

## **Integrated Risk Information System (IRIS) Database Enhancements and Process Changes**

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The Integrated Risk Information System (IRIS) is a publicly accessible U.S. Environmental Protection Agency (EPA) database containing information on the potential adverse health effects associated with chronic exposure to environmental chemicals. The information on IRIS is used throughout EPA and the world to produce consistent risk assessments based on analysis of peer-reviewed data on a chemical's toxicity and dose-response relationships. New features have been added to IRIS to meet the expanded needs of end users.

EPA continually adds and updates chemical assessments on the IRIS database. Since many of the chemical assessments on IRIS were loaded onto the database in the late 80s and early 90s, IRIS has conducted a screening-level literature review to identify new studies performed after those IRIS assessments were completed. The results for 460 chemicals have been incorporated into each IRIS Summary and posted on the IRIS website to inform the users whether any new information is available. This information is used to guide the priority setting process for the selection of new IRIS assessments. Enhanced search capabilities have also been added to the IRIS database. Users can now search by values of the composite uncertainty factors, individual uncertainty factors and modifying factors used to derive reference values. The new human carcinogenicity evidence search criterion allows IRIS users to search the IRIS database and identify substances by the weight-of-evidence classifications or descriptors established in the 1986, 1996 and 1999 Guidelines for Carcinogen Risk Assessment. Assessment tracking features are planned for the IRIS website that will provide information on each IRIS assessment currently being developed and the status of the review. The IRIS program has changed the process by which Toxicological Reviews and Summaries are managed before posting on the IRIS website in order to increase internal efficiencies. Beginning in 2004, EPA has determined that the preferred method of external peer review of an IRIS assessment will be a panel meeting open for public observation. These changes are intended to improve the timeliness, transparency, consistency and quality of IRIS assessments.