Mental Health Status of World Trade Center Rescue and Recovery Workers and Volunteers—New York City, July 2002–August 2004

The program was approved by an institutional review board, and informed consent was obtained for data aggregation and analyses. Participants were asked to complete standardized, self-administered questionnaires that screened for symptoms of anticipated postdisaster mental health conditions. The questionnaires used were the General Health Questionnaire-28 (GHQ), which identifies general psychiatric symptoms; Post Traumatic Stress Disorder (PTSD) Symptom Checklist (PCL), which identifies possible cases of PTSD; Patient Health Questionnaire (PHQ), which identifies panic, generalized anxiety, and depression; CAGE Questionnaire, which identifies likely alcohol dependence and abuse; and Sheehan Disability Scale, which measures functioning at home and work. Participants who met threshold criteria or acknowledged suicidal ideation or substantial disability on any questionnaire were referred for clinical evaluations by mental health professionals on the same day.

The 1,138 program participants were predominantly male (91%) and non-Hispanic white (58%), with a median age of 41 years (range: 21–74 years). Non-Hispanic blacks and Hispanics accounted for 11% and 15% of the population, respectively. Participants had sustained a median of 966 hours (range: 24–4,080 hours) of exposure (approximately 4 months of 8-hour workdays) to the WTC site. During July 16–December 31, 2002, the majority of participants (51%) met criteria for a clinical mental health evaluation on at least one screening questionnaire. Symptoms of depression, panic, and generalized anxiety were each reported by approximately 6% of participants. Nearly 10% reported at least one item on the CAGE Questionnaire. The Sheehan Disability Scale indicated that the top three emotionally related disabilities were problems with social life (15%), work (14%), and home life (13%).

On the PCL, approximately 20% of participants reported symptoms meeting the thresholds for PTSD. The diagnosis of PTSD requires both a characteristic pattern of symptoms and impaired functioning or substantive clinical distress relative to a qualifying trauma. Among program participants, sufficient exposure to qualifying traumatic events was assumed and not assessed; however, despite meeting threshold by symptom count on the PCL, approximately one third (32%) did not meet the criteria for both pattern of symptoms and impaired functioning or substantive clinical distress. Application of the diagnostic criteria reduces the proportion considered to have PTSD from 20% to 13%. Of the 1,138 participants, only 36 (3%) reported accessing mental health services before participating in this program.

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Editorial Note: The direct and protracted nature of the rescue and recovery workers’ exposure to the aftermath of the 9/11 attacks differentiates these persons from the general population. These responders are unlike previous populations of rescue workers because of the heterogeneity of their occupations (e.g., construction trades, utilities and sanitation workers, and first responders) and the documented health effects of their WTC work. The proportion of those meeting PCL threshold scores for posttraumatic stress in the predominantly male sample is approximately four times the 5% reported lifetime prevalence of PTSD in the general male population. The point prevalences of approximately 6%, respectively, for panic and generalized anxiety symptoms represent a two- to fourfold increase, compared with the 12-month prevalences of 2% and 3%, respectively, reported in the general population. However, depression was detected at a prevalence of 6%, nearly half the 12-month prevalence of 10% reported in the general population.
population. The point prevalence of alcohol abuse and dependence of nearly 10% documented by CAGE suggests rates at least as high as the 12-month prevalence of 9.7% reported in the general population.

The findings in this report are subject to at least three limitations. First, no reliable data exist regarding the size of the worker/volunteer responder population; therefore, determining participation rates for the screening program was not possible. Second, persons who participated in the screening might have done so because they experienced (or perceived) greater exposures and/or symptoms; therefore, these results are not generalizable to all responders. Finally, the questionnaires, which had been validated by using psychiatric patients, were applied to nonpsychiatric patients; in addition, certain questionnaires had been validated primarily among women and might not be equally valid in a predominantly male population.

Preliminary findings regarding the possible cases of PTSD among these workers underscore the need for better tools to assess the mental health of responders to a disaster. For example, the popular PCL2 used in this screening program does not conform to established clinical diagnostic criteria for PTSD and might provide either over- or underestimates of posttraumatic psychopathology. In addition, the comparatively low rate of postdisaster depression identified by PHQ challenges assumptions about its sensitivity for detecting depression, especially because the proportion appears lower than that documented for the general population.

Approximately half of the participants met preestablished screening criteria for mental health problems. Despite substantial resources directed at the mental health effects of 9/11, only 3% of this population reported having accessed mental health treatment. Project Liberty, a crisis counseling program funded by the Federal Emergency Management Administration, offered interventions beyond crisis counseling to help persons who experienced persistent and disabling distress. In addition, the Public Safety Workers Program, funded by the Substance Abuse and Mental Health Services Administration, has made limited funds available for the mental health treatment of this specific population through September 30, 2005. The mental health effects observed in this population suggest the need for further mental health screening, follow-up, and access to mental health services for WTC rescue and recovery workers and volunteers.

REFERENCES

Recommended Adult Immunization Schedule—United States, October 2004–September 2005

MMWR. 2004;53:Q1-Q4

CDC's Advisory Committee on Immunization Practices (ACIP) annually reviews the recommended Adult Immunization Schedule to ensure that the schedule reflects current recommendations for the use of licensed vaccines. In June 2004, ACIP approved the Adult Immunization Schedule for October 2004–September 2005. This schedule has also been approved by the American Academy of Family Physicians and the American College of Obstetricians and Gynecologists.

Changes in the Schedule for October 2004–September 2005

The 2004–2005 schedule differs from the previous schedule as follows:

- Both figures now provide a separate row for each vaccine (FIGURE 1 and FIGURE 2).
- Health-care workers have been added to the figure that provides immunization recommendations by medical indications and other conditions (Figure 2).
- The special note regarding influenza vaccination of pregnant women reflects the revised ACIP recommendations that all pregnant women should receive influenza vaccination regardless of preexisting chronic conditions.

Health-care workers were added to the Adult Immunization Schedule in response to provider requests; this change should facilitate assessment of the vaccination status of healthcare workers and administration of needed vaccinations. In 2002, 38.4% of health-care workers reported influenza vaccination, and 62.3% reported having completed hepatitis B vaccination series (National Health Interview Survey, CDC, unpublished data, 2003). Influenza vaccination of health-care workers is an important preventive measure for persons at high risk for complications from influenza infection. Health-care workers involved in direct patient care are among the priority groups recommended to receive influenza vaccination for the 2004–05 influenza season, despite the vaccine shortage.

The Adult Immunization Schedule is available in English and Spanish at http://www.cdc.gov/nip/recs/adult-schedule.htm. General information about adult immunization, including recommendations concerning vaccination of persons with human immunodeficiency virus (HIV) and other immunosuppressive conditions, is available from state and local health departments and from the National Immunization Program at http://www.cdc.gov/nip. Vaccine information statements are available at http://www.cdc.gov/nip/publications/vis. ACIP statements for each recommended vaccine can be viewed, downloaded, and printed from CDC's National Immunization Program at http://www.cdc.gov/nip/publications/acip-list.htm. Instructions for reporting adverse events after vaccination to the Vaccine Adverse Event Reporting System (VAERS) are available at http://www.vaers.org or by telephone, 800-822-7967.

REFERENCES