

## RESPERATORY

4 AGFC USA INDIAN FITNESS ACADEMY People who suffer an acute heart or lung injury, or require a heart or lung operation, are most often admitted directly to hospital. People with a chronic cardiorespiratory condition, who suffer a flareup or exacerbation, may also require hospital admission. While you are in hospital, your doctor may request that an Active Rehab Physiotherapist provide treatment for you. Your Physiotherapist will undertake a comprehensive assessment of your cardiorespiratory system, endurance and mobility and will then tailor a treatment program to your unique needs. Depending on your condition, your physiotherapy treatment may include:

- Deep Breathing Exercise: to encourage increased lung volumes
- Hands-on Techniques and Breathing Facilitation Exercises: to expand your lung capacity
- Percussions and Vibrations: to help you loosen secretions and make coughing easier
- Coughing and Breathing Strategies: to help you cough and manage your shortness of breath
- Breathing and Circulation Exercises to prevent further respiratory and vascular complications such as chest infection and deep venous thrombosis (DVTs)
- Mobility Assistance: to move safely in bed, sit up, stand and walk
- Mobility Aids: advice, prescription and instruction on how to safely use a walking frame, or other walking aids as required
- Individually Tailored Exercises: to control your breathing pattern, build muscle strength and endurance and improve your general health and well being

Cardiorespiratory physiotherapy also plays a large role in the prevention of common complications. When people are admitted to hospital, or are recovering after an unrelated surgery (such as an orthopaedic or abdominal surgery), your doctor may ask an Active Rehab cardiorespiratory physiotherapist to see you. The treatment provided may include:

- Deep Breathing Exercises: to prevent lung infection and collapse
- Bed, Chair and Standing Exercises: to prevent deep vein thrombosis (clots)
- Ongoing Fitness Program: Tailored exercises to help you maintain your mobility and fitness.

Cardiorespiratory physiotherapy is an area of physiotherapy that specialises in the prevention, rehabilitation, and compensation of clients with diseases and injuries in the heart and lungs. These conditions may manifest themselves as shortness of breath, persistent cough, increased work of breathing or the reduced ability to exercise. Common cardiorespiratory conditions include:

- Chronic Obstructive Pulmonary Disease (COPD)
- Asthma
- Bronchiectasis
- Bronchitis
- Emphysema
- Congestive Cardiac Failure (CCF)
- Respiratory Infections (Pneumonia)
- Hypertension
- Peripheral Vascular Disease
- Angina
- Heart Attack (MI)
- Heart or lung injury or surgery

It is now widely recognised that appropriate exercise can be an effective disease prevention strategy and is integral to the management of those with a variety of cardiorespiratory conditions. Following your discharge from hospital, please visit one of our Active Rehabilitation clinics where a Physiotherapist will continue to support your rehabilitation.

Outpatient treatment can include:

- Prevention or resolution of minor lung infections
- Thoracic Assessment and Mobilisations: to increase lung capacity
- Breathing Control Exercises: to optimise athletic performance.

The aim of assessment is to define the patient's problems accurately. It is based on both a subjective and an objective assessment of the patient. Without an accurate assessment it is impossible to develop an appropriate plan of treatment. Equally, a sound theoretical knowledge is required to develop an appropriate treatment plan for those problems which may be improved by physiotherapy. Once treatment has commenced it is important to assess its effectiveness regularly in relation to both the problems and goals. The system of patient management used is based on the problem oriented medical system (POMS) first described by Weed in 1968. This system has three components:

- Problem oriented medical records (POMR)
- Audit
- Educational programme.

Planning an exercise programme. The exercise programme is based on the principle that oxygen delivery and uptake is enhanced in response to an exercise stimulus which is precisely defined for an individual in terms of the type of exercise, its intensity, duration, frequency and the course of the training programme. These parameters are based on an exercise test in conjunction with assessment findings. Exercise tests are performed on a cycle ergometer, treadmill

or with a walk test. The general procedures and protocols are standardized to maximize the validity and reliability of the results. The training-sensitive zone is defined by objective and subjective measures of oxygen transport determined from the exercise test. The components of each exercise training session include baseline, warm-up, steady-state portion, cool-down and recovery period.