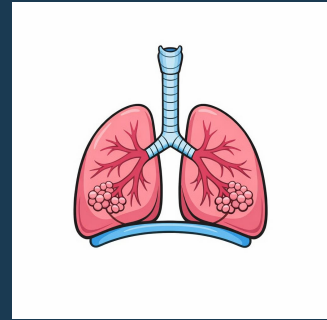


PATIENT INFORMATION

# Preventing lung problems after surgery

How to protect your lungs and support your recovery after surgery



## WHY THIS MATTERS

### Your lungs after surgery

Every day, you breathe in bacteria and particles from the air around you. Your lungs clear these continuously using a layer of mucus and millions of tiny hair-like structures called cilia, which work like a moving belt — sweeping debris upward to be coughed out or swallowed.

Anaesthetic agents and prolonged bed rest temporarily impair this system. Without active steps to compensate, bacteria can accumulate and cause a chest infection, also called pneumonia.

Abdominal and chest wall surgery adds another challenge: your main breathing muscle, the diaphragm, is inhibited by pain and surgical trauma, making deep breathing feel difficult.

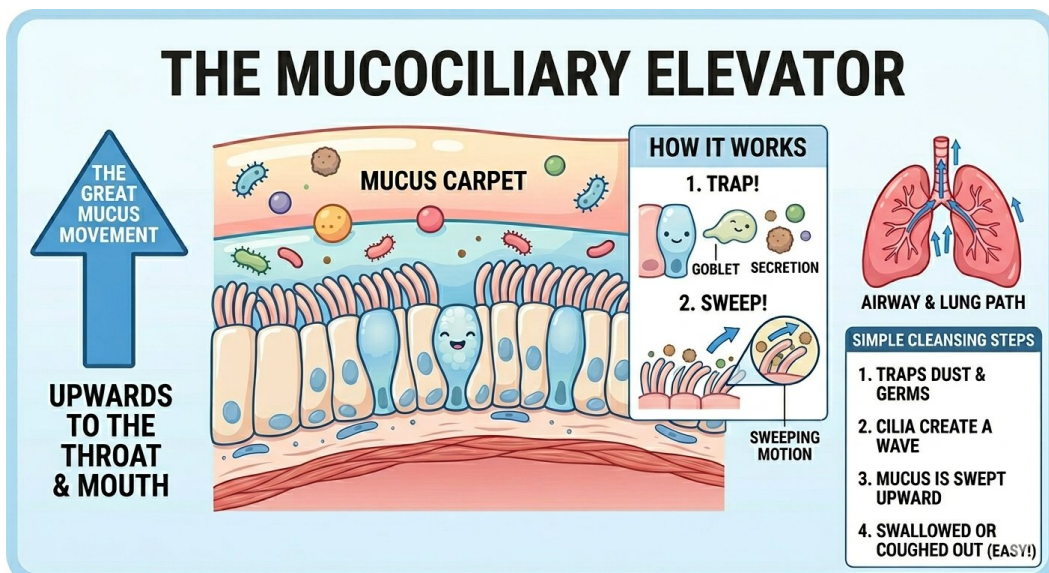
up to  
**50%**

of patients undergoing major abdominal or thoracic surgery develop a **respiratory complication** if breathing exercises are not performed — including chest infections and pneumonia.

For non-major operations this is up to **30%**.

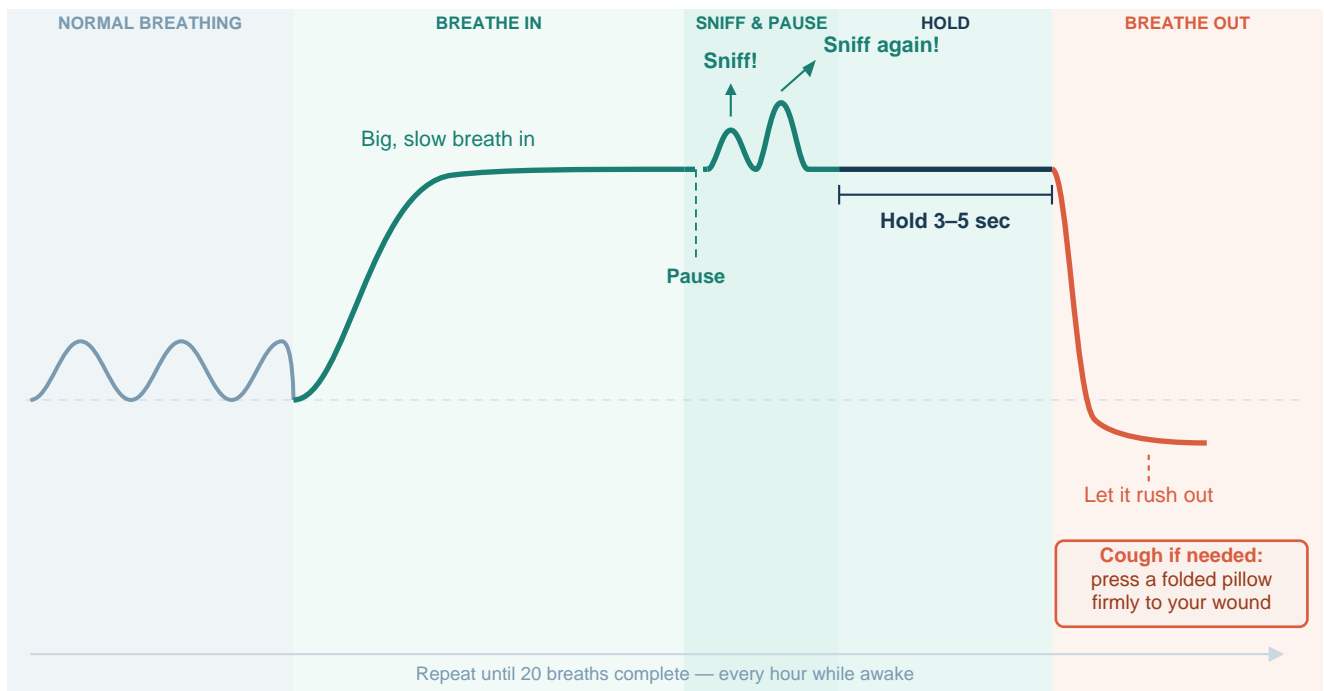
### The good news

Starting deep breathing exercises as soon as you wake from anaesthesia significantly reduces this risk. Practise before your operation so you know exactly what to do when it counts.



# How to do your breathing exercises

Work through the cycle below. Aim to complete **20 deep breaths per session**, and do a session **every waking hour** after surgery. Before your operation, practise 2–3 times a day so it becomes natural.



- 1 Take a **big, slow breath in** through your nose, letting your chest and abdomen expand fully.
- 2 **Pause** briefly at the top, then take two short extra sniffs to fully inflate your lungs.
- 3 **Hold** for 3–5 seconds.
- 4 **Let the air rush out** freely. If you feel any phlegm, press a folded pillow or both hands firmly against your wound site and have a strong cough.
- 5 **Repeat until you reach 20 breaths** per session.

## When to do this

**After surgery:** every hour while awake — use each nursing observation check as your reminder.

**Before surgery:** 2–3 sessions each day to build the habit.

## Your recovery in hospital

Returning to movement as soon as it is safe to do so is one of the most effective things you can do for your recovery.

- Begin your breathing exercises **as soon as you wake up**, and continue every hour. Don't wait to be reminded — tie them to nursing checks or other regular events.
- **Stay on top of pain relief.** Adequate pain control allows you to breathe deeply and move, which are essential for recovery. Ask for analgesia if you need it.
- **Sit upright** as much as possible, and aim to sit out of bed for all meals (starting with around 30 minutes per sitting and extending from there).
- Work with nursing and physiotherapy staff to progress to **standing and walking** to the bathroom and beyond as soon as you are able.

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This information is a guide only and does not replace the advice of your surgical team. If you have questions about your specific situation, please speak with your surgeon, anaesthetist, or physiotherapist.