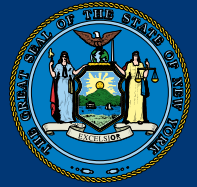




Activities in New York



ATSDR in Partnership With New York

The Agency for Toxic Substances and Disease Registry (ATSDR) is the lead public health agency responsible for implementing the health-related provisions of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). ATSDR is an Atlanta-based federal agency with more than 400 employees and a budget for 2004 of approximately \$73 million. ATSDR assesses the presence and nature of health hazards at specific Superfund sites, helps to prevent or reduce further exposure and illnesses resulting from those hazards, and expands the knowledge base about the health effects of exposure to hazardous substances.

ATSDR works closely with state agencies to carry out its mission to serve the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and disease related to toxic substances. ATSDR provides funding and technical assistance to states and other partners through cooperative agreements and grants to identify and evaluate environmental health threats to communities. These resources enable state and local health departments and other grantees to further investigate environmental health concerns and to educate communities. From **fiscal years 1987 through 2003**, ATSDR awarded more than **\$32.2 million**—more than **\$8.2 million** in the last 2 years—in direct funds and services to New York for comprehensive support of its environmental health unit. In addition to direct funds and services, ATSDR staff provides technical and administrative guidance for state-conducted site activities.

ATSDR Site-Specific Activities Public Health Assessment-Related Activities

In the weeks after the **World Trade Center (WTC)** disaster, several ATSDR staff members were sent to assist the agency's **New York** office staff and the **New York City Department of Health and Mental**

Hygiene (NYC DOHMH). ATSDR staff members detailed to the city health department provided technical

assistance in environmental medicine, including sharing the most current information about air quality and environmental issues with groups of building owners, tenants, business owners, workers, homeowners, and other community members.

ATSDR also assisted NYC DOMH in developing and implementing a residential sampling plan for lower Manhattan. ATSDR provided the draft sampling plan and conducted a technical review of the analytical results from this effort. The purpose of the sampling was to assess the composition of both outdoor and indoor settled surface and airborne dust within residential areas around the WTC. Sampling focused on building materials that have irritant properties (e.g., synthetic vitreous fibers) and are associated with long-term health concerns (e.g., asbestos). This information was used to help determine whether additional public health actions were needed. ATSDR released its Final Report of the Public Health Investigation to Assess Potential Exposures to Airborne and Settled Surface Dust in Residential Areas of Lower Manhattan in September 2002. The U.S. Environmental Protection Agency (EPA) has conducted several follow-up activities to address the public health actions identified by ATSDR's investigation. Information about the World Trade Center Health Registry can be found in the Health Studies section of this fact sheet.

Residents of the village of **Endicott** are concerned about exposures to volatile organic compounds (VOCs) from inhalation of vapor emanating from the IBM groundwater plume and from other potential sources of exposure. Moreover, residents are concerned about the incidence of cancer in both children and adults in the village and the incidence of cancers in former workers at the IBM plant.

ATSDR awarded more than \$8.2 million in the last 2 years in direct funds and services to New York.

ATSDR is working with the **New York State Department of Health (NYS DOH)**, the **Broome County Health Department**, and local citizen groups to develop a public health response plan that will begin the process of addressing the concerns about community exposures to VOCs in Endicott. The draft plan was released for public comment in early 2004. The plan describes historic, ongoing, and planned public health actions by the health and environmental agencies to address specific human exposures to environmental contaminants in Endicott. Specific items in the plan include review of ongoing environmental investigations and exposure mitigation efforts, review and analysis of cancer and birth outcomes in the village, public health implications of low-level exposures to VOCs in drinking water, evaluation of the community outreach and education activities, and health care provider outreach and education activities. ATSDR and NYS DOH also are working with the National Institute for Occupational Safety and Health (NIOSH) to address community concerns about worker exposures at the former IBM facility. NIOSH is assessing the feasibility of a study to evaluate the potential health effects of worker exposures at the former IBM facility.

One of the agency's important mandates is to conduct **public health assessments** of all National Priorities List (NPL) sites and of other sites where a significant threat to public health might exist. **One hundred eight sites** have been designated to the NPL in **New York**.

A **public health assessment** is a written, comprehensive evaluation of available data and information about the release of hazardous substances into the environment in a specific geographic area. Such releases are assessed for current or future impact on public health. ATSDR, in collaboration with public health and environmental officials from New York, has conducted 158 public health assessments in the state, including the following recent examples.

- **Jackson Steel**—This site in **Mineola** is a former steel product manufacturer that contaminated

the groundwater with VOCs. **NYS DOH** and the **Nassau County Health Department** found that indoor air of nearby buildings also was contaminated with VOCs at levels above the



Aerial view of Ground Zero.

health department's guideline for indoor air. At the request of NYS DOH and ATSDR, measures were taken to reduce levels of VOCs within those buildings, including a former day-care facility. VOC levels are now significantly below health department indoor air guidelines.

To help the public understand the exposures and public health actions, ATSDR and NYS DOH developed and

distributed fact sheets about the site. ATSDR and NYS DOH are working together to complete a public health assessment to update information about indoor air quality, on-site and off-site groundwater contamination, and on-site soil contamination. Although the day-care facility ceased operation at the affected building in April 2002, residents, workers, and parents are interested in the outcome of the public health assessment, which is expected to be released for public comment in March 2004.

- **Diaz Chemical Corporation**—On January 5, 2002, this specialty organic chemical manufacturer in **Holley** unintentionally released a mixture of primarily toluene, water (steam), and 2-chloro-6-fluorophenol (CFP) into outdoor air. Soon after the release, residents complained of acute health effects; the company relocated some residents. **NYS DOH**, in consultation with ATSDR, conducted both environmental sampling (air, soil, and surface water) and extensive biomonitoring of urine. Sampling and biomonitoring results indicated exposure to CFP, particularly for residents and properties immediately northeast of the facility. ATSDR assisted NYS DOH in characterizing the health risks of exposure to CFP, and documented these findings in a public health assessment finalized in September 2003. In response to community concerns about long-term health effects from the CFP release, NYS DOH has offered enrollment in

the New York State Volatile Organic Compounds Registry. EPA assumed control of the site in June 2003 and has conducted environmental sampling to consider including the site on the NPL.

A **health consultation** is a written or oral response from ATSDR to a specific request for information about health risks related to a specific site, chemical release, or hazardous material. A health consultation is a more limited response than a public health assessment is. To date, **184** documented health consultations have been conducted at **105** sites in **New York**, including the following recent examples.

- **Hickory Woods Subdivision (Abby Street)**—Many homes in the Hickory Woods neighborhood in **Buffalo** are built on old fill material that possibly contains waste from a nearby former steel and coke plant. Community members are concerned about possible health effects from exposure to chemicals in the soil in their yards. EPA found several chemicals in residential yards at levels above typical soil background levels but not exceeding public health hazard levels. **NYS DOH** and ATSDR prepared two health consultations that were released to the public.

ATSDR and NYS DOH worked with EPA to sample surface soil and evaluate the public health implications of the results and to release the data and evaluation to the homeowners. Because of the evaluations, EPA completed limited soil removal at two of these homes. ATSDR and NYS DOH also recommended that measures be taken to prevent exposure to arsenic in surface soil at a community park in the neighborhood. The city of Buffalo accepted these measures, fenced the park, and obtained an environmental restoration grant from New York State. The city also is developing a plan for cleanup of the park. ATSDR and NYS DOH conducted an exposure/health survey in which the results suggest more thyroid conditions might exist among Hickory Woods residents than among the general U.S. population. On the basis of these findings, NYS DOH conducted a follow-

up health survey and reviewed medical records. The report summarizing findings of the follow-up on thyroid conditions will be released as a health consultation in early 2004. The draft health

consultation will be released for public comment and will be provided to the participants and then to the community and other stakeholders.

- **Southside High School**—Southside High School is on land that straddles the border of **Elmira** and **Southport**. The school was built on land previously used by various industries. In response to community concerns about a perceived unusually high occurrence of cancer in current and former students,

New York State collected soil samples from the school grounds, and **NYS DOH** initiated a cancer study, collected air samples inside the school and soil gas samples from under the school, assisted with some soil sampling, and evaluated the environmental sample results.

Findings of the initial cancer study, which relied on community reports and on the state's system of mandatory cancer reporting, were released in 2000. This study found no excess of cancer among students at the high school; however, an excess of testicular cancer was diagnosed between 1997 and 2000 among males 15–19 years of age living in the area served by the school. A follow-up study was released in 2001. This follow-up study found no unusual conditions or exposures that were shared by all of the young men. In addition, the number of testicular cancer cases this group was similar to the number expected. An update on the initial study, which included a survey of both past and present students who attended the school between 1980 and 2002, was released in November 2003. Although several additional cancer cases were identified, no excesses of any type of cancer were observed with the exception of the previously described excess of testicular cancer.

In cooperation with ATSDR, NYS DOH prepared a health consultation to evaluate public health



NYC DOHMH/ATSDR team member during residential sampling investigation in Manhattan.

implications of exposure to soil and indoor air at Southside High School. The final health consultation was released in September 2003.

- **W.R. Grace**—NYS DOH, in cooperation with ATSDR, prepared a health consultation to evaluate the public health implications of exposure to asbestos related to the former Zonolite Company/W.R. Grace exfoliating facility in **Brutus**. The health consultation recommends that former employees of the exfoliating facility and their household contacts consult a physician with expertise in asbestos-related lung disease if they believe they have been exposed to asbestos. The health consultation is expected to be released to the public for comments in spring 2004.
- **National Lead Inc. (Colonie Site)**—Between 1958 and 1984, National Lead Industries (NL) used depleted uranium (DU) in manufacturing processes at its facility in **Colonie**. Before 1958, the site was used as a brass and lead foundry. These operations generated stack emissions, which released DU and lead into the air. Community members are concerned about potential adverse health effects from past operations at the facility. The U.S. Army Corps of Engineers, which controls the site and is responsible for clean-up activities, asked ATSDR to conduct a public health evaluation of potential exposures to the community from past site operations.

ATSDR released the public comment version of the Colonie Site health consultation in August 2003 and presented the findings of the consultation to over 200 community members in September 2003. ATSDR concluded that past emissions from DU could have increased the risk for kidney disease and, among smokers, lung cancer. However, ATSDR did not find a public health hazard from contact with or incidental ingestion of DU or lead-contaminated soil. For past lead emissions, ATSDR concluded an indeterminate health hazard because of the lack of data.

During the public comment period, which was extended an extra 30 days, ATSDR received many phone calls, letters, and e-mails from community members concerned about their health. ATSDR is responding to the public

comments and updating sections of health consultation. In addition, ATSDR is determining potential follow-up public health activities. The final version of the health consultation is expected in the next few months. All public comments and ATSDR responses will be in an appendix of the final health consultation.

Health Education and Community Activities

New York has participated in ATSDR's cooperative agreement program since 1987. Under this program, **NYS DOH** has received funding and technical assistance for development of community education and activities associated with human exposure to hazardous substances in the environment. Under the cooperative agreement, almost 18,000 New York health professionals and residents have received over 11,000 pieces of environmental health information at 14 training and informational events during 2002.

In cooperation with the NYS DOH, ATSDR conducted a number of educational activities support the **Shenandoah Road** Groundwater Contamination site. Added to the NPL in June 2001, this **East Fishkill** (Dutchess County) site is concerned with health impacts of tetrachloroethene (PCE) and trichloroethene (TCE) exposures. ATSDR sponsored focused training for physicians on PCE and TCE. Environmental health specialists from the Association of Occupational and Environmental Clinics provided this training in September 2002.

The **St. Regis Mohawk Tribe** has participated in a cooperative agreement with ATSDR since 1994 to develop environmental health education programs and promote health in their communities. Under this program, the St. Regis Tribe developed a community relations/risk communication plan related to the General Motors/Massena site; produced several articles, brochures, and fact sheets on the health effects of PCBs; and conducted a workshop for 25 local health care providers. ATSDR completed a public health assessment in 1999 that identified the site as a public health hazard because of past and continued human exposures to hazardous substances at levels of health concerns. Human exposure, primarily ingestion of PCB-contaminated fish and wildlife has occurred and can continue to occur.

Health Studies

Health studies are investigations conducted to determine the relation between exposures to hazardous

substances and adverse health effects. Health studies also define health problems that require further investigation through, for example, health surveillance or an epidemiologic study. Following are examples of health studies or investigations that ATSDR conducted or supported in **New York**.

- **World Trade Center Health Registry**—The World Trade Center Health Registry is a collaborative effort involving NYC DOHMH and ATSDR, as well as academic institutions, public agencies, and community groups. The registry was created because the long-term health effects, if any, among people who lived or worked near the WTC site on September 11, 2001, are not known. The registry is a comprehensive and confidential health survey of persons most directly exposed to the events of September 11.

People enrolled in the registry will be contacted periodically over the next 20 years to track any changes in their physical or mental health. Interviews are being conducted through August 2004; more than 25,000 have been completed to date.

- **Exposure to Tremolite Asbestos in Vermiculite Ore**—ATSDR awarded a cooperative agreement to NYS DOH to conduct a health statistics review of communities in **New York** that received contaminated vermiculite ore from the W.R. Grace mine in Libby, Montana. NYS DOH is reviewing cancer incidence data and mortality data for asbestos-related diseases among residents of seven communities in New York who received the contaminated vermiculite. The results are being compared with national and statewide rates to determine whether potential exposures to asbestos may be associated with adverse health outcomes in these communities. A draft report of the study is expected in early 2005.
- **Multistate Case-Control Study of Childhood Brain Cancer**—ATSDR conducted this population-based case-control study to examine

the association between the risk for childhood brain cancer and residence near NPL sites. The draft final report has been completed and is undergoing external peer review.



HSEES decontamination drill.

- **Asthma and Hazardous Substances**—In fiscal year 2002, ATSDR awarded a cooperative agreement to **Hunter College** to research the impact of hazardous substances on asthma.

- **PCB-Hudson River Study**—ATSDR awarded a grant to NYS DOH to study exposures to polychlorinated biphenyls in older residents of affected communities on the **Hudson River**. Data analysis began in mid-2003 and will

be completed in late 2004. A draft report of the study will be completed in late 2005.

- **Love Canal Follow-up Study**—ATSDR granted funds to NYS DOH and **Health Research Inc.** to comprehensively follow up residents of the **Love Canal** Emergency Declaration Area to determine whether they are at increased risk for adverse health outcomes associated with residential exposure to environmental contaminants in the Love Canal Superfund sites. Data analysis and report generation are under way.
- **Hazardous Substances Emergency Events Surveillance System (HSEES)**—ATSDR established HSEES in 1990 to collect and analyze information about releases of hazardous substances that need to be cleaned up or neutralized according to federal, state, or local law and about threatened releases that result in a public health action, such as evacuation. The goal of HSEES is to reduce the morbidity and mortality of first responders, employees, and the general public from hazardous substances emergencies. Fifteen state health departments, including **New York**, participate in HSEES. HSEES captures data on over 8,000 events annually. Of these, 80% occur at fixed facilities, and 20% are transportation-related events. Most events occur from 8:00 AM to 5:00 PM Monday through Friday. Persons most often injured are employees.

HSEES generates information for use by states to conduct presentations on planning prevention strategies for industries that account for a substantial number of spills; conduct hazardous materials (HazMat) training courses, including information about the risk for injury from methamphetamine labs; establish and maintain protection areas for municipal water systems; assist with the proper placement of HazMat teams; develop fact sheets on frequently spilled chemicals or chemicals that cause a disproportionate number of injuries (e.g., chlorine and ammonia); develop newsletters for industry, responders, and environmental groups; and conduct presentations for state and local emergency planners. A public-use dataset will be available on the ATSDR HSEES Web site in the future.

Great Lakes Human Health Effects Research Program

In support of the Great Lakes Critical Programs Act, this program's six objectives are to

- (1) build on and extend results from past and ongoing research in the Great Lakes region;
- (2) develop information databases or research methodology, or both, that will provide long-term benefits to the human health effects research efforts in the Great Lakes basin;
- (3) provide direction for future health effects research;
- (4) provide health information to state and local health officials, the concerned public, and their medical health care professionals;
- (5) increase public awareness about the potential health implications of toxic pollution in the Great Lakes; and
- (6) coordinate as necessary with relevant government research programs and activities to ameliorate adverse public health impacts of persistent toxic substances in the Great Lakes basin.

Four institutions in New York have been awarded funds by ATSDR to conduct studies. These are

- **NYS DOH**—PCB, DDE, Mirex, and HCB Exposure Among Native American Men and Women From Contaminated Great Lakes and

St. Lawrence River Basin Fish and Wildlife and Neurological Effects of Environmental Exposure to PCBs.

- **The Research Foundation of State University of New York at Buffalo**—The New York State Angler Cohort Study: Exposure Characterization and Reproductive Developmental Health.
- **State University of New York at Oswego**—Behavioral Effects of Consumption of Lake Ontario Fish: Two Methodological Approaches: Continuation of a Longitudinal Study Testing 4- and 6-Year-Olds.
- **State University of New York at Albany**—PCB Congener and Metabolite Patterns in Adult Mohawks: Biomarkers of Exposure and Individual Toxicokinetics.

Neurodevelopmental Test Methods Research

ATSDR awarded a research grant to the **University of Rochester** to determine and validate a battery of neurodevelopmental tests for use in assessing neurologic effects of prenatal or postnatal exposure to toxicants at waste sites and in the environment. Deficits in specific developmental domains will be evaluated in this battery and validation of this testing method will enhance ATSDR's ability to detect subtle neurodevelopmental effects in children. These research methods will address an ATSDR goal to develop methods and tools for evaluating human health consequences of exposure to toxic substances in the environment. The research is funded through partnerships with other federal agencies and industry.

Resource Materials

ATSDR develops materials that public health professionals and medical care providers can use to assess the public health impacts of chemical exposures. Resources are available in print, on the ATSDR Web site, and on CD-ROM. For example, medical management guidelines are available for acute chemical exposures to more than 50 chemicals. These guidelines were designed to aid emergency department physicians and other emergency health care professionals, such as first responders, who manage acute exposures resulting from chemical incidents. ATSDR's toxicological profiles comprehensively describe health effects;

pathways of human exposure; and the behavior of more than 250 hazardous substances in air, soil, and water at hazardous waste sites. The toxicological profiles are primarily used as a comprehensive resource by health professionals at all levels. In the last 5 years, more than **36,100** of these profiles have been sent to requesters, including representatives of federal, state, and local health and environmental departments; academic institutions; private industries; and nonprofit organizations in **New York**. ATSDR also has developed extensive resources for community members.

For more information, contact ATSDR toll-free at 1-888-42ATSDR (1-888-422-8737) or visit the ATSDR Web site at www.atsdr.cdc.gov.

February 2004



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AGENCY FOR TOXIC SUBSTANCES
AND DISEASE REGISTRY