

#### UNDERSTANDING AIRWAY CLEARANCE

For People Living with Cystic Fibrosis (CF)

Contains educational materials on airway clearance techniques (ACT), treatments and devices.







# AIRWAY CLEARANCE TECHNIQUES & WHAT IT MEANS TO YOU



### Airway Clearance is a combination of Techniques, Devices & Inhaled Medications. Examples include:

01

#### **Techniques**

- Active cycle breathing (ACB)
- Breathing and coughing techniques
- Huff Cough
- Percussion and Postural drainage (PPD)
- Exercise

02

#### **Devices**

- Vest Therapy®
- SmartVest Airway Clearance System
- Frequencer<sup>™</sup>
- Percussor
- Positive expiratory pressure (PEP)
  - Acapella®
- RC-Cornet®
- Flutter® Aerobika

**03** 

#### **Inhaled Medications**

#### **Bronchodilators**

- Albuterol Inhalation
- Proventil®
- Ventolin®
- Xopenex®

#### **Osmotic Agents**

 Hypertonic saline or HyperSal®

#### Mucolytic

Pulmozyme®

#### **Inhaled Anti-Infectives**

- Bethkis®
- Cayston®
- Colistimethate
- Kitabis® Pak
- TOBI Podhaler®
- Tobramycin Inhalation Solution



#### Why is ACT necessary?

- 1 CF causes thick, sticky mucus in the lungs
- 2 Airway Clearance helps mobilize the mucus out of the lungs



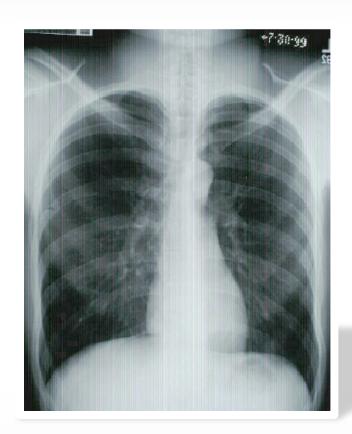
### If you do not perform Airway Clearance every day, mucus will get stuck in your lungs and cause:

- Infection
- Increased cough & congestion
- Shortness of breath
  - **Fatigue**

- **Decrease in energy**
- **Decrease in lung function**
- **Poor appetite**
- Weight loss



#### X-Ray comparison of normal lungs vs. CF lung disease



**Normal Chest X-Ray** 



**Cystic Fibrosis Lung Disease** 



## WHAT ARE THE BARRIERS TO DOING AIRWAY CLEARANCE?



#### Are there other techniques or devices you would like to try?

- Breathing & Coughing Techniques
- Autogenic drainage, active cycle breathing, huff coughing
- **Percussion Therapy & Postural Drainage**
- High Frequency Chest Wall Compression (HFCWC) Therapy
  The Vest® Airway Clearance System, SmartVest® Airway Clearance System,
  - The inCourage system, or other
  - **Positive Expiratory Pressure (PEP)**
  - Acapella®, Flutter®, RC-Cornet®, Aerobika, Vibrating
- **Percussor** 
  - Frequencer





# DO YOU HAVE ANY OTHER QUESTIONS ABOUT AIRWAY CLEARANCE TECHNIQUES?

