

Pressure Volume Study

What is a Pressure Volume Study?

The pressure volume study measures how well you are breathing. There are different types of breathing tests that can be done during the pressure volume study. They include spirometry, lung volumes, and transpulmonary pressure. Spirometry can show how much air you can breathe in and out. It also shows how fast you can breathe in and out. Lung volumes can provide further information about how your lungs are functioning. Transpulmonary pressure can provide information about the pressures occurring in the lungs. The results of the pressure volume study can help your doctor find the best treatment plan for you.

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 will not be able to complete the test.

- Do not eat or drink 1 hour before the test is scheduled.
- Stop these **inhaled** medicines for **48 hours** before your appointment:
 - Anora® (umeclidinium and vilanterol)
 - Bevespi® (glycopyrrolate and formoterol)
 - Stiolto® (olodaterol and tiotropium)
 - Utibron® (indacaterol and glycopyrrolate)
 - Trelegy® (fluticasone, umeclidinium and vilanterol)
- Stop these **inhaled** medicines for **24 hours** before your appointment:
 - Incruse® (umeclidinium)
 - Seebri® (glycopyrrolate)
 - Spiriva® (tiotropium)
 - Tudorza® (aclidinium)
- Stop these **inhaled** medicines for **12 hours** before your appointment:
 - Arcapta® (indacaterol)
 - Brovana® (arformoterol)
 - Perforomist® (formoterol)
 - Serevent® (salmeterol)
 - Striverdi® (olodaterol)
 - Advair® (fluticasone and salmeterol)

- Breo[®] ((fluticasone and vilanterol)
 - Dulera[®] (mometasone and formoterol)
 - Symbicort[®] (budesonide and formaterol)
- Stop these **inhaled** medicines for **6 hours** before your appointment:
 - Atrovent[®] (ipratropium)
 - Combivent[®](albuterol and ipatropium)
 - DuoNeb[®] (albuterol and ipatropium)
 - Stop these **inhaled** medicines for **4-6 hours** before your appointment:
 - ProAir HFA[®], Proventil HFA[®], Ventolin HFA[®] (albuterol), Xopenex[®] (levalbuterol)

Continue to take all your other medicine as you usually do.

What is done during the test?

You will do a number of breathing tests. 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. If you have questions during the tests, please ask the technician.

After some initial breathing tests an esophageal catheter will be inserted into your esophagus (tube food follows to the stomach). You will be asked to swallow water while a small tube is placed in your nose. The tube is passed through your nose into your esophagus. Some people notice minor throat irritation during the test. The tube is in your esophagus for about 30 minutes.

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

You may also inhale a quick-relief medicine. If you inhale the medicine the breathing tests will be repeated after the medicine. Your doctor can see what breathing changes you have after you inhale the medicine.

How long will the test take?

The pressure volume study often takes 1 and 1/2 hours to complete.

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 in the Pulmonary Physiology Services, (PPS), located on the 3rd floor of the May building. If you have questions please call Pulmonary Physiology Services at 303-398-1530.

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

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