GAO Highlights

CHEMICAL ASSESSMENTS

Annual EPA Survey Inconsistent with Leading Practices in Program Management

Why GAO Did This Study

EPA's IRIS Program prepares chemical toxicity assessments that contain EPA's scientific position on the potential human health effects of exposure to chemicals; at present, the IRIS database contains more than 570 chemical assessments. In March 2019, GAO reported on the IRIS Program's changes to increase transparency about its processes and methodologies, including the use of systematic review. However, GAO also found that EPA decreased the number of ongoing assessments in December 2018 from 22 to 13 and continued to face challenges in producing timely assessments.

This report evaluates (1) EPA's progress in completing IRIS chemical assessments since 2018; and (2) EPA's recent actions to manage the IRIS Program, and the extent to which these actions help the Program meet EPA user needs.

GAO reviewed and analyzed EPA documents and interviewed officials from EPA; GAO also selected three standards for program management, found commonalities among them, and compared ORD's management of the IRIS Program against these leading practices.

What GAO Recommends

GAO is making five recommendations, including that EPA provide more information publicly about where chemical assessments are in the development process; and issue guidance for selecting chemicals for nomination and criteria for selecting nominations for assessment. EPA partially agreed with two of our recommendations and disagreed with the other three.

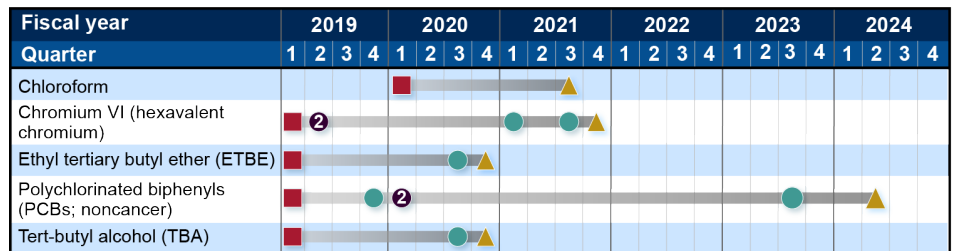View GAO-21-156. For more information, contact J. Alfredo Gómez at (202) 512-3841 or gomezj@gao.gov.

What GAO Found

The Environmental Protection Agency's (EPA) Integrated Risk Information System (IRIS) Program has not produced timely chemical assessments, and most of its 15 ongoing assessments have experienced delays. As we reported in March 2019, the IRIS Program has taken some actions to make the assessment process more transparent, such as increasing communication with EPA offices and releasing supporting documentation for review earlier in the draft development process, but the need for greater transparency in some steps of the assessment process remains. Specifically, the IRIS Program does not publicly announce when assessment drafts move to certain steps in their development process or announce reasons for delays in producing specific assessments. Without such information, stakeholders who may be able to help fill data and analytical gaps are unable to contribute. This could leave EPA without potential support that could help overcome delays.

Delays of Milestones by Quarter for a Selection of the Integrated Risk information System's Assessments in Development 2019 - 2024

Fiscal year	2019				2020				2021				2022				2023				2024			
Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Chloroform					■					▲														
Chromium VI (hexavalent chromium)	■ ②									●	● ▲													
Ethyl tertiary butyl ether (ETBE)	■						●	▲																
Polychlorinated biphenyls (PCBs; noncancer)	■				●	②													●		▲			
Tert-butyl alcohol (TBA)	■						● ▲																	

■ When chemicals first appear on a Program Outlook
● Delayed or moved milestone/advancement to next step
② Systematic Review Protocols released
▲ Projected date for move to next public step (as of June 2020)

Source: GAO analysis of Environmental Protection Agency data. | GAO-21-156

In mid-2018, EPA's Office of Research and Development (ORD) instituted changes to the way it solicits nominations for chemical assessments prepared by the IRIS Program but did so without providing sufficient guidance or criteria, raising questions about its ability to meet EPA user needs. For example, ORD issued a new survey to EPA program and regional offices but did not provide them with guidance for selecting chemicals for nomination, and ORD did not make explicit the criteria it was using for selecting nominations to include in the IRIS Program's list of assessments in development. Furthermore, despite a significant decline in survey participation between 2018 and 2019, EPA did not indicate whether the agency has assessed the quality of information generated by the survey. Leading program management practices state that agency management should internally communicate the necessary, quality information to achieve the entity's objectives and should monitor and evaluate program activities. Without evaluating the quality of the information produced by the survey, ORD cannot know if the survey is achieving its intended purpose and whether ORD has the information necessary to meet user needs.

United States Government Accountability Office