

Multiple Sclerosis and How We Can Help

You're not alone

Multiple sclerosis is a complex disease, and the Multiple Sclerosis Society of Canada is here to help. No one needs to face MS alone. In communities across Canada, our knowledgeable staff and volunteers provide information, support, educational events and other resources for people with MS and their loved ones.

Researchers funded by the MS Society are working hard to find the cause of MS, develop new and better treatments and ultimately find a cure for the disease.

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What is multiple sclerosis?

Multiple sclerosis (MS) is thought to be an autoimmune disease of the central nervous system (brain, spinal cord). The disease attacks myelin, the protective covering of the nerves, causing inflammation and often damaging the myelin. When this happens, the usual flow of nerve impulses along nerve fibres (axons) is interrupted or distorted. A wide variety of MS symptoms can happen as a result of the interruption, depending upon what part or parts of the central nervous system are affected. Damaged areas are called "lesions" or "plaques".

The types of symptoms vary greatly from person to person. They also vary in severity and duration. Symptoms might include fatigue, speech problems, visual disturbances, loss of balance, changes in sensation such as numbness or pain, bladder and bowel problems, mood changes, cognitive impairment and weakening or paralysis of any part of the body. The majority of people with MS do not experience all of these symptoms.

Anyone can get MS; however, it is most often diagnosed between the ages of 15 and 40, and females are more than three times as likely to develop MS as males. It is estimated that there are 100,000 Canadians living with multiple sclerosis.

There are different types of MS

The earliest form of MS is clinically isolated syndrome (CIS). CIS refers to a single episode of neurological symptoms suggestive of multiple sclerosis. Often, on investigation using MRI the doctor finds evidence of another abnormality in the brain or spinal cord. Having multiple attacks of symptoms defines relapsing-remitting MS (RRMS), the most common disease course at the time of diagnosis.

RRMS is characterized by unpredictable but clearly defined relapses (also known as attacks, exacerbations or flare-ups) during which new symptoms appear or existing ones get worse. In the period between relapses, recovery is complete or nearly complete to pre-relapse function, and this recovery persists for a clear period of time (remission).

Secondary-progressive MS (SPMS) follows a diagnosis of RRMS. Over time, distinct relapses and remissions become less apparent and the disease begins to progress steadily, sometimes with plateaus. Approximately half of the people with RRMS will develop SPMS within 10-20 years of diagnosis.

Primary-progressive MS (PPMS) is characterized by a slow accumulation of disability, without defined relapses.

Approximately 10 per cent of people diagnosed with MS have PPMS.

Progressive-relapsing MS (PRMS) is the rarest course of MS, occurring in only about 5 per cent of people diagnosed. People with this form of MS experience relapses with steadily worsening disease from the beginning.

Treatments for MS

MS medications can be divided into three categories.

▶ **Disease-modifying therapies** are drugs that impact the underlying disease. These therapies target some aspect of the inflammatory process of MS and appear to reduce the frequency and severity of relapses; reduce the number of lesions in the brain and spinal cord as seen on MRI; and slow down the accumulation of disability. Because of the way these medications work, they are used for treatment in individuals with relapsing-remitting MS and secondary-progressive MS, with relapses.

▶ **Relapse management medications (steroids)** help to decrease the severity and duration of MS relapses by reducing the inflammation that occurs in the central nervous system.

▶ **Symptom management medications** help ease many MS-related symptoms such as fatigue, spasticity and pain. These medications are available to people with all types of MS.

In addition, there are important non-medicinal strategies to improve quality of life for people living with MS, including appropriate exercise, physiotherapy, massage, stress-reduction techniques, among other wellness approaches. These non-medicinal strategies play a key role in managing all types of MS.

How we can help

The MS Society offers a variety of programs and services to help people affected by multiple sclerosis effectively manage and cope with the disease. Please note that programs and services vary from province-to-province.

- Information and referral
- Support and self-help groups
- Recreation, social and wellness programs
- Conferences, workshops and education programs
- Equipment and special assistance
- Government relations and advocacy

Contact us to learn about programs and services offered in your community.

Research: Hope for tomorrow

The MS Society funds promising avenues of research – both investigator driven and targeted – that focus on progression and therapies, cause and risk factors of MS, nerve damage and repair, and symptom management and quality of life. Approaches include laboratory research, clinical trials and research on aspects of healthy living. Many avenues are currently being pursued:

- Progressive MS
- Genetics
- Myelin repair
- MRI studies
- Paediatric MS studies
- Stem cell studies
- Immunology
- Vitamin D
- CCSVI

About the MS Society

To be a leader in finding a cure for multiple sclerosis and enabling people affected by MS to enhance their quality of life.

The MS Society provides services to people with multiple sclerosis and their families, and funds research to find the cause and cure for the disease. We have a membership of over 28,000 people and are the only national volunteer-led organization in Canada that supports both MS research and services.

Since our founding in 1948, the MS Society is primarily funded by the generous support of tens of thousands of dedicated individuals, companies and foundations in communities across Canada.

Join the movement. End MS.

Without the support of donors, event participants, corporate sponsors and volunteers, we would not be a leader in MS research nor be able to provide meaningful local programs and services to people affected by MS. We invite you to be part of the MS movement and join a dynamic group of Canadians in the fight to end MS.

- Become a member of the MS Society
- Be a part of the community by participating in MS Walk or MS Bike
- Volunteer for the MS Society
- Participate in MS Society government advocacy and help change policies for the better
- Become a one-time or monthly donor to the MS Society

How to reach us

Call toll-free in Canada: **1.800.268.7582**
MS Society of Canada Web: mssociety.ca
Email: info@mssociety.ca