Caring for Your Chest Tube and Pneumostat™ Chest Drain Valve

This information will help you care for your chest tube and Pneumostat Chest Drain Valve after you’re discharged from the hospital.

About Your Chest Tube and Pneumostat

Your chest tube is a flexible tube that’s placed between your ribs, into the space near your lungs (your pleural space). A Pneumostat is a one-way valve that connects to your chest tube (see Figure 1). Your chest tube and Pneumostat let extra air and fluid out of your chest, letting your lung expand fully.

How long you will have your chest tube and Pneumostat depends on your surgery and the amount of drainage you’re having. Everyone’s drainage is different. Some people drain a lot, some only a little. You may be discharged from the hospital with
your chest tube and Pneumostat if you still have drainage or your lung is still leaking air after your surgery.

Caring for Your Chest Tube

Your chest tube will be covered with a bandage.

- Change your bandage every 7 days. Follow the steps in the “How to change your chest tube bandage” section. Your nurse will also show you how before you’re discharged from the hospital.
- If your bandage gets wet, dirty, comes loose, or starts to lift from your skin, change it right away.

Your chest tube may irritate your chest wall, causing some pain. Your doctor may give you a prescription for a pain medication that you can take to help with the pain. If the medication doesn’t ease your pain, contact your doctor’s office.

How to change your chest tube bandage

1. Gather your supplies. You will need:
   - Medical tape
   - 4 (4 inch x 4 inch) gauze pads
   - A clean pair of scissors
2. Clean your hands with soap and water or an alcohol-based hand sanitizer.
3. Remove your chest tube bandage. Be careful not to pull your chest tube. Put the bandage in the trash.
4. Clean your hands again.
5. Clean the area around your chest tube with soap and water. Let the area air dry.
6. Open 2 of the gauze pads. Place 1 of the gauze pads on top of the other. Using clean scissors, cut a slit halfway up the middle of the gauze pads (see Figure 2).
7. Place the cut gauze pads around your chest tube at the insertion site (the place where your chest tube comes out of your body) (see Figure 3).
8. Open the remaining 2 gauze pads and place one of the pads on top of the other. Then, place them over your insertion site, over the cut gauze pads around your chest tube.

9. Put medical tape over the entire bandage.

Instructions for showering

You can take showers, but it’s important to keep your chest tube bandage dry.

- Cover your chest tube bandage with a waterproof dressing (such as AquaGuard®) before you get in the shower.
- Use a hand-held showerhead, if you have one. A hand-held showerhead can help direct the water away from your bandage.
- If your bandage gets wet, change it. Wet bandages are a common cause of skin problems.

Don’t take a bath, use a hot tub, go swimming, or submerge yourself in water while your chest tube is in place.

How to use an AquaGuard waterproof dressing

Follow these instructions to put an AquaGuard waterproof dressing over your chest tube bandage before you shower. Make sure the AquaGuard sticks to your skin, not to your bandage.
1. Make sure the skin around your chest tube bandage is clean and dry.

2. Take the AquaGuard sheet out of the plastic packaging. The edges of the AquaGuard have tape you can peel off. Fold over a corner of the tape on each side (see Figure 4).

3. Peel off the top strip of tape and place the top edge of the AquaGuard above your bandage. Press down firmly so it sticks to your skin.

4. Peel off one of the side strips of tape and press that edge against your skin. If there’s any extra material, pinch it together so it forms a pleat and fold it down.

5. Repeat step 4 with the opposite side of the AquaGuard.

6. Repeat step 4 with the bottom of the AquaGuard.

To take the AquaGuard off, start at the top left or right corner and gently peel the AquaGuard down. Try to peel it in the same direction that your hair is growing. Be careful not to pull on your chest tube bandage or chest tube.

**Emptying Your Pneumostat Chest Drain Valve**

If fluid is draining from your chest, it will flow through your chest tube and into your Pneumostat’s collection chamber. The first couple of days after surgery, the drainage may be dark red in color. This is normal. As you continue to heal it may appear pink or pale yellow.
The collection chamber can hold up to 30 milliliters (mL) of fluid, but you need to empty it before it’s filled up to the 30 mL mark so it doesn’t overflow (see Figure 5). Exactly how often you need to empty it depends on how much fluid is draining from your chest. Everyone’s drainage is different.

Follow these steps to empty your Pneumostat. Your nurse will give you supplies when you’re discharged from the hospital.

1. Gather your supplies. You will need:
   - 1 alcohol swab
   - 1 (20 mL) luer lock syringe (see Figure 6)
   - A thick plastic container with a screw-on cap (such as a laundry detergent bottle). Read the resource How to Store and Dispose of Your Home Medical Sharps (www.mskcc.org/pe/store_dispose_sharps) for more instructions on how to choose a container.
   - Your drainage log. You can use the one at the end of this resource, or you can make your own.
   - A pen or pencil

2. Clean your hands with soap and water or an alcohol-based hand sanitizer.
3. Clean the sample port with the alcohol swab for 15 seconds. Throw the alcohol swab away.

4. Pick up the luer lock syringe. Make sure the plunger is pushed all the way down. Then, attach the syringe to the sample port by twisting the tip of the syringe onto the port clockwise (to the right) (see Figure 6). Make sure you’re twisting the syringe, not the Pneumostat.

5. Pull the plunger back to draw the fluid out of the collection chamber, into the syringe (see Figure 7).

6. Remove the syringe from the sample port by twisting the syringe counterclockwise (to the left).

7. Check how much fluid is inside the syringe. Write down the amount in your drainage log.

8. Empty the fluid into the toilet.

9. Put the syringe in the plastic container. Read the resource How to Store and
Dispose of Your Home Medical Sharps (www.mskcc.org/pe/storeDisposeSharps) for instructions for disposing of the plastic container.

10. Clean your hands with soap and warm water or an alcohol-based hand sanitizer.

Call your doctor’s office if more fluid is draining from your chest tube than usual.

Fixing aDisconnected Pneumostat

Your Pneumostat should be connected to your chest tube at all times. If it comes off of your chest tube, follow the steps below to reconnect it right away, then call your doctor’s office.

1. Push the Pneumostat’s chest tube connection (the larger white port at the top) into the end of your chest tube. Make sure it’s in the chest tube tightly.

2. Cough deeply a few times. This will help get rid of any extra air that may have built up around your lung while your Pneumostat was disconnected.

3. Call your doctor’s office to tell them. If it’s before 9:00 AM or after 5:00 PM, a weekend, or a holiday, call 212-639-2000 and ask to talk to the doctor covering for your doctor.

When to Call Your Doctor

Call your doctor’s office if:

- You have a fever of 101 °F (38.3 °C) or higher.
- The skin around your chest tube is red, puffy, or feels warm or painful when you touch it.
- Drainage is coming from around your chest tube site.
- You have pain that isn’t eased by your pain medication.
- More fluid is draining from your chest tube than usual.
- The color or thickness of the fluid draining from your chest tube changes.
Drainage Log

Every time you empty your Pneumostat, write down the date, time, and amount of drainage. Bring this log to your follow-up appointments to show to your doctor.

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If you have any questions, contact a member of your healthcare team directly. If you're a patient at MSK and you need to reach a provider after 5:00 PM, during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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