



## **Health Effects in New York State Personnel who Responded to the World Trade Center Disaster**

### **Introduction**

The NYS DOH is conducting studies of NYS employees and NYS National Guard personnel who responded to the September 11, 2001, World Trade Center (WTC) disaster. Individuals who responded to the disaster were potentially exposed to various levels of smoke, fumes, dust and debris generated by the collapse of the buildings and the ongoing fires. NYS employees and NYS National Guard personnel who were directed to respond to the WTC disaster underwent a medical evaluation that included completion of a health and exposure questionnaire, a physical examination, and clinical and laboratory tests. This paper describes data resulting from these medical evaluations.

### **Methods**

From May 2002 through November 2003 voluntary medical evaluations were conducted for NYS employees and NYS National Guard personnel who were directed to work at the WTC site between September 11, 2001 and December 23, 2001 in the secure/exclusion zone, waste stream corridor, or at Freshkills Landfill. As part of this evaluation, participants completed a health and exposure questionnaire that collected information on demographics, exposure history, locations and times worked at WTC sites, WTC-related job tasks, WTC-related personal protective equipment use, health symptoms, and diagnoses. Results from the medical evaluation were collected and analyzed to determine the extent of any WTC-related health effects in this population.

### **Findings**

New or worsening lower and upper respiratory symptoms were reported by nearly half of the study participants. One third of participants reported a new or worsening psychological symptom. A number of health effects, including respiratory symptoms and symptoms suggestive of post-traumatic stress disorder (PTSD), appear to be associated with having been caught in the cloud of dust on September 11, 2001 when the WTC buildings collapsed.

### **Conclusions**

This cohort of responders reported fewer symptoms, in general, than most other more highly exposed responder cohorts, which may indicate that, overall, they experienced lower levels of exposure. Results suggest that being present when the buildings collapsed was associated with reported symptoms.

**If you have any questions or would like more information about this study, please contact:**

Matthew P. Mauer, DO, MPH  
NYS Department of Health  
Center for Environmental Health  
Bureau of Occupational Health  
1-800-458-1158, ext. 27900

Karen R. Cummings, MPH  
NYS Department of Health  
Center for Environmental Health  
Bureau of Occupational Health  
1-800-458-1158, ext. 27900