An Overview of the World Trade Center Health Program at the Selikoff Centers for Occupational Health: 15 Years Post-9/11

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The World Trade Center (WTC) terrorist attack on September 11, 2001, created an unprecedented burden of occupational exposure in the United States for the men and women who worked as first responders at Ground Zero. In 2002, the Centers for Disease Control (CDC) created the WTC Worker and Volunteer Medical Screening Program (MSP) at the recommendation of Congress.1 After passage of the James Zadroga 9/11 Health and Compensation Act in 2010, the MSP evolved into the current WTC Health Program (WTCHP).2

There are approximately 65,000 first responders across the national WTCHP, including the seven clinical centers of excellence (CCE) located in the New York City metropolitan area.3 There are approximately 22,000 responders enrolled in the WTCHP at the Irving J. Selikoff Centers for Occupational and Environmental Medicine at The Mount Sinai Hospital, New York City.

The WTCHP is federally funded through the year 2090 under the previously mentioned Zadroga Act.3 The funding covers annual medical monitoring examinations as well as periodic treatment visits with WTC providers and specialists. Participants are also referred for cancer diagnostic consultations. Medications for the treatment of WTC medical conditions and imaging studies (i.e., chest computed tomography) and procedures required for diagnosis (i.e., biopsies), surveillance (i.e., esophagogastroduodenoscopy) or treatment (i.e., surgery) are all covered.

Responders learn of the WTCHP through a variety of channels, including notifications from their employer or colleagues; advertisements periodically placed in local media outlets; and through unions and community groups. In addition, the CDC has a comprehensive Web site where responders can go to learn about and enroll in the program.4

The Medical Monitoring Program

The medical monitoring program is an annual surveillance program designed to monitor the health status of WTC responders and to address any health effects related to their exposure at Ground Zero. During the medical monitoring visit, a detailed 9/11 exposure assessment—including a pre- and post-9/11 occupational and environmental exposure history, past medical and surgical history, family history, and social history (including a smoking history)—is obtained via a series of questionnaires administered by a trained health care provider. The information is reviewed by a physician or nurse practitioner, and discussed with the patient. During the monitoring visit, participants are offered referrals for breast, cervical, colon, and lung cancer screenings in accordance with the United States Preventive Services Task Force recommendations. The program also provides annual influenza vaccinations. Participants also complete a self-administered mental health questionnaire. Based on scoring, patients may be referred to speak with a social worker to address any new or ongoing mental health concerns.

During the monitoring visit, participants with symptoms or health conditions that may be related to WTC exposure are provided referrals for additional evaluation and management in the treatment program. At the conclusion of the visit, a letter summarizing the preliminary findings of the examination is provided to all participants.

Retention in our program, defined as the percentage of patients who have monitoring examinations within 27 months, is 60%. To promote retention, the WTCHP has a dedicated call center staff that reaches out to participants who may have been lost to follow-up. Providers also communicate closely with their patients via phone, e-mail, or an online patient portal which helps to foster the relationship with each member.

WTC Medical Conditions

Virtually every organ system has been affected by exposure to the dust and debris from the WTC disaster. Health conditions are divided into two categories: WTC-related and WTC-associated conditions. Related conditions are those illnesses in which exposure to airborne toxins, other hazards, or any other adverse condition resulting from the terrorist attack is likely to be a significant factor in aggravating, contributing to, or causing the illness. Associated conditions are those that result from the treatment of or the progression of a WTC-related health condition.5

The most common WTC-related conditions observed in the first responder population are as follows:

- upper respiratory conditions (chronic rhinitis, chronic sinusitis, chronic laryngitis, chronic nasopharyngitis);
- lower respiratory conditions (asthma, reactive airways dysfunction syndrome, chronic obstructive pulmonary conditions);
- continued on page 2
• gastrointestinal conditions (gastroesophageal reflux disease);
• psychological conditions (posttraumatic stress disorder, depression, anxiety, substance abuse); and
• sarcoidosis, which is increasingly seen in our population and has more recently been accepted as a WTC-related condition.

Common WTC-associated conditions include the following:
• obstructive sleep apnea;
• Barrett’s esophagitis; and
• chronic cough.

Additionally, many kinds of cancer are covered through the WTCHP. The most common cancers seen in this population are skin cancer, prostate cancer, lymphoma, and thyroid cancer.6

WTC Treatment Program
Individuals can be certified for medical conditions by the National Institute for Occupational Safety and Health (NIOSH) if the illness is an accepted WTC condition and if the timing of symptom onset is consistent with the guidelines established by NIOSH. Certification ensures that any ongoing care and treatment of the WTC medical condition is covered by the program.

If a participant is identified as having a medical condition that is WTC-related, he or she is managed by the WTC treatment program. Each participant is matched with a treatment provider who is a board-certified physician in occupational medicine, internal medicine, or pulmonary medicine, or is a nurse practitioner. A participant is encouraged to regularly follow-up with his or her treatment provider. The frequency of follow up is determined by the severity of the condition(s) and the individual needs of each participant.

Program members often have multiple co-morbid conditions that contribute to the level of complexity. Management of these participants requires an interdisciplinary team approach. Participants are referred for consultation with a specialist (in areas such as pulmonology, otolaryngology, or gastroenterology) when they fail standard treatment or if they require further evaluation. Individuals with findings suspicious for cancer or diagnosed with cancer are referred to the cancer management team which facilitates further coordination of care.

Mental Health and Other Services
Participants with WTC-related mental health conditions are offered ongoing care and support through the WTC psychiatric program and are managed by psychiatrists, psychologists, and licensed social workers. Social workers also help program members access comprehensive services and benefits such as workers’ compensation, social security disability, pension/union benefits, the 9/11 Victims Compensation Fund, and medical insurance. There is also an on-site workers’ compensation program coordinator who meets with patients individually as needed to further discuss these benefits. In our program, 40.68% (N=9,177) are working, 1.96% (N=442) are disabled, and 5.57% (N=1,256) are unemployed.

Our clinic also offers a comprehensive tobacco cessation program that includes a detailed behavioral assessment, counseling, treatment, and regular follow up. Registered nurses in clinic are available to provide patient education regarding their health conditions and medication use (such as inhaler technique).

As a substantial proportion of the program members are non-English speaking, we provide Spanish- and Polish-speaking staff who provide interpretation and translation services. For individuals who speak other languages, interpretation services are provided through a telephone translation service. Our interpreters also provide on-site assistance to patients during their diagnostic studies and consultations.

Conclusion
In this article, we have described the components of the WTCHP at the Selikoff Centers for Occupational Health in Manhattan. The WTCHP has successfully managed thousands of first responders and survivors in the 15 years that have passed since the WTC disaster. Members are generally very satisfied with the care and services they receive. NIOSH continues to review and modify certification criteria so participants can garner as much benefit from the program as possible. Continued research on this population will be necessary to further enhance the services provided to members through the program.

References