How Much Does an EMG Cost?

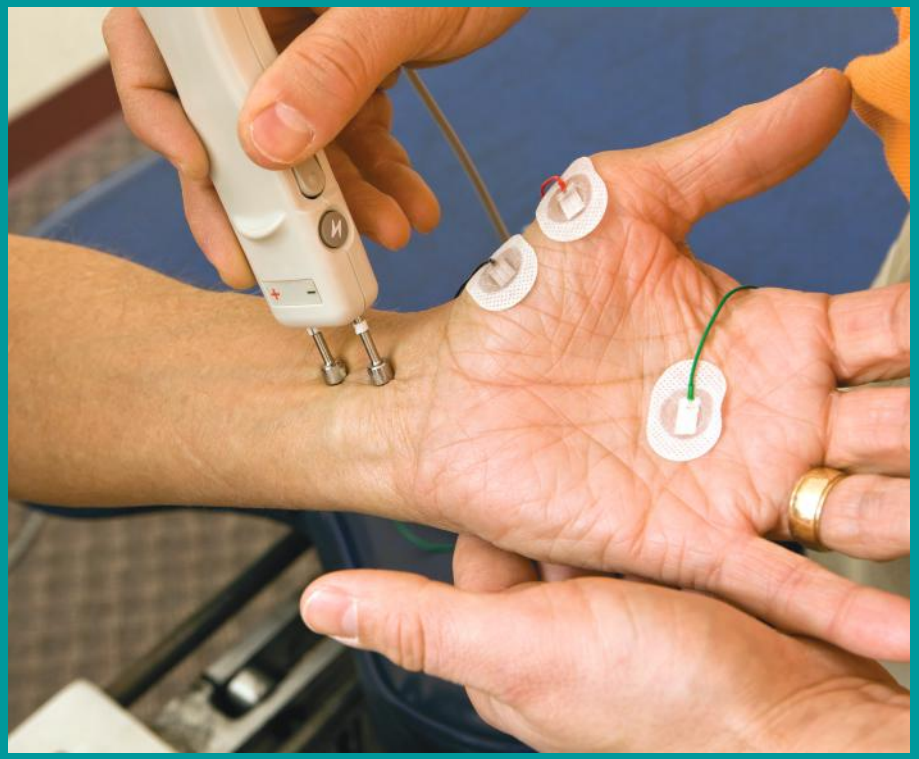
Most health insurance policies cover EMGs; however, the coverage is not always 100%. To find out what kind of coverage you have for an EMG, please contact your insurance company or one of our locations.

If you have any questions, please visit **AtriumHealth.org/AHNeurology** or call **704-468-0101**

Our Locations

1. **Atrium Health Neurology Ballantyne**
   15110 John J. Delaney Drive, Suite 200
   Charlotte, NC 28277
2. **Atrium Health Neurology Cabarrus**
   315 Medical Park Drive, Suite 202
   Concord, NC 28025
3. **Atrium Health Neurology Cleveland**
   202 E. Grover St.
   Shelby, NC 28150
4. **Atrium Health Neurology Huntersville**
   16645 Birkdale Commons Parkway
   Suite 200D
   Huntersville, NC 28078
5. **Atrium Health Neurology Kenilworth**
   1225 Harding Place, Suite 4100
   Charlotte, NC 28204
6. **Atrium Health Neurology Lincoln**
   441 McAllister Road, Suite 2200
   Lincolnton, NC 28092
7. **Atrium Health Neurology Pineville**
   10660 Park Road, Suite 4500
   Charlotte, NC 28210
8. **Atrium Health Neurology Union**
   1423 E. Franklin St., Suite I
   Monroe, NC 28112
9. **Atrium Health Neurology University City**
   101 W.T. Harris Blvd., Suite 5202
   Charlotte, NC 28262
10. **Atrium Health Neurosciences Institute, a facility of Carolinas Medical Center**
    1010 Edgehill Road N.
    Charlotte, NC 28207

Atrium Health
Neurosciences Institute



Electromyography

EMG

Atrium Health
Neurosciences Institute

Electromyography (EMG) is a test that measures the electrical activity of your nerves and muscles.

Why Is an EMG Test Needed?

EMGs are typically ordered when patients are experiencing negative issues involving their muscles or nerves.

Common symptoms and conditions that call for EMG testing include:

- Tingling or numbness in arms or legs
- A possible pinched nerve in the back or the neck
- Weakness of the muscles
- ALS (Lou Gehrig's disease)
- Guillain-Barré syndrome
- Myasthenia gravis

What Happens During an EMG?

The EMG is performed by a specialist, who is a neurologist or a specially trained technician. During the test, you will be lying on an examination table, next to the EMG machine (which looks like a desktop or laptop computer).

There are 2 parts of the EMG test. The first part is the **nerve conduction study**, which tests the nerves and is performed by a specially trained technician. The second part of the study is the **needle examination**, which tests the muscles. This is performed by a specialist who is a neurologist. Depending on your unique symptoms, you may receive one part of the test or both.

Part One: The Nerve Conduction Study

During the nerve conduction study, brief electrical shocks are sent to your arm or leg to determine how fast or slowly your nerves are conducting the electrical current. The specialist will study your body's responses and occasionally pause to make calculations and take measurements.

Nerves work something like an electrical wire. If you want to see if the wire is functioning properly, the easiest thing to do is to run electricity through it. If there are any problems along its length, the current fails to go through the wire. During the test, the specialist will attach small recording electrodes to the surface of one part of your arm or leg. Then he or she will touch your skin at another point with a pair of electrodes. When this happens, you will feel a tingling sensation.

As there are several nerves that need to be tested, the procedure is usually repeated 5 times per limb. The amount of current delivered is always kept at a safe level. Patients wearing pacemakers or other electrical devices do not need to worry, since this current will not interfere with such devices.

Part Two: The Needle Examination

The second part of the test is the needle examination, and as the name suggests, it does involve some needle sticking. During this part of the test, your muscles will be examined to determine if there has been any damage because of a nerve problem or if a disease involves the muscle itself rather than the nerve.

The needles used are thin, fine and a little over 1-inch long. Typically 5 to 6 muscles are sampled in one limb. The needle, which acts as a recording device, is usually inserted into a relaxed muscle and then moved gently to record the muscle activity. When this is occurring, you will be able to hear the muscle activity amplified by the EMG machine; it will sound something like radio static.

The uncomfortable part of the process occurs when the needle is first inserted through your skin, because your pain receptors are in that area. Once the needle is inside the muscle, the sensation usually felt is discomfort or pressure.

How Long Does an EMG Take?

Please plan on arriving 15 minutes prior to your study. You can count on being in the room for about an hour.

How Should I Prepare for an EMG?

Few preparations are needed on the day you have an EMG.
Do NOT apply lotion to your skin on the day of your EMG test.
You will be able to drive yourself home.
You don't need to worry about:

- Fasting
- What to wear; you'll wear a gown during the test

With few exceptions, you may continue taking medication(s) prescribed by your doctors without disturbing the test. If the study is being performed to evaluate for the possibility of myasthenia gravis or Lambert-Eaton myasthenic syndrome, you must stop taking pyridostigmine (Mestinon) for 24 hours before the study. Please let the person calling to schedule your study know if you are taking an anti-coagulant (blood thinner) as this may affect the needle examination.

How Soon Will I Find Out My Results?

Usually, the results come in on the same day or the following day. Your doctor will assess the results and share them with you.