

The Health Hazards of Air Pollution

California USC researchers estimate that more than 20% of dementia cases worldwide may be due to air pollution. You see, in areas where there's heavy traffic and exhaust fumes, the air is loaded with "particulate matter," or PM. These are tiny particles of toxins like sulfate, nitrate, ammonium, black carbon and heavy metals. They're 30 times smaller than the width of a human hair. And when it comes to toxins, size matters. The smaller the particles, the more oxidative stress they cause in your cells.

But there's another reason...

Because they're so small, they can travel along nerve byways directly to your brain after you inhale them through your nose. Once there, they begin to wreak havoc.

A 2015 analysis of MRI brain scans by researchers at Harvard Medical School found that the closer people lived to a major road, the more their brains shrank.

The Lancet published a study that looked at dementia rates in the Canadian province of Ontario. Researchers found that people living within 50 meters of a major road — where levels of PM are often 10 times higher than just 150 meters away — were 12% more likely to develop dementia than people living more than 200 meters away.

For more information, read the study by *Environmental Health Perspectives* by going to: <https://ehp.niehs.nih.gov/doi/10.1289/EHP124>