HAWC (Health Assessment Workspace Collaborative): A module web-based interface to facilitate development of human health assessments of chemicals

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Literature-based assessments of potential human health effects from environmental exposures require a systematic review of the literature, comprehensive data extraction, synthesis, and interpretation by teams of experts across multiple fields. These data challenges can make it difficult for coordination during production, and conventional reports may limit the wealth of data captured, and interpretation applied in the analysis due to their document-based nature. HAWC (https://hawcproject.org/) is an open-source, modular, content-management system designed to facilitate synthesis of multiple data sources into overall human health assessments of environmental exposures. It integrates and documents workflow from literature search to data extraction, synthesis, and interpretation. It creates a workspace for interested parties, including reviewers and stakeholders, to have dynamic access to on-going and completed assessments. Finally, it creates a clear and concise summary of the results of these assessments, enables online access to literature review, source primary data and/or tabulated study summaries and visual aids (e.g, Forest plots) that constitute the scientific justification for conclusions. The HAWC website is currently being used by US state, federal, and international agencies.

The goal of the presentation is to showcase the capabilities of HAWC, and how it being utilized by the NTP Office of Health Assessment and Translation (OHAT), the World Health Organization (WHO) International Agency for Research on Cancer (IARC) monographs program, and others.