

April 2022 Newsletter



Dizziness, Vertigo and MS

Dizziness is a common MS symptom, affecting [over half](#) of people living with the disease. Some (approximately [20 percent](#)) also have episodes of vertigo, which is an intense spinning sensation that can last anywhere from a few seconds to a few days. Vertigo may be accompanied by nausea, vomiting, ringing in the ears ([tinnitus](#)), abnormal or jerking eye movements ([nystagmus](#)), sweating or headaches. Balance problems in MS are due to nerve damage (lesions) along the pathways to the brain that coordinate the input that is needed to maintain balance. Ongoing dizziness and vertigo can interfere with daily tasks, increase the risk of falls, and can even become disabling. Anyone struggling with these symptoms should take heart, however, as there are a number of ways to ease them.



Many body systems must work together to maintain the body's equilibrium. When any of these systems aren't functioning well, instability can occur. Sensory information from the eyes, muscles, tendons, joints, and balance organs in the inner ear (the [vestibular system](#)) are all sent to the brain stem. The vestibular system is composed of three canals and two sacs filled with fluid. The fluid shifts when the head changes position and stimulates hair

cell receptors in the inner ear to tell the brain what's happening. The brain stem also gets information from other parts of the brain (the cerebellum and cerebral cortex), mostly about previous experiences that have affected balance. Once the brain stem sorts out all of this information, it sends messages to the eyes and other parts of the body to move in a way that will help maintain balance and have clear vision while moving. The brain can control balance by using the information that is most important for a particular situation. For example, in the dark, when the information from the eyes is reduced or might not be accurate, the brain will use more information from the legs and inner ear. If an individual is walking on a sandy beach during the day, the information coming from their legs and feet will be less reliable and their brain will use information from their visual and vestibular systems more.



While dizziness and vertigo in MS are usually due to the growth of an existing lesion or the appearance of a new lesion in the brain stem or cerebellum (making it difficult to send messages to the rest of the body), they can also be caused by other factors. Some people with MS experience dizziness and vertigo as a side effect of medications they are taking, whether for MS or for another condition. Other conditions may also cause these troubling symptoms, such as bacterial/viral infections, dehydration, stress, anxiety, high and low blood pressure, blood vessel disease, stroke, migraines or inner-ear problems. A specific type of vertigo called [benign paroxysmal positioning vertigo](#) (BPPV) often occurs when crystals of calcium carbonate collect in parts of the ear canal that affect the vestibular system. These crystals can dislodge from the tiny hairs in the ear when an individual moves their head, causing the hairs to move and sending false signals to the brain that result in vertigo.

In order to effectively treat dizziness or vertigo, it's important to know the cause. These symptoms should be assessed by a health care professional before starting treatment. Medications used to treat motion sickness are often helpful. This includes antihistamines, such as [Antivert](#) (meclizine), [Dramamine](#) (dimenhydrinate) and [Benadryl](#) (diphenhydramine). In cases of severe vertigo, a physician may prescribe a short course of high-dose [corticosteroids](#) to reduce any inflammation in the nervous system that may be contributing. BPPV is treated with a procedure called the [Epley maneuver](#) that involves manipulating the head in a series of distinct movements in order to reposition the above-mentioned crystals that are causing the problem. A number of rehabilitation specialists

can also provide advice and teach techniques to improve balance and coordination. [Vestibular rehabilitation therapy](#) is a specialized form of physical therapy that is used to improve balance. [Research](#) shows these exercises are effective at reducing dizziness in MS. An occupational therapist may also be able to recommend methods to stay safe during an episode of dizziness/vertigo, such as removing rugs to reduce the risk of falls and installing handrails.



A number of preventive measures can be taken that may make living with dizziness or vertigo a bit easier. It's important to clear any tripping hazards around the house (especially throw rugs). Staying active is not only a good idea in general, but exercise can also help with balance issues. Keeping a journal and noting the times when these symptoms are most likely may be a helpful strategy so that activities

can be planned at optimum times.

When vertigo occurs, the following steps can help you stay safe and feel more comfortable:



Sit until it passes. Lean your head on a wall or the back of a chair.



Do not move

Avoid moving your head or body position.



Keep a support device nearby in case you must move around.



Dim bright lights and don't try to read or watch TV.



NO STAIRS

Avoid stairs.



Don't drive.



Move slowly once you feel better.

If vertigo strikes during the night, sit up straight, turn on soft lighting, and remain still until you feel better. If vertigo returns when you lie down, try sleeping in a comfortable recliner.



Dizziness and vertigo in people with MS are not usually permanent, they typically come and go. Nonetheless, these sensations can be very unsettling. In addition, balance issues increase the risk of injury due to falls, especially for people whose MS symptoms already include trouble walking, weakness, and fatigue. It's important for people with MS to work with their physician to determine the cause of any dizziness or vertigo they may be experiencing. Once the cause is known, he or she can offer advice on an effective treatment plan to minimize their impact on daily life.

