



# Decision Support Tools

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# ISES 2021 VIRTUAL MEETING

Multisector Engagement for Addressing Emerging Environmental Exposures

## Overview

- Multi-route, multi-pathway tools to support aggregate exposure estimates
- Two case studies presented:
  - 1,4-dioxane
  - Home ownership
- Update of CHEM modules
  - RPGen
  - Product Use Scheduler
  - Source-to-Dose

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## **Source-to-Dose, Product Use Scheduler, RPGen**

- Several decision tools are being developed, enhanced, and adapted to address multi-route and multi-pathway, aggregate exposures.
- In particular, EPA's potential application of three modules have been demonstrated for chemicals of concerns, including PFAS.

## Recent Advances in Aggregate Exposure Estimates

- Modules that comprise in the Consolidated Human Exposure Model (CHEM)
  - SHEDS-High Throughput,
  - ExPriori,
  - The Lorber-Egeghy update,
  - Other EPA decision support tools.
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- The presentations also provided updates on progress toward a consensus template for a scientific workflow for exposure to apply secondary data as inputs to the models.

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Multisector Engagement for Addressing Emerging Environmental Exposures

## CONCLUSIONS

- Tools Are Modular and Interoperative
- We demonstrated how the modules can apply consumer product/chemical ingredient information
- We have made major strides in informing estimates of aggregate risk.
- Several decision tools are being developed, enhanced, and adapted to address multi-route and multi-pathway, aggregate exposures.

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