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Study Finds Post-Traumatic Stress From 9/11 Increasing

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The number of people who have reported symptoms of [post-traumatic stress disorder](#) as a result of being directly exposed to the World Trade Center attacks has increased over time, according to a new study published in [The Journal of the American Medical Association](#), based on a survey of 50,000 people conducted five to six years after the attacks of Sept. 11, 2001.

Overall, 19 percent of those surveyed in 2006-7 said they had developed post-traumatic stress symptoms in the five to six years after the attack, up from 14 percent in the first survey done of the group, two to three years after the attack. The increase was seen across the board — in rescue workers, office employees, residents and passers-by — but the sharpest jump was reported in the rescue workers.

The 19 percent overall rate in the second survey is roughly four times the rate of post-traumatic stress syndrome typically seen among American adults. Of the 19 percent, 9.5 percent had not reported symptoms in the earlier survey.

The study, “Asthma and Post-Traumatic Stress Symptoms 5 to 6 Years Following Exposure to the World Trade Center Terrorist Attack,” is one of the longest-running studies of post-traumatic stress in civilians. “There are very few studies that have looked at one-time major disaster and looked at the course of mental health over time,” said Dr. Lorna E. Thorpe, a deputy New York City health commissioner who was the senior writer of the study. The research is a collaboration between the city’s [Department of Health and Mental Hygiene](#) and the federal [Centers for Disease Control and Prevention](#).

Most studies of civilians disasters — mass shootings, the Oklahoma City bombing and Hurricane Katrina, for example — end at three years, but studies of combat veterans do continue longer, Dr. Thorpe said.

Even though military combat is a different experience from one-time disasters, “Our findings are very consistent with combat veterans,” she said. Stress symptoms may increase over time because repercussions from the original event — such as job loss or health problems — may add to the strain, she said.

The interviews — drawing on a total registry of more than 71,000 people affected by the attacks — were done by phone, mail and e-mail in 2006 and 2007. The earlier survey was

done in 2003 and 2004.

The participants were not asked if they had been given a diagnosis of post-traumatic stress syndrome, but were asked specific questions about mental and physical health used to evaluate post-traumatic stress. “It’s very close to a diagnosis. It correlates with a diagnosis,” Dr. Thorpe said.

The survey found that while the number of diagnosed cases of asthma had increased since the last survey, the people reporting underlying symptoms had not, suggesting that the rate of asthma cases has leveled out. As of the last survey, 10.2 percent of people and 20.5 percent of rescue and recovery workers reported a diagnosis of asthma since the attacks. Earlier studies showed that those [near the World Trade Center were twice as likely to develop asthma](#) as the general population.

Of people with no previous history of post-traumatic stress, 23.8 percent reported symptoms in at least one of the two studies. In the new study, 16.3 percent of surveyed residents and 19.1 of surveyed office workers reported symptoms; both figures were about 3 percentage points higher than in the previous survey. In contrast, rescue workers, as a group, saw post-traumatic stress jump to 19.5 percent from 12.1 percent in the earlier survey.

However, the highest rate, 23.2 percent, was reported by passers-by, which researchers considered a bit mysterious. They offered a variety of potential explanations. One possibility is that unlike office workers or rescue responders, passers-by were much harder to find because there were no systematic lists to track them. “They weren’t part of a constituency that were easily reached with services and care,” Dr. Thorpe said. Therefore, they may have less of a support network, increasing stress.

In addition, it was harder for researchers to create an exhaustive list of passers-by, so there might be bias in those who chose to participate. “Some of it might be self-selection,” Dr. Thorpe said.

The increasing incidence of post-traumatic stress symptoms continues to raise concern at the city’s health department. “This really helps us,” Dr. Thorpe said, adding that it “tells us we are still responding to 9/11.”