

Irritant Challenge Test

What is an irritant challenge test?

The irritant challenge test evaluates how sensitive the airways in your lungs are when exposed to a specific chemical or irritant. A spirometry breathing test is done before and after the exposure. Examples of the chemical that you may be exposed to include perfume, ammonia or cigarette smoke. Your health care provider will determine what you will be exposed to during the irritant challenge.

Spirometry can show how much air you can breathe in and out. It also shows how fast you can breathe in and out. The spirometry results are compared before and after the exposure to see what changes there are in your breathing. You will be given additional information in PPS at the time of the test.

A laryngoscopy may be scheduled after the irritant challenge test. A laryngoscopy is often done to identify if your vocal cords may be causing you to have trouble breathing.

How do you get ready for the test?

Please follow these directions when getting ready for this test. These medicines will affect the results of some of these tests and need to be stopped before the testing is done. If the medicine is not stopped before the test we may not be able to complete the test. Please let your doctor know if you are not able to stop the medicine due to increased symptoms.

- Stop this **inhaled** medicines for **7 days** before your appointment:
 - Spiriva® (tiotropium)
 - Anora® (umeclidinium and vianterol)
- Stop these **inhaled** medicines for **48 hours** before your appointment:
 - Advair® (fluticasone and salmeterol)
 - Symbicort® (budesonide and formoterol)
 - Dulera® (mometasone and formoterol)
 - Breo® (fluticasone and vilanterol)
 - Arcapta (indacaterol)
 - Serevent® (salmeterol)
 - Foradil® (formoterol)
 - Serevent® (salmeterol)
 - Tudorza® (aclidinium)
 - Brovana® (arformoterol)
 - Perforomist® (formoterol)
- Stop these **inhaled** medicines for **24 hours** before your appointment:
 - Atrovent® (Ipratropium)
 - Combivent® (Albuterol and Ipratropium)
 - DuoNeb® (Albuterol and Ipratropium)
- Stop these **oral** medicines for **24 hours** before your appointment:

- Accolate® (zafirlukast) Zyflo® (zileuton)
- Singular® (montelukast)
- Stop these **inhaled** medicines for **6-8 hours** before your appointment:
 - Proventil HFA®, Ventolin HFA®, ProAir® (Albuterol), Xopenex® (Levalbuterol),
- **Continue to take all your other medicine as you usually do.**
- **Pregnant women or mother's who are currently breast feeding may not perform a irritant challenge. Please advise your ordering doctor.**
- Adults - If a laryngoscopy is scheduled at the same time, do not eat for 2 hours before the test is scheduled.
- Children - If a laryngoscopy is scheduled at the same time, do not eat for 3 hours before the test is scheduled.

What is done during the test?

You will be exposed to a chemical or irritant. You will do a number of breathing tests before and after the exposure. The technician will explain what you need to do during each test. A good effort during the testing is important to get good results. The technician will coach you during each test to help you give a good effort. If you have questions during the tests, please ask the technician.

You may be asked to sit in a Plexiglas booth for some of the testing. This booth is called a body box or plethysmograph. You will do different breathing techniques, blowing into a tube, while in the booth. Each breathing technique is often repeated to make sure the test is reliable.

If your doctor has scheduled you for a laryngoscopy this will be done right after the breathing tests are completed. During the laryngoscopy a doctor will place a small tube (fiberoptic probe) in your nose. The tube is passed through your nose to the back of your throat after topical anathesia is applied. The movement of the vocal cords can be seen with the probe. **Please do not eat 2 to 3 hours prior to the test if a laryngoscopy has been scheduled.**

How long will the test take?

The irritant challenge test often takes 1 ½ to 2 hours.

How do you get to your test?

If you are being seen at National Jewish Health, on the day of your scheduled test, report to room A310a at Pulmonary Physiology Services, (PPS), located on the 3rd floor of the May building. If you have questions please call the Pulmonary Physiology Services at 303-398-1530.

Visit our website for more information about support groups, clinical trials and lifestyle information.

PTE.313 © Copyright 2014

NOTE: This information is provided to you as an educational service of National Jewish Health. It is not meant to be a substitute for consulting with your own physician.

National Jewish Health is the leading respiratory hospital in the nation. Founded 123 years ago as a nonprofit hospital, National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of patients with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive, coordinated care. To learn more, visit njhealth.org.