



~AN INNOVATION IN AIRWAY CLEARANCE THERAPY~

Recommended Usage Directions - COPD, Asthma, Pneumonia, Neuromuscular

Always follow your health care professionals' instructions.

While the following are **recommendations only**, they are based on the Vibralung Acoustical Percussor applying principles of sound to the respiratory system. The Vibralung generates three tonal frequency stepping modes, L-Low, M-Medium, and H-High, which are all 10 minute treatment times.

During these modes, at or near sympathetic resonance, the mucus, mucus plugs, and/or the airway surfaces themselves will vibrate, causing the mucus to break away from the airway walls, thin out, and liquefy making it easier for the patient to expel.

Low mode is for larger airways, Medium mode is for middle airways, and High is for smaller airways. Starting with Low will clear the airway path so that mucus cleared further down in the lungs may be expelled as the patient moves to the higher ranges.

Another mode called Random Noise appears to help reduce constriction of the airways to improve breathing. The Vibralung generates frequencies from 5 – 1,200 Hz, which are within the normal range of human speech.

Summary: The tonal settings (L-Low, M-Medium, and H-High) mobilize mucus for airway clearance, and the random noise settings (R2 and R5) relax and open the airways.

Start with the PEP (Positive Expiratory Pressure) valve half open and adjust as needed.

Typical example treatments: ("+" means "followed by", "/" means "or" with progression over time as mucus production diminishes, or as airways relax.

COPD/CF	Weeks	L + R2	L/M + R2	M/H + R2
Asthma, wet	Weeks	L + R2	L/M + R2	M/H + R2
Asthma, dry	Weeks	R5 + R5 + R5	R5 + R5	R5 + R5 or R5
Pneumonia Days	Days	R2 + L/M + R5	R2 + M/H + R5	R2 + M/H + R5

Chronic Conditions Recommended Usage Directions (COPD, chronic bronchitis, emphysema, refractory asthma, bronchiectasis, cystic fibrosis.)

Use the optional noon treatment if your symptoms worsen, such as if you get bronchitis or notice an increase in mucus from allergies. At anytime, you can try R2 or R5, that is random noise for 2 minutes or 5 minutes.

Step 1: To Start: Morning treatment: L-Low followed by R2.

Noon treatment(optional): L-Low followed by R2.

Evening treatment: L-Low followed by R2.

If you have wheezing do a R2 or R5 treatment first before the other treatments.

Morning treatment: R2, then L-Low followed by R2.

Noon treatment(optional): R2, then L-Low followed by R2.
Evening treatment: R2, then L-Low followed by R2.

Continue with either schedule until the amount of mucus produced has decreased, then proceed to Step 2.

Step 2:

Morning treatment: L-Low followed by R2.
Noon treatment (optional): M-Medium followed by R2.
Evening treatment: M-Medium followed by R2.

Anytime you have wheezing add a R2 or R5 treatment before the other treatments.
Continue with this schedule until the amount of mucus produced has lessened, then proceed to Step 3.

Step 3:

Morning treatment: M-Medium followed by R2. Every third or fourth day, do L-Low followed by R2 instead.
Noon treatment (optional): M-Medium followed by R2.
Evening treatment: M-Medium followed by R2.

Anytime you have wheezing add a R2 or R5 treatment before the other treatments.
Continue with this schedule until the amount of mucus produced has lessened, then proceed to Step 4.

Step 4:

Morning treatment: M-Medium followed by R2. Every third or fourth day, do L-Low followed by R2 instead.
Noon treatment (optional): H-High followed by R2. Every third or fourth day, do M-Medium followed by R2 instead.
Evening treatment: H-High followed by R2.

Anytime you have wheezing add a R2 or R5 treatment before the other treatments.
Continue with this schedule until the amount of mucus produced has lessened, then proceed to Step 5.

Step 5: If you have been doing three treatments per day, do only two treatments per day.
Alternate the days.

Day 1: Morning treatment: L-Low followed by R2.
Evening treatment: M-Medium followed by R2.

Day 2: Morning treatment: M-Medium followed by R2.
Evening treatment: H-High followed by R2.

If you tolerate this well, after two weeks, go onto Step 6. **Cystic fibrosis** patients will most likely remain on this schedule. If he or she experiences an exacerbation they should immediately return to step 1 or 2.

Step 6. Alternate these days.

Day 1: Morning treatment: L-Low followed by R2.
Day 2: Morning treatment: M-Medium followed by R2.
Day 3: Morning treatment: H-High followed by R2.

Most long term COPD patients will stay on either Step 5 or Step 6. Keep using the Vibralung in the best way for you and your condition.

Step 7.

Day 1: Morning treatment: L-Low followed by R2.
Day 2: No treatments
Day 3: Morning treatment: M-Medium followed by R2.
Day 4: No treatments
Day 5: Morning treatment: H-High followed by R2.
Day 6: No treatments
Day 7: Morning treatment: L-Low followed by R2.

Step 8. Continue to space out the treatments as tolerable, but continue to use the Vibralong at least twice per month.

At any time you have more coughing, or wheezing, feel tightness in the lungs, or any exacerbation, immediately return to step 1 or 2.

Note how each range, L-Low, M-Medium, or H-High makes your lungs feel, the amount of clearing you experience, and vary your treatments accordingly. You may also try adding more of the Random Noise, by using R5 (5 minutes) rather than R2 (2 minutes), especially if you have wheezing, or tightness in the lungs.

Asthma Usage Recommended Directions

- Start with two or three R5 treatments together. Repeat two or three times a day. If there is mucus or secretions add a L-Low followed by either R2 or R5 for one week or until the amount of mucus produced has lessened.
- Continue two or three times a day: If there is mucus or secretions use M-Medium followed by either R2 or R5 for one week or until the amount of mucus produced has lessened. Otherwise use two or three R5 treatments together.
- As airways relax and mucus production diminishes treatments may be spaced out and patient may find they only need random noise.

If the patient experiences any exacerbation, immediately do a R5 treatment which may be repeated up to three times as needed, then return to the beginning of these recommendations.

Pneumonia Recommended Usage Directions

For severe pneumonia (such as COVID-19 induced) increase the number of treatments up to 5 per day.

- Start with R2 then L-Low then R5 for two to three treatments. If little or no secretions are expelled on L-Low, move to R2 then M-Medium followed by R5.
- Continue with: Mornings R2, then L-Low or M-Medium then R5, and R2 then for other times R2 then M-Medium or H-High followed by R5.
- If pneumonia appears to be in the lowest lobes or more distal, start with mornings with R2 then M-Medium then R5nd R2 then for other times R2 then M-Medium or H-High followed by R5.

Continue treatments until symptoms abate.

Neuromuscular Recommended Usage Directions

- Morning treatment: L-Low, followed by R2 or R5.
- Afternoon treatment: L-Low, followed by R2 or R5.
- Evening treatment: M-Medium, followed by R2 or R5.

After the first week, every third or fourth day change to these directions.

- Morning treatment: M-Medium, followed by R2 or R5.
- Afternoon treatment: M-Medium, followed by R2 or R5.
- Evening treatment: H-High, followed by R2 or R5.

If necessary, follow each treatment with postural drainage.