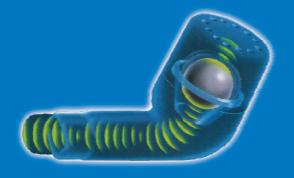


Mucus clearance, respiratory device



The Turboforte® provides positive expiratory pressure (PEP) therapy for patients with mucus producing respiratory conditions including:

- Atelectasis
- Bronchitis
- Bronchiectasis
- Cystic Fibrosis
- Chronic Obstructive Pulmonary Diseases (COPDs), such as asthma
- Other conditions producing retained secretions



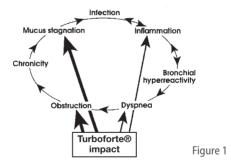
Making the most of your therapy with the Turboforte® Mucus Clearance Device

Although your health care professional has trained you in the use of your Turboforte®, this manual will assist you in using your Turboforte® at home when your instructor is not available. It will help you understand what Turboforte® is, how it works, how to use it, and how to keep it working like new.

If you have any questions about Turboforte® or these instructions, contact your healthcare professional for assistance.

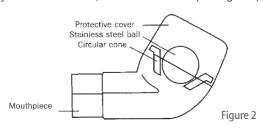
Why airway clearance?

In many chronic pulmonary conditions there is a build-up of secretions in the airways. These secretions, if left in the airways, can block air passages, make breathing difficult, and provide an ideal environment for bacteria to multiply and thive –a primary cause of progressive, irreversible lung damage. Therefore, airway clearance is critical to your overall care. Daily airway clearance with the Turboforte® can help break this cycle of lung infection and damage. (see Figure 1).



What is the Turboforte®?

The Turboforte® is a device used to help loosen, mobilize, and eliminate mucus from your airways. It consists of the following components: a mouthpiece (stem), a protective cover, a high-density stainless steel ball, and a circular cone (see Figure 2).



How does the Turboforte® work?

When you exhale (breathe out) through the Turboforte®, your breath moves the steel ball inside. This causes: 1) airway vibrations that loosen mucus and, 2) a slight increase in pressure that aids in keeping your airways open. This combined action of vibration and pressure results in the mucus moving progressively up your airways until you can easily cough it out (see Figure 3).



Figure 3

How do I use the Turboforte®?

Proper use of your Turboforte® is important for successful therapy. Although there are different Turboforte® techniques, the one presented here is used most often. "Individualizing" a technique for your specific condition may be necessary to obtain the best results. Check with your healthcare professional for the complete, personal training before beginning Turboforte® therapy. Continue follow-up on a regular basis to review your method of use, especially if you are not getting expected results or if you notice a change in how your therapy is progressing.

Turboforte® Technique

- You may want to have a glass of water and a box of tissue
 within close reach. Now, think about what you are doing,
 how you are going to breathe, and the goals of the therapy.
 Visualize the airways vibrating and the mucus being loosened
 and propelled along with your exhaled air to progressively
 larger airways so you can cough it out.
- 2. Begin by being relaxed. Sit with you back straight and head tilted slightly upward so your throat and windpipe are wide open (see Figure 4). This allows exhaled air to flow smoothly from your lungs out through the Turboforte®. You may prefer an alternate position, with elbows placed on a table a height that won't allow you to "slouch". Determine which position is best for you. If you must perform Turboforte® therapy while in bed, sit as upright as possible in a position that will not restrict your smooth breathing effort.

3. Keep your cheeks as stiff as possible, since the vibrations produced by the Turboforte® are wasted when they are used up in your cheeks. Look into a mirror or hold your cheeks flat with your other hand to help learn the technique. Eventually you will learn the technique and your cheeks will not vibrate as much.



Figure 4

4. The angle at which you hold the Turboforte® is critical. Hold it with the stem horizontal with the floor (see Figure 5). This places the cone at a slight tilt and insures that the ball not only bounces (vibrates), but also rolls during your exhalation. Now the experiment by tilting the Turboforte® upward and downward (see Figure 6). You might get a greater vibrating sensation in your chest with the stem in a tilt position than you do with the stem in line with the floor. For best results, use the angle that gives you the strongest vibrating senstation. The vibration may not occur immediately, so don't become discouraged. Several sessions may be require to learn how to "tune" the Turboforte® for your specific needs.







Figure 6



Stage 1 Mucus loosening and Mucus Mobilization

Slowly inhale (breathe in) beyond a normal breath, but do not fill your lungs completely. Place the Turboforte® in your mouth with your lips closed around the stem. Position the Turboforte® at the proper angle. After holding your breath 2 to 3 seconds, begin to breathe out through the Turboforte® at a reasonably fast but not too forceful speed. Exhaling too fast and too forcefully at this point should be avoided. Concentrate on feeling the vibration in your airways, since the best results are obtained when there is maximum fluttering in your chest. Continue to exhale through the Turboforte® to a level slightly further than you would exhale during normal breathing without the Turboforte®. At this point, the urge to cough should be suppressed. Repeat the breathing technique described above for 5 to 10 breaths to loosen and mobilize as much mucus as possible from your airways, moving the mucus further up with each Turboforte® exhalation.

During these loosening and mobilization breaths, it is important to inhale slowly, hold your breath 2 to 3 seconds, and as you exhale suppress your use to cough. Now you are ready for Stage 2, mucus elimination with cough.

Stage 2 Mucus Elimination

To accomplish mucus elimination, perform 1 or 2 additional breaths through the Turboforte®. This time breathe in slowly and as fully as comfortable possible. Really fill your lungs with air. Again hold your breath for 2 to 3 seconds and then exhale forcefully through the Turboforte®, as completely as you comfortably can.

This forceful exhalation moves mucus up to a level in your lungs that triggers a cough. If mucus is not easily coughed out following 1 or 2 elimination breaths, attempt a "huff" manoeuvre (like trying to "huff" a bread crumb out of your throat). The standard series of 5 to 10 mucus loosening and mobilization breaths with cough suppression followed by 1 or 2 elimination breaths with cough should result in successful airway clearance.

You may find that your therapy requirements for loosening, mobilizing and eliminating mucus may change, requiring modification of your routine to maximize therapeutic effectiveness.

Remember, the goal of airway clearance therapy is to comfortably and efficiently remove as much mucus as possible. The Turboforte® will assist you in achieving this goal.

What is the recommended length and frequency of a Turboforte® session?

Your healthcare professional will advise you on how often you should use the Turboforte® and on the length of each session. Generally, morning and late afternoon or evening sessions are recommended. Sessions ranging from 5 to 15 minutes are common depending on your pulmonary condition and degree of severity. You can avoid becoming overly tired by adding a session instead of extending any one session to a point of discomfort. The inability to cough out additional mucus during therapy is often an indication that the session was successful and can be ended.

Important Tips

- When inhaling through the Turboforte® either remove it from your mouth or, if you leave the Turboforte® in your mouth, inhale through your nose.
- Holding your breath 2 to 3 seconds following every inhalation is very important. This allows the inhaled air to be distributed more evenly thoughout the lungs. Patients with lung conditions do not fill their lungs evenly and holding one's breath partially makes up for that.
- · Remember "huff" manoeuvers may be helpful.
- Beginning Turboforte® uses or those with particularly thick mucus may learn that multiple repetitions of Stage 1. Mucus elimination. Several attempts may be necessary to help determine the appropriate number of breaths you need to perform in each stage.
- It may be beneficial to have someone assist you when you first start using your Turboforte®. You may forget some key points of proper use, and a second person can observe and encourage maximum effort on your part.
- A second person can also help determine when you achieve the strongest fluttering sensation by placing one hand on your back and the other hand on your chest and actually feeling the vibrations in your lungs as you exhale.

How do I clean the Turboforte®?

Cleaning your Turboforte®, as with all respiratory therapy equipment used in the home, is extremely important.

Some patients find it necessary to clean the Turboforte® after each session to remove moisture and/or mucus from the internal components. Disassemble (see Figure 7) and rinse all components with tap water, wipe with a clean towel, reassemble, and store in a clean, dry location. A more vigorous cleaning is recommended every two days. Again, disassemble your Turboforte® and wash in a solution of mild soap or detergent.

Do not use chlorine bleach or other chlorine-containing products (e.g., dishwashing detergent). Rinse all components with tap water. Wipe with a clean towel, reassemble, and store in a clean, dry location.

Your health care professional may recommend your Turboforte® be thoroughly disinfected at regular intervals. To accomplish this, place the already-cleaned components in a solution containing 1 part alcohol and 3 parts tap water. Leave components submerged in this solution for approximately 15 minutes. Rinse all components with tap water, wipe with a clean towel, reassemble, and store in a clean, dry location.

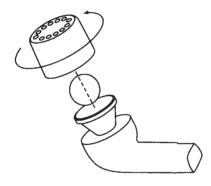


Figure 7



Quick Reference Guide

Stage 1 – Mucus Loosening and Mucus Mobilization

- 1. Gather supplies, relax, assume proper posture and position.
- Slowly inhale beyond a normal breath, but do not fill lungs completely.
- 3. Hold breath for 2 to 3 seconds.
- 4. Place Turboforte® in mouth, adjust tilt to feel maximum of vibrations within chest, keep cheeks stiff.
- 5. Exhale though Turboforte® at a reasonably fast but not too forceful speed, using abdominal breathing.
- 6. Exhale beyond a normal breath, but do not empty lungs completely.
- 7. Attempt to suppress cough.
- 8. Repeat steps 1 though 7 for 5 to 10 breaths.

Begin Stage 2 - Mucus Elimination

- 9. Slowly inhale, filling lungs completely.
- 10. Hold breath for 2 to 3 seconds.
- 11. Place Turboforte® in mouth, adjust tilt to feel maximum of vibrations within chest, keep cheeks stiff.
- 12. Exhale forcefully through Turboforte® as completely as possible.
- 13. Repeat steps 9 through 12 for 1 to 2 breaths.
- 14. Initiate cough (or "huff" manoeuvre). Return to Stage 1 and repeat full sequence (Stages 1 and 2) until lungs are clear or therapy is over.
- 15. Additional sessions may be added if necessary. Note: Clean Turboforte® after each therapy session and store in clean, dry location.

- Caution: Federal law restricts the device to sale by or the order of physician.
- Nonsterile
- Autoclavable
- Cleaning Instructions: Page 6 and 7

Turboforte® is a registered trademark of Jackaroo Oceania Pty Ltd



For Further information or professional advice, call the **Toll Free Line on 1800 812 097**

sales@wymedical.com.au www.wymedical.com.au