

Smoking & surgery



If you smoke, you will have much higher risks for serious complications during and after surgery.

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



Before surgery

— a good opportunity to quit

Stopping smoking is good for your health at any time of life. Before you have an operation is an especially good time to quit. Why wait and increase your risks when you have surgery? You won't be able to smoke immediately after surgery, so make this a good opportunity for you to stop for good.

Quitting completely is the only way to stop and reverse the damage done by cigarettes. Cutting down in the weeks before surgery does not appear to reduce the risks of wound or lung complications at all. You can cut down before stopping smoking completely, but the recovery of your body will only start from the time you stop completely.

If you have not quit, stopping smoking for at least 12 hours before surgery will still greatly help. The longer you stop smoking, the better.

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
- reduce how well certain drugs work.

How does smoking cause these risks?

The chemicals in cigarettes affect how your body works, and how well it copes during and after surgery.

Smoking and anaesthesia

When you have surgery, you usually have an anaesthetic drug so the operation can be performed without pain.

Anaesthetic drugs can put your body under stress. They may lower your resistance to infection, and if you are unconscious, your breathing and heart need monitoring to prevent problems.

If you smoke, your body is less able to cope with the stress caused by 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. Your heart works harder, and so it needs more oxygen.

The carbon monoxide in cigarette smoke competes with the oxygen in your blood. If you smoke, you can have several times more carbon monoxide in your blood than non-smokers. This makes it harder to get the oxygen you need for your heart and body. 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. You may need to be given extra oxygen to prevent damage to vital organs, such as your brain and heart.

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 to people who have stopped smoking for at least eight weeks. The chemicals in cigarette smoke can paralyse or destroy the tiny hair-like cilia in your lungs which work to keep your lungs clear. If you smoke, you may have more mucus in your lungs and narrower airways. Also, your airways and air sacs in your lungs are more likely to partially collapse making it harder to breathe.

Immune system

Smoking decreases your resistance to infection. If you smoke, you will have a higher risk for infections after surgery, such as chest and wound infections.

Impaired healing of bones, skin and wounds

Smoking can slow down and interfere with the healing of bones, skin and other body tissues. In some types of surgery, skin at the site of surgery is far more likely to die if you smoke. Smokers are more likely to have wound infection after surgery, longer healing times, problems with new scars opening up, and bad scarring, compared to people who have stopped smoking for six weeks or more.

Drug doses

Chemicals in cigarette smoke interfere with the rate at which certain drugs break down in your body. This means that you may need more anaesthetic and pain-relieving drugs. Regular smokers tend to have less tolerance to pain and may need higher doses of pain-relieving drugs after surgery.

When you quit

At **24 hours** the nicotine and carbon monoxide from cigarettes will be mostly gone from your body. Even quitting 12 hours before surgery will improve your heart rate, blood pressure and oxygen levels.

At **1 week** the cilia in your lungs will have begun to recover and will start cleaning mucus out of your lungs.

At **2 weeks** your throat and the large airways in your lungs will be less reactive, causing less problems with breathing during surgery.

At **3 weeks** your body's ability to heal wounds will have begun to improve.

At **4 weeks** the small airways in your lungs will be working better, but will still improve over the next five months.

At **6 weeks** your lungs will produce a normal amount of mucus, which will help your breathing during surgery.

At **8 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 — staying stopped

After surgery, it is important that you do not start smoking again, even if you only quit 12 hours before surgery. Allow your body 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. If you smoke, you are more likely to need further surgery.

There is help available

Talk to your doctor and surgeon

Keep your doctor (general practitioner) and your surgeon informed about your smoking and when you have quit – it may affect your treatment during and after surgery.

If you wish to use prescription quitting medications or nicotine replacement products to quit, consult with your doctor and surgeon first – it may affect your treatment.



Call the Quitline 13 7848

Ask to have a Quit Pack posted to you, or speak to trained advisors who can provide support and information to help you. The Quitline is confidential and free.

Remember the 4Ds

Delay acting on the urge to smoke. After five minutes the urge to smoke weakens and your resolve to quit will come back.

Deep breathe. Take a long slow breath in and slowly release it out again. Repeat three times.

Drink water slowly holding it in your mouth a little longer to savour the taste.

Do something else to take your mind off smoking. Doing some exercise is a good alternative.

**Quitline 13 7848**
quitsa.org.au



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