

## When you quit

At eight hours your heart rate and blood pressure will begin to return to normal.

At 12 hours the nicotine and carbon monoxide in your body will drop dramatically.

At one week the cilia in your lungs will have begun to recover and will start cleaning mucus out of your lungs.

At two weeks your throat and the large airways in your lungs will be less reactive, causing less problems with breathing during surgery.

At three weeks your body's ability to heal wounds will have begun to improve.

At four weeks the small airways in your lungs will be working better and will continue to improve.

At six weeks your lungs will produce a normal amount of mucus, which will help your breathing during surgery.

At eight weeks your risk of lung complications will be lower than a continuing smoker. Your blood will be less thick and sticky and your blood flow will improve. Your risk of wound complications will be much less than a continuing smoker. Your immune system and your response to anaesthetic drugs will also improve.

Your rate or extent of recovery may also depend on other things such as whether you already have an advanced smoking-related illness.

## After surgery

After surgery, it is important you do not start smoking again, even if you only quit 12 hours before surgery. Allow your body time to recover and heal properly. Smoking makes recovery harder by stressing your heart, affecting your blood pressure, reducing oxygen in your blood and body tissues and damaging your lungs.

Special thanks for their contribution: Australian and New Zealand College of Anaesthetists, 630 St Kilda Road, Melbourne VIC 3004 (03) 9510 6299. Assoc. Professor Paul Myles, Dept. of Anaesthesia, Alfred Hospital and Monash University.

## How to quit

To improve your chance of quitting smoking for good, it is a good idea to plan ahead. You may find these tips useful:

- **Get support:** Call Quitline 13 QUIT (13 7848) for free information, practical assistance and support. Quitline's trained counsellors are available seven days a week to help you get through the process of quitting.
- **Talk to your health professional:** Discuss quitting smoking with a general practitioner, pharmacist or community health worker, and plan your quitting strategy together.
- **Consider using pharmacotherapy:** Different products are available to help you quit smoking. Nicotine Replacement Therapy (NRT) includes patches, gum, lozenges, sublingual tablets and inhalers. The aim of NRT products is to replace some of the nicotine from cigarettes without the harmful chemicals found in tobacco smoke, thus reducing withdrawal symptoms such as cravings and anxiety. Bupropion Hcl and Varenicline are non-nicotine medications that are also effective in helping smokers to quit.



### Further information:

[www.quitnow.info.au](http://www.quitnow.info.au) • [www.cancerqld.org.au](http://www.cancerqld.org.au)  
[www.health.qld.gov.au/quitsmoking](http://www.health.qld.gov.au/quitsmoking)  
Cancer Council Helpline 13 11 20

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# Smoking and surgery



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**If you smoke, you have a higher risk of serious complications during and after surgery.**

**Doctors strongly recommend stopping smoking at least eight weeks prior to surgery.**

## **Surgery – A good opportunity to quit**

Smokers have a higher risk of serious complications during and after surgery. Having an operation is a good reason to quit smoking. For greatest benefit, you should aim to quit smoking at least eight weeks prior to surgery.

Quitting completely is the only way to stop and reverse the damage done by cigarettes. Cutting down in the weeks before surgery does not reduce the risks of wound or lung complications.

Remember, the longer you stop smoking, the better. However, if you have not quit, stopping smoking for at least 12 hours before surgery will help.

## **What are the risks?**

If you continue to smoke right up to the time you have surgery, you will be more likely to:

- Starve your heart of oxygen.
- Form blood clots in your veins.
- Have difficulty breathing during and after surgery.
- Increase your risk of infection.
- Impair the healing of bones, skin and wounds.
- Change the breakdown of certain drugs in your blood.

## **Smoking and anaesthesia**

When you have surgery, you usually have an anaesthetic drug so that the operation can be performed without pain. If you smoke, your body is less able to cope with the stress caused by this anaesthesia.

## **Reduced oxygen supply to your heart and body**

The nicotine in cigarette smoke increases your heart rate and blood pressure every time you smoke. The carbon monoxide in cigarette smoke competes with the oxygen in your blood. If you smoke, you can have up to ten times more carbon monoxide in your blood than non-smokers. This makes it harder for your heart and body to get the oxygen needed. High levels of carbon monoxide can also disturb the rhythm of your heart during surgery.

The combined effects of carbon monoxide and nicotine can be dangerous. It may result in you needing to be given extra oxygen to prevent damage to vital organs, such as your brain. If you have heart disease, where your supply of blood and oxygen is already reduced, then it is very important that you stop smoking at least 24 hours before surgery.

## **Blood clots**

Chemicals in cigarette smoke cause changes in your blood, making it thicker, stickier and more likely to clot.

## **Chest and breathing complications**

Smokers have higher rates of lung complications after surgery compared with people who have stopped smoking for at least eight weeks before surgery. The chemicals in cigarette smoke can paralyse or destroy the tiny hair-like cilia in your lungs which work to keep them clear. This results in you having more mucus in your lungs and narrower airways. Smokers are also more likely to suffer from a collapsed lung.

## **Immune system**

Smoking decreases your resistance to infection. If you smoke, you will have a higher risk of infection of the chest and wound.

## **Impaired healing of bones, skin and wounds**

Smoking can slow down and interfere with the healing of bones, skin and other body tissues. Smokers are more likely to suffer from wound infections, longer healing times and problems with scarring, compared to people who have stopped smoking for eight weeks or more.

## **Drug doses**

Chemicals in cigarette smoke interfere with the rate at which certain drugs break down in your body. This means you may need more anaesthetic and pain-relieving drugs after surgery.