UNDERSTANDING RELAPSING MULTIPLE SCLEROSIS

Inside, you’ll find information and support.

ABOVE MS™
Brought to you by Biogen
Take the next step while living with relapsing MS

At Biogen, we know that living with relapsing multiple sclerosis (MS) can sometimes feel overwhelming. We hope this brochure helps you and your healthcare team as you make choices about treating relapsing MS. Inside, you’ll find information including:

- **What MS is** and how it may affect the body
- Why [early diagnosis and timely treatment](#) may be important
- The [potential impact of wellness](#) on your journey with MS
- How to [have more productive appointments](#) with your healthcare team
- What [support services](#) are available through the Above MS program from Biogen

Get insights from expert contributors, live support and services, and more when you sign up for the Above MS™ program at AboveMS.com.
MS is an immune-mediated disease that is thought by some to be an autoimmune disease. That means that in addition to defending the body against harmful invaders (like viruses or bacteria), the immune system actually attacks the body.

Although nobody knows the exact cause of MS, at Biogen we’re committed to fighting the disease through research and development.
Who gets MS?
MS affects an estimated 2.3 million people across the globe. 85% of MS cases are relapsing MS. This is a type of MS where symptoms can flare up at times and then lessen or go away.
It’s thought that factors such as genetics and location affect who gets MS. For example, it’s more common in colder climates farther from the equator.

Did you know?
Relapsing MS is about 2 to 3 times more common in women than in men.

How MS may affect the body
Relapsing MS affects cells in a part of the body called the central nervous system (CNS). The CNS helps control a lot of functions, such as movement and thoughts.
The CNS does this by sending electrical signals to other parts of your body. MS disrupts these electrical signals.
How relapsing MS affects the nerves

You depend on your nerves to feel, see, move, and think. Each nerve has a covering that functions much like the rubber coating around an electrical wire. It protects the nerves inside, but when damaged, it can cause changes in any one of these functions. That’s why people living with MS can experience pain, feel tired, or have changes in mood.

If you have any questions about what you read here, talk to your healthcare team.

Healthy nerve

In a healthy nerve, nerve fibers are protected by something called myelin. This allows messages to be sent without interruption.

Damaged nerve

In people with MS, the immune system attacks the myelin, wearing it down. This makes it harder to send messages.

Scarred nerve

After wearing down the myelin, the immune system can actually damage the nerve fiber or cause loss of the nerve fiber altogether. Damaged nerves can make it difficult or even impossible for the nerve to send messages.
Some of the most common symptoms

Relapsing MS affects everyone differently, so people can have different types of symptoms. Some are considered visible and can be seen by others. Most are considered invisible and are seen or felt only by the person with MS. Over time, symptoms can get worse and new symptoms can appear:

- Walking problems
- Difficulties with attention, learning, and memory (cognition)
- Mood changes
- Muscle stiffness
- Numbness and tingling
- Pain in arms and legs
- Bladder and bowel dysfunction
- Sensitivity to hot and cold
- Sexual difficulties
- Tiredness and exhaustion (fatigue)
- Vision problems
- Weakness or poor coordination

All these symptoms may affect you and your daily life in a number of ways. Always talk to your healthcare team if you have any questions regarding your MS, symptoms, or ways to manage them.

What are MS relapses?

Relapses are when new symptoms not brought on by fever, heat, or infection temporarily appear or symptoms you already have get worse for a period of time. Your healthcare team may call relapses flare-ups or exacerbations.

Relapses are not always the same. Some are worse than others, and they may last anywhere from a few days to several months.

How do you know if you’re having a relapse?

<table>
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<tr>
<th>Symptoms typically last at least 24 hours</th>
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<tr>
<td>Think you may be having a relapse or have any questions? Talk to your healthcare team right away.</td>
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Even mild flare-ups may cause damage, so it’s important to take every relapse seriously.
Understanding the words your healthcare team uses

Making sense of relapsing MS can be difficult, especially if there are words you may not know yet.

Here are some of the most common terms you’ll hear when learning about MS. If your healthcare team uses any other words you don’t know, be sure to ask what they mean.

**Autoimmune disease** When the immune system mistakenly attacks the body's own tissues, as it would foreign invaders such as viruses or bacteria.

**Central nervous system (CNS)** The CNS is made up of the brain, spinal cord, and optic nerve. It controls most functions of the body and the mind.

**Evoked potential** A diagnostic test that measures the electrical response in the brain to sound, light, or other sensations.

**Infusion** The process of flowing a solution into the body, usually through a vein (or infusion port).

**Injectable** A type of treatment you may be able to give yourself with a needle.

**Intravenous (IV)** The passing of medicines into a vein through a needle attached to a tube.

**Magnetic resonance imaging (MRI)** A way to create images of the inside of the body with powerful magnets and radio waves. An MRI produces detailed pictures of areas that are difficult to see using other types of scanning devices. Along with other tests, an MRI may help confirm or determine a diagnosis.

**Myelin** The fatty layer of protective material around nerve fibers.

**Neurological test** A way to measure a person’s thinking, coordination and strength, vision and hearing, and other senses.

**Relapse** When MS symptoms appear, reappear, or become worse. Also called a flare-up, attack, or exacerbation.

**Sclerosis** The scarring of tissue.
Relapsing MS can sometimes take a while to diagnose. In general, no single test can diagnose it. So healthcare teams may use a few different tests, such as a neurological test, a spinal fluid test, an evoked potential test, or an MRI.

**What is an MRI?**

An MRI—or magnetic resonance imaging test—uses powerful magnets and radio waves to show images of the inside of someone’s body.

In people with MS, MRIs can show brain and spine lesions. Lesions are areas where nerve tissue is damaged from MS.
Three types of lesions are visible with an MRI

**Gadolinium-enhanced (Gd+) lesions** These lesions show active inflammation. This lesion type might indicate a flare-up and current damage occurring in the brain (which may not be reflected in other lesion types)

**T2 lesions** In an MRI scan, these lesions appear as white spots and indicate the long-term impact of MS

**T1 lesions** In an MRI scan, these lesions appear as dark spots. This lesion type indicates nerve tissue damage, which may be permanent

Depending on where the lesions show up, there may be different symptoms:

**Cerebrum (front part of the brain)** Difficulty with attention, learning, and memory; mood changes

**Cerebellum (back part of the brain)** Poor balance, poor coordination

**Brain stem** Impaired speech

**Optic nerve (nerve behind the eye)** Vision problems

**Spinal cord** Muscle stiffness, numbness and tingling, pain in arms and legs, problems with urinating or bowel movements

It’s also important to ask your healthcare team if you have questions about what your MRI shows.

MRIs can detect changes in the disease when there are no signs or symptoms of relapse. Lesion activity may occur 5 to 10 times more frequently than relapses, and that’s why getting regular MRI tests is important. Since MRIs may help determine whether or not you are responding to treatment, they provide one way to determine whether it may be time to talk about your treatment options.
The importance of treatment
Disease modifying therapies (DMTs) aim to work at the “root” of MS disease activity. It’s important to know that treatment may also come with risks, so keep working with your healthcare team. Together, you can find a treatment that’s right for you.

Treatments can be given in different ways

- Injections
- Infusions
- Pills

MS is different for everyone, and not everyone responds to the same DMT the same way. You may have to try several different DMTs until you find the one that’s right for you.
Beyond understanding the details of relapsing MS, you should know that a focus on wellness can also help you too.

**What’s wellness?**
A combination of your physical, mental, and social well-being. Paying attention to wellness may impact your overall health.

**How can it help?**
While more research is needed, studies have shown that sticking to a healthier lifestyle may have a positive impact on MS symptoms. For example, eating fresh, natural ingredients may help with fatigue—and stretching may help with spasticity and stress.

Read on for more tips to consider. Keep in mind that everyone is different and you should work with your healthcare team to find a wellness plan customized for you.
Wellness starts with forming healthy habits
Consider the following to see if they are right for you:

A nutritious diet
Try choosing a variety of fresh, natural ingredients over frozen or canned foods. Focus on fruits and veggies, lean proteins, and whole grains.

Exercise routines
Physical activity doesn’t have to feel like a chore. Find something that fits your current level of ability, such as walking with a friend, an active hobby, or simple stretches.

Exercise may not be for everyone. Talk to your doctor before beginning any exercise routine.

Mental activities
Sudoku and crossword puzzles are two options for keeping your mind active. It’s also important to get enough sleep and stick to a daily routine as much as possible.

Emotional wellness
Having a positive outlook can go a long way. You can also try practicing mindfulness by meditating and staying aware of how you feel.

Part of developing healthy habits also means avoiding risk factors such as smoking and alcohol use, which can have an effect on your health. Talk to your healthcare team about developing daily routines that are comfortable and right for you.

Learn more about wellness on AboveMS.com.
When it comes to treating your relapsing MS, it’s important to maintain open communication with your healthcare team. The following information can help you have a more productive conversation about different Biogen treatment options. Together, you can make a decision that may be right for you.
Tips for making the most of your healthcare visit

Monitor your mood and symptoms. When your healthcare team better understands what goes on between appointments, you can make better treatment decisions together. Try keeping a journal with helpful notes or consider using Aby, Biogen’s app to support people living with MS. With Aby, you can keep track of your mood and symptoms—and more.

Be prepared. Talk about the most important symptoms, recent changes, and treatment goals first to help make sure you don’t run out of time.

Ask questions. People with MS can have many different symptoms, and they can be hard to figure out. It’s okay to ask your healthcare team, “Is this normal?”

Take notes. It’s easy to forget something your healthcare team says. Taking notes (or bringing a friend or loved one to take them) can help make sure you get all the important details. You could also ask if you can record audio of your appointments.

Take your time. It’s okay to ask for an explanation if you don’t understand everything your healthcare team says. And if you run out of time at your appointment, be sure to ask how you can get the information you need.

Meet Aby, Biogen’s free app to help you stay informed, track symptoms, access different wellness programs, connect with Nurse Educators—and more.

Download Aby today.
Taking charge of your treatment
You know your body best. One way to help play an active role in your treatment is to regularly discuss how you feel with your healthcare team.

Here are ways to help take charge of your relapsing MS treatment:

Consider treatment as soon as you’re diagnosed. With treatment, you may be able to help prolong physical ability by slowing disability progression. You and your healthcare team should decide what’s best for you.

Stay on your treatment as prescribed. If you need help, set reminders to take your medicine and fill your prescription. Aby, Biogen’s app to support people living with MS, has custom notifications. You could also use your watch or any device with an alarm or calendar. Always tell your healthcare team about any side effects.

Set treatment goals. Work with your healthcare team to set both short- and long-term goals. At each appointment, make sure you’re on track with your treatment plan.

Monitor your treatment. Keep track of how your MS changes over time. The more consistent you are, the better your healthcare team can monitor how you’re doing.

Be honest and open with your healthcare team. Things that feel small to you might mean more to your healthcare team. The important thing is not to guess. Remember, it’s their job to help you—and it’s your job to tell them what you’re experiencing.
For one-on-one support from Above MS and Biogen, call 1-800-456-2255 to speak with an Above MS Support Coordinator, or sign up at AboveMS.com.

Above MS™ from Biogen offers personalized services and extra support to help people living with MS in different aspects of their lives. We’re here to help throughout the MS journey, offering one-on-one MS support over the phone, relevant disease education, and lifestyle information.

Please keep in mind your healthcare team is your primary resource when it comes to your relapsing MS and treatment.
There are many benefits to joining the Above MS program
Sometimes it helps to know that you’re not facing MS alone. Your healthcare team is your first source of information, but Biogen is also always here to support you through its Above MS™ services.

By joining Above MS, you’ll get tips, tools, and personalized assistance for your MS, including:

- Specially tailored information from people who are living with relapsing MS
- Insights from expert contributors in areas such as financial planning, cooking, exercise, and many others
- Free, one-on-one access by phone to Nurse Educators 24/7
- A variety of financial and insurance support services, and our $0 Copay Program (if you’re eligible)
- Information about Biogen’s relapsing MS treatment options
- Ways to connect with the community through our Facebook page, live events, and MS webinars

Whether you’re living with MS or caring for someone who is, Above MS is here to help.
Sign up today at AboveMS.com.
Above MS Support Coordinators
As you continue on a relapsing MS therapy as prescribed by your healthcare team, you may need extra support along the way. For people taking a Biogen relapsing MS treatment, our Above MS Support Coordinators can help you understand and access the resources you may need along your MS journey.

If needed, the Above MS Support Coordinators offer a broad range of services:

- General MS information
- One-on-one MS support by phone
- Tips to support living with MS
- Insurance benefits investigation and research on financial assistance options
- Recommendations for free, nearby educational events that let you learn from experts and people living with MS
- Follow-up calls as necessary
- Support is available in Spanish

To talk to an Above MS Support Coordinator, call 1-800-456-2255. They can be reached Monday through Friday from 8:30 AM until 8:00 PM ET.

Facebook community
Connect with other people in the MS community online. This is a great way to learn more about MS, share your own experience, and find the latest in Above MS™ content.

Like the Above MS Facebook page for additional support and information.
Insurance and financial assistance support

Above MS Support Coordinators can help you understand your insurance coverage and try to identify the best financial assistance solution for you. Our goal is for no one to forgo treatment based solely on financial limitations.

Financial and insurance services include:

• Benefits investigation to clarify your coverage options
• Insurance counseling, including help navigating changes due to the healthcare reform law
• $0 Copay Program with no income requirements and no enrollment time limit for those who are eligible.*
  Call 1-800-456-2255 to see if you're eligible
• Infusion Copay Assistance Program for those who are eligible†
• Free Drug Program for eligible patients in need
• Support finding assistance through charitable organizations

*Depending on your income or, in some cases, if your medication is obtained from an out-of-network provider, there may be an annual cap that limits the amount of assistance that you can receive over one year. Federal and state laws and other factors may prevent or otherwise restrict eligibility. People covered by Medicare, Medicaid, the VA/DoD, or any other federal plans are not eligible to enroll. Please note that the $0 Copay Program provides a monthly supply of relapsing MS medication. You are eligible to enroll in the $0 Copay Program for as long as you are treated with a Biogen relapsing MS medication.

†You will be responsible for any cost associated with your infusion above the $100 per infusion assistance provided by the program. In order to participate in the program and get assistance, you must still meet the following requirements:
  • You have a financial responsibility or copay for your infusion
  • You are not a resident of Massachusetts, Michigan, Minnesota, or Rhode Island
  • You are not covered by any federal healthcare program, like Medicare, Medicaid, the VA/DoD, TRICARE®, and/or state medical or pharmaceutical assistance programs. You agree to tell Biogen immediately if you obtain coverage through programs listed above

TRICARE is a registered trademark of the Department of Defense, Defense Health Agency. All rights reserved.

To learn more about the financial services that are available, call one of our Above MS Support Coordinators at 1-800-456-2255 Monday through Friday from 8:30 AM until 8:00 PM ET.
Above MS Nurse Educators

Whether you’re just starting therapy or have been on therapy for a while, Above MS Nurse Educators are available by phone 24 hours a day, 7 days a week to provide extra support and to answer your questions. Support is available in Spanish. The Above MS™ program from Biogen also provides training for people taking an injectable Biogen treatment for relapsing MS.

Please keep in mind that your healthcare team is always your primary resource when it comes to your MS and your treatment.

Call 1-800-456-2255 to connect with an Above MS Nurse Educator 24/7, or sign up at AboveMS.com.

Above MS Nurse Educators are available throughout the United States to:

- Offer additional injection and treatment education through one-on-one guidance—at no cost to you
- Train you on administering your treatment and provide information on common side effects
- Provide training in your home or at another agreed-upon location
- Answer your questions about MS and common symptoms
- Follow up with your healthcare team about your injection experience
- Follow up with you to help further support you with proper injection technique

You can also access Above MS Nurse Educators through Biogen’s MS support app, Aby.
JOIN THE ABOVE MS PROGRAM

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Brought to you by Biogen

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