Health Concerns After 9/11

Shortly after 9/11, the NYC Department of Health and Mental Hygiene (NYC Health Department) recognized the need for a registry to track health impacts among people who were exposed to the WTC disaster. Providers, scientists, and community and labor stakeholders also expressed concerns about the health impacts of 9/11. A scientific advisory committee was created.

Registry Is Established

The NYC Health Department received federal funding from the Federal Emergency Management Administration and CDC’s Agency for Toxic Substances and Disease Registry (ATSDR) to establish the Registry in collaboration with the ATSDR. Labor and community advisory committees were formed over time.

Wave 1 Enrollment Survey

More than 71,000 rescue and recovery workers, area workers and residents, and passersby who enrolled in the Registry were interviewed about their physical and mental health symptoms and conditions as well as their exposure to and experiences regarding 9/11.

Wave 2 Survey

In addition to follow-up health questions about the Wave 1 Survey, the Wave 2 Survey had other questions on dust cloud exposure and potential hearing loss after 9/11.

Combined Survey Findings

Combined findings from the Wave 1 and Wave 2 surveys were reported in an article published by the Journal of the American Medical Association. Notably, 25% of enrollees had both 9/11-related asthma and PTSD.

Wave 3 Survey

The Registry collected updated information on enrollees’ physical and mental health, including functioning and disability, unmet health care, and for the first time, depression.

Wave 4 Survey

The Registry collected updated information on enrollees’ physical and mental health for 14 years after 9/11. Enrollees who had asthma after 9/11 were asked to complete an additional Asthma Survey.

Wave 5 Survey

Building upon data from four previous Wave surveys, the Registry added new topics to the Wave 5 Survey, including sleep quality, Alzheimer’s disease, oral health, menstrual history and vaping.

First Registry Research

Findings from the Registry’s publication “Surveillance for World Trade Center Disaster Health Effects Among Survivors of Collapsed and Damaged Buildings,” such as an association between exposure to 9/11 and hearing loss, stroke and psychological distress, were validated in later Registry studies.

Wave 1 Survey Findings

The Registry released more findings from its 2003 and 2004 enrollment interviews. Notably, 67% of adult enrollees reported new or worsening respiratory symptoms and 16% likely had post-traumatic stress disorder (PTSD).

Hurricane Sandy Survey Findings

Adult enrollees who had 9/11-related PTSD and experienced traumatic events related to Hurricane Sandy in 2012 were significantly more likely to have had Hurricane Sandy-related PTSD five to 12 months later than enrollees who did not have 9/11-related PTSD.

Adolescent and Young Adult Mental Health Findings

The Registry assessed trauma-related behavioral issues in adolescents and their mental health outcomes later as adults. Enrollees with abnormal scores on the Strengths and Difficulties Questionnaire as adolescents were more likely to smoke, have PTSD, and have two or more self-reported, health care provider-diagnosed mental health conditions as adults.

COVID-19 Survey

The COVID-19 Survey assessed the effects of the COVID-19 public health emergency on enrollees with questions on COVID-19-related symptoms and hospitalizations, access to health care, mental health, quality of life, and employment and financial difficulties, among other topics.