

EMG and NCS Patient Information Sheet

What Are EMG and NCS Tests?

Electromyography (EMG) and **Nerve Conduction Studies (NCS)** are diagnostic tests used to evaluate the health and function of your muscles and the nerves that control them.

- **NCS** measures how quickly and effectively your nerves can send electrical signals.
- **EMG** evaluates the electrical activity in your muscles when they are at rest and during contraction.

These tests are commonly ordered to help diagnose conditions such as:

- Nerve compression or injury (e.g., carpal tunnel syndrome, sciatica)
 - Neuropathy
 - Muscle disorders
 - Radiculopathy (nerve root problems from the spine)
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How to Prepare for Your Appointment

To ensure accurate test results and a smooth experience, please follow these preparation instructions:

Before the Test

- **Shower or bathe** the day of your test to remove oils from your skin.
- **Do not apply lotions, creams, or oils** to your skin, especially on arms and legs.
- Wear **loose, comfortable clothing** that allows access to arms and legs. You may be asked to change into a gown.
- Bring a **list of current medications**, especially any blood thinners.
- Inform the doctor or technician if you have:

- A **pacemaker or defibrillator**
- A **bleeding disorder**
- Any **implanted electrical device**

Avoid the Following

- Lotions or skin oils (these can interfere with electrode contact)
 - Tight clothing or compression garments
 - Heavy exercise just before the test (it can affect muscle results)
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What to Expect During the Test

- The test usually takes **30–90 minutes**, depending on how many areas are being tested.
 - **For NCS:** Small electrical pulses are applied to the skin to stimulate nerves. This may cause a brief, mild tingling or twitching sensation.
 - **For EMG:** A very thin needle is inserted into a few muscles to record electrical activity. This may cause some mild discomfort or soreness, similar to an injection.
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After the Test

- You can **resume normal activities** immediately after the test.
- Some **mild soreness or bruising** at the EMG needle sites is normal and should resolve in a day or two.
- If you experience unusual pain, swelling, or signs of infection at a needle site, contact your doctor.