

Severe Viral Infections in Teens May Trigger Multiple Sclerosis

Hospital-diagnosed infections of youth between ages 11 and 19 are associated with an elevated risk of developing MS.

September 23, 2021 By [Jeanette L. Pinnace](#)

Previous studies show that certain infections increase one's risk of developing [multiple sclerosis](#) (MS). Now, study [findings published in the journal Brain](#) reveal that serious [brain](#), spinal cord and respiratory [infections](#) that occur in adolescents between ages 11 and 19 were linked with a higher risk for MS, reports [TheConversation.com](#).

Multiple sclerosis is a disease that develops when the [immune system](#) malfunctions and attacks the nerves, which can affect how one sees, moves, thinks or feels.

In a previous investigation, researchers learned that adolescents under age 20 who were diagnosed with [pneumonia](#) in a hospital experienced an escalated risk for MS. To determine whether other types of infection were connected with the onset of the disease, a second group of scientists reviewed the medical records of almost 2.5 million individuals born in Sweden between 1970 and 1994.

Researchers learned that about 4,000 of these patients were diagnosed with MS after age 20. Of this number, 19% were diagnosed with an infection in a hospital (indicating relative severity) between their birth and their 10th birthday, and 14% were diagnosed with an infection in a hospital between ages 11 and 19.

The majority of hospital-diagnosed infections experienced before age 11 were not linked with a subsequent diagnosis of MS. However, those between ages 11 and 19 exhibited an elevated risk for MS.

Findings confirmed that not all types of infections were linked to MS. But scientists noted that brain and spinal cord infections increased MS risk the most. In addition, respiratory infections during adolescence were associated with the [disease](#) and upped risk by 51%.

“Our study provides further evidence that adolescence is a period of heightened susceptibility to exposures linked with MS risk and that there can be many years between exposure and MS diagnosis,” said Scott Montgomery, an honorary professor of epidemiology at University College

London, an investigator involved in both studies. “These results help us to better understand the types of exposures that may increase the risk of MS. It may be worthwhile considering MS as a potential diagnosis in someone displaying neurological symptoms if they had a serious infection in adolescence.”

But of those individuals who experience serious infections during their teen years only about 1% develop multiple sclerosis. This is because additional factors, such as biological predisposition to the disease, play a role in its development.

Researchers plan further studies to learn whether those with a genetic susceptibility to MS have a stronger immune response to infections, necessitating hospitalization.

To learn how multiple sclerosis affected the lives of two prominent [African-American](#) entertainers, read “[Personal Best](#)” and “[Former Boyz II Men member Michael McCary Discloses He Has Multiple Sclerosis.](#)”

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