



ATSDR in Partnership with Wyoming

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. ATSDR's annual budget for 2002 is \$78 million. ATSDR is responsible for assessing the presence and nature of health hazards at specific Superfund sites, helping to prevent or reduce further exposure and illnesses that result, and expanding the knowledge base about the health effects of exposure to hazardous substances.

ATSDR works closely with state agencies to carry out its mission of preventing exposure to contaminants at hazardous waste sites and preventing adverse health effects. ATSDR provides funding and technical assistance for states to identify and evaluate environmental health threats to communities. These resources enable state and local health departments to further investigate environmental health concerns and educate communities. In addition to direct funds and services, ATSDR provides technical and administrative guidance for state-conducted site activities.

ATSDR Site-Specific Activities

Public Health Assessment-Related Activities

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 there might be a significant threat to the public health. In **Wyoming** there have been **three** sites designated to the NPL.

A public health assessment provides a written, comprehensive evaluation of available data and information on 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 conjunction with public health and environmental officials from **Wyoming**, has conducted **three** health assessments in the state. An example of a public health assessment conducted in **Wyoming** follows.

F. E. Warren Air Force Base - ATSDR conducted a public health assessment at this site to evaluate exposure pathways and to respond to community concerns. Concerns were expressed about past, current, and potential future exposures to contaminants originating at the Air Force base.

The majority of contamination identified at the site resulted from past waste and resource management. The northern portion of the base is in open prairie formerly used as firing ranges to test artillery. In 1990, the Environmental Protection Agency (EPA) placed the site on the NPL because of groundwater contamination.

ATSDR reviewed available data from several sources and spoke with community members about their health concerns. Principal possible exposure pathways of concern were contamination of private wells by volatile organic compounds (VOCs) and metals, recreational use of two landfills, and dust blowing from the areas surrounding the firing range (ricochet zone). Also, dirt from this area was removed to be used as landfill in other areas at the base. Access to these landfills was unrestricted and children had been observed playing in these areas.

After reviewing all available data, ATSDR concluded that contaminants present in any media tested at the site do not pose a public health hazard to past, current, or potential future residents. Final results of the public health assessment were released in 1999.

Public health assessments also have been conducted at Baxter/Union Pacific Tie Treating and Mystery Bridge Road at Highway 20.

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. It is a more limited response than a public health assessment. To date, **eight** documented health consultations have been conducted at **four** sites in **Wyoming**. Following is an example of a health consultation conducted in the state.

North Casper Perchloroethylene (PCE) Plume - ATSDR received a citizen's request to conduct a health consultation at this site. Concern was expressed about potential health effects from exposure to groundwater, soil, and air contamination from the North Casper PCE Plume and other specified sources. After public comments were received on the draft document, ATSDR revised the consultation and released the final report in 1999.

Two separate and apparently unrelated groundwater plumes in the area, identified as east and west plumes, were contaminated with PCE. Residents were concerned that treated drinking water at a nearby trailer park was contaminated with PCE and trichloroethylene (TCE). Although TCE was found in the water, neither PCE nor TCE were found in excess of Environmental Protection Agency (EPA) standards. Similarly, the levels of PCE found in indoor air were not sufficiently elevated to constitute a public health threat.

ATSDR reviewed a health survey conducted by a local community group, and evaluated existing and potential environmental exposures, as part of the process. Both the east and west plumes were identified as potential sources of PCE and TCE contamination. None of the data reviewed indicated that the documented exposures in the area would cause adverse health effects. Additionally, ATSDR reviewed childhood cancer incidence data for the Casper area. These data indicated levels, ages, and types of childhood cancers similar to those found nationally.

Due to potential contamination from multiple sources, ATSDR strongly recommended that North Casper residents not drink private well water. Treatment and periodic testing of municipal water supplies should be continued.

Health consultations also have been conducted at F.E. Warren Air Force Base, Riverside Norge Village, and Wenger Drum.

Toxicological Profiles

ATSDR develops toxicological profiles that describe health effects, environmental characteristics, and other information for substances found at NPL sites. These profiles contain information on pathways of human exposure and the behavior of hazardous substances in environmental media such as air, soil, and water.

In the last 5 years, more than **120** 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 **Wyoming**.