Activities in Florida

ATSDR in Partnership With Florida

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 **$9.2 million**—more than **$999,000** in the last 2 years—in direct funds and services to Florida 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

ATSDR collaborated with the Federal Bureau of Investigation (FBI) and the Centers for Disease Control and Prevention's (CDC's) National Institute for Occupational Safety and Health, National Center for Environmental Health, and National Center for Infectious Diseases to help collect close to 5,000 evidence samples at the anthrax-contaminated offices of American Media Inc. (AMI) in **Boca Raton** in September 2002. CDC/ATSDR scientists and FBI investigators worked together on building entry and medical monitoring teams throughout the field investigation. The field investigation team successfully applied new scientific techniques to locate, quantify, and collect concentrations of anthrax spores within the building. The FBI noted that the results of these tests will provide valuable data to advance the ongoing investigation of the anthrax attacks.

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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. **Seventy-five** sites have been designated to the NPL in **Florida**.

A **public health assessment** is a written, comprehensive evaluation about 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 Florida, has conducted 99 public health assessments in the state, including the following recent example.

- **Stauffer**—In April 2003, ATSDR released its new public health assessment for the Stauffer Chemical Company site in **Tarpon Springs** for public comment. This public health assessment made three conclusions. First, past exposures were a public health hazard for area residents because of elevated levels of sulfur dioxide and particulate matter in air and for former Stauffer workers because of elevated levels of airborne contaminants including asbestos,

carbon monoxide, sulfur dioxide, and silica. Second, current exposures are not a public health hazard because no one is currently exposed to contaminants at unsafe levels. Third, future exposures could pose a public health hazard if the site were developed into a residential neighborhood because of elevated gamma radiation levels from on-site slag and elevated arsenic levels in on-site soils. The public health assessment recommended that ATSDR provide health education to area residents, former Stauffer employees, former students of Gulfside Elementary, and local health care providers and conduct a 1-day workshop of medical experts to discuss possible follow-up activities for former Stauffer workers. Health education for area residents, former Gulfside Elementary students, and local health care providers is ongoing. The expert panel workshop was held in July 2003 [see the Health Studies section of this fact sheet], and health education for former Stauffer workers will occur in conjunction with the proposed health study activities.

Stauffer Chemical Company in Tarpon Springs.

ATSDR is developing responses to public comments on the new public health assessment, preparing the document for final release (in spring 2004), developing health education strategies for the target audiences, and seeking CDC approval for a mortality study and a medical evaluation project for former Stauffer employees.

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, **154** health consultations have been documented at **88** sites in **Florida**, including the following recent examples.

- **Pahokee and South Bay**—A health consultation on total trihalomethanes in the **Pahokee** and **South Bay** municipal water systems is scheduled for release in early 2004. During the 30-day public comment period for the health consultation, public availability sessions will be held in both Pahokee and South Bay to gather additional community concerns and address comments on the document.

- **Speedway #8366 and Jack's Service Center**—ATSDR prepared a health consultation in response to community concerns about Speedway #8366 and Jack's Service Center in **Palm City**. A Palm City resident petitioned ATSDR to perform a public health assessment at the site known as 36th Street in Palm City. The letter also referenced contamination at Jack's Service Center. Specific concerns at both sites included groundwater contamination and its impact on private wells, possible improper disposal of soil from a 1988 tank excavation, and effects of contamination on the nearby Saint Lucie River.

  In a health consultation released in August 2003, ATSDR classified this site as an indeterminate public health. ATSDR concluded that indeterminate health hazards are associated with the present or future use of drinking water from private wells near the site. The sources of groundwater contamination at both Speedway and Jack's have been or soon will be remediated. **FDEP** and the **Martin County Health Department** continue to monitor the private wells and will provide a connection to the county public water system or a filter in the event that any state water quality limits are exceeded.

  No health hazards are associated with surface soil at either Speedway or Jack's. No reason exists to believe that surface soil became contaminated. Most of the ground surface at both facilities is paved, thus preventing any exposure to surface soil. Samples of the stockpiled soil excavated in 1991 at Jack's did not exceed any ATSDR comparison values and the soil was properly disposed of in June 1992.

No health hazard is associated with the Saint Lucie River. ATSDR's investigation found no evidence that contamination from Jack's or Speedway has migrated far enough to affect the Saint Lucie River. Postremedial monitoring at Speedway indicates that the site has been adequately remediated—all contaminants are below detection limits. A similar remediation plan is being implemented at Jack's. Therefore, ATSDR does not believe the Saint Lucie River has been or will be affected by the contamination.

An **exposure investigation** collects information about specific human exposures through biologic sampling, personal monitoring, related environmental assessment, and exposure-dose reconstruction. ATSDR has conducted **10** exposure investigations in **Florida**, including the following recent example.

- **Coronet Industries—FDOH** and the **Hillsborough County Health Department** (**HCHD**) assisted ATSDR in conducting an exposure investigation of the Coronet Industries site (also known as the Borden Feed site) in **Plant City**. The purpose of the exposure investigation was to better characterize human exposure to site-related chemicals for residents who were drinking the water. Coronet Industries processes phosphates for use in animal food supplements.

  ATSDR found that groundwater collected from monitoring wells at the facility was contaminated with fluoride, arsenic, cadmium, lead, and alpha radiation. Many residents who live near the site rely on private wells for potable water. Public health officials and residents expressed concern that water from these wells could contain chemical contaminants at concentrations of health concern. This contamination could originate from naturally occurring minerals in the underlying phosphate deposits or from chemicals released during operations or waste management practices at the facility.

  The exposure investigation released in December 2003 concluded that the measured exposures to lead, cadmium, uranium, fluoride, and boron pose no apparent public health hazard. These contaminants were not detected in urine samples at concentrations associated with adverse health effects. When this report was written, the NCEH laboratory had not yet analyzed the urine samples for speciated arsenic. When these results become available, ATSDR will prepare an addendum to this report that discusses the arsenic test results and their significance.

  Because blood-lead concentrations are a better indicator than urine lead concentrations of potential adverse health effects, the exposure investigation recommended that blood lead be measured in the participants who had urine lead concentrations exceeding the 95th percentile comparison range. HCHD will offer blood lead testing to participants whose urine lead concentrations exceeded the 95th percentile comparison range.

Health Education and Community Activities

Florida has participated in ATSDR's cooperative agreement program since 1987. Under this program, the **Florida Department of Health** has received funding and technical assistance for the development of community education and activities associated with human exposure to hazardous substances in the environment. Since 2000, more than 125 educational tools have been developed and distributed under the cooperative agreement. Examples of material recently developed include fact sheets to inform local residents about issues associated with the Callaway and Son Drum Service site (**West Leesburg**), the Alaric, Inc. site (**Tampa**), and the Kerr McGee, Inc. site (**Jacksonville**). More than 1,300 Florida residents and local government officials have participated in more than 30 different educational briefings or training sessions.

Health Studies

Health studies are investigations conducted to determine the relations 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 **Florida**.

- **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.
- **Mortality Study and Medical Evaluation Project, Former Workers at the Stauffer**

Chemical Company Site, Tarpon Springs—In July 2003, ATSDR convened an expert panel to get biomedical input for designing health follow-up activities. ATSDR is designing two activities: a former worker cause-of-death study and a medical evaluation project focused on respiratory health. ATSDR is seeking CDC approvals for these activities. ATSDR hopes to collect, evaluate, and analyze data and write reports in 2004.

- **Wingate Community Health Study**—From 1954 to 1978, the City of **Ft. Lauderdale** incinerated solid waste at the Wingate Road municipal incinerator and landfill. In 1990, EPA added this site to the NPL. Residents near the Wingate site were concerned that their health has been adversely affected by exposure to chemicals from the site. In response to these concerns, **FDOH** surveyed approximately 1,500 residents to assess self-reported diseases and symptoms in the Wingate area. Data collection began in August 2003 and was completed in December 2003. A draft final report is expected in March 2004.

Minority Health Professions Foundation Research Program

The Minority Health Professions Foundation (MHPF) Program supplements the substance-specific information needs of the public and the scientific community and supplies necessary information for conducting comprehensive public health assessments of hazardous waste sites. The program addresses ATSDR's goals to ascertain the relationship between exposure to toxic substances and disease and to build and enhance effective partnerships. The purpose of the MHPF Program is to initiate research to fill ATSDR-identified data needs for priority hazardous substances, and to enhance existing disciplinary capacities to conduct research in environmental health at MHPF member institutions, one of which is **Florida A&M University College of Pharmacy** in **Tallahassee**.

A new ATSDR/MHPF program, The Environmental Health, Health Services, and Toxicology Research Program, began in September 2003. The goals of the new program are to apply findings from the 10-year Environmental Health and Toxicology Research Program and to improve public health and environmental medicine in low-income and minority communities. This new program will build on earlier efforts and expand the program's public environmental health impact on affected communities. Activities across four research and environmental public health focus areas were funded to initiate this new program. These activities include substance-specific toxicology research, environmental exposure assessments, community-based environmental health education, and environmental health education for primary-care providers.

Scientists at the **Florida A&M College of Pharmacy** are conducting two studies—Lead/Manganese: Cell Signaling and Gene Expression in Primary Neurons and Community-Based Internships to Address Environmental Issues.

Resource Materials

ATSDR develops materials for public health professionals and medical care providers to use to assess the public health impacts of chemical exposures. These 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 **34,700** 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 **Florida**. 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.