Sputum Induction (Aerosol)

Sputum is the mucous found in the lung. A sputum test can be helpful in detecting:
- Infection
- Tuberculosis (TB)
- Lung diseases

If you cannot easily give a sputum sample, then an aerosol sputum induction may be done. During the test, you inhale saline aerosol (mist). This makes it easier to cough up sputum.

This test, done in the Pulmonary Function Lab, takes about 20 minutes.

Note: If this is a test to rule out TB for the first time and your doctor has instructed you to wear a protective mask, you must have this mask on upon arrival to the hospital. The initial testing for TB is usually done in 3 visits. These visits may be 1 day after another for 3 days or else within a short period of time.

Before the Test

Since you will be coughing deeply, avoid eating a heavy meal close to the test time.

There is no other special preparation for this test.

On the day of the test, plan to arrive 15 minutes before your test time. Wear loose-fitting, comfortable clothes, nothing that would constrict your chest or make breathing difficult.

Be sure to bring:
- Your doctor’s written order for the test (if one was given to you)
- A list of allergies
- A list of all your current medications (prescription, over-the-counter, and herbals)
- Photo ID
- Medical insurance information
- Medicare card (Medicare patients only)

Please come to the Galter Pavilion, 201 East Huron Street and check in at the reception desk on the 8th floor.
Parking is available for patients and visitors in the garage at 222 East Huron Street, across from the Feinberg and Galter pavilions. For discounted rates, please bring your parking ticket with you. Tickets can be validated at the Customer Services Desks on the 1st and 2nd floor of the Feinberg and Galter pavilions; 1st floor of Prentice (including the Prentice 24-hour desk near the Superior entrance).

During the Test

Using a filtered mouthpiece, you will inhale a saline mist. Then, you will be asked to cough up sputum into a sterile cup. During the test, it is important:

■ To breathe in deeply when inhaling the saline mist.
■ Not to touch the inside of the sputum cup.

If you still have trouble coughing up sputum, these steps may be repeated.

After the Test

Once the test is over, you are free to leave. You may resume your normal diet and activities.

Reporting of the results will depend on the type of sputum test ordered by your doctor. Initial results are sent to your doctor within 48 hours. A full report follows in about 5 business days.

If you have questions about this test, please call the Pulmonary Function Lab at 312.926.3195.

Northwestern Medicine – Health Information Resources

For more information, contact Northwestern Memorial Hospital’s Alberto Culver Health Learning Center (HLC) at hlc@nm.org, or by calling 312.926.5465. Health information professionals can help you find the information you need and provide you with personal support at no charge.

For more information about Northwestern Medicine, please visit our website at nm.org.