How to:

Breathe, Wriggle and Walk after surgery

This booklet gives you information about what you can do to help your recovery after surgery.

- 1. What you can do before your surgery to help you recover faster
- 2. What you can do in the hospital to help you recover faster
- 3. How to recover well once you are discharged home



Share this information with your family, friends, and support workers.

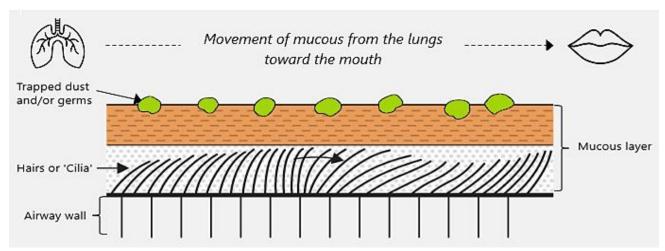
Bring this booklet into hospital with you.

Understanding lung complications after surgery

- Lung complications after surgery are serious and can make you very unwell.
- Problems with breathing and/or coughing after surgery can lead to low oxygen levels.
- When serious, lung complications may be life-threatening, and you may need to be cared for in the Intensive Care Unit.

How do chest infections after surgery happen?

- A thin layer of mucous keeps your lungs healthy by trapping dust and germs.
- Tiny hairs (cilia) normally sweep this mucous out of your lungs towards your mouth where you swallow it away or cough it out, removing any germs with it.
- During and after surgery, these tiny hairs do not work well and mucous builds up. Germs in the mucous may begin to grow and spread causing a chest infection, or pneumonia.
- The sooner you can move mucous out of your lungs after surgery, the less risk you have of getting a chest infection.



 $Modified\ from:\ https://bronchiectasis.com.au/physiotherapy/principles-of-airway-clearance/airway-clearance-in-the-normal-lung$





Why might I be at risk for a chest infection after surgery?

People have different risk factors for a chest infection after surgery. These include:

- Age ≥ 65 years old
- Length of surgery ≥ 2.5 hours
- Type of surgery and incision (chest and upper abdominal, open cut)
- History of lung disease (asthma, bronchitis, emphysema, COPD, bronchiectasis

Additional **risk factors that you can change prior to surgery** are outlined in the table below.

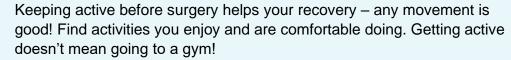
Smoking



Smokers are more likely to get chest infections and recover slower after surgery. If you are a smoker QUIT NOW and avoid smoking after surgery.

To find more information about quitting smoking, refer to the 'My RBWH Surgical Pathway Booklet' (page 24).

Not regularly active





- If you don't normally do much exercise: Start by moving at a comfortable pace in or around your house. Gradually increase the time and distance as you can tolerate.
- If you are normally active: Continue or increased your usual exercise.

Further information about getting active for surgery, refer to the 'My RBWH Surgical Pathway Booklet' (page 22).

Poor ability to breathe or cough

Deep breathing and coughing is important to keep your lungs well inflated and clears of mucous that can lead to a chest infection.



Before surgery: Practise the breathing exercises in this booklet.



Ensure you take any medications for your breathing as prescribed by your doctor.

After surgery: Restart the breathing exercises as soon as you can.

Take pain medication as prescribed. If pain is making it difficult to breathe or cough talk to your nurse or doctor.

Slow to get walking/moving after surgery

Ask staff to help you move (this may be within hours of your surgery).

Sit out of bed and walk as often as you can once it is safe to do so:

- Sit out of bed at meals times for at least 1 hour.
- If you can't move by yourself and want to get up, ask for help!
- Once you can walk by yourself, go for a walk every couple of hours and each time aim to go a bit further.



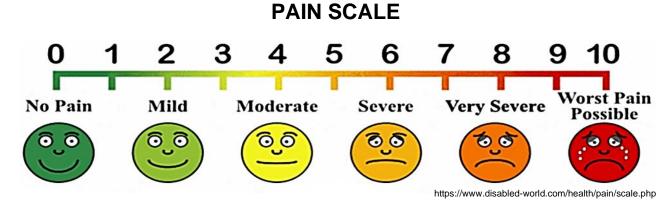
What should I bring into hospital?

- Flat, non-slip, closed-in shoes or slippers that fit well (avoid thongs/ flip flops)
- Your walking aids if you normally use one (e.g., wheelie walker or walking stick)
- Your CPAP machine if you normally use one. Sleep is important for recovery

Keep comfortable after surgery

It is **normal** to have some pain or discomfort following surgery, with pain medication used to help you return to normal movement as soon as possible after your operation.

It is a good idea to be familiar with the pain scale as hospital staff will ask you about your pain levels after surgery – they will ask you to rate your pain from 0-10.



How do I know if my pain is well controlled?

You should discuss pain with staff doctor or nurse if:

- you cannot tolerate your pain, it is increasing, or it is limiting your ability to move
- you are unable to take big breaths, cough or move comfortably in bed due to pain,
- you are unable to mobilise out of be due to additional pain.

Ways to manage pain

- 1. **Take prescribed pain medication.** This may be a tablet, via a drip or through a regional (e.g., an epidural or nerve block). Taking pain medication regularly is often required after surgery, but it is important that you ask for extra pain medication if needed.
- 2. **Do regular gentle movement.** Moving helps to reduce stiffness/soreness at your surgery site. IT may also be useful to do before you try to get up and moving.
- 3. **Try cold or heat packs.** Depending on the type of pain, cold or heat may help, and packs are available by asking your nurse.



It important that you use prescribed pain relief so that you can take deep breaths, cough and get moving early after surgery.

These activities help in your recovery and will help you get home faster.

Recovering in hospital

Breathing exercises

Breathing exercises **reduce your risk of chest infections** after surgery by helping to reinflate your lungs and clearing any built up mucous.

You can do these exercises in **lying or sitting** and should start **as soon as you wake up from surgery**.

Deep Breathing

Complete: 20-30 breaths every hour

- Take a slow deep breath into the bottom of your lungs breathe in as deeply as you comfortably can
- Hold your breath for 2-3 seconds
- Relax as you breathe out

Ensure you are sitting tall and try to keep your shoulders relaxed as you breathe in. (Practising in front of a mirror before surgery can help with this).



Supported Cough

Complete: Whenever you need to cough

Supporting your wound improves comfort and confidence with coughing – this may be providing support over a wound on your neck, chest, tummy or groin.

- Place a folded towel over where you are most sore
- Wrap your hands/arms over the top of the towel
- Take the biggest breath in that you comfortably can
- Brace or cuddle your stomach as you go to cough

Any additional discomfort with coughing should settle quickly.





If you cannot take a deep breath in or cough due to pain this may be a sign that you need more pain relief.

Please discuss any issues with your nurse and/or doctor.

Circulation exercises

Circulation exercises reduce your risk of blood clots.

You can do these exercises in **lying or sitting** and should start **as soon as you wake up from surgery**.

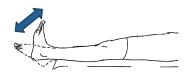


If you have a skin graft or flap on your leg as part of your surgery, do not do exercises 1 or 4 unless you have been told it is safe to do so.

1. Ankle Pumps

Complete: 10 times on each leg every hour

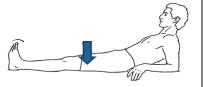
• Pump your ankles up and down as far as you can – use big slow movements.



2. Knee Squeezes

Complete: 10 times on each leg every hour

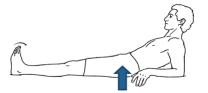
- Straighten/push your knee down into the bed to tense up your thigh muscles.
- Hold for 2-3 seconds then relax



3. Bottom Squeezes

Complete: 10 times every hour

- Squeeze your bottom cheeks together.
- Hold for 2-3 seconds then relax.



4. Heel Slides

Complete: 10 times on each leg every hour

- Slide your heel towards your bottom so your hip and knee bends.
- Do one leg at a time only



Ho to get out of bed

The following method of getting out of bed is used to reduce pain and strain on your body after surgery.

Bend your knees up one at a time



Roll onto your side like a "log", i.e. keep your knees, hip, and shoulders in line.



Push up with your arms as you swing your legs over the side of the bed



Sit on the edge of the bed for a few moments before trying to stand

- If you feel dizzy or faint, take some deep breaths and move your feet.
- If the dizziness does not get better, return to bed, and tell your nurse and/or physiotherapist.



Moving after surgery

Moving early after surgery reduces your risk of complications and speeds your recovery.

Depending on your operation, you may be able to get moving within hours of your surgery, or for larger procedures, the next morning.



Most patients will get out of bed the morning after their surgery.

This includes sitting on the edge of the bed, sitting in a chair and/or walking.

When you first get up, it is important to have a nurse or physiotherapist with as you may:

- have drains or attachments that you need help with.
- feel dizzy, sore, or unsteady when moving.
- need the support of a walking aid.







Walking with an aid



Basic post-operative lines

As you recover you will become more independent with walking and getting out of bed – how long this takes will depend on your operation.



Your physiotherapist or nurse will let you know when it is safe for you to walk around by yourself, or with your family/visitors.

Aim to move regularly during the day when safe and you are able to do so:

- Sit out of bed often throughout the day: At a minimum aim to sit out of bed for mealtimes.
- Walk throughout the day:
 - Aim to go for walks every 1-2 hours (minimum of 5 walks per day)
 - Try to move a little further each time you get up.

Recovering at home

You will lose some strength and endurance after your surgery, so it is important to gradually return to your usual activities. Ensure you listen to your body and are tolerating each stage well before pushing yourself further.

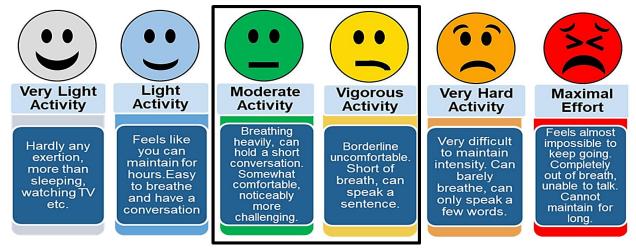


Ask your doctor when you can restart your normal activity, or talk to your doctor if you feel you are struggling to return to normal activity.

Remember: Your body needs time to get used to normal activities again, so start slowly and build up over time.

Each stage of recovery at home **may take up to a month** before progressing to the next stage (depending on how big your surgery was). This should be guided by your doctor.

- Start with short, frequent sets of light exercise, e.g. moving around the house, walking.
- Progress the time and intensity of exercise until it is **moderate** to **vigorous** in intensity. The picture below will help you to know if you are working at the right pace.



https://sportsperformancetracking.com/blogs/spt-playbook/an-athletes-introduction-to-rating-of-perceived-exertion-rpe

Tips to start moving.

It is recommended that you aim to get back to moving around like you previously were able to.

The aim is to gradually build up movement so that you can do 20 - 30 minutes per day on most days by 4 - 6 weeks after surgery. For most patients this will involve a walking program.

- Start moving at a comfortable pace and distance.
- If needed, break movement sessions into smaller bursts (e.g., 5-10 minutes).
- Wear loose, comfortable clothing.
- Keep well hydrated.
- Avoid hot weather or on hills initially



Returning to daily activities

You may be asked to avoid activities that involve straining, pushing, pulling, twisting or heavy lifting for 4-6 weeks after your surgery to give your body time to heal.

This may include avoiding activities such as:

- Heavy housework or gardening, e.g., vacuuming, mopping, sweeping, scrubbing, making the bed, mowing the lawn.
- Heavy lifting, i.e., lifting more than 5 kgs (~2 bottle of milk, or a bag of potatoes).
- Going to the gym and playing sports.

You may need to **modify** activities at home to make them safe and easier to do, for example:

Grocery shopping	Make bags light and bring in one at a timeConsider grocery delivery
Laundry	 Be careful - add/remove in small handfuls at a time Do not carry heavy laundry baskets - carry small amounts at a time or use a laundry trolley. Alternatively, use a dryer. Bring the clothesline down as low as possible or use a clothes frame Get help for heavy laundry (e.g. towels, sheets, blankets)
Playing sport	Go walking instead
Caring for small children	 Where possible avoid picking up small children Ask them to climb onto the lounge for cuddles or to play
Driving	Your surgeons will discuss with you any driving restrictions

Before returning to more vigorous activity ensure you practice, and are comfortable with, the individual skills needed prior to returning to the full activity, for example:

- Go for a few short, gentle jogs before you return to your normal running distance.
- Go to the driving range or do gentle practice swings before you take on 18 holes of golf.
- Have a few short social hits of tennis before you play a full game.



Aim to build up to doing the recommended physical activity level for adults:

150 minutes (e.g. 30minutes, 5 times a week) of moderate intensity exercise

OR

or, 75 minutes of vigorous exercise per week.

Scan the QR code here to access this resource online on our website! Or go to: https://metronorth.health.qld.gov.au/rbwh/healthcare-services/physiotherapy-2/general-surgery

