure helps clear mucus naturally



PEP assists in lung expansion & opens up blocked or semi closed airways



Prevents pulmonary complications after surgery & increases lung volume



It is reliable hand held & portable



Approx. 5-10 mins  
1-2 times per day



Multiple user filter  
available separately

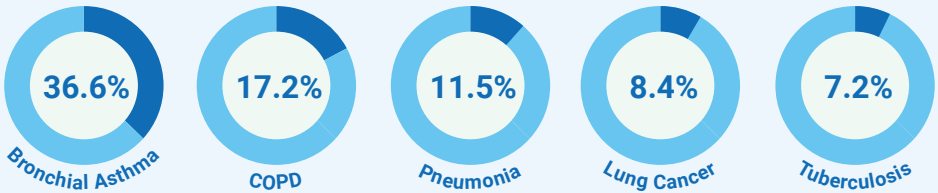


Australian made  
High Quality

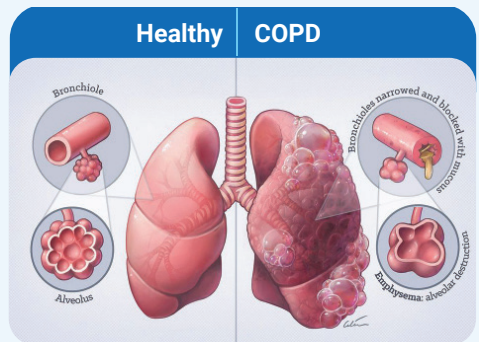
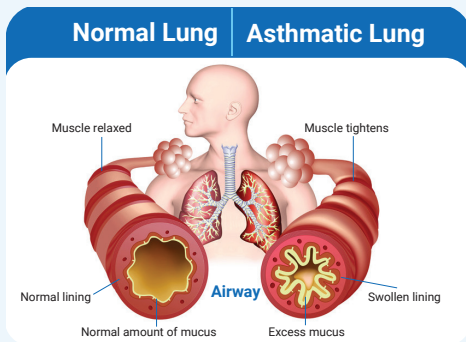
## Respiratory conditions can be life threatening

- Respiratory diseases are associated with excess **mortality**, **reduced quality of life** for patients, and high health-care costs<sup>1</sup>
- In 2019, approximately **8372 people** with respiratory diseases died, compared to 6129 in 2010<sup>1</sup>
- Respiratory diseases represented the **5th** leading cause of death in Australia, according to the Australian Bureau of Statistics<sup>1</sup>

The most prevalent respiratory diseases in hospitalised patients are:



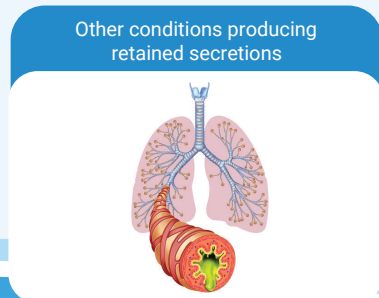
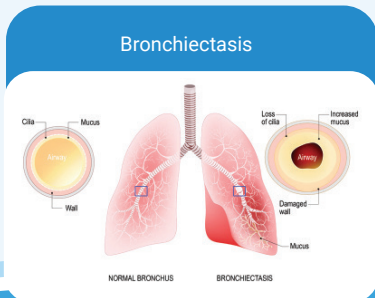
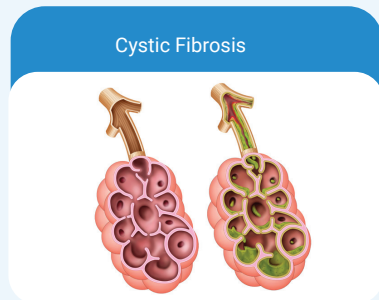
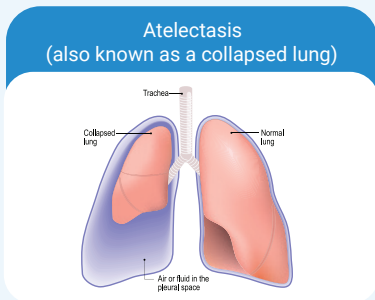
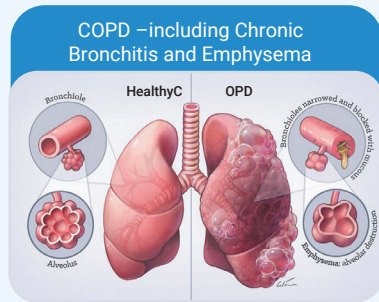
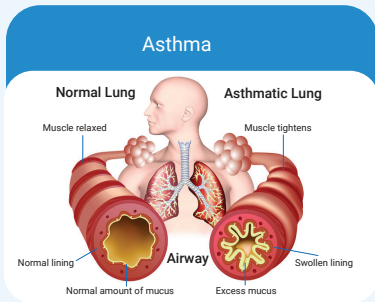
According to the World Health Organisation (WHO), **asthma** and **chronic obstructive pulmonary disease (COPD)** are among the most common respiratory diseases affecting people worldwide<sup>1</sup>



## What is AirPhysio? <sup>3</sup>

- AirPhysio is an International Award-winning mucus clearance and lung expansion medical device.
- AirPhysio uses an all natural process called Oscillating Positive Expiratory Pressure which is similar to the cough mechanism
- AirPhysio is on the ARTG for Australia and CE for Europe for medical devices and has been validated by Griffith University.

## AirPhysio helps treat the following Respiratory Conditions: <sup>3</sup>



## How AirPhysio Helps Airway Obstruction? <sup>3</sup>

AirPhysio is a drug-free handheld Oscillating Positive Expiratory Pressure (OPEP) device designed to assist in the clearance of secretions from the lungs and improving lung capacity by:

### | Vibrating the airways:

Which loosens the bond of mucus to the airway walls for mucus clearance:

### | Intermittently increasing endobronchial pressure:

Which assists in maintaining the clearing of the airways while a person exhales so that mucus does not become trapped as it moves up the air canal

### | Accelerating expiratory airflow:

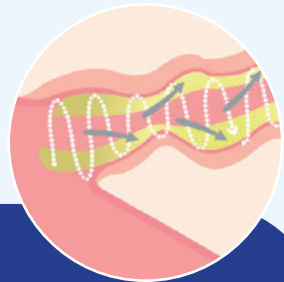
Which facilitates the upward movement of the mucus through the airways so that it can be more easily cleared.



Airway with a mucus plug



Resistance holds the airways open



Pulses help thin and loosen mucus while the airways are held open

oPEP therapy is highly safe since small portions of air cannot dramatically increase pressure and cause barotrauma.<sup>5</sup>

The operating pressure of oPEP therapy is considered low, in the range of 15–20 mbar.<sup>5</sup>



## AirPhysio post-operative use <sup>6</sup>

In adults undergoing thoracic and upper abdominal surgery, postoperative use of an oscillating PEP device resulted in fewer cases of fever and shorter hospital stay.<sup>6</sup>



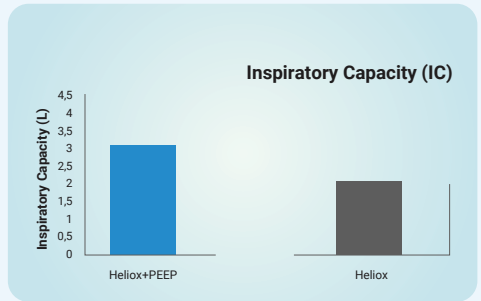
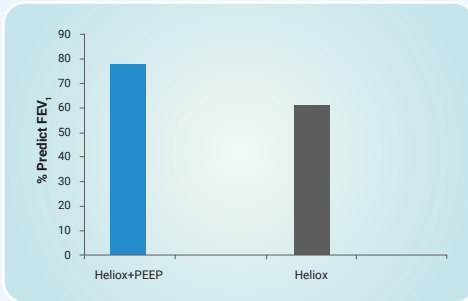
## AirPhysio use after beta2-agonists <sup>7</sup>



- The use of AirPhysio after the use of beta2-agonist shows a significantly enhanced effect of bronchodilative effect in patients with an FEV1 below 85% FVC, over beta2-agonist therapy by itself.<sup>7</sup>
- The additional effect of AirPhysio use in improving pulmonary function after beta2-agonist nebulization therapy is a result of an enhancement in mucus clearance.<sup>7</sup>

## Administration of inhaled bronchodilators with Heliox + AirPhysio showed greater improvement in pulmonary function than use of Heliox alone. <sup>8</sup>

Randomised, double blinded study to differentiate the effect of heliox and oxygen with and without positive expiratory pressure (PEP), on delivery of radiotagged inhaled bronchodilators on pulmonary function and deposition in 32 patients with moderate to severe asthma.

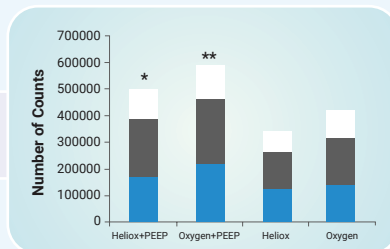


Adapted from ref. 8

## AirPhysio significantly increases bronchodilators lung deposition. <sup>8</sup>

- In asthmatics, different degrees of airway obstruction cause heterogeneous drug deposition during nebulisation.<sup>8</sup>
- Deposition is least in more affected areas, thereby compromising the benefits of aerosol therapy in these patients.<sup>8</sup>

Number of counts in upper, middle and lower regions



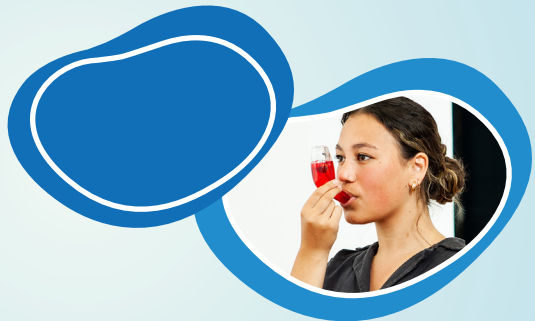
\* Heliox+PEEP was greater than Heliox (p=0.02)

\*\* Oxygen+PEEP was greater than Heliox (p=0.01)

Adapted from ref. 8

## How to Use the AirPhysio Device? <sup>6</sup>

1. Take a deep breathe (abdominal breath) into your lungs and fill them completely.
2. Hold your breath for 2 to 3 seconds.
3. Place the AirPhysio device into your mouth and exhale through the device at a reasonably fast, but consistent pace for between 3-5 seconds until you empty your lungs. i.e. don't try and blow too hard too quickly as this may cause you to over exert your lung muscles and leaving you feeling tight in the chest, so take it easy and don't push too hard.
4. Most people can get it oscillating without too much exertion, but some people struggle to start with. But once your lungs are at optimal lung capacity, you should be able to lift the ball bearing slightly off the cone and have it oscillating.
5. Adjust the device to have the cap facing the ceiling and tilt it until you feel maximum vibrations within your chest, try to keep cheeks stiff to help amplify the affect in your chest.
6. After exhaling through the device, you may feel mucus accumulating near the top of your lungs or at the back of your throat, if so, initiate a cough to expel the mucus. If not, the mucus will continue working up to the throat and maybe swallowed as a normal process.
7. Repeat steps 1 through 6 for approx. 2 times per minute for up to 5 minutes, taking two deep breaths in between each session to reduce the chance of feeling lightheaded.





- An international award-winning mucus clearance and lung expansion medical device.<sup>3</sup>
- Helps treat various respiratory complications.<sup>3</sup>
- Removes mucus from the lungs while helping to maintain maximum lung capacity.<sup>3</sup>
- Fewer cases of fever and reduced length of hospital stay in thoracic and upper abdominal postoperative adult patients.<sup>6</sup>
- Significantly increases bronchodilator effect when used concomitantly.<sup>7,8</sup>
- Self-administered and easy to use.<sup>9</sup>
- Recommended by guidelines.<sup>10</sup>



- ▶ Consider oscillating positive expiratory pressure for patients with stable COPD who need an airway clearance technique to assist in the removal of secretions (Grade C).
- ▶ Consider positive expiratory pressure when recommending an airway clearance technique for adults with cystic fibrosis (Grade A).
- ▶ Consider oscillating positive expiratory pressure when recommending an airway clearance technique for adults with non-cystic fibrosis-related bronchiectasis (Grade A).
- ▶ Consider positive expiratory pressure in patients with uncomplicated community-acquired pneumonia admitted to hospital (Grade B).

References: 1,2. according to the Australian Bureau of Statistics 2019; <https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/latest-release>. 3. About AirPhysio. Available at: <https://www.airphysio.com/about-us/>. Last accessed April 2021. 4. Bourbeau J, McIvor RA, Devlin HM, Kaplan A. Oscillating positive expiratory pressure (OPEP) device therapy in Canadian respiratory disease management: Review, care gaps and suggestion for use. Canadian Journal of Respiratory, Critical Care, and Sleep Medicine. 2019;3(4):233-40. 5. Rehabilitation. Respiratory Rehabilitation for Post-Covid-19 Patients. Medicine 2021; 11(1): 22-33. 6. Zhang XY, Wang Q, Zhang S, Tan W, Wang Z, Li J. The use of a modified, oscillating positive expiratory pressure device reduced fever and length of hospital stay in patients after thoracic and upper abdominal surgery: a randomised trial. Journal of physiotherapy. 2015;61(1):16-20. 7. Tsai CF, Tsai JJ. Effectiveness of a positive expiratory pressure device in conjunction with beta2-agonist nebulization therapy for bronchial asthma. Journal of Microbiology, Immunology, and Infection 2001; 34(2): 92-6. 8. Alcoforado L, Brand o S, Rattes C, et al. Evaluation of lung function and deposition of aerosolized bronchodilators carried by heliox associated with positive expiratory pressure in stable asthmatics: a randomized clinical trial. Respiratory medicine 2013; 107(8): 1178-85. 9. AirPhysio User guide. Available at: <https://www.airphysio.com/users-guide/>. Last accessed April 2021. 10. Bott J, Blumenthal S, Buxton M, Ellum S, Falconer C, Garrod R, Harvey A, Hughes T, Lincoln M, Mikelsons C, Potter C. Guidelines for the physiotherapy management of the adult, medical, spontaneously breathing patient. Thorax 2009; 64 (Suppl 1): i1-52.

[www.respiwise.com.au](http://www.respiwise.com.au)  
[support@respiwise.com](mailto:support@respiwise.com)



2017 Best Product Award  
**WINNER**



PROUDLY  
 SUPPORTING



**ASTHMA  
 AUSTRALIA**

