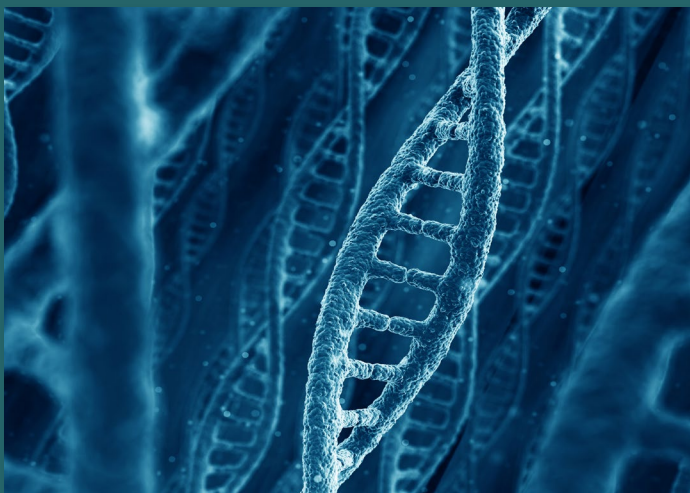


A Portfolio Approach to Chemical Assessment

Samantha Jones, Ph.D.
National Program Director
Health and Environmental Risk Assessment Research



The views expressed in this presentation do not necessarily reflect the views or policies of the U.S. EPA

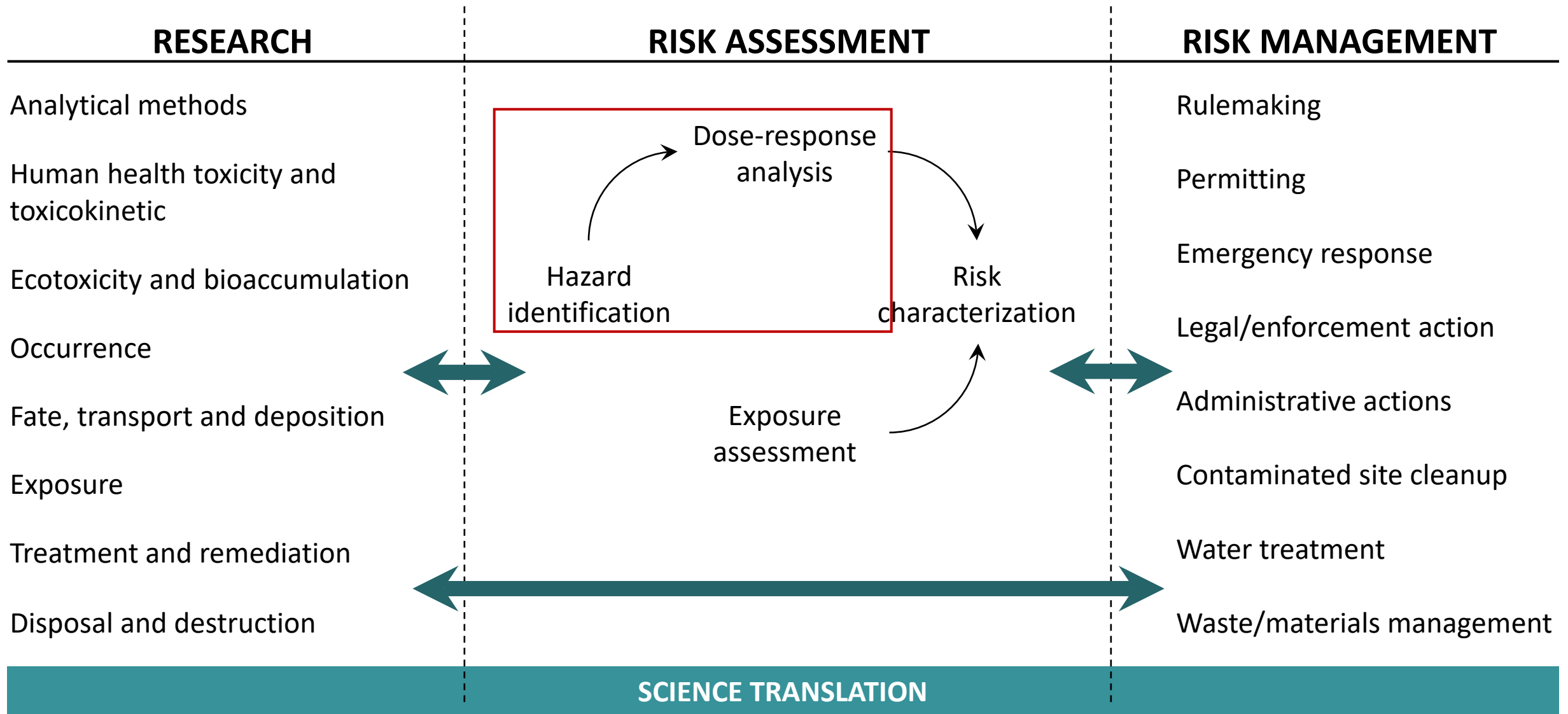
Office of Research and Development (ORD)

Provides the scientific foundation for EPA to execute its mandate to protect human health and the environment.

- *Innovative and anticipatory* research addressing a range of EPA program and regional needs to identify and solve longer term environmental challenges.
- Research to support Agency priorities and to assist states, tribes, and communities with addressing *environmental challenges*.
- Technical support to *respond to environmental crises and needs*, large and small.

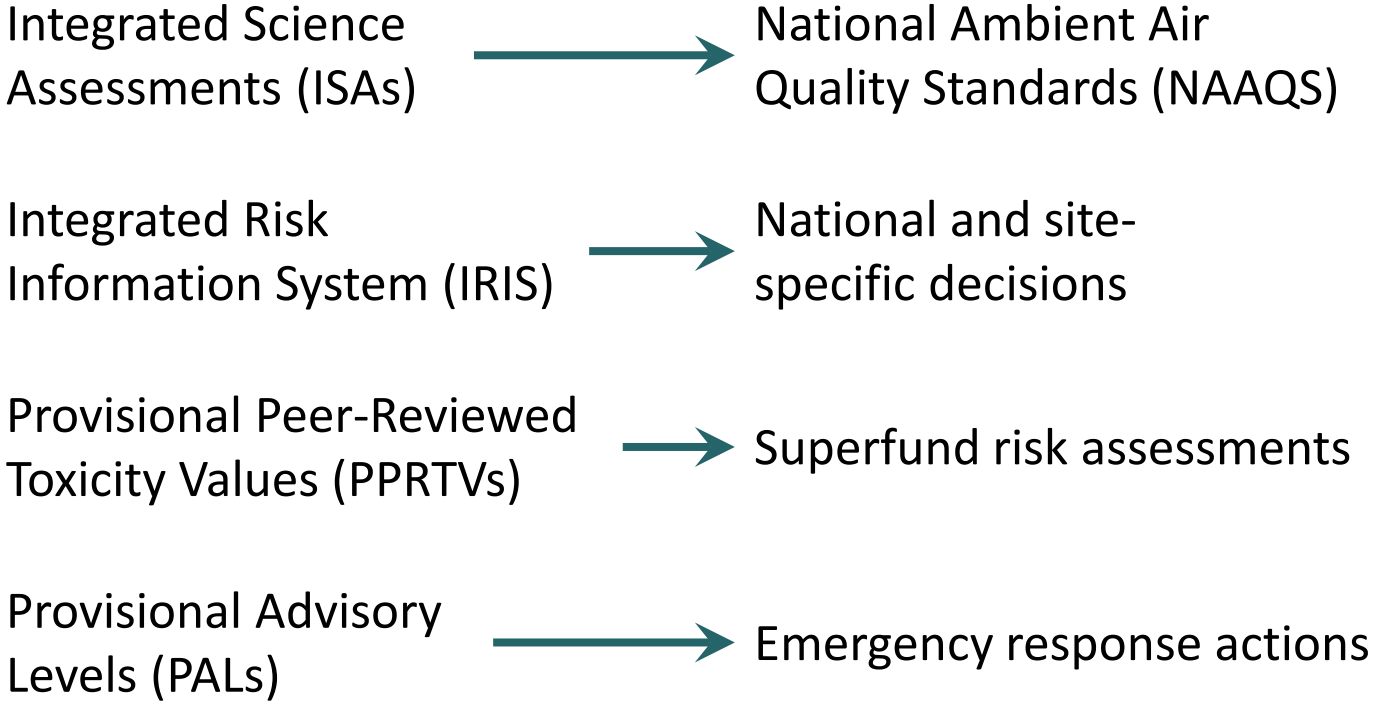
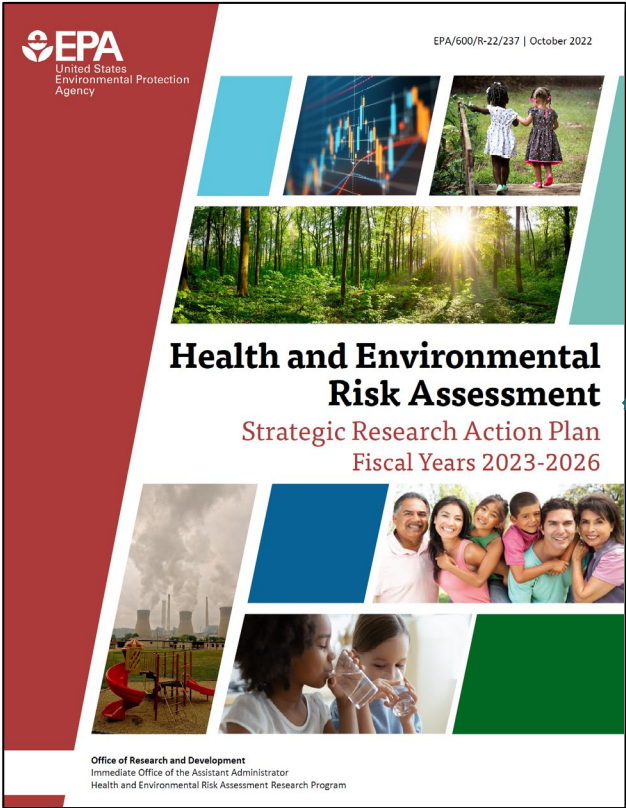


ORD Science Informs Decisions



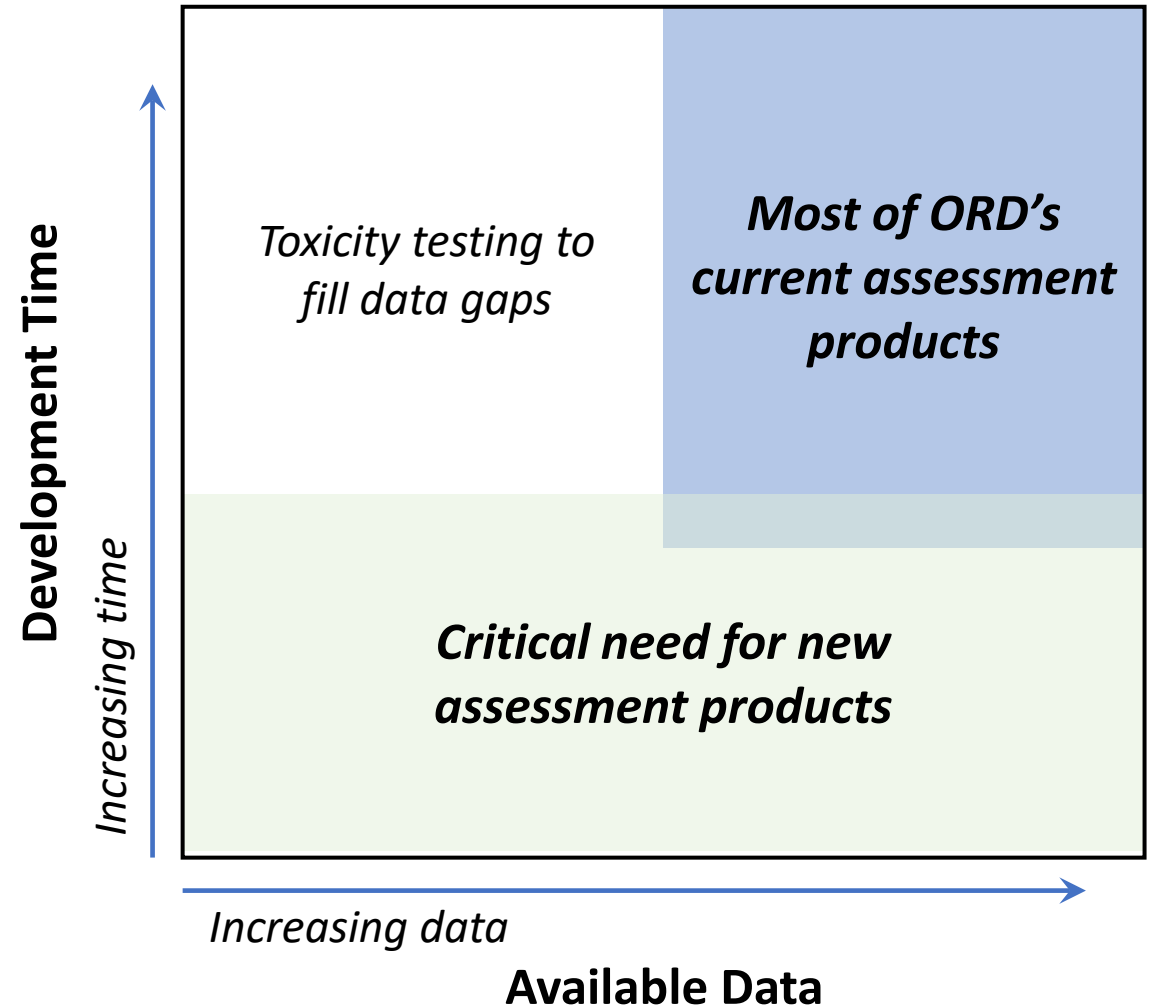
Science Assessments

ORD is focused on producing **high quality, transparent, consistent, and scientifically defensible** assessment products to meet EPA’s diverse statutory and policy needs.



Need for More Assessments, Faster

- Timely chemical assessments have been an ongoing challenge for the environmental health community
 - Limited data
 - Long development processes
- Improve timeliness of assessments by:
 - Matching needs and assessment products (“fit-for-purpose”)
 - Utilizing new scientific approaches



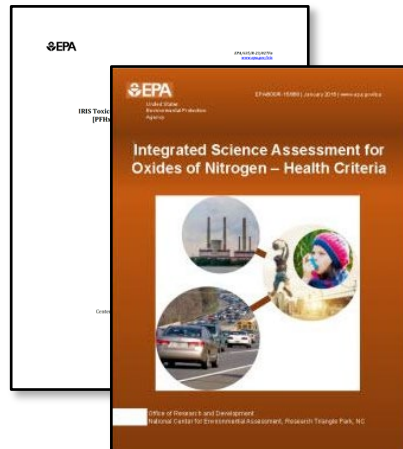
A Portfolio of Assessment Products

ORD is developing new assessment products to provide **actionable science** to decision-makers **sooner**.

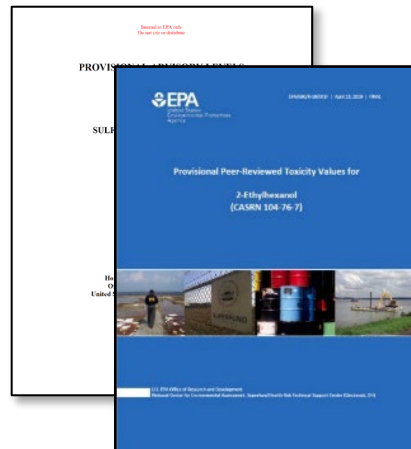
Data-Rich

Relative Data Availability

Data-Poor



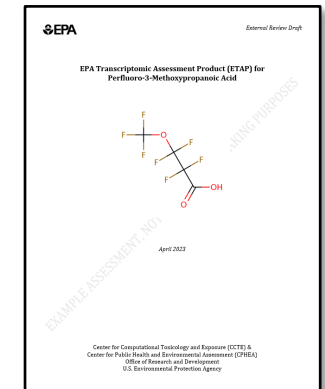
ISAs, IRIS



PPRTVs, PALs



Human Health Toxicity Assessments
Fit-for-purpose



EPA Transcriptomic
Assessment Product

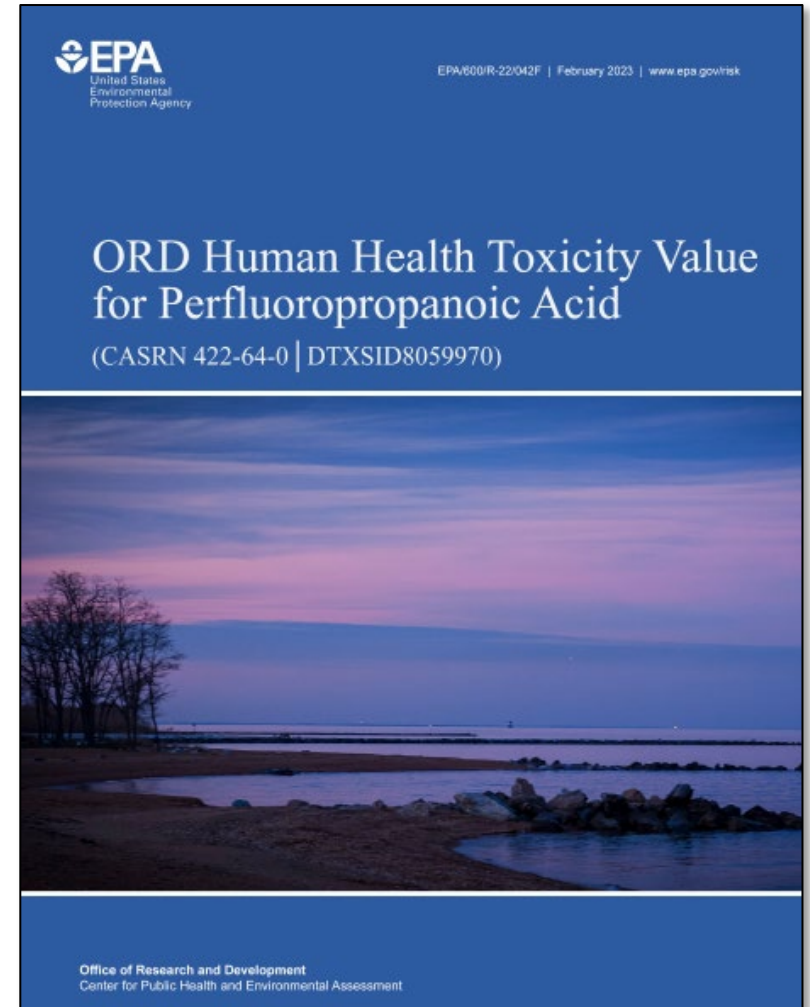
Longer

Relative Development Time

Shorter

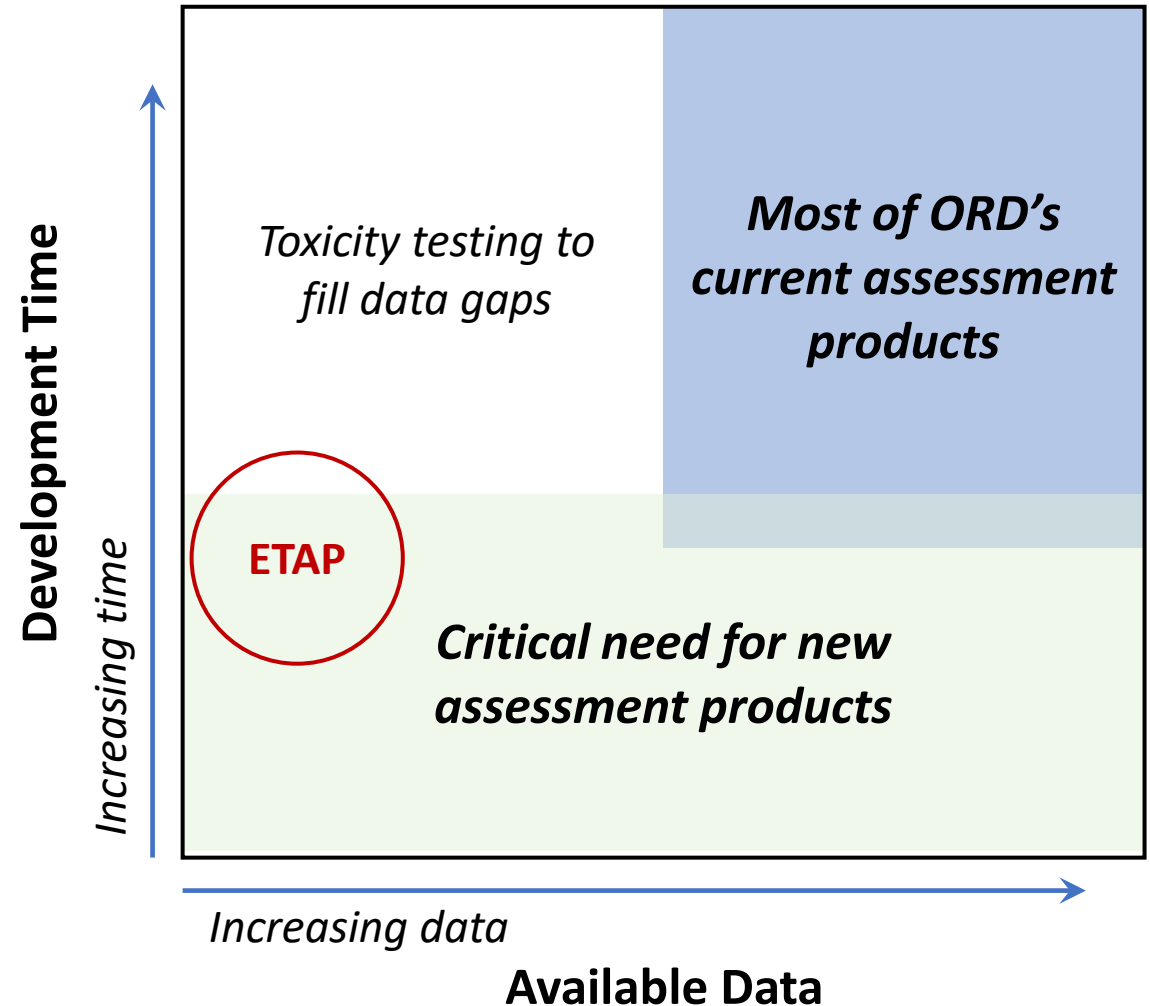
Human Health Toxicity Assessments

- Fit-for-purpose assessments
 - Context-specific
 - Flexible process
- Example: Perfluoropropanoic Acid (PFPrA)
 - Developed to inform site-specific evaluation under the Safe Drinking Water Act
 - Modeled after PPRTV format
 - Process included:
 - Internal peer review by ORD scientists
 - Contract-led, independent letter external peer review
 - No public comment period

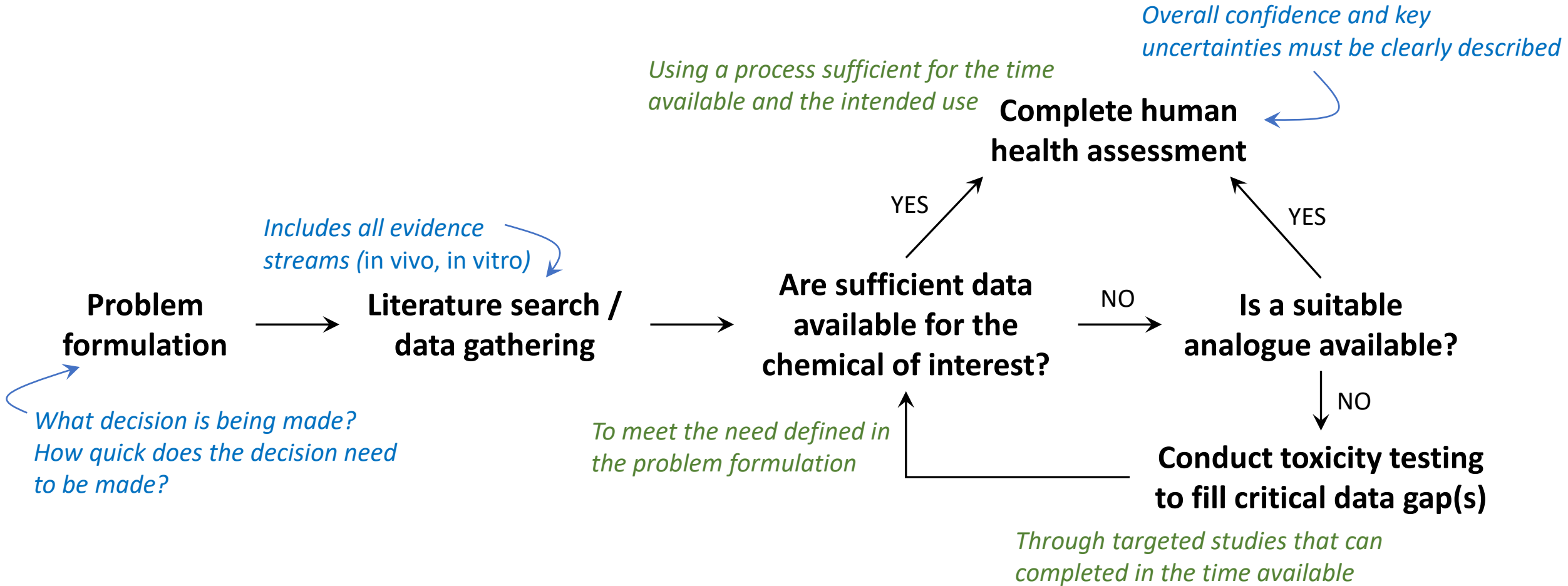


EPA Transcriptomic Assessment Product

- Potential new assessment product (and the subject of this BOSC meeting)
 - For data-poor chemicals
 - Prescriptive process
- Could enable development and release of chemical assessments in as little as 9 months, from chemical procurement to assessment release



Selecting an Assessment Product



There are opportunities for innovation in all steps...

Summary

- ORD conducts science to inform decision-makers at all levels, from local officials to federal regulatory agencies.
- We are focused on producing high quality, transparent, consistent, and scientifically defensible assessment products.
- ORD is implementing a portfolio approach to chemical assessments, where assessment products are matched to the decisions being made.
- New assessment products—like ETAP—allow ORD to produce assessments that contain actionable science sooner.

Thank You!