

Methacholine Challenge Testing

How to prepare and what to expect

This handout describes a methacholine challenge test and how to prepare for it. This test is done to diagnose asthma.

Your methacholine challenge test is on:

DAY

DATE

TIME

If you need to reschedule or cancel, please call 206.598.4265.

What is a methacholine challenge test?

A methacholine challenge test measures how well your lungs take in and release air. It will tell us if you have asthma.

For this test, we will monitor your lungs as you inhale a medicine called methacholine in larger and larger doses. We will be watching for a change in your *pulmonary function test* results.

The test will continue until one of these things occurs:

- You reach at least a 20% drop in the amount of air you exhale in the first second. This measurement is called FEV1.
- You finish all the doses of the medicine.



During your test, we will monitor your lungs to see how they respond to the medicine methacholine.

What should I expect?

- After the testing is done, we will give you a nebulizer treatment that will reverse the action of the methacholine, if it has caused your results to change.
- After each dose and after the breathing (nebulizer) treatment, we will ask you to do several breathing tests.
- The testing time varies. It may take up to 2 hours, depending on your results during the test.

- You may have some mild shortness of breath from taking the methacholine.
- Asthma attacks after this test are very rare. If they occur, they usually respond quickly to treatment.

How should I prepare?

Medicines

Before your test, we will ask you **not** to take some of your usual medicines.

- **Avoid these medicines for 48 hours before your test:**
 - **Oral bronchodilators:** Slobid, Theodur, Uniphyll, Unidur, Theophylline
 - **Antihistamines:** Claritin (regular and D), Allegra (regular and D), Benadryl, Bromfed, Atrohist, and over-the-counter cold, cough, and sinus medicines
- **Avoid these medicines for 24 hours before your test:**
 - **Oral steroids:** Prednisone, Medrol, Methylpredisolone
 - **Oral bronchodilators:** Proventil Repetabs
- **Avoid these medicines for 12 hours before your test:**
 - **Bronchodilators:** Albuterol, Ventoline, Proventil, Maxair, Brethaire, Serevent, Atrovent, Combivent

On the Day of Your Test

- It is OK to have coffee, tea, and other products that contain caffeine, if these are part of your usual routine.
- You may eat as usual. You do not need to fast.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

Lung Function Testing:
206.598.4265

After hours and on weekends and holidays, call 206.598.6190 and ask for the Pulmonary Fellow on call to be paged.