



Highlights of [GAO-07-933T](#), a testimony before the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives

Why GAO Did This Study

In the early 1980s, volatile organic compounds (VOC) were discovered in some of the water systems serving housing areas on Marine Corps Base Camp Lejeune. Exposure to certain VOCs may cause adverse health effects, including cancer. Since 1991, the Department of Health and Human Services' Agency for Toxic Substances and Disease Registry (ATSDR) has been examining whether individuals who were exposed to the contaminated drinking water are likely to have adverse health effects. ATSDR's current study is examining whether individuals who were exposed in utero are more likely to have developed certain childhood cancers or birth defects.

GAO was asked to testify on its May 11, 2007 report: *Defense Health Care: Activities Related to Past Drinking Water Contamination at Marine Corps Base Camp Lejeune* ([GAO-07-276](#)). This testimony summarizes findings from the report about (1) efforts to identify and address the past drinking water contamination, (2) the provision of funding and information from the Department of Defense (DOD) to ATSDR, and (3) an assessment of the design of the current ATSDR study. GAO reviewed documents, interviewed officials and former residents, and contracted with the National Academy of Sciences to convene an expert panel to assess the current ATSDR study.

www.gao.gov/cgi-bin/getrpt?GAO-07-933T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Marcia Crosse at (202) 512-7119 or crossem@gao.gov.

DEFENSE HEALTH CARE

Issues Related to Past Drinking Water Contamination at Marine Corps Base Camp Lejeune

What GAO Found

Efforts to identify and address the past drinking water contamination at Camp Lejeune began in the 1980s, when Navy water testing at Camp Lejeune detected VOCs in some base water systems. In 1982 and 1983, continued testing identified two VOCs—trichloroethylene (TCE), a metal degreaser, and tetrachloroethylene (PCE), a dry cleaning solvent—in two water systems that served base housing areas, Hadnot Point and Tarawa Terrace. In 1984 and 1985 a Navy environmental program identified VOCs, such as TCE and PCE, in some of the individual wells serving the Hadnot Point and Tarawa Terrace water systems. Ten wells were subsequently removed from service. DOD and North Carolina officials concluded that on- and off-base sources were likely to have caused the contamination. It has not been determined when contamination at Hadnot Point began. ATSDR has estimated that well contamination at Tarawa Terrace from an off-base dry cleaner began as early as 1957.

Since ATSDR began its Camp Lejeune-related work in 1991, the agency has not always received requested funding and has experienced delays in receiving information from DOD. However, ATSDR officials said that while funding and access to records were probably slowed down and made more expensive by DOD officials' actions, their actions did not significantly impede ATSDR's Camp Lejeune-related health study efforts. The ATSDR officials also stated that while issues such as limitations in access to DOD data had to be addressed, such situations are normal during the course of a study.

Members of the expert panel that the National Academy of Sciences convened for GAO generally agreed that many parameters of ATSDR's current study are appropriate, including the study population, the exposure time frame, and the selected health effects. Regarding the study's proposed completion date of December 2007, the panel experts had mixed opinions: three of the five panel experts who commented said that the projected date appeared reasonable, while two said that the date might be optimistic.

DOD, the Environmental Protection Agency, and the Department of Health and Human Services provided technical comments on a draft of the May 11, 2007 report, which GAO incorporated where appropriate. Three members of an ATSDR community assistance panel for Camp Lejeune provided oral comments on issues such as other VOCs that have been detected at Camp Lejeune, and compensation, health benefits, and additional notification for former residents. GAO focused its review on TCE and PCE because they were identified by ATSDR as the chemicals of primary concern. GAO's report notes that other VOCs were detected. GAO incorporated the panel members' comments where appropriate, but some issues were beyond the scope of the report.