



# UNDER STANDING MMN

MULTIFOCAL MOTOR NEUROPATHY

You can take control of MMN.  
It's a long journey. And this is an important step.

# YOU'RE ON YOUR WAY

**Hearing that you have MMN** can bring up lots of different thoughts and feelings. Curiosity, relief, anxiety, or concern—these are all common reactions. However, the confidence that comes with finally knowing what's been causing your symptoms means you and your doctor can take some decisive steps toward helping to improve them.

Let's get started by learning what MMN is, what causes it, and the clues that helped your doctor diagnose it.

## What is MMN?

Multifocal motor neuropathy, or MMN, is a rare and long-lasting neurological condition in which your body's own immune system mistakenly attacks parts of your nervous system. Usually, the immune system works to protect your body from infection and other threats. But for people with MMN, it also interferes with nerves that control your muscles—what doctors call “motor neurons”—causing muscle weakness. Yet the nerves that make you aware of pressure, heat, cold, or pain—known as “sensory neurons”—are generally not affected by MMN.

MMN can be hard to diagnose, in part because it shares many symptoms with better-known neuropathies like amyotrophic lateral sclerosis (ALS). It's important to note that MMN progresses slower than ALS and does not affect the brain or muscles that control breathing.

While there is no known cure, it's important to know that MMN is NOT life-threatening. There is treatment for MMN that can help improve muscle weakness.

## Some facts about MMN

### It's rare

MMN is estimated to affect 1-3 in every 100,000 people

### It's not inherited

MMN doesn't appear to run in families

### It's more common in men than women

MMN affects men almost 3 times more often than women

### It's usually noticed in middle-aged adults

MMN symptoms usually appear around age 40 but have been known to occur between ages 20 and 70

### It's difficult to detect

MMN is rare and complicated, so it can take years to diagnose

### It's a progressive condition

MMN symptoms tend to get worse over time, but treatment can help

From symptoms to certainty:

# THE PATH TO DIAGNOSIS

It may help to know how MMN causes the symptoms you've experienced

In healthy motor nerves, electrical signals travel down the length of the nerve to communicate with your muscles. But with MMN, the immune system damages the nerve.

This causes a **"conduction block,"** where damage to the nerve interferes with the electrical signals to certain muscles, resulting in weakness in parts of your body.

Most people with MMN begin noticing weakness in one hand or foot, and these symptoms are usually limited to one side of the body. Over time, they can become more severe and may spread to both sides of the body in the hands and feet.

While other neuromuscular conditions can cause numbness, tingling, or pain, people with MMN still have relatively normal sensation in their hands and feet.

## How MMN is diagnosed

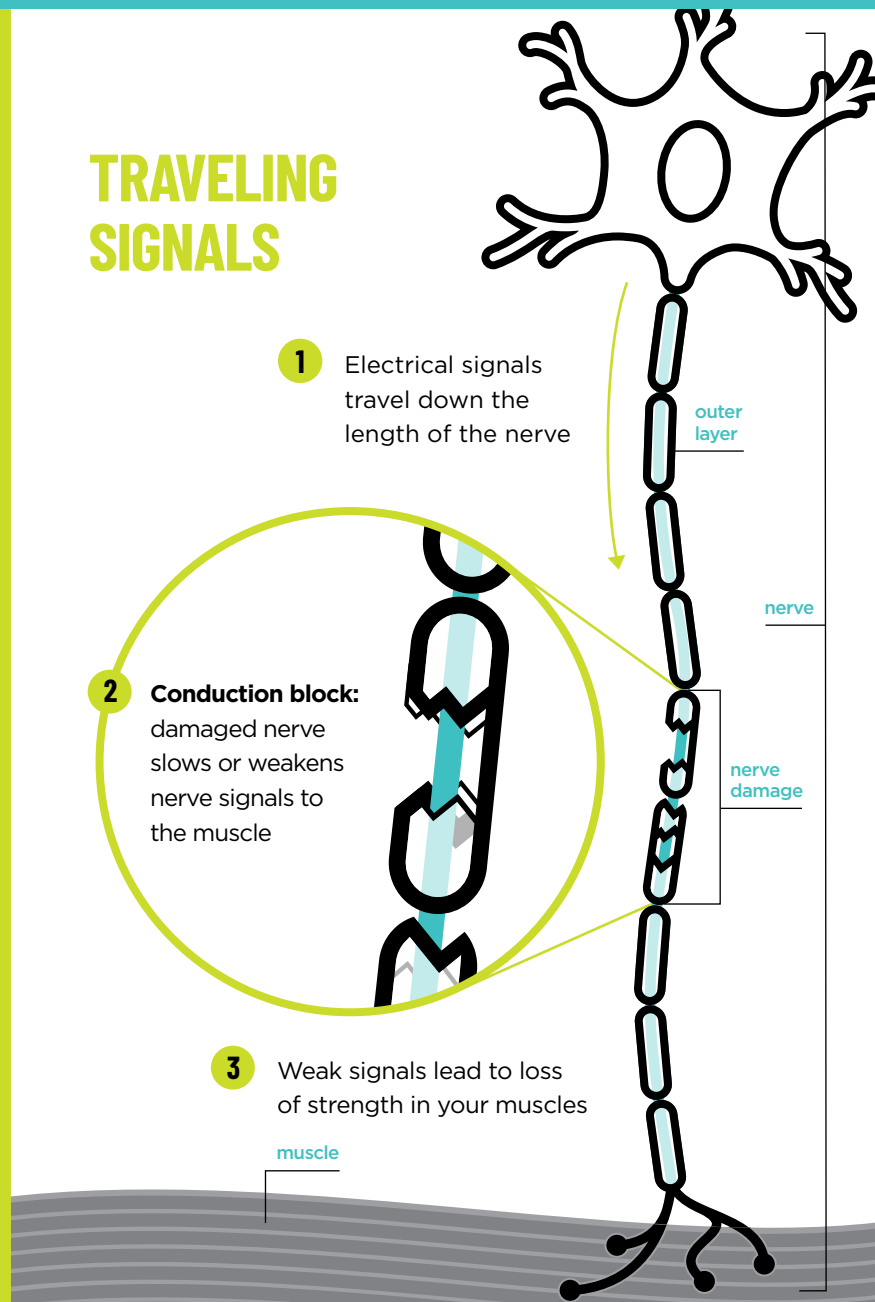
### Key symptoms

- > Weakness in your hands or feet, leading to loss of muscle mass
- > May involve cramping, spasms, and/or twitching
- > Effects are worse on one side of the body ("asymmetrical")
- > Generally, no numbness, tingling, or pain

### Key test results

- > One or more **"conduction blocks"**—places where nerve signals are interfered with

## TRAVELING SIGNALS



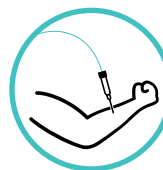
## How to test for conduction blocks

Doctors look for nerve damage using electrodiagnostic tests, which measure electrical signals in the nerves and muscles. This is a very important step in confirming MMN.



### Nerve conduction study (NCS)

Measures the signal strength and speed along the length of the nerve



### Electromyography (EMG)

Measures how well your nerves and muscles communicate



Now that you know,

# IT'S TIME TO MOVE FORWARD

Now that your doctor has diagnosed MMN, there are key steps you can take to help manage your condition and prepare for the future.

You can partner with your doctor to figure out what comes next.

You can also start to build your support network and get help doing activities that MMN interferes with.

Most importantly, remember that there are lots of resources that can help you with this journey.

## WHAT YOU CAN DO TO TAKE CHARGE OF MMN

### Discuss next steps with your doctor

- > How often will you have appointments?
- > Are there additional specialists you should see?
- > Are there other tests you will need?
- > Are you at a point where you should consider treatment?
- > What should your expectations be for managing symptoms?
- > What resources are available to help manage your MMN?

### Learn about MMN management

The standard treatment for MMN is immunoglobulin (Ig) therapy. Talk to your doctor about treatment options to identify what might be right for you.

### Build on your knowledge

The following resources have information on MMN and other conditions.

- > **The GBS/CIDP Foundation International**  
[www.GBS-CIDP.org](http://www.GBS-CIDP.org)
- > **The Neuropathy Action Foundation (NAF)**  
[www.neuropathyaction.org](http://www.neuropathyaction.org)
- > **The National Organization for Rare Disorders (NORD)**  
[www.rarediseases.org](http://www.rarediseases.org)
- > **The Foundation for Peripheral Neuropathy**  
[www.foundationforpn.org](http://www.foundationforpn.org)
- > **MyIgSource**  
[www.myigsource.com/mmn](http://www.myigsource.com/mmn)

Now you're ready to

# START TAKING CONTROL

**By choosing to learn about MMN,** you're already on your way toward taking back control. Now it's important to learn about treatment options and how you can be an advocate for your own best care.

## Three things to remember

- > It's NOT fatal
- > It IS treatable
- > It's up to YOU to take action

## TALK TO YOUR DOCTOR ABOUT TAKING CONTROL OF MMN

**Learn more about MMN in  
the next brochures in this series**

- > Management of MMN
- > Maintenance of MMN