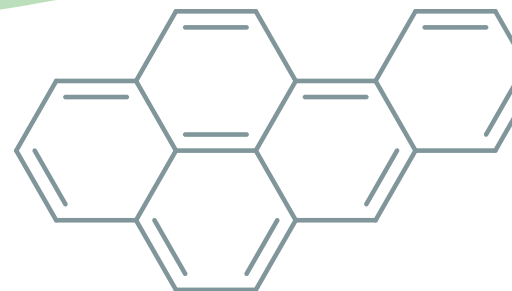


9/11 Exposure and Links To Cognitive Impairment, Including Alzheimer's Disease

Research conducted by the World Trade Center (WTC) Health Registry suggests there may be a connection between acute exposure to dust, debris and hazardous chemicals during 9/11 and neurocognitive and motor dysfunctions that resemble the typical features of neurodegenerative disease among thousands of first responders and survivors.

Several studies have shown an increased risk of conditions such as mild cognitive impairment (MCI), Alzheimer's disease and Parkinson's disease among people who were at ground zero. A combination of airborne pollutants, including heavy metals and carcinogens (cancer-causing chemicals), likely contributed to nervous system damage over time. These findings show the long-lasting health consequences of 9/11 and highlight the need for ongoing monitoring and health care support for survivors.



Study findings include:

- Vapor, smoke and dust exposures included significant levels of polycyclic aromatic hydrocarbons (PAHs), which are chemicals found in coal, crude oil and gasoline. These chemicals were detected at several WTC sites. PAHs can stay in the body for weeks and eventually reach the brain.
- Twenty years later, studies have identified higher-than-expected MCI levels in people who were exposed to 9/11. Symptoms of MCI include losing things, forgetting meetings or appointments, and having more trouble coming up with words than other people who are the same age. Difficulties with movement and loss of smell may be associated with MCI. Various brain diseases may develop, including Alzheimer's disease.

To learn more about other 9/11-related physical and mental health conditions, visit nyc.gov/911health and click on the **Enrollees** tab, then **Health Conditions**.

Contact **988** for 24/7 mental health and substance use support: Call or text **988** or chat at 988lifeline.org/chat.

This material is provided by the New York City Department of Health and Mental Hygiene's WTC Health Registry. For questions, email wtchr@health.nyc.gov.

More work is needed to determine the causes and rate of cognitive decline among people who were exposed to 9/11.