

Scientific issues relating to inorganic arsenic explored

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To assist the EPA in performing the toxicologic assessment of [inorganic arsenic](#), Joseph H. Graziano, Ph.D., from the Columbia University Mailman School of Public Health in New York City, and colleagues conducted an assessment to evaluate the critical scientific issues relating to the cancer and non-cancer effects of oral exposure to inorganic

arsenic, and offer recommendations on how these issues could be addressed.

The researchers note that the steps involved in the toxicologic assessment of arsenic include hazard identification, based on broad literature searches and screening processes that identify specific inorganic arsenic-related health effects. Further evaluation of the evidence and systematic reviews were conducted to support the toxicologic assessment. The EPA draft plan aimed to conduct mode-of-action analyses for end points that seemed to have causal associations with arsenic. Priority outcomes with evidence of a causal association included lung, skin, and bladder cancer, ischemic heart disease, and skin lesions. Based on literature searches, factors that could contribute to arsenic susceptibility were identified. In addition, dose-response analyses were recommended.

"This interim report addresses the first phase of the project by providing recommendations on key aspects of and controversies related to the performance of the hazard identification and dose-response analyses for inorganic arsenic," the authors write.

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