



Multiple Sclerosis and How We Can Help

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 affected by MS. 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.

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. 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, numbness, pain, bladder and bowel problems, mood changes, cognitive impairment and weakening or paralysis of any part of the body. Most people with MS do not experience all of these symptoms.

Anyone can get MS; however, it is most often diagnosed between the ages of 20 and 49, and females are more than three times as likely to develop MS as males. It is estimated that there are more than 77,000 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. 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).

Most people with relapsing-remitting will eventually transition to a phase of the disease called **secondary progressive (SPMS)**. This phase of the disease has progressive worsening and fewer relapses, though sometimes there are occasional relapses and minor remissions and plateaus.

Primary-progressive MS (PPMS) is characterized by a slow accumulation of disability, without defined relapses. It may stabilize for periods of time, and even offer minor temporary improvement but overall, there are no periods of remission. Approximately 15 per cent of people diagnosed with MS have PPMS. About five per cent of people diagnosed with PPMS experience occasional relapses with steadily worsening disease from the beginning.

Treatments for MS

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 forms of MS.

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 nonmedicinal 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 MS effectively manage and cope with the disease. Programs and services vary from province-to-province.

- Information and referral
- Support and self-help groups
- Recreation, social and wellness programs
- Conferences and education programs
- Quality of Life Grants
- Government relations and advocacy

Research: Hope for tomorrow

Research supported by the MS Society of Canada is focused on several major areas – 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. Much of MS research is so-called “basic” research, with researchers trying to understand how the complex central nervous system

MS Knowledge Network

The MS Knowledge Network is the MS Society of Canada’s hub of knowledge, lead by a team of MS navigators, who provide trusted, consistent, quality MS information and support. MS Navigators are available to assist anyone in Canada, from 8am to 8pm ET, Monday to Friday.

Phone: 1-844-859-6789

Email: msnavigators@mssociety.ca

Live Web Chat is available Monday to Friday at certain times of the day. Please visit www.mssociety.ca