

## Executive Summary

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THE Safe Drinking Water Act (SDWA) directs the U.S. Environmental Protection Agency (EPA) to establish national standards for contaminants in public drinking-water supplies. Enforceable standards are to be set at concentrations at which no adverse health effects in humans are expected to occur and for which there are adequate margins of safety. Enforceable standards are standards that can be achieved with the use of the best technology available.

Arsenic is a naturally occurring element present in the environment in both inorganic and organic forms. Inorganic arsenic is considered to be the most toxic form of the element and is found in groundwater and surface water, as well as in many foods. A wide variety of adverse health effects, including skin and internal cancers and cardiovascular and neurological effects, have been attributed to chronic arsenic exposure, primarily from drinking water. EPA's interim maximum contaminant level (MCL) for arsenic in drinking water is 50 micrograms per liter ( $\mu\text{g}/\text{L}$ ). Under the 1996 SDWA amendments, EPA is required to propose a standard (an MCL) for arsenic in drinking water by January 2000 and finalize it by January 2001.

### THE CHARGE TO THE SUBCOMMITTEE

In 1996, EPA's Office of Water requested that the National Research Council (NRC) independently review the arsenic toxicity data base and evaluate the scientific validity of EPA's 1988 risk assessment for arsenic in drinking water. The NRC assigned this project to the Committee on Toxicology (COT), which convened the Subcommittee on Arsenic in Drinking Water, whose membership includes experts in toxicology, pharmacology, pathology, chemistry, nutrition, medicine, epidemiology, risk assessment, and biostatistics. The subcommittee was charged with the following tasks: (1) review