

# COPD INFORMATION PACK

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# What is COPD?

**COPD stands for Chronic Obstructive Pulmonary Disease**

- **Chronic** means it won't go away
- **Obstructive** means partly blocked
- **Pulmonary** means in the lungs
- **Disease** means sickness

COPD is a long-term lung disease that reduces airflow in and out of the lungs, making it difficult to breathe.

**Although doctors cannot cure COPD, it is possible to improve your symptoms and slow the damage to your lungs.**

When you follow the instructions of your doctor it will help you to:

- Manage your shortness of breath
- Cough less
- Get stronger and get around better
- Improve your mood



**This booklet is designed to help you and your family understand and manage COPD**

## Who gets COPD?

Smoking is the major cause of COPD. Around 1 in every 5 smokers will become disabled from COPD. Quitting smoking slows the rate of damage and prolongs life. Smoking inflames the air passages which narrow, making breathing more difficult. The airways produce excess sputum (phlegm), making infections more likely. Less oxygen gets into the blood because of the damage to the air sacs. Exertion becomes increasingly difficult. The news isn't all bad! Stopping smoking and taking the correct medicines can make breathing easier and help you exercise more. The more you exercise the better you will feel.



Because the normal lung has a large reserve, you can have COPD without any symptoms. However, many patients cough and bring up sputum most days. Some get frequent, prolonged chest infections.

COPD is diagnosed with an easy breathing test called spirometry. You are asked to blow hard into a tube connected to a machine. The result tells the doctor the severity of your COPD.

### Mild

- Breathing capacity is 60-80% of normal.
- You feel a little out of breath if you work hard or walk rapidly, especially on hills and stairs.

### Moderate

- Breathing capacity is 40-60% of normal.
- You feel out of breath if you walk rapidly and have to slow down on hills and stairs.
- You may have trouble doing hard work or chores.

### Severe

- Breathing capacity is less than 40% of normal.
- You probably can't work or do chores around home.
- You cannot walk up stairs or across the room very well.
- You tire easily.

# Self Management of COPD

Be in control of your lung condition and have an action plan to manage your symptoms if you get a chest infection.

## Signs to look out for:

- Increased sputum, darker colour
- Increased breathlessness
- Increased use of reliever medication
- Increased ankle swelling
- Nausea, loss of appetite, fatigue
- Fever, chills



1. Notify your GP early.
2. Have an action plan and a supply of medications (eg, antibiotics, prednisolone).
3. Some people need oxygen when they are worse. If you are already on oxygen, do not increase the flow unless your doctor orders it.

By using an action plan early:

- Severity of the episode may be decreased.
- Hospitalisation may be avoided or the length of stay reduced.

## See your doctor regularly

- Go for checkups at twice a year, even if well.
- Have your lungs tested.
- Ask the doctor to list your medications, how much to take and when to take it.
- Bring medications or list to every checkup.
- Show your family your medication list and keep it handy.
- Have yearly flu and 5-yearly pneumonia vaccinations.



Put things needed in an emergency in one place so you can act quickly:

- Phone numbers: doctor, hospital
- Action plan
- My Health Record red book
- Directions to the hospital and doctor's office
- List of medications
- Overnight bag, money

Get emergency help if you see any of these danger signs:

- Breathing is more difficult than usual - it is hard to talk or walk
- Lips or fingernails turn grey or blue
- Heartbeat or pulse is very fast or irregular
- Ankles swell or swelling increases
- Medication does not help for very long or not at all



## **Action Plans**

This plan will allow quick and effective treatment of an exacerbation and may help avoid hospital admissions. Your GP or specialist should fill it out. Carry it with your ‘My Health Record’. It should be reviewed regularly by your doctor (yearly at a minimum). On the back of the action plan there is information on what you can do to keep well. A blank action plan is included at the end of this pack. The plan is broken up into 3 sections:

**Green** These are your normal medications you should be taking when well. This section will tell you what you are taking, how much you should be taking and when.

**Yellow** If you are starting to feel unwell begin taking the extra medications your doctor has prescribed, eg, prednisolone, antibiotics. Get scripts filled so that the medications are available immediately when you need them.

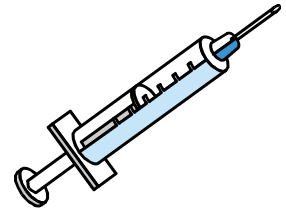
**Red** If you have a severe attack that requires immediate attention call an ambulance on 000 and your GP / Specialist / Nurse

## **Influenza and pneumococcal vaccinations**

Influenza or “flu” is caused by a virus spread by a sneeze or cough. Symptoms include fever, headache, muscle aches, cough and fatigue. People aged 65 and over should have the free influenza vaccination every year in autumn. If you are under 65, but have a chronic illness (eg COPD, heart disease) ask your GP about being vaccinated. The vaccine is safe and cannot cause influenza because the viruses it contains are dead. Anyone who has an allergy to eggs should not be vaccinated. People who have a fever should wait until they feel better.

One common bacterial cause of pneumonia can also be prevented. Pneumococcal infection can be life threatening in older people, those with poor immune systems, and those who suffer from chronic illness. Pneumococcal vaccination (5-yearly) is recommended for:

- Everyone over the age of 65
- People at increased risk of complications from pneumococcal diseases because of chronic illness
- Anyone who does not have a functioning spleen
- Patients with a weak immune system
- Aboriginal and Torres Strait Islanders aged over 50



## **Medications and devices**

The response to medication in COPD is often small, but helpful. Discuss treatment with your doctor. Some medications (eg oral corticosteroids) can have significant side effects. A trial period will enable your doctor to decide whether it is of benefit. The majority of medications fall into two main groups – relievers and preventers. Many medications can be inhaled via nebulisers, metered dose inhalers (puffers), or dry powder inhalers (Turbohalers, Accuhalers, Autohalers or Handihalers). Some medications can be given as tablet or injection.

### **Reliever Medications**

#### Airomir, Asmol, Bricanyl, Respolin, Ventolin

These medications help open up the airways. These act quickly so you should feel some relief from breathlessness within 5 to 10 minutes and good relief in 1 hour. You may benefit from regular use of this medication, as your doctor prescribes. Wait 1-2 minutes between puffs.

#### Atrovent, Ipravent

These are not as rapid as those medications listed above, but they last longer (up to 6 hours). Wait 1-2 minutes between puffs.

#### Spiriva

This is a long acting bronchodilator (airway opener) that lasts for 24 hours. It should only be taken once daily.

#### Oxis, Serevent

These are long acting bronchodilators that act within 10-30 minutes of a dose and last for up to 12 hours.

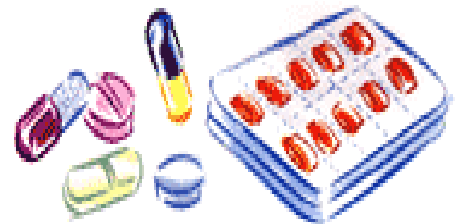
## Preventer Medications

### Qvar, Pulmicort, Flixotide

These reduce or prevent inflammation and swelling of the lining of the airways. They work for 6-12 hours after commencement, but it may take days or weeks for maximal effect. Use these 10 minutes after your reliever medications as this allows the airways to open. Brush your teeth, gargle and rinse mouth after use. You may need to use this medication regularly.

### Prednisolone, Prednisone

These are tablets that reduce airway inflammation like the inhalers above. They are used when the airways are so narrow that the inhaled steroid cannot get into the lung. They are usually taken in the morning on a full stomach. Do not stop taking them abruptly as they have to be cut back gradually.



## Combination Medications

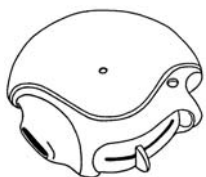
### Seretide, Symbicort

These contain both reliever and preventer medications that reduce the swelling and irritation in the walls of small air passages in your lungs. They are usually used twice a day and may need to be used regularly.

Using devices incorrectly can result in incorrect doses of medication.

### **Accuhalers**

Accuhalers (Flixotide, Seretide, Serevent) produce a fine powder which is inhaled into the lungs.



1. Check number of doses left in Accuhaler.
2. Hold Accuhaler in one hand, place thumb of other hand on thumbgrip.
3. Open Accuhaler by pushing thumbgrip as far as it goes.
4. Slide lever until it clicks. Extend neck comfortably.
5. Breathe out gently and fully away from mouthpiece.
6. Put mouthpiece between lips to form a seal.
7. Breathe in forcefully until lungs are comfortably full.

8. Remove Accuhaler from mouth and hold breath for 10 seconds or as long as comfortable.
9. Breathe out slowly.
10. Close Accuhaler by placing thumb in thumbgrip and sliding it back until cover clicks into place.

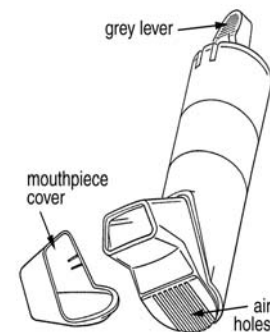
To take a second dose repeat steps 2 to 10.

After using Flixotide and Seretide rinse your mouth well and spit, to stop medication sticking to the mouth and throat, helping to decrease side effects. The Accuhaler contains 60 doses. A dose counter on the side displays the doses left. For the last 5 doses, the number is red. Do not breathe out into the Accuhaler as moisture clogs up the powder. Keep accuhaler dry. Close when not in use.

## Autohalers

Autohalers (Airomir, Atrovent, Qvar) produce a fine mist or aerosol that is inhaled into the lungs. Autohalers are breath activated.

1. Unclip mouthpiece cover from back.
2. Holding Autohaler upright, click grey lever up.
3. Shake Autohaler well.
4. Breathe out gently and fully.
5. Place Autohaler in mouth and seal lips around mouthpiece. Be careful not to block the air holes on bottom of Autohaler with thumbs or hands.
6. Breathe in with a slow, deep, steady breath.
7. Take Autohaler out of mouth and hold breath for 10 seconds or as long as is comfortable.
8. Breathe out gently.
9. Holding Autohaler upright, lower grey lever.
10. Replace dust cap.



To take a second dose, repeat steps 2-9.

When the device is empty medication or propellant discharge will not be heard. The mouthpiece of the Autohaler may be wiped clean with a clean, dry cloth. Do not put the device in water. Do not stop breathing in when the “click and whoosh” is heard - take a full, deep breath. The “click and whoosh” lets you know that the medication has been released.



## Turbuhalers

Turbuhalers (Bricanyl, Oxis, Pulmicort, Symbicort) produce a fine powder of medication that is inhaled into the lungs. After using Pulmicort and Symbicort rinse your mouth well and spit. Before use, check the content indicator on the side of the device.



1. Check content indicator window on side of device.

2. Unscrew cap and lift off.

3. Hold Turbuhaler upright and turn grip to right as far as it will go away from you.

4. Twist grip back to left, towards you until it clicks. (Click indicates the dose is ready to inhale.)



5. Breathe out gently and fully, away from mouthpiece.

6. Place mouthpiece between lips and form a seal.

7. Breathe in quickly and deeply until the lungs are comfortably full.

8. Remove device from mouth before breathing out.

9. Replace cap and screw shut.

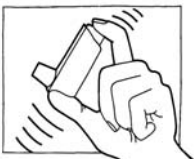
To take a second dose, repeat steps 3 - 8.



The dose indicator window on the side of the Bricanyl, Oxis and Pulmicort Turbuhalers should be checked regularly. When a red line appears in the window, there are approximately 20 doses left. When red fills the window, the Turbuhaler is empty. The Symbicort Turbuhaler counts down the number of doses left. The rattling sound heard when shaking the Turbuhaler is the drying agent built into the base. *It is not medication.* The Turbuhaler should be kept dry. Ensure the cap is replaced securely after use. Avoid breathing into the Turbuhaler.

## Metered Dose Inhalers

These inhalers (Airomir, Asmol, Atrovent, Atrovent Forte, Flixotide, Intal, Intal Forte, Qvar, Seretide, Serevent, Tilade, Ventolin) produce a fine mist or aerosol that is inhaled into the lungs.



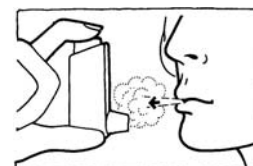
1. Remove dust cap and check that canister fits securely into mouthpiece.

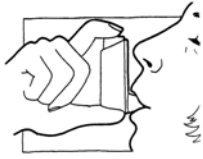
2. Shake inhaler vigorously.

3. Hold inhaler upright.

4. Extend neck comfortably.

5. Breathe out gently and fully.





6. Place inhaler between lips and form a seal.

7. As you begin to breathe in, press canister firmly.

Continue to breathe in slowly until lungs are full. If unable to press down on canister with one hand, two hands can be used. Hold breath for 10 seconds or as long as is comfortable.

8. Breathe out gently.

Wait 30 to 60 seconds between puffs of reliever medication. It is not necessary to wait between puffs of preventer medication.

### Care and cleaning of inhaler

Clean the inhaler weekly (Intal, Intal Forte and Tilade inhalers should be cleaned daily).

1. Remove metal canister from plastic mouthpiece. Do not wash metal canister.

2. Rinse mouthpiece and dust cap under warm running water.

3. Shake off excess water and allow to dry.

4. When inhaler is completely dry, reassemble. Ensure metal canister is sitting securely in inhaler.

Qvar inhalers should only be wiped clean and not put into water.

Ensure the dustcap is on the inhaler when not in use. If the inhaler has not been used for a week or more, press inhaler once to test it is working.

If using a preventer medication rinse mouth well and spit after use.

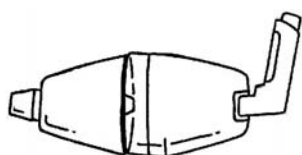
### **Spacer Devices**

Inhalers are most effective used with a spacer device. These increase medication delivered to the lungs and decrease the amount sticking to the tongue and throat, reducing side effects. Use only one puff of medication in the spacer at a time.

1. Join the 2 halves of the spacer by matching the "lug(s)". Small volume spacers are in one piece and do not require assembling.



2. Remove cap, shake inhaler vigorously.



3. Put mouthpiece of inhaler into the hole in the spacer at the end opposite the mouthpiece.

4. Place lips around mouthpiece. While exhaling fully, release 1 puff of medication, by pressing

canister firmly. If needed, use two hands to press canister.

5. Breathe in slowly and deeply through mouth until lungs are comfortably full.

6. Hold breath for 10 seconds **OR** breathe in and out normally 5 times.



To take a second dose, wait 30 to 60 seconds and repeat steps 4-6.

### Cleaning the Spacer Device

Medications will discolour the spacer device. To wash the spacer (once a fortnight):

1. Separate the halves

2. Swish in hot soapy water

3. Shake off excess moisture and soap - do not rinse, as soap helps to reduce static charge

4. Allow to drip dry - do not cloth dry as the plastic will become charged and medication will stick rather than passing through to your airway.

### **Aerolisers**

This device (Foradile) pierces a capsule of medication releasing a fine powder that is inhaled into the lungs.

1. Pull off cap.

2. Hold base of aeroliser and twist mouthpiece in direction of arrow.

3. With dry hands place one capsule in capsule-shaped slot in base of aeroliser. Ensure the capsule is lying flat in bottom of slot.

4. Twist mouthpiece to closed position.

5. Keep aeroliser upright, firmly squeeze the two blue buttons once and release quickly, piercing the capsule.

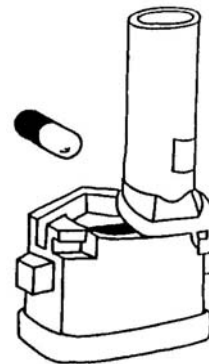
6. Breathe out gently and fully (away from mouthpiece).

7. Extend neck and seal lips around mouthpiece.

8. Breathe in quickly and deeply until lungs are comfortably full (a whirring sound should be heard – this is the capsule spinning in the device releasing powder).

9. Hold breath for 10 seconds or as long as is comfortable.

10. Breathe out slowly.



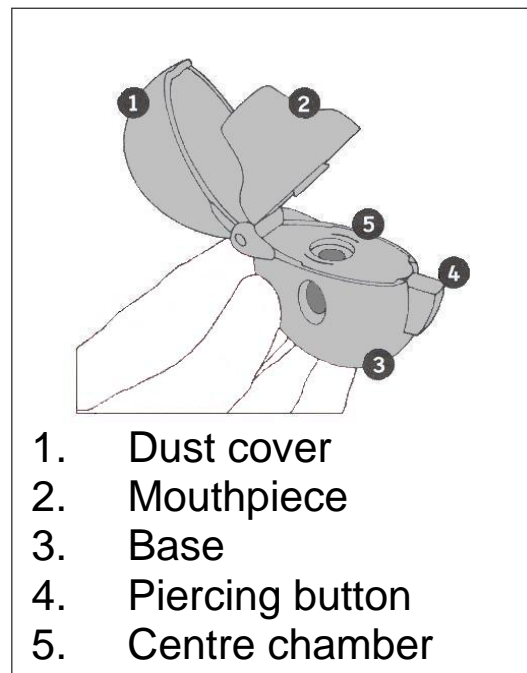
11. Open device, check for powder remaining in capsule. If powder remains, repeat steps 6 to 9.

12. After each use, tip out empty capsule, close mouthpiece and replace cap.

Clean the aeroliser by wiping mouthpiece and capsule compartment with a dry cloth or a soft clean brush. Do not put device into water. Place capsule in the device just before use. Do not exhale into the device as moisture may clog up the powder. Capsules may be affected by warmth and cold. Keep them sealed in the foil and in their box in a cool, dry place.

## Handihalers

1. Open dust cover by pulling it upwards then open mouthpiece.
2. Remove capsule from foil strip and put into chamber.
3. Close mouthpiece firmly until you hear a click (leaving the dust cover open).
4. Hold Handihaler with mouthpiece facing up and press piercing button once, then release.
5. Breathe out completely (away from mouthpiece).
6. Seal lips around mouthpiece.
7. Breathe in quickly and deeply (at a rate sufficient to hear the capsule vibrate) until lungs are comfortably full.
8. Take Handihaler out of mouth and at the same time hold breath for 10 seconds, or for as long as is comfortable. Resume normal breathing.
9. Repeat steps 6 to 8 once to make sure capsule is completely empty.
10. Open mouthpiece and tip out empty capsule and dispose. Close mouthpiece and replace cover.

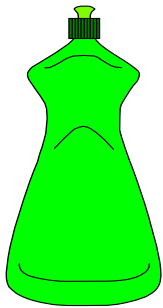
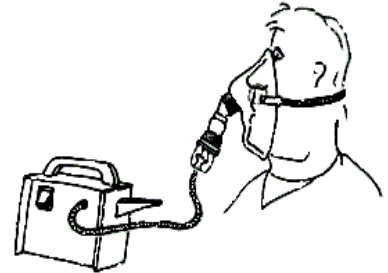


Clean the Handihaler once a month. Open the dust cover and mouthpiece then open the base by lifting the piercing button. Rinse the complete inhaler with warm water to remove any powder. Dry the

Handihaler by tipping excess water out onto a paper towel and air dry afterwards, leaving the dust cover, mouthpiece and base open. The Handihaler takes 24 hours to air dry, so clean immediately after use so it is ready for your next dose. The outside of the mouthpiece may be cleaned with a moist tissue.

## Nebulisers

Nebulisers change liquid medication into a mist, which is breathed in through a mask or mouthpiece for 5 to 10 minutes. Proper cleaning will help prevent chest infections.



The nebuliser bowl, face mask and mouthpiece should be cleaned and dried after each use, or once daily.

- Wash in mild soapy water.
  - Soak in either weak bleach or a weak cleaning solution, available from pharmacies.
  - Rinse twice in hot tap water or boiled water.
  - Air dry the tubing and nebuliser bowl using the nebuliser pump.
- 
- Check the compressor pump for correct airflow annually (many pharmacies have testing equipment).
  - When purchasing a nebuliser bowl always ask how long it will last. Mark the date on a calendar to remind you to replace it.
  - Check your nebuliser bowl regularly for cracks.

## Exercise

People with lung conditions often experience:

- Breathlessness or difficulty breathing
- A fear of breathlessness

This can very easily turn into a vicious cycle and people stop exercising. To break this cycle you need:

1. An understanding of how the lungs work
2. Self help skills such as breathing control and relaxation techniques.
3. To start a long term gentle exercise program (usually walking).



Exercise should get you a little ‘puffed’ - even the fittest of athletes get puffed! Learn how to exercise safely.

Benefits of exercise:

- ◆ Improved fitness
- ◆ Improved ability to perform the activities of daily living
- ◆ Improved strength, flexibility, and coordination
- ◆ Improved weight control, relaxation and sleep
- ◆ Improved relaxation and sleep
- ◆ Improved health by reducing disease risk factors

Pulmonary Rehabilitation programs tailor exercises to suit you and help you manage tasks around the house or return to activities that you enjoy.

The programs usually incorporate:

- Supervised exercise:
  - cardiovascular (heart and lung)
  - strength
  - balance
  - posture
  - flexibility



- Education about:



- exercise and breathing techniques
  - lung anatomy and healthy hearts
  - medications and device use
    - recent advances treatment
- healthy eating and safe swallowing
- prevention of falls
- energy conservation
- community services
- relaxation techniques

- Support:

- meet other people with similar experiences

## **Smoking Cessation**

Smoking is the main cause of COPD. Individuals with COPD become progressively more breathless. The **only** way to stop this process is to quit smoking. Stopping smoking prevents further damage.



Stopping smoking will:

- reduce heart rate and blood pressure
- make the lungs work better
- improve senses of taste and smell
- reduce bad breath and staining of teeth, fingers and clothes
- improve blood flow to the hands and feet

- decrease risk of heart attack and stroke
- reduce the risk lung, mouth, throat and bladder cancer.

**REMEMBER – IT’S NEVER TOO LATE TO STOP !!**



How to stop smoking:

- Ask for help from a doctor or nurse.
- Use nicotine replacement patches, gums, lozenges.
- Set a date to quit. Tell family and friends and ask them to keep cigarettes out of the house. Ask people not to smoke inside. Remove ashtrays from your home.
- Stay away from places that make you want to smoke. Keep your hands busy. Try holding a pencil instead of a cigarette.
- When the craving is bad, use NRT, chew gum or a toothpick. Snack on fruits and vegetables. Drink water.
- Think about quitting just 1 day at a time.
- If you start smoking again, don't despair! Try to stop again. Reset a date to quit. Many smokers make several quit attempts prior to succeeding (the average is 6 attempts).

Nicotine withdrawal symptoms include irritability, headaches, stomach cramps, constipation, poor sleep, decreased concentration, muscle spasms, cough and mouth ulcers. However, these withdrawal symptoms are short lived. Nicotine replacement therapy can help to reduce these symptoms.



If you have failed several times there is a tablet which reduces the craving for a cigarette and can be taken for up to 3 months. You have to get a clearance from your doctor and be involved in a fully supervised quit program.

## **Emotional Reactions**

COPD can be a very tough illness to live with and only people who have the disease, and their families, can fully understand. COPD can restrict activities. Feelings of anger, frustration, grief, sadness, denial, avoidance, anxiety, worry and confusion are common.

Shortness of breath may trigger a cycle of anxiety. Exposure to psychological or physical stress may lead to increased shortness of breath, chest tightness, and dizziness. The person may interpret these sensations as meaning that something terrible is about to happen – for example that he or she is about to stop breathing. The person's interpretation may then lead to them "panicking", and a vicious cycle is established. Anxiety can lead to excessive fear of shortness of breath, and to the person avoid otherwise achievable activities.

Learning to live with COPD involves acknowledging the emotional stress, accepting the illness as something to be coped with, and getting help when necessary. Pulmonary rehabilitation is a useful way of finding out how to manage COPD. Clinical psychologists are also available to help people experiencing problems with panic anxiety.

## **My Health Record**

My Health Record was developed following broad consultation with consumers and health care professionals to provide a simple means by which a patient and his or her health care providers and carers can keep track of all aspects of that person's care and treatment. The benefits of My Health Record include:

- better coordination of care
- better informed patients and carers
- access to information such as test results, medications, allergies and emergency contact numbers



- record of appointments

My Health Record helps you to be responsible for your own health. Your local hospital or GP can provide you with a copy of My Health Record.

## Contact Information

### Prince of Wales Hospital

Switchboard	9382-2222
Department of Respiratory Medicine	9382-4631/43
Respiratory Ward	9382-4046/7
Pulmonary Rehabilitation Program	9382-2850
Smoking Cessation Clinic	9382-4641
Post Acute Care Services (PACS)	9382-2470

### St George Hospital

Switchboard	9350-1111
Department of Respiratory Medicine	9350-2325
Respiratory Ward	9350-3458
Pulmonary Rehabilitation Program	9350-2163
Respiratory Coordinated Care Program (RCCP)	9350-3471/2

### St Vincent's Hospital

Switchboard	8382-1111
Respiratory CNC	8382-3838
Pulmonary Rehabilitation Program	8382-3346

### Sutherland Hospital

Pulmonary Rehabilitation Program	9540-7540
Sutherland Heart and Lung Team (SHALT)	9540-7540

### Sydney Hospital

Chronic Care Community Liaison Nurse	9382-7551
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National Smoking Quitline 131 848

Australian Lung Foundation 1800 654 301