

Why GAO Did This Study

The nation's drinking water is among the safest in the world, but contamination has occurred, causing illnesses and even deaths. Under the Safe Drinking Water Act (SDWA), the Environmental Protection Agency (EPA) has authorized most states, territories, and tribes to take primary responsibility for ensuring that community water systems provide safe water. EPA needs complete and accurate data on systems' compliance with SDWA to conduct oversight. GAO was asked to assess the (1) quality of the state data EPA uses to measure compliance with health and monitoring requirements of the act and the status of enforcement efforts, (2) ways in which data quality could affect EPA's management of the drinking water program, and (3) actions EPA and the states have been taking to improve data quality. GAO analyzed EPA audits of state data done in 2007, 2008, and 2009, and surveyed EPA and state officials to obtain their views on factors that have affected data quality and steps that could improve it.

What GAO Recommends

GAO is making recommendations to improve EPA's ability to oversee the states' implementation of SDWA and provide Congress and the public with more complete and accurate data on compliance and enforcement. EPA partially agreed with two of the recommendations, disagreed with one, and neither agreed nor disagreed with one. GAO believes that EPA needs to implement all of the recommendations to improve its ability to oversee SDWA.

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DRINKING WATER

Unreliable State Data Limit EPA's Ability to Target Enforcement Priorities and Communicate Water Systems' Performance

What GAO Found

The data states reported to EPA for measuring compliance with health and monitoring requirements of SDWA did not reliably reflect the number of health-based and monitoring violations that community water systems have committed or the status of enforcement actions. Using data from the 14 states EPA audited in 2009, GAO estimates that those 14 states did not report or inaccurately reported 26 percent of the health-based violations that should have been reported and 84 percent of the monitoring violations that should have been reported. GAO's findings were consistent with the results of prior EPA audits. In addition, according to EPA headquarters and regional officials GAO interviewed and surveyed, state-reported data underreported the percentage of water systems with violations against which the states have taken enforcement actions. Survey respondents and other officials reported that numerous factors contribute to errors in reported data on violations and enforcement, including inadequate training, staffing, and guidance, and inadequate funding to conduct those activities.

Unreported health-based and monitoring violations and incomplete enforcement data limit EPA's ability to identify water systems with the most serious compliance problems and ensure that it is achieving its goal of targeting for enforcement those systems with the most serious compliance problems. Specifically, incomplete and inaccurate data on both violations and enforcement actions affect a scoring tool EPA and the states are using to rank systems for enforcement actions. In addition, unreliable data quality impedes EPA's ability to monitor and report progress toward a strategic objective of reducing exposure to contaminants in drinking water. For example, EPA's 2011 national program guidance contains a performance measure for the number and percentage of systems with certain repeated health-based violations, but EPA's ability to reliably use this type of measure requires complete and accurate data on violations. Because of unreported violations data, EPA may not be able to report accurate performance information on systems with these violations.

EPA and the states have collaborated over many years to identify and address the causes of incomplete and inaccurate violations data, but those efforts have not been fully successful, according to EPA and state officials GAO surveyed. EPA's efforts have included (1) conducting audits—discontinued in 2010 because of funding constraints—to determine the completeness and accuracy of the violations data states reported to EPA, (2) establishing three work groups to address data management and quality, and (3) urging EPA regions and states to use data management tools the agency has developed. However, EPA has encouraged but not required that its regions or the states take specific actions that could improve data quality. EPA's 2010 drinking water strategy calls for, among other things, an increase in shared data between the agency and the states. EPA also plans to redesign its drinking water data system to provide it with greater access to, and oversight of, the states' determinations of SDWA violations.