

Study: Common virus + low sunlight exposure may increase risk of MS

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New research suggests that people who are exposed to low levels of sunlight coupled with a history of having a common virus known as mononucleosis may be at greater odds of developing multiple sclerosis (MS) than those without the virus. The research is published in the April 19, 2011, print issue of *Neurology*, the medical journal of the American Academy of Neurology.

"MS is more common at higher latitudes, farther away from the equator," said George C. Ebers, MD, with the University of Oxford in the United Kingdom and a member of the American Academy of Neurology. "Since the disease has been linked to environmental factors such as low levels of sun exposure and a history of infectious mononucleosis, we wanted to see whether the two together would help explain the variance in the disease across the United Kingdom."

Infectious mononucleosis is a disease caused by the Epstein-Barr virus, which is a Herpes virus that is extremely common but causes no symptoms in most people. However, when a person contracts the virus as a teenager or adult, it often leads to infectious mononucleosis. The body makes vitamin D when exposed to ultraviolet B (UVB) light.

For the study, researchers looked at all [hospital admissions](#) to National Health Service hospitals in England over seven years. Specifically, they identified 56,681 cases of [multiple sclerosis](#) and 14,621 cases of infectious mononucleosis. Scientists also looked at NASA data on ultraviolet intensity in England.

The study found that adding the effects of sunlight exposure and mononucleosis together explained 72 percent of the variance in the occurrence of MS across the United Kingdom. Sunlight exposure alone accounted for 61 percent of the variance.

"It's possible that [vitamin D deficiency](#) may lead to an abnormal response to the Epstein-Barr virus," Ebers said.

He noted that low [sunlight exposure](#) in the spring was most strongly associated with MS risk. "Lower levels of UVB in the spring season correspond with peak risk of MS by birth month. More research should be done on whether increasing UVB exposure or using vitamin D supplements and possible treatments or vaccines for the Epstein-Barr [virus](#) could lead to fewer cases of MS."

Provided by American Academy of Neurology

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