Arterial Blood Gases (ABGs)

An arterial blood gas test checks the oxygen ($O_2$), carbon dioxide and pH (acidity) levels in your blood. It provides helpful information about:

- How well the lungs and kidneys work.
- The effects of oxygen therapy.

The test is done in the Pulmonary Function Lab.

Blood is taken from an artery in the wrist. (Veins are used for most blood tests.) While the blood draw takes only a few minutes, it is helpful to allow about 30 minutes for the total testing time.

Before the Test

There is no special preparation for this test. However, being well-hydrated can be helpful. Try to drink at least 24 ounces of fluid (such as water or juice) before you come to the hospital. If you are on oxygen at home, please remove your oxygen as soon as you arrive in the hospital waiting area. On the day of the test, plan to arrive 15 minutes before your test time.

Be sure to bring:

- Your doctor’s written order for the test (if one was given to you)
- A list of allergies
- A list of all your current medications (prescription, over-the-counter, and herbals)
- Photo ID
- Medical insurance information
- Medicare card (Medicare patients only)

Please come to the Galter Pavilion, 201 East Huron Street. Check in at the reception desk on the 8th floor.

Parking is available for patients and visitors in the garage at 222 East Huron Street, across from the Feinberg and Galter pavilions. For discounted rates, please bring your parking ticket with you. Tickets can be validated at the Customer Services Desks on the 1st and 2nd floor of the Feinberg and Galter pavilions; 1st floor of Prentice (including the Prentice 24-hour desk near the Superior entrance).
During the Test

Please tell the technologist (tech) if you:

- Have an arm that should not be used to take blood or blood pressure
- Are taking any blood thinners (anticoagulants)
- Have any problems with prolonged bleeding

While seated in a chair, the tech will insert a needle in the radial artery (inner side of your wrist). The needle is connected to a small tube. Once the tube is filled with blood, firm pressure is applied to your wrist for at least 5 minutes. This is done to prevent any bleeding.

After the Test

You are free to leave when the test results have returned. This takes about 10 to 15 minutes. If your doctor needs to be notified of the results, you will need to wait until they have been contacted.

Do not use the affected arm for heavy lifting or other vigorous activity for 24 hours. There are no other diet or activity restrictions.

Initial test results will be sent to your doctor within 48 hours. A full report will follow in about 5 business days.

When to Seek Medical Attention

If any bleeding is noted at the puncture site, apply firm pressure right away. Go to the nearest hospital Emergency Room if you note any of the following in the affected arm:

- Prolonged bleeding after pressure has been applied.
- Swelling or change in color.
- Pain, numbness or tingling.

If you have questions about this test, please call the Pulmonary Function Lab at 312.926.3195.

Northwestern Medicine – Health Information Resources

For more information, contact Northwestern Memorial Hospital’s Alberto Culver Health Learning Center (HLC) at hlc@nm.org, or by calling 312.926.5465. Health information professionals can help you find the information you need and provide you with personal support at no charge.

For more information about Northwestern Medicine, please visit our website at nm.org.