

A Message from the IRIS Program
IRIS Program Outlook
February 2022

The IRIS Program is committed to producing assessments in a timely and transparent manner. Table 1 describes assessments that are currently in development and their projected public release dates. The IRIS Program is providing this information so that stakeholders are aware of upcoming assessment products, and to allow the public and research community an opportunity to communicate relevant research to EPA. The documents listed in Table 1 can be found at Regulations.gov in the IRIS public comment dockets. Docket numbers are listed on the IRIS website here: <https://iris.epa.gov/Dockets/>. While IRIS assessments are not associated with proposed rulemaking, Regulations.gov serves as both an internal portal to facilitate public comment and as a document repository for Federal government agencies.

Projected dates are based on factors such as the 1) scope of the assessment (e.g., size and complexity of a chemical's evidence base)ⁱ and 2) resource availability. Nearer-term activities are estimated using current Fiscal Year (FY) and Quarter. Long-term milestones are projected only for the FY due to the increased uncertainty of projecting timelines at the Quarter level. While projected dates reflect the IRIS Program's best estimate at this time based on available information, they are subject to change. Changes to estimated dates typically result from additional time needed to address the scientific challenges unique to each chemical assessment, new data, or respond to internal, public, and/or peer review comments, in addition to current EPA priorities and the availability of staff with the appropriate expertise to address those challenges. The IRIS Program Outlook is updated at least three times each calendar year (February, June, October).

Additional information regarding other pertinent products relating to IRIS assessments and IRIS Program activities is included in Tables 2 and 3. For questions regarding the IRIS Program activities, visit the [Contact Us](#) page on the EPA Website. For press inquiries, visit EPA's Office of Public Affairs [website](#).

ⁱ The scope of IRIS assessments is discussed in the IRIS Assessment Plan (IAP). Information regarding size of the evidence base and expected key areas of scientific complexity is available in these documents. For information on how IAPs are developed, please see the IRIS Handbook: https://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=350086.

Table 1. IRIS Assessment Products/Activities – February 2022.

Assessment	Public Product(s)/Activity	Projected Date
Arsenic, Inorganic	Systematic Review Protocol	Released on May 28, 2019 for a 30-day public comment period until June 27, 2019. NAS review meeting July 16, 2019.
	Public Comment Draft Release	FY23 Q1
	External Peer Review	FY23
Chloroform (Inhalation) ¹	IRIS Assessment Plan	Released on September 18, 2017 for a 30-day public comment period until October 18, 2017. Public Science Meeting on September 27, 2017.
	Systematic Review Protocol	Released on January 31, 2018 for a 30-day public comment period until March 2, 2018.
	Public Comment Draft	FY22 Q4
	External Peer Review	FY23 Q1
Chromium VI	Systematic Review Protocol	Released on March 15, 2019 for a 45-day public comment period until April 29, 2019. Public Science Meeting on April 24, 2019.
	Public Comment Draft Release	FY22 Q4
	External Peer Review	FY23 Q1
Ethylbenzene ^{1, 2}	IRIS Assessment Plan	Released on September 18, 2017 for a 30-day public comment period until October 18, 2017. Public Science Meeting on September 27, 2017.
	Systematic Review Protocol	FY22 Q3
	Public Comment Draft Release	TBD
	External Peer Review	TBD
Formaldehyde ¹	Public Comment Draft Release	FY22 Q3
	External Peer Review	FY22 Q3

Assessment	Public Product(s)/Activity	Projected Date
Inorganic Mercury salts	IRIS Assessment Plan	Released on October 8, 2019 for a 30-day public comment period until November 7, 2019. Public science meeting on December 5, 2019
	Systematic Review Protocol	Released on March 11, 2021 for a 30-day public comment period until April 12, 2021.
	Public Comment Draft Release	FY23
	External Peer Review	FY23
Methylmercury	IRIS Assessment Plan	Released on April 4, 2019 for a 30-day public comment period until May 6, 2019. Public Science Meeting on May 15, 2019
	Systematic Review Protocol	Released on May 28, 2020 for a 45-day public comment period until July 13, 2020.
	Public Comment Draft Release	FY23
	External Peer Review	FY24
Naphthalene ^{1,2}	IRIS Assessment Plan	Released on July 5, 2018 for a 30-day public comment period until August 6, 2018; extended until September 5, 2018. Public Science meeting originally scheduled for August 23, 2018 was postponed and held November 9, 2021.
	Systematic Review Protocol	FY22 Q4
	Public Comment Draft Release	TBD
	External Peer Review	TBD
Perfluorobutanoic Acid (PFBA) ³	Systematic Review Protocol	Released on November 8, 2019 for a 45-day comment period until December 23, 2019.
	Public Comment Draft Release	Released on August 23, 2021 for a 60-day public comment period until October 22, 2021; extended until November 8, 2021.
	External Peer Review	FY22 Q1; see Table 2 for details
Perfluorodecanoic Acid (PFDA) ³	Systematic Review Protocol	Released on November 8, 2019 for a 45-day public comment period until December 23, 2019.

Assessment	Public Product(s)/Activity	Projected Date
	Public Comment Draft Release	FY23 Q1
	External Peer Review	FY23 Q2
Perfluorohexanoic acid (PFHxA) ³	Systematic Review Protocol	Released on November 8, 2019 for a 45-day public comment period until December 23, 2019.
	Public Comment Draft Release	Released on February 2, 2022 for a 60-day public comment period until April 4, 2022.
	External Peer Review	FY22 Q3
Perfluorohexanesulfonic Acid (PFHxS) ³	Systematic Review Protocol	Released on November 8, 2019 for a 45-day public comment period until December 23, 2019.
	Public Comment Draft Release	FY23 Q2
	External Peer Review	FY23 Q2
Perfluorononanoic Acid (PFNA) ³	Systematic Review Protocol	Released on November 8, 2019 for a 45-day public comment period until December 23, 2019.
	Public Comment Draft Release	FY23 Q2
	External Peer Review	FY23 Q3
Polychlorinated Biphenyls (PCBs; oral, noncancer)	Systematic Review Protocol	Released on December 19, 2019 for a 30-day public comment period until January 21, 2020.
	Public Comment Draft Release	FY24
	External Peer Review	FY25
Uranium ^{1,2}	IRIS Assessment Plan	Released on January 31, 2018 for a 30-day public comment period until March 2, 2018. Public Science Meeting on March 22, 2018
	Systematic Review Protocol	FY22 Q4
	Public Comment Draft Release	TBD
	External Peer Review	TBD
Vanadium and Compounds (Oral)	IRIS Assessment Plan	Released on July 24, 2020 for a 30-day comment period until August 24, 2020. Extended until September 23, 2020. Public Science Meeting on August 19, 2020

Assessment	Public Product(s)/Activity	Projected Date
	Systematic Review Protocol	Released on April 26, 2021 for a 30-day public comment period until May 26, 2021.
	Public Comment Draft Release	FY24
	External Peer Review	FY24
Vanadium and Compounds (Inhalation) ²	IRIS Assessment Plan	Released on May 28, 2021 for a 30-day public comment period until June 28, 2021. Public Science Meeting on July 14, 2021.
	Systematic Review Protocol	FY22 Q3
	Public Comment Draft Release	TBD
	External Peer Review	TBD

¹The chloroform, ethylbenzene, formaldehyde, naphthalene, and uranium IRIS assessments were suspended in April 2019 due to realignment of Agency priorities, see April 2019 IRIS Program Outlook here: https://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=350410. Chloroform was later identified as a priority; see February 2020 IRIS Program Outlook, here: https://www.epa.gov/sites/default/files/2020-02/documents/iris_program_outlook_feb2020.pdf. Formaldehyde was also later identified as a priority, while naphthalene, ethylbenzene, and uranium were nominated in FY21 and are currently in progress; see June 2021 IRIS Program Outlooks here: <https://www.epa.gov/system/files/documents/2021-07/iris-program-outlook-june-2021.pdf>.

²The IRIS Program is currently revising the ORD Staff Handbook for Developing IRIS Assessments (“IRIS Handbook”) following external peer review by the National Academy of Sciences, which is expected to impact systematic review protocol development (ethylbenzene, naphthalene, uranium, vanadium inhalation). Following the systematic review protocol release, subsequent projected milestone dates (public comment and peer review) will be updated and provided in the next IRIS Program Outlook.

³The five per- and polyfluoroalkyl Substances (PFAS) assessments are being developed according to the scope and methods outlined in the publicly posted systematic review protocol (https://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=345065) and build upon several other PFAS assessments that have already been developed. These assessments represent only one component of the broader [EPA 2021 Strategic Roadmap](#) currently being implemented at the U.S. EPA, located at <https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024>.

Table 2. Upcoming IRIS Assessment support products and activities

Product or Activity	Next Anticipated Public Step(s)	Projected Date
ORD Staff Handbook for Developing IRIS Assessments (“IRIS Handbook”)	Final	FY22 Q4/ FY23 Q1
NAS Workshop - Advances Made During Application of Artificial Intelligence and Open Data Practices in Chemical Hazard Assessment	Public Workshop	May 25-26, 2022
NAS Workshop - Triangulation of Evidence in Environmental Epidemiology	Public Workshop	May 9, 2022 and May 11, 2022
PCB Mixtures/Modeling and Tool Webinar	Public Meeting	March 16, 2022
Peer Review Activities		
Perfluorobutanoic Acid (PFBA)	Public External Peer Review Meeting	February 22-23, 2022
Perfluorohexanoic acid (PFHxA)	Public External Peer Review Meeting	FY22 Q3
Formaldehyde	Public External Peer Review Meeting	FY22 Q3

Table 3. Select Recent Publications Related to IRIS Assessment Activities

Assessment	Citation	Publication Date
Polychlorinated Biphenyls (PCBs; oral, noncancer)	Weitekamp, C.A., Phillips, L.J., Carlson, L.M., DeLuca, N.M., Cohen Hubal, E.A., Lehmann, G.M. (2021). A state-of-the-science review of polychlorinated biphenyl exposures at background levels: Relative contributions of exposure routes, Science of the Total Environment, 776(1). 145912. https://doi.org/10.1016/j.scitotenv.2021.145912	Published February 2021