

Traffic Makes Us Dumber: Scientists Say Car Exhaust Causes Brain Damage

Brian Merchant (@bcmerchant)

Transportation / Cars

November 8, 2011



Scientists are finding that traffic exhaust might be going right to your head. The particulate pollution that vehicles emit has long been known to cause a host of respiratory woes, like asthma and lung disease, especially in heavily congested areas. Now, as detailed in **a disturbing report in today's Wall Street Journal**,

researchers are finding that a growing body of evidence suggests that car exhaust causes nothing less than brain damage.

The Journal's report is horrifying, even as its subjects note that the data in a lot of these studies is still new. After all, the implications of news like "New public-health studies and laboratory experiments suggest that, at every stage of life, traffic fumes exact a measurable toll on mental capacity, intelligence and emotional stability" are severe indeed.

To summarize (read [the entire story for all the gory details](#)) scientists are finding that exposure to vehicle exhaust can injure brain cells and impair learning ability in people of every age, shape, and size. Researchers find that babies whose mothers were exposed to higher levels of traffic exhaust routinely have lower IQs than their peers, and are more likely to develop anxiety, depression, and learning disorders. Some experts link higher levels of air pollution to autism based on correlations in their data.

People exposed to exhaust even for short periods of time have been found to undergo chemically motivated behavior changes -- often manifested in higher stress levels -- while those exposed for longer periods of time have experienced memory loss and impaired reasoning capabilities. One study found that folks exposed in the long term to "higher levels of traffic-related particles and ozone had memory and reasoning problems that effectively added five years to their mental age."

This is pretty horrifying stuff, to say the least. On a macro level, it helps build a powerful argument for seeking policies that reduce traffic congestion, tightening

pollution regulations, and accelerating the re-imagining of our car-centric approach to transportation.

On a local level, discouraging traffic has already been shown to have a tangible impact on some communities: The decongesting of Times Square, for instance, reduced air pollution by 63% in the area. And now, it's increasingly looking like such traffic-curbing policies will be vital not just to improving the livability of communities -- but to protecting both the lungs and the very mental health of those who reside in them. The case for more and better public transportation, more aggressive congestion pricing schemes, and, yes, improved biking and pedestrian environments, has never been stronger.

<http://www.treehugger.com/cars/your-brain-traffic-fumes.html>