

Living near a major road increases the likelihood of developing a neurological disorder such as Alzheimer's, Parkinson's and multiple sclerosis (MS) according to research published in the journal *Environmental Health*.

<https://ehjournal.biomedcentral.com/articles/10.1186/s12940-020-0565-4>

There is little known about the air quality risk factors associated with these disorders, so researchers at the University of British Columbia set out to investigate the link between them and air pollution.

The researchers analyzed data from 678,000 adults between the ages of 45 – 84 who lived in Vancouver between 1994 to 1998 and estimated individual exposure to road proximity, air pollution, noise and green space, based on each person's postcode.

During the follow-up period, the researchers identified 13,170 cases of dementia, 4,201 cases of Parkinson's and 658 cases of MS.

Based on this, the researchers found that living less than 50 meters from a major road or less than 150 meters from a motorway is associated with a 14% increased risk in developing dementia, Parkinson's, Alzheimers and MS due to the increased exposure to air pollution.

When the researchers analyzed proximity to green space, they found that the effect of air pollution on neurological disorders was reduced, which suggests that living near green spaces can have a protective effect.

Air pollution is known to trigger neuroinflammation which is the immune response of the brain to fight an invasion of toxins. It can become over-active and cause damage to healthy tissue, which can consequently lead to neurological damage.