

*If you have
any questions
or concerns,
please talk
with the tech.*

Methacholine Challenge (Aerosol)

When asthma patients inhale the drug methacholine, they react in a certain way. A methacholine challenge test measures how your lungs respond to this medicine to see if you have asthma.

This test, done in the Pulmonary Function Lab, takes about 90 minutes.

Before the Test

Some asthma and allergy medicines can affect test results.

Do not use inhalers, antihistamines, decongestants or cough medicine for at least 48 hours before your test.

Do not have caffeine on the day of the test.

If your physician gives you different instructions about holding these medications, please follow the physician's instructions.

If you take a blood pressure medication called a "beta blocker" please tell your physician. Patients on beta blockers (such as atenolol, metoprolol, propranolol) may not be able to have this test.

If you have a history of an allergic reaction please tell the technician before the test. We will need to know:

- When your allergic reaction happened
- What was the cause
- How was it treated

There are no other diet or activity restrictions prior to the test.

On the day of the test, plan to arrive 15 minutes before your test time. If you wear glasses, hearing aids or dentures, please have them for the test. If you have any questions or concerns, please talk with the technologist (tech).

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)

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

You will be seated in a chair and a small plastic clip placed on your nose. You will be asked to inhale and exhale forcefully into a filtered mouthpiece. The mouthpiece is attached to a spirometer, which measures the airway flow. You will be given 6 increasing doses of methacholine to inhale. Measurements are recorded before the medicine is given and after each increased dose.

During the test, you may have some chest tightness, coughing, congestion and wheezing. The tech is with you at all times to assist.

At the end of the test, you are asked to inhale a bronchodilator to open up (dilate) your breathing airways, which reverses the effects of the methacholine.

After the Test

Before you leave, you are tested to make sure that your lung function is at your pretest level. Once you are at the pre-test level, you are free to leave. There are no diet or activity restrictions.

Initial findings 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.

Para asistencia en español, por favor llamar al Departamento de Representantes para Pacientes al 312.926.3112.

The entities that come together as Northwestern Medicine are committed to representing the communities we serve, fostering a culture of inclusion, delivering culturally competent care, providing access to treatment and programs in a nondiscriminatory manner and eliminating healthcare disparities. For questions, please call either Northwestern Memorial Hospital's Patient Representatives Department at 312.926.3112, TDD/TTY 312.926.6363 or the Northwestern Medical Group Patient Representatives Department at 312.695.1100, TDD/TTY 312.926.6363.

Developed by: NMH Pulmonary Function Lab

©January 2018 Northwestern Memorial HealthCare
900809 (1/18) Methacholine Challenge (Aerosol)