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213198 Diagnosed Asthma among Persons Exposed to the September 11, 2001 Terrorist Attacks

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Background: The objective of this study is to characterize and examine risk factors for new asthma diagnoses among highly exposed adults 5-6 years post-attack.

Methods: The World Trade Center Health Registry (WTCHR) contains data on a longitudinal cohort with baseline enrollment of 71,437 individuals (September, 2003-November, 2004); 46,322 adults (68%) completed the adult follow-up survey (November, 2006-December, 2007). We conducted descriptive and multivariable analyses to assess the impact of exposures associated with 9/11 on self-reported diagnosed asthma post-9/11.

Results: 10.1% of follow-up participants with no asthma history reported new asthma diagnoses post-9/11; highest rates were in the first 16 months. Intense dust cloud exposure on 9/11 was a major contributor to new reported asthma diagnoses for all eligibility groups (adjusted odds ratios [aORs], 1.4-1.5). Asthma risk was highest among rescue/recovery workers working on the WTC pile on 9/11 (12.2%, aOR, 2.2, 95% confidence interval, 1.9-2.6). Prolonged risk exposures included working longer at the WTC site, not evacuating homes, and experiencing a heavy layer of dust in one's home or office. **Conclusions:** Both acute and prolonged exposures resulted in a large burden of asthma 5-6 years after 9/11. Continued surveillance, outreach and treatment are needed to mitigate the burden and inform long-term disaster response planning.

Learning Objectives:

Describe the World Trade Center Health Registry. Identify 9/11 associated environmental exposures associated with post 9/11 diagnosed asthma. Discuss the importance of long-term surveillance of physical health effects from a major environmental exposure.

Keywords: Asthma, Disasters

Presenting author's disclosure statement:

Qualified on the content I am responsible for because: I co-authored the study.

Any relevant financial relationships? No

I agree to comply with the American Public Health Association Conflict of Interest and Commercial Support Guidelines, and to disclose to the participants any off-label or experimental uses of a commercial product or service discussed in my presentation.

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