Centre universitaire de santé McGill



McGill University Health Centre

# Caring for your chest drain

This booklet will help you understand why you need a chest drain and how to care for it.

Bring this guide with you on the day of your procedure, if planned in advance.

This booklet was developed by the McGill University Health Centre (MUHC) Surgical Recovery (SURE) working group. The Thoracic and Upper Gastrointestinal surgery and the Pleural Care Program also participated in the creation of this guide.

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This booklet was produced by Precare, a Montréal-based company focused on improving patient education. Precare creates custom patient guides, interactive media for information delivery and digital solutions for healthcare institutions to integrate into their workflows easily. Learn more about them at Precare.ca.

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#### Important

The information provided by this booklet is for educational purposes. It is not intended to replace the advice or instruction of a professional healthcare practitioner, or to substitute medical care. Contact a qualified healthcare practitioner if you have any questions concerning your care.





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#### **Table of Contents**

Why do I need a chest drain?	4
How does the drain work?	5
How long should I keep my drain in place?	7
How do I take care of my drain?	7
What should I look out for?	8
Who do I contact for help or questions?	9
What will my follow-up be?	9
What can I expect with a drain?	9
When should I go to the emergency room?	10
Drain diary	11
Maps of the Royal Victoria Hospital and Montreal General Hospital	12

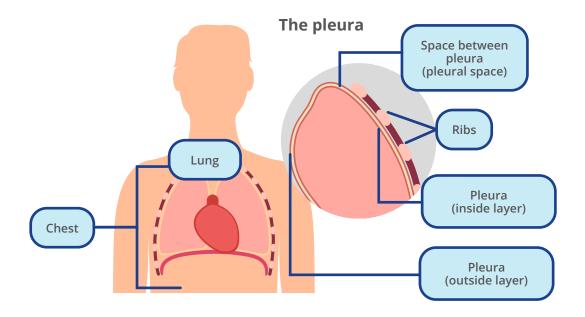
### Why do I need a chest drain?

Your lungs are covered by 2 thin layers of tissue called the pleura. These 2 layers of pleura slide against each other when you breathe. When air or liquid enters the space between the pleura, it can be hard to breathe.

This can be caused by:

- an operation
- a biopsy: when a small piece of lung tissue is removed for testing
- a hole in the pleura
- a lung disease

To make breathing easier, your doctor can place a drain at chest level so that air and liquid can escape.

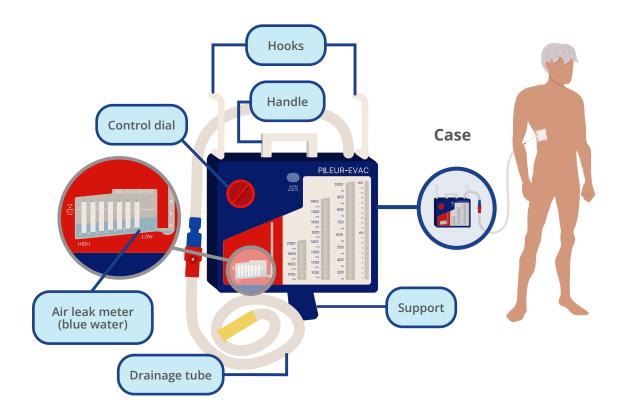


### How does the drain work?

A plastic tube (drain) is placed in the space between your ribs. The tube is fixed to your chest with sutures.

The drain collects air and liquid, which go through a drainage tube and into a drainage box that lets the air out. The liquid stays in the drainage box.

The drainage box also has a space with blue water in it. This is called an air leak meter. If there is air between the two layers of pleura, bubbles will form here. After certain surgeries, bubbles may already be present. If you notice more bubbles than before and you are having a hard time breathing, go to the emergency room right away.



#### How does the drain work?

The drainage box should always be lower than the drain in your chest. If you are lying or sitting down, you can hang the drainage box from your bed with hooks. You can also put it on a flat surface, like the floor, by using the floor stand under the drainage box. Be careful not to let the drainage box fall over.

While moving, hold on to the handle of the drainage box tightly, while keeping it upright.

#### This drain works without a battery.

If you have a smaller version of the drainage box, the mini drainage box, you might have gotten a transparent bag for the drainage box and a strap for carrying it (see illustration below). This keeps the drainage box upright at all times.



If you want to sit down after being up, do not forget to put the drainage box on the floor. This is important to help the liquid drain.

## How long should I keep my drain in place?

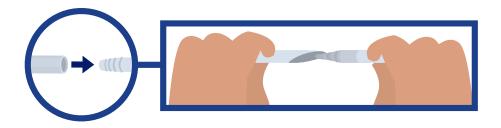
You need to keep it in until the pleura has healed. This varies from case to case, from a few days to a few weeks.

## How do I take care of my drain?

- Take a photo of your drainage box before you leave the hospital so you can compare the amount and color of the liquid.
- Record the amount and color of the liquid in your drain diary on page 11 every day at the same time. Bring this information with you to your appointment.
- Always keep the drainage box lower than the place on your chest where the drain is fixed.
- Always keep the drainage box upright.
- Never take the tube off the drainage box.
- Make sure that both tubes (the one attached to the chest and the one attached to the drainage box) are never crushed, stretched or bent.
- Never touch the control dial on the drainage box. The care team will adjust it.
- Do not shower or bathe while the drain is in place. You can, however, wash with a damp washcloth. This is also called a sponge bath.

### What should I look out for?

- If there is more than 400 mL of liquid in the drainage box in 24 hours, contact the nurse or the doctor. See page 9 for "Who to contact for help or questions?"
- If the drain disconnects from the tube connected to the drainage box, reconnect it immediately and tape it in place. Then go to the emergency room as soon as possible.



- If the entire drain comes out of your skin completely, leave it out. Follow these steps before going to the emergency room:
- 1. Take the compresses and Hypafix you've been given.
- 2. Apply the compresses on the hole for the drain.



- 3. Apply Hypafix or tape over the compresses.
- 4. Go to the emergency room.

## Who do I contact for help or questions?

If you have questions, call one of the clinics listed below from Monday to Friday, 8 a.m. to 4 p.m.

- For pneumology patients at the Montreal Chest Institute Glen site: 514 934-1934 ext. 32689 or 32568. Please leave a message during evenings and weekends.
- For thoracic patients at the Montreal General Hospital: 514 934-1934 ext. 44339. For evenings and weekends, call the thoracic unit at ext. 46100.

### What will my follow-up be?

You will get a follow-up appointment when you leave the hospital.

We will refer you to the CLSC nurse if you need your dressings changed.

### What can I expect with a drain?

- There may be some liquid leaking from the dressing on your chest, which is also called bandage. Do not take off the dressing. You can add more dressings, using the materials provided (see page 8). Contact the CLSC or the nurse of the care team: see section "Who to contact for help or questions?"
- You may feel some pain in your chest, but it should be tolerable. It should not stop you from breathing deeply, coughing or walking.

## When should I go to the emergency room?

- You suddenly have a hard time breathing.
- You have severe pain at the drain site that won't go away with pain medication.
- Fever higher than 38°C (100.4°F), taken by mouth.
- You have more bleeding or liquid leaking from where the drain is on your chest, after you have already added more dressings.
- The liquid draining into the drainage box suddenly changes color to bright red, green or milky.
- The drainage box is full of liquid.
- You have a hard time breathing and there are more bubbles in the air leak meter than there were when you left the hospital.
- You feel as if you have air and swelling under your skin. This can feel like:
  - Neck or chest pain
  - Hard time breathing or swallowing
  - Crackles under the skin when touched
  - Cracking noises when breathing
  - Change in the sound of your voice

#### **Drain diary**

A nurse will show you how to care for your chest drain and fill in this diary to record the amount and color of the liquid in the drainage box.

Amount and color of the liquid in the thoracic drainage box				
Date	Time	Amount	<b>Color</b> (ex: light yellow, light red, bright red, green, milky (white))	Total for the day

#### **Map of the Royal Victoria Hospital**



#### **Map of Montreal General Hospital**

