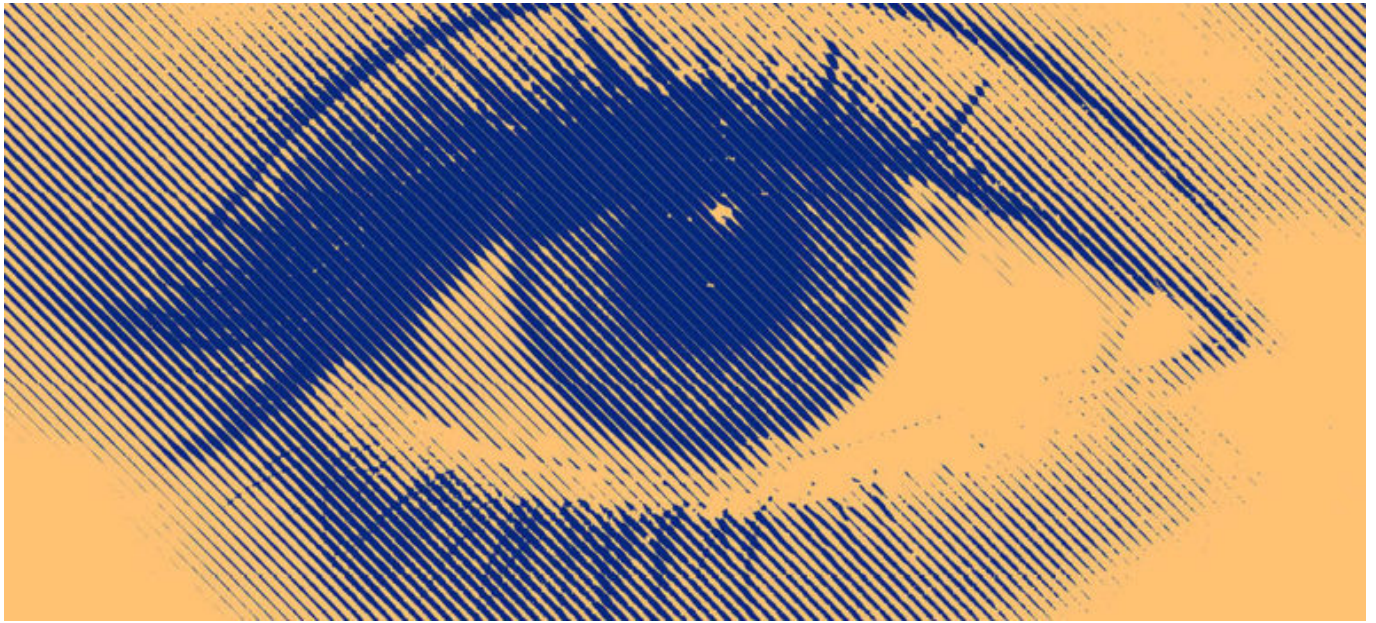


Boost your eye-Q



Most people with multiple sclerosis experience vision problems. Here are ways to help protect your peepers.

by Aviva Patz

Matt Cavallo of Phoenix, Arizona, was walking his dog one cold February morning when he noticed a black speck in his right field of vision. Over the next 24 hours, the speck ballooned, nearly blocking his sight. Even dim light caused searing pain, as did the slightest eye movement. On the way to his doctor's office, Cavallo taped business cards to his sunglasses. "I felt like a vampire being exposed to light," says Cavallo, who had been diagnosed a year earlier with relapsing-remitting multiple sclerosis. "I had to cringe and hide and protect myself."

The diagnosis: optic neuritis, one of several common visual disturbances affecting people with MS. "In the course of living with multiple sclerosis, 80% to 90% of people will have some sort of visual issue along the way," explains Georgetown neurology professor Robert K. Shin, MD, director of the Georgetown Multiple Sclerosis and Neuroimmunology Center. A vision problem may be the first symptom that leads to an MS diagnosis.

Common vision problems in multiple sclerosis

New vision symptoms could be a sign of a flare-up or MS activity that's not adequately controlled, so see your MS healthcare provider if you experience any of these symptoms.

Optic neuritis

Some 70% of people with MS experience vision loss from optic neuritis in one or both eyes, according to Padmaja Sudhakar at the University of Kentucky. “Optic neuritis happens as demyelination affects the optic nerves,” she explains. The optic nerves are a highly myelinated cable, only an inch or two long, connecting the eyes to the brain. If the optic nerve is affected, there is no other way for vision to get to the brain.

Symptoms: What may begin as hazy or blurry vision can proceed to significant vision loss within hours or days. Ninety percent of people with optic neuritis experience an aching or poking pain on eye movement and sensitivity to light, Shin says.

Treatment: A short course of corticosteroids, a potent anti-inflammatory medication, may speed up recovery, which could take five weeks to up to a year.

Diplopia, or double vision

Some 5% to 15% of people with MS experience double vision from demyelination of brainstem pathways controlling eye movements. “The eyes are like synchronized swimmers, so we usually see one image,” says Robert K. Shin at Georgetown MS and Neuroimmunology Center. “If there’s demyelination in the brainstem, which coordinates the nerves and muscles in the eye, the eyes won’t move together — each eye will see something slightly different.”

Symptoms: A hallmark of double vision is that if you cover one eye, you’ll see a single image, but with both eyes, you’ll see double.

Treatment: Double vision may resolve on its own within weeks or months, but if not, glasses with prisms can help align the eyes. You can also wear an eye patch.

Nystagmus

Some 15% to 20% of people with MS may develop nystagmus, a “rhythmic oscillation of the eyes,” when MS lesions affect the cerebellum or brainstem, says Sudhakar.

Symptoms: A rapid, involuntary shaking of the eyes — up and down, side to side or rotating. “If you imagine not holding a video camera still, the image shakes,” Shin says. This shaking of vision is called oscillopsia.

Treatment: Nystagmus may improve over time on its own. Medications — baclofen, clonazepam, gabapentin used off-label — may help reduce the shaking, but they can be sedating.

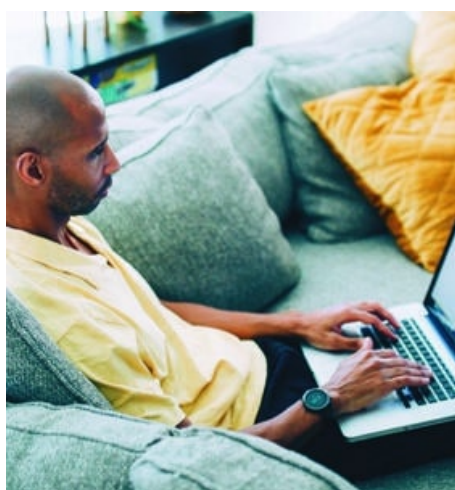
If you have MS, you should be scheduling comprehensive eye exams once or twice a year to treat any other vision issues and otherwise support your vision. “There may be silent changes in your eyes related to your disease that you might not be aware of,” Sudhakar says.

Like other MS-related flare-ups, vision problems often clear up over time, though it’s not

uncommon to experience residual effects. Cavallo, for example, still sees “squiggles” coming off lights at night. Fortunately, there are tips, tricks and tools to help you manage these symptoms. Here’s what you need to know.

Daily activities could be making it worse

Although vision often returns after these episodes, people with MS “may be left with some kind of visual dysfunction,” says Padmaja Sudhakar, MD, associate professor of neurology and ophthalmology at the University of Kentucky. According to the National Multiple Sclerosis Society, deficits can include diminished contrast — especially in low light — less color saturation, poor depth perception and dimming or blurring vision when fatigued or overheated.



Atiba Malik, who lives with MS, works on his laptop. Photo: Jackie Ibe Queano

One everyday activity that can worsen residual eye effects in people with MS is staring at a computer screen or smartphone, as many of us do. The culprit is eye strain. And while it won’t damage your eyes, Shin says, it can make existing symptoms feel worse.

What doesn’t help

Sudhakar suggests avoiding hot showers or exercise with extreme changes in temperature that can cause vision to fluctuate, especially after optic neuritis. “This is called ‘Uthoff’s phenomenon,’” she says. “It doesn’t mean you have another attack of vision loss. You should just have that awareness and avoid these circumstances to the extent possible.”

Ultimately, you don’t want visual issues to limit your activities or dampen your quality of life. “Most individuals with MS should not experience disability related to visual issues,” Shin says. “You don’t need to change your behavior or be afraid of activity.”

Work with your healthcare provider to deal with existing symptoms, Shin adds, and see a specialist to find the strategies and aids that will help maintain your eye health and vision over time.

How to manage vision problems

The best fix for you will depend on your particular vision problem, but these tips and tools from [CanDo-MS.org](https://www.cando-ms.org) may help you see and read more easily.

Task	Tip	Tools
For reading, writing or computer work	Magnify the text	Use a handheld illuminated magnifier or portable electronic magnifier. Upgrade to a larger computer screen, TV or phone.
	Enhance the lighting	Add full-spectrum lighting (24 watts or higher) to decrease glare and increase contrast.
	Control glare and boost contrast	Wear blue-light blocking glasses or polarized lenses, or try special contact lenses with filters that help with color vision loss.
For better balance and mobility	Use mobility aids	Use a cane or rolling walker with a seat to aid balance, boost endurance, flag changes in terrain and lower the risk of falls. Some mobility aids may be covered by insurance.
	Make safer choices if lighting is poor	When walking and taking the stairs, opt for a ramp, escalator or elevator if possible.
	Dress sensibly	Wear supportive, non-slip shoes and keep hemlines well above the floor.
For safer driving	Enhance peripheral vision	Add a panoramic mirror to the rearview mirror and expanded-view mirrors to the sideview mirrors.
	Boost distance vision	Use a bioptic telescope lens system as needed atop your regular glasses to help you zoom in on signs, traffic lights and pedestrians.
	Control glare	Wear glare-control sunglasses to improve contrast on the road.

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