

# Multiple Sclerosis

Each person has specific toxic exposures along with dietary and genetic weaknesses that are causing their symptoms. Toxic exposures can be inorganic like heavy metals, DDT, VOC's, Radio-active waste and any other chemical like food additives or pesticides and fertilizers sprayed on the foods. They can also be organic or living organisms like parasites, bacteria, viruses, or fungi. All the different possible combinations make it difficult to accurately address issues unless you have experienced medical professionals mapping through all your different clinical symptoms.

Dr. Marilyn Tucker founded The Vibrant Health Community to do Symptom Mapping to be able to bring a completely personalized plan for each person. When you join the Vibrant Health Community you have your own medical team of doctor, pharmacist and health coach. This Team specializes in Integrative-Complementary Medicine. They will work with your personal physician to bring you to a place of as much natural healing as your body will allow. For those of you that have health issues that require prescription medications, your Team can help introduce natural measures that can reduce the imbalances and complications that inevitably come with prescription medication. This can reduce side effects and possible additional drugs having to be introduced.

## Definition

Multiple sclerosis is an autoimmune disease that affects the central nervous system (the brain and spinal cord).

## Alternative Names

MS

## Causes, incidence, and risk factors

Multiple sclerosis (MS) usually affects woman more than men. The disorder most commonly begins between ages 20 and 40, but can be seen at any age.

The exact cause is not known, but MS is believed to result from damage to the myelin sheath, the protective material which surrounds nerve cells. It is a progressive disease, meaning the nerve damage (neurodegeneration) gets worse over time.

In addition to nerve damage, another part of MS is inflammation. Inflammation occurs when the bodies own immune cells attack the nervous system. The inflammation destroys the myelin, leaving multiple areas of scar tissue (sclerosis). It also causes nerve impulses to slow down or become blocked, leading to the symptoms of MS. Repeated episodes, or flare ups, of inflammation can occur along any area of the brain and spinal cord.

Symptoms vary because the location and extent of each attack varies. Usually episodes that last days, weeks, or months alternate with times of reduced or no symptoms (remission).

Recurrence (relapse) is common although non-stop progression without periods of remission may also occur.

Researchers are not sure what triggers an attack. Patients with MS typically have a higher number of immune cells than a healthy person, which suggests that an immune response might play a role. The most common theories point to a virus or genetic defect, or a combination of both. There also appears to be a genetic link to the disease.

MS is more likely to occur in northern Europe, the northern United States, southern Australia, and New Zealand than in other areas. Geographic studies indicate there may be an environmental factor involved.

People with a family history of MS and those who live in a geographical area with a higher incidence rate for MS have a higher risk of the disease.

## Symptoms

- Decreased ability to control small movements
- Decreased attention span
- Decreased coordination
- Decreased judgment
- Decreased memory

- Depression
- Difficulty speaking or understanding speech
- Dizziness
- Double vision
- Eye discomfort
- Facial pain
- Fatigue
- Loss of balance
- Movement problems - slowly progressive; beginning in the legs
- Muscle atrophy
- Muscle spasms (especially in the legs)
- Muscle spasticity (uncontrollable spasm of muscle groups)
- Numbness or abnormal sensation in any area
- Pain in the arms or legs
- Paralysis in one or more arms or legs
- Slurred speech
- Tingling
- Tremor in one or more arms or legs
- Uncontrollable rapid eye movements
- Urinary frequency (frequent need to urinate)
- Urinary hesitancy (difficult to begin urinating)
- Urinary urgency (strong urge to urinate)
- Urine leakage (incontinence)
- Vertigo
- Vision loss -- usually affects one eye at a time
- Walking/gait abnormalities
- Weakness in one or more arms or legs

Additional symptoms that may be associated with this disease:

- Constipation
- Hearing loss

Note: Symptoms may vary with each attack. They may last days to months, then reduce or disappear, then recur periodically. With each recurrence, the symptoms are different as new areas are affected. Fever can trigger or worsen attacks, as can hot baths, sun exposure, and stress.

## Signs and tests

Symptoms of MS may mimic many other neurologic disorders. Diagnosis is made by ruling out other conditions.

A history of at least two attacks separated by a period of reduced or no symptoms may be a sign of relapsing-remitting MS.

If the health care provider can see decreases in any functions of the central nervous system (such as abnormal reflexes), a diagnosis of MS may be suspected.

A neurological exam may show localized decreases in nerve function. This may include decreased or abnormal sensation, decreased ability to move a part of the body, speech or vision changes, or other loss of neurologic functions. The type of neurologic deficit usually indicates the location of the damage to the nerves.

There may be a positive Babinski's reflex.

Eye examination may show abnormal pupil responses, changes in the visual fields or eye movements, rapid eye movements triggered by movement of the eye, decreased visual acuity, or problems with the internal structures of the eye.

Tests that indicate or confirm multiple sclerosis include:

- Head MRI scan

- [Spine MRI](#)
- [Lumbar puncture](#) (spinal tap)
- Cerebrospinal fluid tests, including [CSF oligoclonal banding](#)

## Treatment

There is no known cure for multiple sclerosis at this time. However, there are promising therapies that may slow the disease. The goal of treatment is to control symptoms and maintain a normal quality of life.

## Expectations (prognosis)

The outcome is variable and unpredictable. Although the disorder is chronic and incurable, life expectancy can be normal or nearly so. Most people with MS continue to walk and function at work with minimal disability for 20 or more years.

The factors felt to best predict a relatively benign course are female gender, young age at onset (less than 30 years), infrequent attacks, a relapsing-remitting pattern, and low burden of disease on imaging studies.

The amount of disability and discomfort varies with the severity and frequency of attacks and the part of the central nervous system affected by each attack. Commonly, there is initially a return to normal or near-normal function between attacks. As the disorder progresses, there is progressive loss of function with less improvement between attacks.

## Complications

- Progressive disability
- [Urinary tract infections](#)
- Side effects of medications used to treat the disorder

## Calling your health care provider

Call your health care provider if you develop any symptoms of MS, as he or she is the only one who can distinguish multiple sclerosis from other serious disorders such as stroke or infection.

Call your health care provider if symptoms progressively worsen despite treatment.

Call your health care provider if the condition deteriorates to the point where home care is no longer possible.

## References

Goetz, CG, ed. Multiple Sclerosis. In: *Textbook of Clinical Neurology*. 2nd ed. Saunders. Philadelphia, PA: 2003.