U.S. Environmental Protection Agency
Workshop on Model Averaging Methods for Dose-Response Analysis

December 10–11, 2015 | 12-4pm EST

Agenda

Workshop Discussants
David Dunson | *Duke University*
Ruth Hummel | *U.S. EPA*
Michael Messner | *U.S. EPA*
Walter Piegorsch | *University of Arizona*
Woody Setzer | *U.S. EPA*
Matthew Wheeler | *National Institute for Occupational Safety and Health (NIOSH)*

Thursday, December 10, 2015

12:00 – 12:20	**Welcome and Opening Remarks**
12:20 – 1:00	**Public Presentations**
1:00 – 1:20	**Discussion Question 1: Overall approach to model-averaging** Are there other model averaging methods that EPA should consider?
1:20 – 2:00	**Discussion Question 2, 5: Completeness of suite of models** Are there other parametric models that should be included in model-averaging? If so, do you recommend testing performance of the new suite?
2:00 – 2:15	**BREAK**
2:15 – 3:00	**Discussion Question 3: Implementation of methods** Do you agree with the approaches used to implement the methods reviewed in the workshop support material?
3:00 – 3:30	**Discussion Question 4: Testing approach** Should additional testing be performed to identify a model averaging approach for dose-response analyses that offers the greatest advantage for the development of chemical health assessments?
3:30 – 4:00	**Day 1 Audience Questions and Day 1 Wrap-Up**
4:00	**ADJOURN**

Friday, December 11, 2015

12:00 – 12:20	**Welcome and Day 1 Recap**
12:20 – 1:45	**Discussion Question 6: Motives for using model averaging in health assessments** **a.** How useful is model averaging for characterizing model uncertainty? **b.** How useful is model averaging for incorporating prior information? **Discussion Question 7: Should alternatives or complements to model averaging be investigated?** Examples: Isotonic regression; Non-parametric and semi-parametric (Bayesian and frequentist) modeling; Full Bayesian model averaging; Flexible parametric models
1:45 – 2:00	**BREAK**
2:00 – 2:40	**Discussion Question 8: Dichotomous Data** Describe any major concerns for the application of methods described in this report to dichotomous data. How do the results of the present background paper on models for continuous data compare to published work on model averaging for dichotomous models?
2:40 – 3:10	**Discussion Question 9: Is Model Averaging Ready for Use in Chemical Health Assessment?** Is model averaging as implemented in the workshop support material suitable for use in chemical health assessments, possibly with some reservations or precautions? Can you identify circumstances when model averaging may be helpful and informative or misleading?
3:10 – 3:30	**Discussion Question 10: Conclusions** Do you agree with the conclusions made in Section 4.1 of the workshop support material?
3:30 – 4:00	**Audience Questions and Final Wrap-Up**
4:00	**ADJOURN**