

MAKE SMOKING HISTORY[®]

COPD and Smoking: Question and Answer Sheet

What is COPD?

Chronic Obstructive Pulmonary Disease is commonly known as chronic bronchitis and emphysema, both long-term lung diseases that cause shortness of breath. Each condition can occur alone, but many people struggle with a combination of the two problems.

What causes COPD?

In Australia, chronic bronchitis and emphysema usually occur in people who have smoked or continue to smoke cigarettes. Smokers' risk of COPD increases with each cigarette smoked with almost all smokers of 20 cigarettes per day showing some degree of emphysema.

Other known causes of COPD include exposure to industrial pollutants, usually in the workplace. A small proportion of cases of emphysema are also caused by an inherited problem called alpha-1-antitrypsin deficiency.

To understand what happens to the airways and lungs of people with chronic bronchitis and emphysema it is useful to know how healthy lungs work.

How do the lungs work?

Each time you breathe, air is drawn, via the nose and mouth, into the windpipe or trachea. The windpipe is a tube about 10-12 centimetres long in adults and splits into two smaller tubes that go to the left and right lungs. Each of these tubes is called a bronchus. They divide into smaller and smaller airways, and together they are called bronchi. The air passes down the bronchi in each lung, dividing another 15-25 times into smaller and smaller airways called bronchioles. The smallest airways end in tiny air sacs called alveoli. It is here that the oxygen from the air is absorbed into tiny blood vessels called capillaries which criss-cross the walls of the alveoli.

Once it passes into the blood stream, oxygen is carried all around the body, and at the same time a waste product, called carbon dioxide, comes out of the capillaries back into the alveoli ready to be breathed out. If you could look inside your lungs, you would see a mass of fine tubes and air pockets, all looking rather like a giant sponge.

What happens in emphysema?

In emphysema, the alveoli or air sacs in the lungs are gradually destroyed so people have difficulty absorbing enough oxygen. The bronchi become floppy and narrow so that it becomes harder to breathe in and out.

What happens in chronic bronchitis?

Bronchitis means inflammation of the bronchi. As a result mucus which is normally made in the airways to keep them moist is produced in excessive amounts: this leads to cough and sputum production. The bronchi may also become narrow and floppy (making them narrower) and therefore it is harder for air to get in and out of the lungs: breathlessness results.

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Most adults have a bout of 'acute' or short-term bronchitis at some time in their lives, lasting a week or two at the most. In chronic bronchitis, however, people produce a lot of mucus, sometimes called phlegm and they cough and are breathless for months or even years.

How do people feel?

In mild forms of these diseases, breathlessness may occur walking up hills or stairs, but in severe cases, breathlessness can occur walking slowly along flat ground. Normally daily activities become more difficult as the disease gets worse.

It is not surprising that people with chronic bronchitis and emphysema may become frustrated, anxious and depressed, making breathing problems worse. People who feel more positively toward life tend to do better.

Adapting to the limitations placed on lifestyle, together with the care and support of family and friends, can also do a lot to relieve anxiety and lift depression.

Are there other problems associated with COPD?

People with chronic bronchitis and emphysema are more prone to chest infections and pneumonia and occasionally require admission to hospital for intensive treatment of their disease. During these episodes they may have a low oxygen level in the blood and develop swollen ankles because of inadequacy of the pumping action of the heart.

What can be done?

Unfortunately there is a belief among smokers that once they have lung damage there is nothing that can be done.

While it is true that little can be done to restore destroyed lung tissue, stopping smoking at any stage in the progression of COPD will improve both quality of life and length of life. Once you stop smoking you gradually reduce your chances of getting COPD. For sufferers of COPD, stopping smoking can relieve breathlessness and other symptoms and reduce the rate at which the disease progresses.

For help to quit

For free advice about quitting and support to quit contact the Quit line on **13 7848** or visit your local doctor, pharmacist or health professional. The Cancer Council Western Australia offers *Fresh Start* courses that are run in workplaces and the community. If you are interested in attending a course, call the Quitline or the Cancer Council Helpline 13 11 20, to find out where courses are running. You can also access information at www.cancerwa.asn.au/prevention/tobacco.

Adapted from the fact sheet, *COPD - Chronic Bronchitis and Emphysema* (2008) with kind permission of The Australian Lung Foundation.

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