



Methacholine Challenge Test Procedure

Your health care provider has ordered a methacholine (meth-ah-COE-lean) challenge test to help diagnose and evaluate your health condition.



What does the test involve?

You will complete a pulmonary (lung) function test, to measure how your lungs are working. The test will take place before and during the methacholine challenge test.

You will breathe in increasing doses of methacholine (a drug that stimulates secretions and smooth muscle activity) through a nebulizer. A nebulizer is a machine that turns liquid medicine into mist, which a person breathes in through a mouthpiece. Lung function will be measured at 30 and 90 seconds after the last inhalation (mouthful of air) of methacholine. There will be a 5-minute break between doses. The therapist will listen to your breath sounds and use a pulse oximeter, a small device that uses a beam of red light, to measure your oxygen level. This will help monitor and evaluate your response to the medicine.

If you feel shortness of breath, the therapist will give you a bronchodilator medicine (a drug that helps the airway open wider, making it easier to breathe) through a nebulizer to help you.



Inform staff right away if you:

- become lightheaded
- feel out of breath
- dizzy
- have severe coughing
- have a low oxygen saturation level (the therapist will track this)
- have chest pain
- any other unusual symptom

For your safety, the test may need to be stopped due to these symptoms. If you feel that you need to stop testing at any time during the test, please inform staff.

Risks, which were given in the consent form, include but not limited to:

- abnormal blood pressure
- fainting
- increased irregular or ineffective heart rate or rhythm
- trouble breathing
- severe coughing
- respiratory arrest and/or heart attack (in very rare cases)

If you have questions at any time, please ask staff.