

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.

You are scheduled for testing on:

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

What is a methacholine challenge test?

A methacholine challenge test 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. This test measures how well your lungs take in and release air.

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

What should I expect?

- After the testing is done, you will be given 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, you will be asked to do several breathing tests.
- The testing time varies. It may take up to 2 hours, depending on your results during the test.



Avoid all forms of caffeine on the day of your test.

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

How should I prepare?

Medicines

Before your test, you will be asked 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

- Avoid all caffeine – coffee, tea, chocolate, soft drinks, chocolate, and energy drinks and energy bars.
- 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.