

# MS Fitness Specialist

## Module 3

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### MS Types

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#### Learning Objectives

1. Learn the 4 types of MS

## Chapter Three

# Types of Multiple Sclerosis

Everyone with MS is different. How quickly the disease progresses and the symptoms one experiences won't necessarily be the same as someone else's with the condition. MS is a disease that starts early in life but progresses over time.

Patients usually experience a first neurologic event suggestive of MS known as Clinically Isolated Syndrome (CIS). It lasts for at least 24 hours, with symptoms and signs indicating either a single lesion or more than one lesion within the central nervous system. (Kappos, et al., 2006). CIS is a first episode of neurologic symptoms caused by inflammation and demyelination in the central nervous system. The episode, which by definition must last for at least 24 hours, is characteristic of multiple sclerosis but does not yet meet the criteria for a diagnosis of MS because people who experience a CIS may or may not go on to develop MS. When CIS is accompanied by lesions on a brain MRI (magnetic resonance imaging) that are similar to those seen in MS, the person has a high likelihood of a second episode of neurologic symptoms and diagnosis of relapsing-remitting MS. When CIS is not accompanied by MS-like lesions on a brain MRI, the person has a much lower likelihood of developing MS. Individuals with CIS who are considered at high risk for developing MS may now be treated with a disease-modifying therapy (DMT) that has been approved by the U.S. Food and Drug Administration (FDA) for that purpose. Early treatment of CIS has been shown to delay onset of MS.

## Types of MS

There are 4 types of MS. They're named according to the way the disease acts on the body over time (Hooper, 2011). (See Figure 3.1)

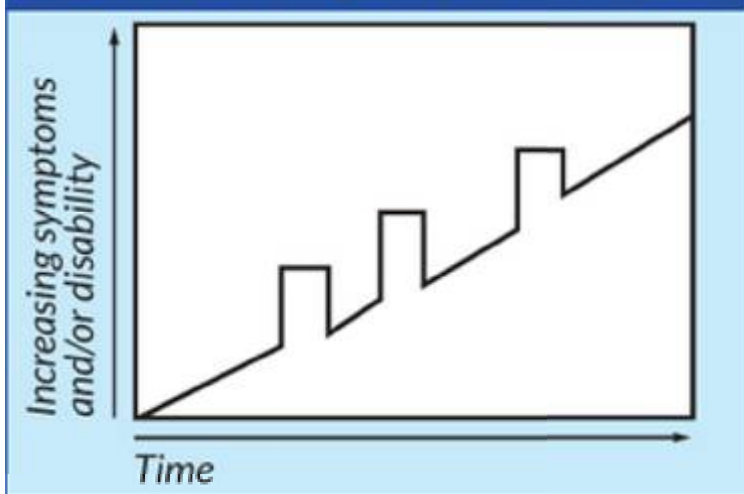
**Relapsing-Remitting MS (RRMS).** This is the most common form of multiple sclerosis. About 85% of people with MS are initially diagnosed with RRMS. People with RRMS have temporary periods called relapses, flare-ups or exacerbations, when new symptoms appear.

**Secondary-Progressive MS (SPMS)** In SPMS, symptoms worsen more steadily over time, with or without the occurrence of relapses and remissions. Most people who are diagnosed with RRMS will transition to SPMS at some point.

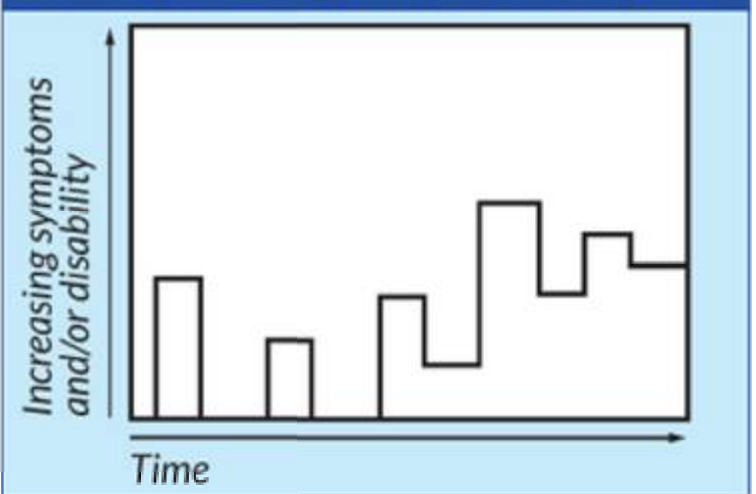
**Primary-Progressive MS (PPMS)** This type of MS is not very common, occurring in about 10% of people with MS. PPMS is characterized by slowly worsening symptoms from the beginning, with no relapses or remissions.

**Progressive-Relapsing MS (PRMS)** A rare form of MS (5%), PRMS is characterized by a steadily worsening disease state from the beginning, with acute relapses but no remissions, with or without recovery.

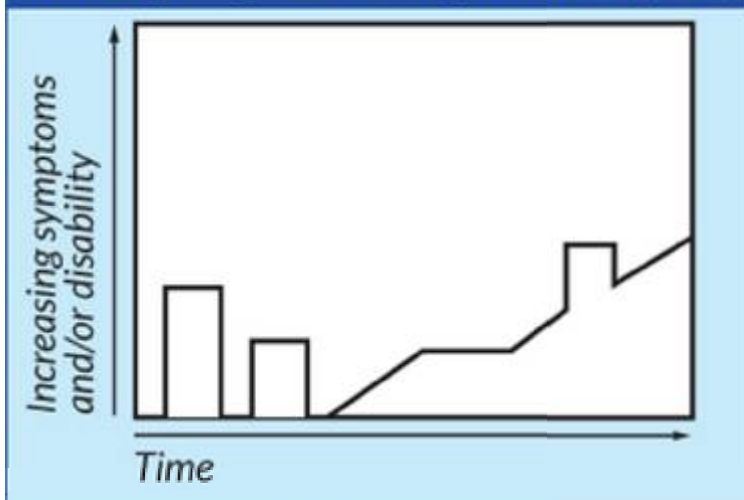
**Progressive-Relapsing Multiple Sclerosis (PRMS)**



**Relapsing-Remitting Multiple Sclerosis (RRMS)**



**Secondary-Progressive Multiple Sclerosis (SPMS)**



**Primary-Progressive Multiple Sclerosis (PPMS)**

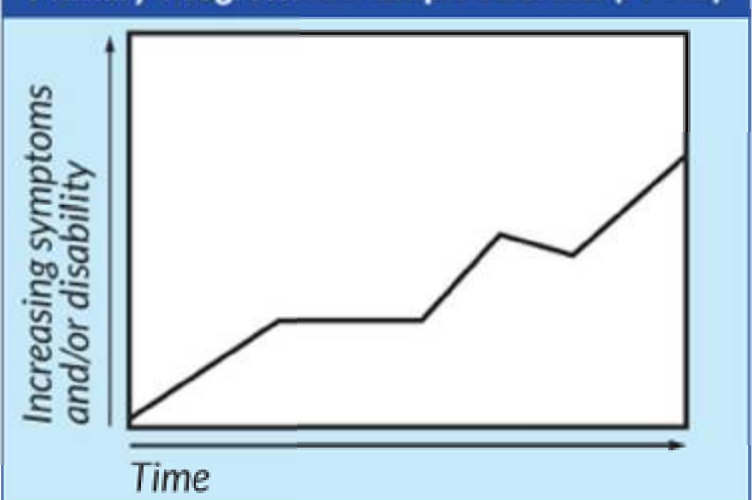


Figure 3.1