Chris Dockins, Economist in EPA's National Center for Environmental Economics

Research Interests: Human health risk valuation, human health risk assessment, stated preference methods, discounting, benefit-cost analysis, chemicals regulation.

Biography: Chris Dockins has been an economist at the National Center for Environmental Economics (NCEE) at the U.S. EPA since 1996. From 2006-2010 he was Director of the Science Policy and Analysis Division of NCEE, and he was the founding executive director of EPA's Economics Forum from 2001-2006. Chris was appointed to EPA's interdisciplinary Risk Assessment Forum in 2019. Chris' work has largely focused on the evaluation and valuation of human health risks and the frontier between human health risk assessment and economic analysis, as well as the use of stated preference methods for valuing human health and the environment. Chris has a PhD (1996) and MA (1993) in economics from Duke University and BAs in economics and speech & drama (1988) from Mercer University. Chris also teaches economics courses at Johns Hopkins University and the University of Maryland.

E-mail: Dockins.Chris@epa.gov

Recent NCEE Working Papers:

"Muddying the Water? An Analysis of Non-Constant Baselines in Stated Preference Surveys" with C Moore, K Maguire, D Guignet, and N Simon. NCEE Working Paper #2018-02. 2018.

"A Stated Preference Study of the Chesapeake Bay and Watershed Lakes," (with C Moore, D Guignet, K Maguire and NB Simon), NCEE Working Paper, 2015-06.

Peer-Reviewed Publications and book chapters:

"What's in a Name? A Search for Alternatives to 'VSL'," with N Simon, K Maguire, S Newbold, A Krupnick, and L Taylor. *Review of Environmental Economics and Policy*. 2019. 13(1):155-161.

"Preterm Birth and Economic Benefits of Reduced Maternal Exposure to Fine Particulate Matter," with J Kim and D Axelrad. *Environmental Research.* 2018, 170:178-186.

"Broad Application of a Probabilistic Dose-Response Framework to Improve Chemical Risk Assessment," with W Chiu, K Shao, D Axelrad, D Chimeddulam, and A Shapiro. Submitted to *Environmental Health Perspectives*. 2018. 126(6).

"Defining the Baseline" with C Griffiths, in *Teaching Benefit-Cost Analysis,* Scott Farrow, editor. Cambridge University Press. 2018.

"Valuing Ecological Improvements in the Chesapeake Bay and the Importance of Ancillary Benefits," with C Moore, D Guignet, K Maguire, and NB Simon, *Journal of Benefit-Cost Analysis,* 2018. 9(1): 1–26.

"Estimating the health benefits of environmental regulations," with A McGartland, R Revesz, D Axelrad, P Sutton, and T Woodruff. *Science,* 2017. 357(6350): 457–458.

"Framework for Human Health Risk Assessment to Inform Decision Making," with J Fitzpatrick, R Schoeny, K Gallagher, K Deener, M Firestone, W Jordan, M McDonough, D Murphy, M Olson, and K Raffaele, *International Journal of Risk Assessment and Risk Management,* 2017. 20:3 - 20

"Lessons from risk assessment, economics, and risk management at EPA," with W Wheeler, in *Benefit–Cost Analyses for Security Policies: Does Increased Safety Have to Reduce Efficiency*? C Mansfield and VK Smith, editors. Edward Elgar Press. 2015.

"Meeting Report: Estimating the Benefits of Reduced Hazardous Air Pollutants – Summary of 2009 Workshop and Future Consideration," with M Gwinn, J Craig, D Axelrad, R Cook, N Fann, R Fegley, D Guinnup, G Helfand, B Hubbell, S Mazure, T Palma, R Smith, J Vandenberg, and B Sonawane. *Environmental Health Perspectives*, 2011. 119(1): 125–130.

"Cancer Premiums and Latency Effects: A Risk Tradeoff Approach for Valuing Reductions in Fatal Cancer Risks," with G Van Houtven and M Sullivan. *Journal of Risk and Uncertainty,* 36(2), pp. 179-199, 2008.

"Risk Assessment for Benefits Analysis: Framework for Analysis of a Thyroid-Disrupting Chemical," with D. Axelrad, K Baetcke, CW Griffiths, RN Hill, P Murphy, N Owens, NB Simon, and LK Teuschler. *Journal of Toxicology and Environmental Health*, 68(11-12), pp.837-55, June 11-25, 2005.

"Linking Economics and Risk Assessment" with C Griffiths, N Owens, NB.Simon, and D Axelrad. *Journal of Toxicology and Environmental Health,* 67(8-10), pp. 611-620, 2004.

"What to Do at Low Doses: A Bounding Approach for Economic Analysis" with CW Griffiths, N Owens, N Simon and DA Axelrad. *Risk Analysis: An International Journal*, 22(4), pp. 679-688, 2002.

"Valuation of Childhood Risk Reduction: The Importance of Age, Risk Preferences and Perspective" with R Jenkins, N Owens, NB Simon and L Wiggins), *Risk Analysis: An International Journal*, 22(2): 335-346, 2002.

"Assessing Conservatism in Individual Risk Estimates," with WK Viscusi and JT Hamilton in *Calculating Risks, The Spatial and Political Dimensions of Hazardous Waste?* MIT Press, Cambridge MA. 1999.

"Conservative vs. Mean Risk Assessments: Implications for Superfund Policies," with WK Viscusi and JT. Hamilton. *Journal of Environmental Economics and Management*, 34(3), pp. 187-206, 1997.

Select EPA reports:

"Valuing mortality risk reductions for policy: a meta-analytic approach," (with S Newbold, K Maguire, C Moore, and NB Simon). Prepared for the Science Advisory Board, Environmental Economics Advisory Committee, 2016.

Framework for Human Health Risk Assessment to Inform Decision Making, (contributing author). EPA/100/R-14/001, April 2014.