



# Preparing for Your Pleural Catheter Placement

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This guide is for patients who are going to have a procedure to place a pleural catheter. It answers some of the most commonly asked questions.

- If you have more questions, talk with your doctor or nurse.
- You can find more information on the PleurX™ pleural catheter system online at [BD.com/PleurXPatient](https://www.bd.com/PleurXPatient), including a 12-minute video demonstration on how to drain the catheter and written instructions for catheter use and drainage.

Your procedure date: \_\_\_\_\_

Your procedure location: \_\_\_\_\_

## What is a pleural catheter?

A **tunneled pleural catheter (TPC)** or **indwelling pleural catheter (IPC)** is a flexible tube that is placed in your chest so that you can drain fluid from around your lungs at home. Draining this fluid helps you feel more comfortable with your breathing. Michigan Medicine currently uses catheters by the brand name PleurX™.

## What is the contact information for my Interventional Pulmonology team?

Your Interventional Pulmonology team includes your pulmonary doctor, pulmonary nurses, medical assistants, and schedulers. We will coordinate your care and communicate with you as needed.

**Call us right away if you have any change to your condition or if you are having new or worse symptoms before your procedure.**

- During business hours (Monday through Friday between 8:00 AM - 5:00 PM): Call the Interventional Pulmonology Program at (888) 287-1084.
- After business hours, or on weekends or holidays: Call the paging operator at (734) 936-6267 and ask for the Interventional Pulmonology doctor on call.

### **How should I plan for the pleural catheter placement procedure?**

Please read the instructions below carefully to prepare for your procedure. If you have any questions about these instructions, please contact us.

- You must have a driver and responsible adult with you at the procedure.**
  - You must have a driver on the day of your procedure. You may not travel by taxi or bus unless you have a responsible adult with you, and you may not walk home after the procedure. We will not start your procedure until we have confirmed your travel plans.
  - A responsible adult (18 years or older) must come with you on the day of your procedure. We will not start your procedure until your responsible adult is present. This person should plan to stay in the waiting room during your entire visit.
  - You will need also need someone to stay with you at home overnight after your procedure.
  
- Plan for any needed changes to your medications or meal plans.**
  - If you are taking any blood thinners (anticoagulant medications), your pulmonary team will discuss this with you at your clinic visit. Your clinic team will tell you if your medication needs to be changed or stopped before your procedure.

- If you have diabetes, any procedure that causes you to miss a meal or change your usual meal plan will require special planning to safely manage your blood sugar. We will discuss a plan for managing your blood sugar at your pulmonary visit.
- ☐ **Please leave children, jewelry, cosmetics, and personal items at home.**
- Do not wear makeup, deodorant, lotion, or powder on the day of your procedure.
  - Remove all jewelry, hair clips, and body piercings before coming to the hospital.
  - You should bring a case for your eyeglasses or contact lenses with you to the hospital, so you can take them off before your procedure.
- ☐ **Bring important paperwork to your procedure.**
- Bring the following with you on the day of your procedure:
    - A list of all the medications you are taking
    - A list of your allergies
    - Your health insurance cards
    - Advance directives, if applicable

**What are my instructions for preparing for my pleural catheter placement procedure?**

The timeline table below will help you figure out the days of the week for your prep. First, figure out what day of the week your appointment is. Then highlight or circle the correct row to see your other prep days.

- If you reschedule your appointment, you must redo the timeline table to match your new date.

**Your appointment date and day of the week:** \_\_\_\_\_

**Timeline table:**

<b>My appointment is on:</b>	<b>7 days before is:</b>	<b>4 days before is:</b>	<b>3 days before is:</b>	<b>1 day before is:</b>
Monday	Monday	Thursday	Friday	Sunday
Tuesday	Tuesday	Friday	Saturday	Monday
Wednesday	Wednesday	Saturday	Sunday	Tuesday
Thursday	Thursday	Sunday	Monday	Wednesday
Friday	Friday	Monday	Tuesday	Thursday
Saturday	Saturday	Tuesday	Wednesday	Friday

**Start your prep instructions as soon as you wake up on each day.** Follow the instructions below carefully to ensure a successful procedure.

<b>7 days before your procedure</b>	<b>Day:</b> _____ (Fill in the day according to the timeline table)
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- Stop taking phentermine (Adipex-P®, Lomaira™, Fastin®, Phentercot®) and phentermine and topiramate (Qsymia®). These are weight loss medications.
- If you inject semaglutide (Ozempic®, Wegovy®, Rybelsus®), liraglutide (Saxenda®), dulaglutide (Trulicity®) or tirzepatide (Mounjaro®) once a week, do not inject it the week before your procedure.

<b>4 days (96 hours) before your procedure</b>	<b>Day:</b> _____ (Fill in the day according to the timeline table)
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- 96 hours before your procedure, stop taking the following diabetic/weight loss medications: ertugliflozin (Steglatro®), ertugliflozin and metformin (Segluromet™), and ertugliflozin and sitagliptin (Steglujan®).

<b>3 days (72 hours) before your procedure</b>	<b>Day:</b> _____ (Fill in the day according to the timeline table)
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- 72 hours before your procedure, stop taking the following diabetic/weight loss medications: empagliflozin (Jardiance®), dapagliflozin (Farxiga®), canagliflozin (Invokana®), dapagliflozin and saxagliptin (Qtern®), dapagliflozin and metformin (Xigduo® XR), canagliflozin and metformin (Invokamet®, Invokamet® XR), empagliflozin and metformin (Synjardy®, Synjardy® XR), and empagliflozin and linagliptin (Glyxambi®).

<b>1 day before your procedure</b>	<b>Day:</b> _____ (Fill in the day according to the timeline table)
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- Your doctor may instruct you to shower with an antibacterial soap.

<b>The day of your procedure</b>	<b>Day:</b> _____ (Fill in the day according to the timeline table)
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- Starting at 12:00 AM (midnight) the night before your procedure, don't eat or drink anything other than sips of water. No gum, candy, smoking, or chewing tobacco.
- If you take semaglutide (Ozempic®, Wegovy®, Rybelsus®), liraglutide (Saxenda®), dulaglutide (Trulicity®), or tirzepatide (Mounjaro®) every day, do not take it on the day of your procedure.
- You may take all your other necessary medications, including blood pressure medications, with a small amount of water up to 4 hours before your appointment time.

- 2 hours before your arrival to the MPU for your procedure, stop drinking all liquids, including water.

### **Where will I have the procedure?**

- Your procedure will be in one of our Medical Procedures Unit (MPU) or University Hospital operating rooms, located at 1500 East Medical Center Drive, Ann Arbor, MI 48109. Your team will tell you which location to go to when they set up the procedure appointment with you.
- Detailed driving instructions, parking information, and maps are available on our website at: [UofMHealth.org/patient-visitor-guide/patients](https://www.uofmhealth.org/patient-visitor-guide/patients)

### **How long is the procedure?**

The procedure itself will generally be about 35-40 minutes. You and your responsible adult should plan to be at your procedure visit for a total of 3-4 hours, which includes time for testing and monitoring you before and after your procedure.

### **What are the risks of a pleural catheter placement?**

Complications (medical problems) after a procedure to insert a pleural catheter are extremely rare, but all medical procedures have a risk for complications. We will explain these risks to you at the time you sign your consent form for the procedure.

### **What will happen once I arrive for my procedure?**

- In the reception area, you will answer questions about your health history, current medications, and allergies.
- You will review the procedure risks and sign a consent form.

- After you change into a hospital gown, a nurse will start an intravenous line (IV). We use this IV to give you medication to make you more comfortable during the procedure.
- Your procedure will be done in a room specially designed for pulmonary procedures. The nurse and doctor will use equipment that will help monitor (check) your heartbeat and breathing during the procedure. A doctor who is specially trained in Interventional Pulmonology procedures will perform the procedure.

### **What can I expect after the procedure?**

- You will get a chest x-ray and a nurse will monitor you for about an hour after the procedure.
- When you are ready to go home, the nurse will tell you your discharge instructions and answer your questions.
- You may not drive yourself home. Your responsible adult will need to drive you.
- A family member or friend will need to stay with you for the rest of the day and overnight after your procedure.

### **What activities should I avoid after the procedure?**

- On the day of your procedure, do not make any major legal or financial decisions.
- For at least 12 hours after the procedure, do not drive a vehicle, operate machinery, or drink any alcohol.

### **How will I care for myself after the procedure?**

We encourage you and your caregiver to carefully review the following care instructions for after your procedure.

### **Care from the visiting home nurse**

The day after your procedure, a visiting nurse will come to your home. The nurse will:

- Change your dressing.
- Drain your catheter.
- Teach a friend or family member how to drain the catheter.

The nurse will also visit you again in 5-7 days to remove your sutures (your stitches from the procedure).

### **Showering instructions**

- 24 hours after your procedure, you may shower carefully with the dressing and catheter in place. Do not move the catheter in any way.
- Do not put the catheter underwater (in a bathtub, pool, hot tub, or lake).
- Change the dressing if it gets dirty.

### **Diet, medications, and activities**

Unless your doctor tells you otherwise:

- You may go back to your normal diet immediately after the procedure.
- You may restart your normal medication schedule immediately after the procedure. Your doctor will tell you when to start taking your blood thinners.
- In most cases, you may go back to your normal activities and return to work or school the day after your procedure.

### **Drainage supplies and instructions**

We will give you a starter kit of supplies for your catheter before you leave the hospital after your procedure. These will include PleurX™ drainage bottles and dressing supplies you can use until more supplies are delivered to your home. The Interventional Pulmonology team will arrange for more drainage kits to be

delivered to your home directly from the manufacturer. The kit includes these items:

- Vacuum bottle with an attached drainage line
- Blue wrapping
- Alcohol pads
- Gloves
- Gauze pads
- Valve cap
- Blue emergency slide clamp
- Foam catheter pad
- Self-adhesive dressing



Your doctor will tell you what schedule you should follow for draining the catheter:

- Monday - Wednesday - Friday
- Tuesday - Thursday - Saturday
- Daily

Drainage instructions are included below. The drainage usually takes 5-15 minutes after you connect the bottle to the catheter. Do not drain more than once per day from each catheter site.

You may stop the drainage if any of the following happens:

- You have discomfort which is not relieved by using the roller clamp to slow the draining fluid
- The flow of fluid stops
- You develop chest pain, chest tightness, or cough

At any one time, do not drain more than 1000 mL from the chest. If you drain less than 50 mL fluid after doing 3 drainage procedures in a row, contact your doctor to make sure that the tube is not clogged. This could also mean that there's no more fluid around your lungs to drain and your doctor may safely remove your Pleurx™ catheter.

# Drainage instructions

## PleurX™ catheter system

**Getting started:** Have all drainage supplies ready and then thoroughly wash your hands.



**1** Open all packaging. Unfold blue wrapping. Place bottle near wrapping and lay access tip on blue wrapping.



**2** Pick up each glove by the wrist cuff and put both of them on.

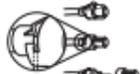


**3** Tear open alcohol pads. Lay open alcohol pad pouches on blue wrapping a short distance from sterile items.

**Connecting the drainage bottle:** Be sure to keep the end of the catheter and access tip clean.



**4** Close roller clamp completely by rolling the wheel on roller clamp toward bottle. Remove access tip cover by twisting and pulling gently. Set access tip on blue wrapping.



**5** Take valve cap off catheter.



**6** Clean around valve opening with first alcohol pad.



**7** Insert access tip into catheter valve.

**Draining fluid:** Do not drain more than 1,000 mL from your chest or 2,000 mL from your abdomen at any one time.



**8** Remove support clip from top of drainage bottle and push down T plunger.



**9** To begin draining, roll the wheel on the roller clamp away from vacuum bottle.



**10** When finished draining, completely close the roller clamp by rolling the wheel on toward the bottle.

**Final steps and disposal:** If you have any questions or concerns, contact your doctor or nurse.



**11** Pull access tip out of the valve; set drainage line down.



**12** Clean around the valve opening with second alcohol pad.



**13** Place new cap on catheter valve and twist it until it clicks into its locked position.



**14** Clean around catheter site with third alcohol pad.



**15** Place foam catheter pad around catheter and wind catheter on top of pad. Cover catheter with gauze pads.



**16** Apply self-adhesive dressing over gauze pads.



**17** Push down T plunger and move the plunger in a circular motion to further puncture fail seal so fluid can be poured out.



**18** Remove flexible cap and drainage line from bottle.

**19** Empty bottle into toilet. Place bottle in a plastic bag, seal tightly and discard.

These instructions are to be used only as a supplemental reference. Read the *Instructions for Use* that come with the drainage kits and watch the drainage video for more detailed instructions.

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## When should I contact my doctor?

Call us at (888) 287-1084 (during business hours) or at (734) 936-6267 (after hours, or on weekends or holidays) if you have:

- Pain, redness, swelling, or leaking fluid around the catheter site
- Changes or difficulty in your breathing
- A temperature of 100.4 °F (38 °C) or higher
- Chills
- Less than 50 mL of fluid draining after 3 draining procedures in a row
- Changes in the drainage fluid color or thickness
- Drainage fluid that is cloudy or smells bad
- Pain when you drain the catheter, or pain that continues after drainage
- Damaged, broken, or cut catheter
- A catheter that comes out
- Leaking from the valve or catheter
- Any concerns about your catheter

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