

Hawkes Bay Today Vital Signs Column, May 2012.

Respiratory, or lung, diseases are a major concern in New Zealand. As a country we have the second highest prevalence of asthma in the world with one in four children suffering from the condition. According to WHO data, New Zealand also has one of the highest COPD mortality rates in the world.

Chronic obstructive pulmonary disease (COPD) includes bronchitis and emphysema. In chronic bronchitis the breathing tubes become swollen, irritated, sticky and blocked with mucous. In emphysema the breathing tubes lose their stretchiness and collapse, reducing airflow and the air sacs at the end of the airways are damaged permanently.

Smoking is the main cause of COPD, but exposure to air pollution, dust or chemicals can also cause the disease. COPD cannot be cured, but symptoms can be controlled, and further lung damage can be prevented. The symptoms are similar to asthma, but treatment and management is different so it is important to speak to your doctor to get the correct diagnosis.

Regular exercise is important in the management of COPD. Exercise keeps your muscles working, improves your breathing and allows you to continue doing simple everyday activities. Walking is ideal but your doctor or physio will recommend activities right for you. As COPD gets worse, breathing becomes harder and takes more energy, so it is important to do special breathing control exercises.

Having good nutrition is critical and skipping meals is not sensible. Eat small amounts often, eat foods high in energy and protein. Pre-prepare meals when you feel up to it, for the days when you don't.

Inhaler devices can help relieve symptoms and to treat flare-ups of breathing difficulties. It is very important to use these inhalers correctly, and that takes practise. Ask your pharmacist to check your technique so you know you are getting the most benefit.

Asthma is a narrowing of the airways in the lungs when the muscles around the airways tighten and the lining of the airways swells up. Mucous is often produced as well making it difficult for the air to move in and out of the lungs.

Although it is a common condition, there are many different levels of severity and different triggers. Some of the common triggers include cold air, dust, animals, colds and flu, exercise, food additives, fumes/smog, medicines, pollens, and even emotions.

Triggers for asthma often cause spasm, inflammation or excessive mucous production. Magnesium may help strengthen the lining of the lungs and foods rich in quercetin (natural anti-histamine) including apples, blackcurrants, red onions, cabbage, carrots and watercress may also be beneficial. Experiment with removing wheat and dairy from your diet to try and reduce mucous production.

The most common signs of asthma are difficulty breathing, tightness in the chest, a wheezy sound and a cough. Asthma is considered not controlled if you have symptoms more than three times a week or you wake at night with asthma. Take the Asthma control test at www.asthmacontrol.co.nz and assess your own current level of control. The Asthma Foundation of New Zealand recommends seven steps to managing your asthma well:

- Understand how asthma affects you and act immediately to stop your asthma getting worse when symptoms appear and avoid triggers
- Take your medications as instructed
- Follow a self management plan to help you work out how well you are and know what to do if your asthma changes
- Use a peak flow meter to monitor your asthma and decide when to change your treatment according to your 'self management plan'
- Keep active
- Be smoke free
- Visit your asthma team regularly

In an asthma attack, it is vital to act as soon as possible. Remember the **ASTHMA** steps – **A**ssess the severity of the attack; **S**it the person down and lean forward slightly; **T**reat with an reliever inhaler; call for **H**elp; **M**onitor; **A**ll OK.