

## **International Physiotherapy Group for Cystic Fibrosis (IPG/CF) 2018 Physiotherapy for Respiratory Conditions – Glossary (2<sup>nd</sup> edn)**

[www.cfww.org/IPG-CF/index.asp](http://www.cfww.org/IPG-CF/index.asp)

Physiotherapy is defined as the physical management of problems or potential problems in patients with respiratory conditions, in order to obtain and maintain maximal function and to minimize disease progression.

This glossary defines terms used in physiotherapy for respiratory conditions. Physiotherapy may include inhalation therapy, airway clearance techniques/therapy and physical therapy. Common physiological terms and expressions, defined in respiratory physiology books, are not included.

The terms and expressions used in this glossary are those used in the International Physiotherapy Group for Cystic Fibrosis (IPG/CF) booklet: "Physiotherapy in the treatment of CF", available through [www.cfww.org/IPG-CF/index.asp](http://www.cfww.org/IPG-CF/index.asp). The glossary is available through the same IPG/CF web-site.

The 2<sup>nd</sup> edn of the Glossary has been updated by the task group between 2014 and 2017. In some cases where the group has not agreed on a definition, the majority has decided the outcome. New editions of the glossary will be presented as new terms and words are introduced as more chapters may be added and the user group increase.

The IPG/CF task group:

Button Brenda, Dept. of CF & Respiratory Medicine, Physiotherapy dept., the Alfred Hospital, Dept. of Medicine, Nursing & Health Sciences, Monash University, Melbourne, Australia

Chevallier Jean, IPG/CF, Belgium

Gursli Sandra, Norwegian Resource Centre for Cystic Fibrosis, Oslo University Hospital, Norway

Lanefors Louise, CF-centre Gothenburg, Sahlgrenska University Hospital, Sweden

McIlwaine Maggie, Dept. of Physiotherapy, BC Children's Hospital, Vancouver, Canada

Oberwaldner Beatrice, Postgraduate School, Medical University of Graz, Austria

Parrot Helen, Dept. of Cystic Fibrosis, Royal Brompton Hospital, London, United Kingdom

Suter Peter, Physiotherapist, Dept. of Practice Development, University Hospital Basel, 4031 Basel, Switzerland

<b>Word/Term/Expression</b>	<b>Definition</b>
Active Cycle of Breathing Techniques (ACBT)	An airway clearance technique. A cycle of the techniques of breathing control (BC), thoracic expansion exercises (TEE) and the forced expiration technique (FET).
Air flow	Flow: Expressed volume / time, (l/min)
Air flow rate (velocity)	Speed: Expressed distance / time, (m/min)
Airway Clearance Technique (ACT)	An airway clearance strategy (with or without a device) used to support/enhance mucus clearance by loosening, mobilizing, transporting and evacuating airway mucus.
Airway Clearance Therapy	Therapy used to support/enhance mucus clearance in patients with pulmonary hyper

	secretion.
Assisted Autogenic Drainage (AAD)	Autogenic Drainage (AD) carried out with assistance in infants, toddlers or individuals unable to follow instructions or to participate actively.
Autogenic Drainage (AD)	An airway clearance technique utilizing optimal inspiratory and expiratory flow rate at different lung volume levels.
Bi-level Positive Airway Pressure (Bi-levelPAP)	Assisted ventilation with independent settings for positive inspiratory and expiratory pressures.
Breathing Control (BC)	Normal tidal breathing encouraging use of the lower chest and relaxation of the upper chest and shoulders.
Chest clapping/percussion	Rhythmical percussion of the chest wall using cupped hands with a flexion / extension action of the wrist.
Chest compression	Manual compression of the chest in the direction of the normal expiratory movement of the ribs in time with expiration.
Chest mobility exercise(s)	Physical exercises to maintain or increase the mobility of the chest wall.
Chest physiotherapy	A historical ambiguous term including a variety of ACTs and modalities to define airway clearance therapy.
Chest shaking/vibrations	A shaking or vibration of the chest wall, in the direction of the normal movement of the ribs, during expiration.
Continuous Positive Airway Pressure (CPAP)	Assisted ventilation with the same positive pressure setting during the whole breathing cycle.
Cough control	Being able to control the cough, to prevent unproductive paroxysms of coughing or coughing attacks and produce a most effective cough during airway clearance therapy.
Expiratory Resistance Breathing (ERB)	Expiring against a resistance. Type and size of resistor chosen and instructions given are dependent on immediate treatment aims and physiological strategy, e.g. Positive Expiratory Pressure, High Positive Expiratory Pressure or Pursed Lips Breathing.
Forced Expiration Technique (FET)	Huffs/forced expirations performed at various lung volumes, interspersed with periods of breathing control (BC).
High Positive Expiratory Pressure (Hi-PEP)	An airway clearance technique combining PEP with forced expirations against the resistor.
Huff, huffing	A huff is a forced expiration with an open glottis.
Inhalation device	A device through which aerosolised or powdered drugs can be inhaled.
Inhalation therapy	Delivery of drugs to the airways through inhalation using adequate inhalation technique and device.

Manual therapy	The treatment of joints and muscles by specific mobilization, manipulation and stretching.
Modified postural drainage	The adaptation of postural drainage, i.e. to eliminate head-down positions.
Mucociliary clearance	The physiological movement of airway mucus by the mucociliary transport system, in a cephalad direction (towards the mouth).
Nebulizer	A device that aerosolizes a liquid.
Nebulizer system	Equipment comprising of an energy source and a nebulizer. These function as a unit.
Non-invasive ventilation (NIV)	Assisted ventilation applied non-invasively with a mask or mouthpiece for spontaneously breathing patients, with independent settings for inspiratory and expiratory pressures, flow rates and trigger levels. Can be utilized for sleep and rest but also as a part of the airway clearance therapy but with different settings.
Oscillating Positive Expiratory Pressure (OPEP)	An airway clearance technique which utilizes oscillating positive expiratory pressure and oscillating flow to enhance airway clearance.
Percussion	See "Chest clapping/percussion".
Physical activity	Used as part of Airway Clearance Therapy to enhance mucus clearance and facilitate expectoration by influencing breathing pattern, ventilation and ventilation distribution.
Physical exercise	Targeted exercise(s) to preserve or improve a specific physical function.
Physical training	An individual tailored programme of structured and repeated physical exercise to improve/maintain exercise capacity and endurance, mobility, muscle strength and posture.
Positioning	The use of positioning to utilize the effects of gravity, to change regional functional residual capacity (FRC) and to increase regional ventilation in order to: <ul style="list-style-type: none"> <li>• improve aerosol deposition pattern</li> <li>• facilitate drainage of bronchial secretions</li> <li>• prevent / treat atelectasis</li> </ul>
Positive Expiratory Pressure (PEP)	An airway clearance technique which utilizes the effects of tidal volume breathing towards an expiratory resistance to increase the lung-volume (FRC) temporarily.
Postural Drainage (PD)	The use of gravity for drainage of secretions guided by bronchial anatomy.
Postural drainage & percussion (PD & P)	An airway clearance technique which combines postural drainage and chest clapping / percussion.
Specific Cough Technique (SCT)	Using cough in a controlled way, at specific lung volumes, to check for and/or assist the removal of bronchial secretions.
Pursed lips breathing	The generation of a positive expiratory pressure

	by expiring against partially closed lips in order to control expiratory flow, increase expired volume and decrease FRC and/or in order to reduce/avoid dyspnoea.
Shaking	See "Chest shaking / vibrations".
Thoracic expansion exercise (TEE)	Deep inspiration towards total lung capacity.
Vibrations	See "Chest shaking/vibrations".