



Highlights of [GAO-05-344](#), a report to the Chairman, Subcommittee on Environment and Hazardous Materials, Committee on Energy and Commerce, House of Representatives

Why GAO Did This Study

Media reports on elevated lead in the District of Columbia's drinking water raised concern about how local and federal agencies are carrying out their responsibilities. The Lead and Copper Rule requires water systems to protect drinking water from lead. The U.S. Army Corps of Engineers' Washington Aqueduct treats and sells water to the District Water and Sewer Authority (WASA), which delivers it to District residents. The Environmental Protection Agency's (EPA) Region III Office oversees these agencies.

GAO examined (1) what agencies implementing the rule in the District are doing to improve their coordination and reduce lead levels, (2) the extent to which WASA and other agencies are identifying populations at greatest risk of exposure to lead in drinking water and reducing their exposure, (3) how other drinking water systems that exceed EPA's action level for lead conduct public education, and (4) the state of research on lead exposure and how it applies to drinking water.

What GAO Recommends

GAO recommends that EPA (1) identify and publish best practices that water systems use to educate their customers about lead in drinking water and (2) develop a strategy for closing information gaps in the health effects of lead in drinking water. EPA generally agreed with the report.

www.gao.gov/cgi-bin/getrpt?GAO-05-344.

To view the full product, including the scope and methodology, click on the link above. For more information, contact John Stephenson at (202) 512-3841 or stephensonj@gao.gov.

DISTRICT OF COLUMBIA'S DRINKING WATER

Agencies Have Improved Coordination, but Key Challenges Remain in Protecting the Public from Elevated Lead Levels

What GAO Found

WASA and other government agencies have improved their coordination, but significant challenges remain. According to EPA officials, WASA has thus far met the terms of a June 2004 consent order by enhancing its coordination with EPA and the D.C. Department of Health. For example, WASA developed a plan to improve its public education efforts and collaborated with the department to set priorities for replacing lead service lines. EPA expects the August 2004 addition of a corrosion inhibitor to eventually reduce lead in drinking water, though it may take more than one year for full improvements to be observed. Tap water test results reported in January 2005 show that D.C. drinking water still exceeds the standard for lead.

WASA is identifying those customers most at risk from exposure to lead in drinking water and reducing their exposure. WASA is focusing on lead service lines as the primary source of lead in drinking water. It is updating its inventory of lead service lines, accelerating its rate of service line replacement, and providing priority replacement for customers most vulnerable to lead's health effects. However, questions remain about the success of the replacement program because, by law, WASA can only pay to replace the portion of the service line that it owns. Homeowners may pay to replace their portion of the service line, but few homeowners chose to do so in 2003 and 2004.

Other water systems use innovative methods to educate their customers and to judge the effectiveness of their efforts. These practices include using a variety of media to inform the public, forming partnerships with government and nonprofit agencies, and targeting and adapting information to the audiences most susceptible to lead exposure through drinking water. Many of these practices go well beyond the requirements of the Lead and Copper Rule. In this connection, water industry representatives and others noted several shortcomings with the rule's public education provisions, including confusing language and the lack of a requirement to notify homeowners of the specific lead levels in their drinking water. Additionally, EPA has not evaluated water systems' public education efforts on lead in drinking water since the rule was established more than a decade ago.

Much is known about the health effects of lead exposure, particularly its impact on brain development and functioning in young children. However, limited studies have been conducted on the health effects of exposure to low levels of lead in drinking water. EPA plans to prepare a health advisory document to help utilities explain the risks of lead exposure to the public, and a paper summarizing lead research conducted since the Lead and Copper Rule was published in 1991. However, the timetable for these projects is not clear, and it is also not clear how this work will fit into a broader research agenda, or if this effort needs to involve other key organizations, such as the Centers for Disease Control and Prevention.