



Decision Support Tools

Daniel A. Vallero, Ph.D and Elaine Cohen Hubal, Ph.D.

U.S. EPA, Office of Research and Development

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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
 - RPSGen
 - 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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