

Since the September 11 attacks, the Agency for Toxic Substances and Disease Registry (ATSDR) has worked with other federal agencies, state and local health departments, and other organizations to respond to the enormous challenges of this tragedy. ATSDR also assisted in the response to the anthrax contamination of postal facilities, government, and media offices. ATSDR, an agency of the U.S. Department of Health and Human Services, worked in partnership with the Centers for Disease Control and Prevention (CDC) in many of these activities and provided workers to help staff the CDC's emergency operations center, which operated around the clock. Altogether, more than 120 ATSDR staff members have been directly involved in the response effort.

ATSDR staff members have assisted the response effort in a variety of ways—including conducting environmental sampling at anthrax-contaminated offices, mapping sampling locations, helping to develop screening guidelines for asbestos and other hazardous substances, sampling dust in Manhattan residences, answering questions from the news media, and speaking with groups of business owners, residents, rescue workers, and others in New York to answer their health questions.

## Response to the Attacks of September 11

The ATSDR desk at the CDC's Emergency Operations Center (EOC) was staffed 24 hours a day, and provided quick answers to health questions about asbestos fibers and particulates present in the dust cloud from the World Trade Center, as well as assistance in answering many other calls. A significant number of ATSDR staff members in the agency's Atlanta headquarters also provided surge-capacity staffing support to the EOC. Two of ATSDR's Commissioned Corps officers were detailed to New York through the Public Health Service Commissioned Corps Readiness Force to serve with disaster mortuary units. Several ATSDR



*Ground Zero*

staff members with expertise in environmental health assessment, air monitoring, health risk communication, and industrial hygiene were sent to assist the agency's New York office staff with the response at Ground Zero.

Some of the activities in which ATSDR staff members participated included the following:

- Assisting EPA and other agencies in sampling dust and air at Ground Zero and evaluating data to assess health risks.
- Providing technical assistance to the New York Department of Health on environmental medicine, including speaking to groups of building owners, tenants, business owners, workers, homeowners, and others about air quality in the Lower Manhattan area.
- Providing leadership to the World Trade Center Environmental Assessment Workgroup, which is made up of representatives from ATSDR and other federal agencies.
- Assisting in the preparation of a fact sheet on asbestos that was posted on the Department of Health and Human Services website.
- Using geographic information systems (GIS) to map environmental sampling results and other data for Lower Manhattan.

## ATSDR Assistance in Sampling Air in Lower Manhattan

One major effort in which ATSDR has assisted the New York City Department of Health has been in sampling air and dust in residences in lower



*Dust covers the interior of a Manhattan Residence*

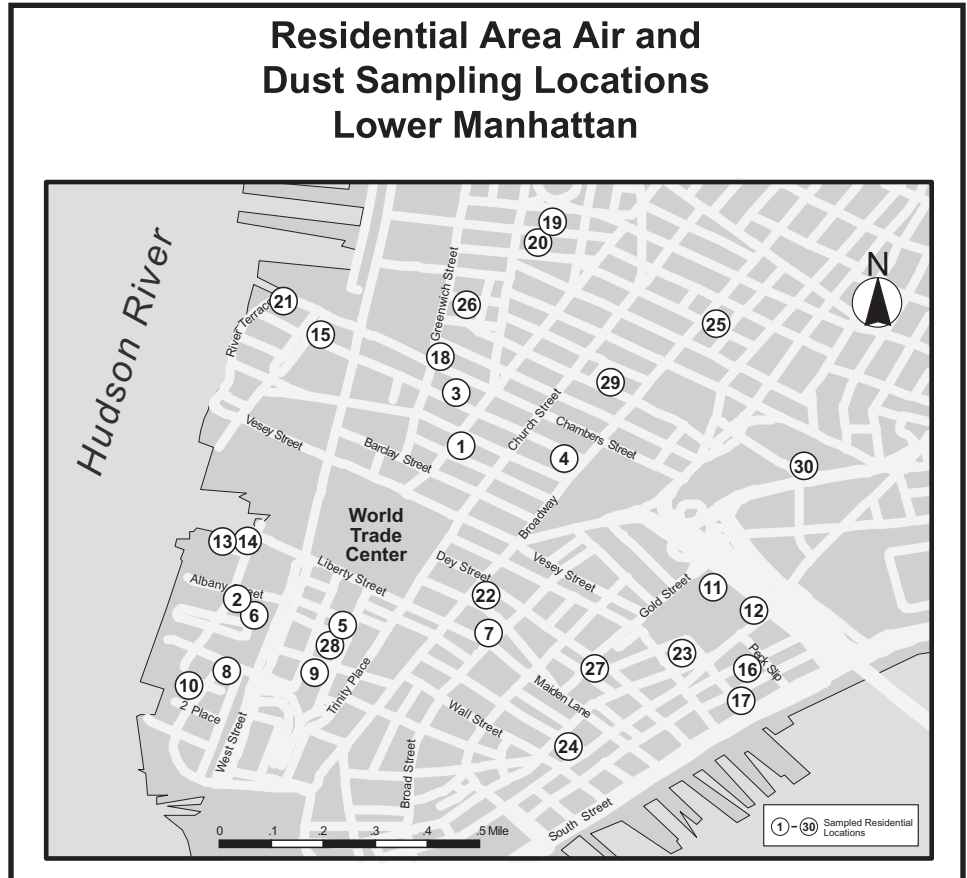
Manhattan. An ATSDR technical team provided the draft sampling plan and conducted the technical review of the analytical results from the sampling effort. The sampling and analysis were designed to determine if residents are being exposed to concentrations of materials that may be harmful, determine whether areas already cleaned contain materials that may be of public health concern, and provide information to the public on possible public health concern. Samples collected under the plan included air samples taken from various areas of lower Manhattan; dust samples taken from residential units, residential common areas, and outdoor areas; and background samples of both dust and air taken from four buildings north of 59th Street.

The sampling results, which have been provided to city and state health and environmental officials, as well as residents

and building landlords and owners, included the following:

- No asbestos was found in air samples.
- Low levels of asbestos were found in settled dust in 10 (18%) residences, 5 (19%) of the common areas sampled, and 5 (33%) of the outdoor areas sampled.
- Asbestos was detected in some of the areas that previously had been cleaned.
- No asbestos was detected in dust samples taken from north of 59th Street.
- Fibrous glass was detected in settled dust samples from 23 (40%) of the residences sampled, 11 (42%) of the common areas sampled, and 9 (64%) of the outdoor samples.
- Fibrous glass was detected in many of the locations that had previously been cleaned.
- No fibrous glass was detected in the samples from north of 59th Street.

In response to the findings of the indoor air sampling effort, ATSDR and the New York City



Department of Health recommended that people continue to conduct frequent cleaning with HEPA vacuums and damp cloths or mops to reduce the potential for exposure. Exposure to fibrous glass may cause rashes and upper respiratory irritation.

## Response to the Anthrax Mailings

ATSDR's expertise in environmental sampling and assessment was called upon to help unravel the perplexing questions about anthrax contamination.

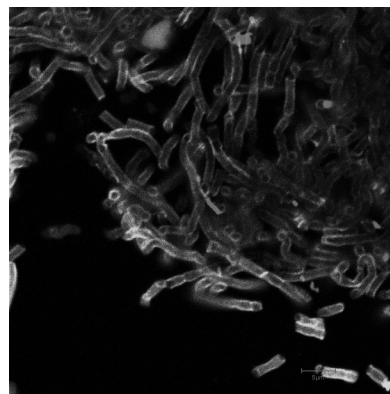


*American Media building in Florida*

ATSDR sent staff members to sites in Florida, New Jersey, Connecticut, Kansas, and Washington, D.C., to assist in the public health response. As a result of ATSDR's long-standing working partnership with EPA for Superfund work, the agency was able to effectively facilitate communication between the CDC and the EPA On-Scene Coordinators, who were responsible for directing the environmental sampling, assessment and clean-up at affected sites. Some of the activities in which staff members were involved included the following:

- ATSDR staff members assisted federal, state, and local health and environmental agencies in conducting environmental sampling at the American Media Inc., office building in Boca Raton, Florida, where the index case of inhalation anthrax occurred in an employee.
- ATSDR staff members provided emergency on-scene scientific consultation to New York City Department of Health and NBC News to assist in assessment of the anthrax threat in the news anchor's office.

- A Commissioned Corps medical officer from ATSDR helped provide medical information and prophylactic antibiotics to postal workers in New York City who were potentially exposed to anthrax spores.



*Anthrax Spores*

- At the urgent request of EPA, ATSDR convened occupational health and safety medical experts from NIOSH and ATSDR to provide On-Scene Coordinators with guidance on protecting environmental sampling and clean-up workers involved in the anthrax response. A consultation letter detailing these recommendations was provided to EPA within 3 working days of the conference call.
- ATSDR staff members were deployed to be members of the "Tiger Team," which provided emergency on-scene technical expertise, public health assessment, and consultative support to EPA, the Senate Sergeant-at-Arms, and the



*Cutaneous Anthrax*

Capitol Hill Attending Physician. They reviewed sampling data from the Hart Building, made recommendations for additional air sampling in



the offices of Senator Tom Daschle and the heating and air ventilation system, and helped draft a team report and other documents.

- Two ATSDR staff members were on hand in the first few days the Hart Building was reopened to answer Capitol Hill staff members' questions and health concerns.
- A team of ATSDR industrial hygienists and sanitarians and NIOSH staff members repeatedly sampled the regional mail sorting facility in Connecticut, employing improved sampling strategies and techniques. Consequently, the team was successful in detecting anthrax contamination at the mail facility where two previous rounds of sampling had failed to find any anthrax spores. The environmental sampling was conducted to identify potential sources of anthrax that led to the death of a 94-year-old Connecticut woman. ATSDR also assisted in the sampling of the woman's home and other locations.
- ATSDR staff members used GIS to plot locations where anthrax was found in anthrax-contaminated buildings.
- ATSDR staff members assisted CDC in answering media questions related to environmental sampling and worker health and safety protection. ATSDR staff were on the scene to assist Washington, D.C., and Connecticut health officials in answering media questions about anthrax.
- ATSDR hosted a panel of experts to discuss the application of formal risk assessment techniques to

environmental sampling for anthrax. The panel discussed concerns about re-occupying buildings that have been decontaminated for anthrax and provided the basis for subsequent research agenda discussions hosted the following day by the National Center for Infectious Diseases.

- ATSDR staff members provided round-the-clock staffing of the ATSDR desk, and part-time staffing of the State Liaison Team's Epidemiology desk at the CDC emergency operations center. ATSDR staff members have been a continuous part of the Occupational /Environmental Team, which is responsible for preparing guidance documents for medical providers, exposed workers, the public, and the public health community.
- ATSDR created a full-time temporary detail for a staff position in the Office of the Assistant Administrator, to coordinate the agency's bioterrorism response activities.

### **Other ATSDR Activities Related to the Response to Terrorism**

ATSDR has joined non-infectious disease centers at the CDC to form an Inter-Agency Working Group for Event-Based Preparedness Planning. This working group is developing detailed plans for responding to non-infectious types of terrorism, such as chemical and radiological events, mass casualties caused by explosions and fires, and the use of panic and infrastructure disruption as tools of terrorism.

**For more information,  
contact ATSDR's toll-free information line:  
(888) 42-ATSDR... that's (888) 422-8737**

**ATSDR's Internet address is <http://www.atsdr.cdc.gov>**