

Thoracentesis

Thoracentesis is a procedure to drain excess fluid in between the lungs and the chest wall (pleural space). A small amount of fluid is always present in this space. In some cases, the body makes too much pleural fluid. It may be caused by:

- › Infection
- › Heart failure
- › Tumor

The build-up of this fluid puts pressure on the lung and may cause shortness of breath. Thoracentesis helps to:

- › Relieve pain or shortness of breath
- › Find the cause of the fluid build-up


The procedure takes about 30 to 45 minutes. You may have it as an outpatient in the Interventional Radiology (IR) Department. If you are in the hospital, it may also be done in your room. A physician, a physician assistant (PA) or an advanced practice nurse (APN) will do the thoracentesis.

Before the procedure

Outpatients

Come to the 4th floor of Feinberg Pavilion, 251 East Huron Street, 1 hour before your procedure. Check in with the receptionist. Parking is available for patients and visitors in the garage at 222 East Huron Street, across from Feinberg and Galter pavilions.

If you have any questions,
please talk with your
physician or nurse.



For a discounted rate, bring your parking ticket with you. You can validate your ticket at the Customer Service desk on the 1st or 2nd floor of Feinberg and Galter pavilions.

When you arrive in the IR Department, a staff member will bring you and 1 family member to the exam room. They will review your health history, medications and allergies.

Tell your physician:

- › If you have allergies
- › If you take prescription, over-the-counter or herbal medications
- › If you take blood-thinning medications or have bleeding problems
- › If you are or may be pregnant
- › About past lung surgery or chronic lung disease, such as emphysema

You may need blood tests to check your blood clotting level. You will have an X-ray or ultrasound of your chest to locate the area of fluid to be drained.


All patients

After reviewing the procedure and answering your questions, we will ask you to sign a written consent form.

During the procedure

A nurse or technologist will help you sit on the side of the bed and lean forward with your arms resting on a table. You may use a pillow under your arms for comfort. It is important that you do not move, cough or breathe deeply during the procedure.

The clinician will clean the area on your back where they will insert the needle. They will use a special soap that may feel cold. They will inject an anesthetic (numbing medication) into the area. This will sting for a few seconds. Once the area feels numb, they will insert the needle into your back between the ribs. You may feel pressure as the needle goes in. Then, they will connect the needle to a syringe or a tube attached to a collection bag.



After they drain the fluid from your chest, they will remove the needle and put a bandage over the site. You may have soreness over the site.

After the procedure

You will have a chest X-ray to check that the fluid has been removed and that your lung is fully inflated.

Tell your nurse if you have any of the following:

- › Increased shortness of breath
- › Pain when taking a breath

The clinician may send the fluid to the lab for testing. It can take a few days to have results. Your primary care physician will talk with you about treatment options based on the test results.

Outpatients

If you are going home after the procedure, you may resume your normal diet and activities. Do not shower or bathe until the next day. At that time, you may remove the bandage.

Ask your physician for guidelines about when you may drive and return to work. Be sure to keep all follow-up appointments.

Call your physician or nurse right away if you have any of the following:

- › Sudden or increasing shortness of breath
- › Temperature more than 100.4 degrees F
- › Increased pain when taking a breath
- › Bleeding or drainage from the puncture site

For more information about Northwestern Medicine, please visit our website at [nm.org](https://www.nm.org).