

Name: Erin N. Haynes, DrPH, MS

Employer: University of Kentucky

Employer Location: Lexington, KY, United States of America

History of Employment:

2002-2004	Post Doctoral Fellow, Molecular Epidemiology in Children's Environmental Health, NIEHS training program, Division of Epidemiology and Biostatistics, Department of Environmental Health, University of Cincinnati College of Medicine, Cincinnati, OH
2004-2018	Director, Clinical Research Training Program. Department of Environmental Health, University of Cincinnati College of Medicine, Cincinnati, OH
2004-2007	Adjunct Assistant Professor, Department of Environmental Health, University of Cincinnati College of Medicine, Cincinnati, OH
2007-2014	Assistant Professor – <i>tenure track</i> , Department of Environmental Health, University of Cincinnati College of Medicine, Cincinnati, OH
2014-2018	Associate Professor <i>with tenure</i> , Department of Environmental Health, University of Cincinnati, College of Medicine, Cincinnati, OH
2018	Professor, Department of Environmental Health, University of Cincinnati, College of Medicine, Cincinnati, OH
2018-	Professor and Chair, Department of Epidemiology, University of Kentucky, College of Public Health, Lexington, KY
2019-	<i>Interim</i> Chair, Department of Preventive Medicine and Environmental Health, University of Kentucky, College of Public Health, Lexington, KY

Degrees:

Institution	Degree	Year	Field of Study
Wilmington College, Wilmington, OH	BS	05/1995	Biology/Secondary Science Education
University of Cincinnati, Cincinnati, OH	MS	06/1997	Environmental Health/Toxicology
University of Michigan, Ann Arbor, MI	DrPH	06/2002	Environmental Health
University of Cincinnati, Cincinnati, OH	Postdoctoral fellowship	11/2004	Molecular Epidemiology in Children's Environmental Health

Narrative of Research Experience:

I am a community-engaged environmental health scientist. My training and research experience in environmental health and community-engaged research (CEnR), particularly in Appalachian Ohio. My primary research interest is to work directly with community residents to address their environmental exposure concerns using cutting-edge multidisciplinary environmental health research strategies. As a highly collaborative investigator, I forged a strong multidisciplinary team to establish a research program to investigate environmental chemical exposures in low-income, at-risk communities. I have served as PI of four (4) NIH-funded awards that conducted pediatric manganese exposure research in close collaboration with community residents from low-income, at-risk communities. These studies have successfully recruited over 500 children from rural Appalachian Ohio and are in process of recruiting 150 children from an urban Southeast Side Chicago to study the effects of chronic manganese exposure on neurodevelopmental outcomes. Our team has found nonlinear associations between biological Mn concentrations as measured in blood and hair, and child cognition. Most recently, we identified a significant relationship between hair manganese and deficits in child IQ in children living near a manganese processing facility in eastern Ohio. We have innovatively developed individual and community-level report-back strategies for biological and environmental data in close collaboration with communities. These CARES cohorts represent the only pediatric U.S.-based cohort available to investigate the role of Mn exposure on neurodevelopmental outcomes. I have also innovatively co-developed citizen science toolkits for environmental health and environmental health research messaging for lay audiences, including fact sheets, use of social media, websites, and YouTube videos.

Short List of Key Publications:

1. **Haynes EN**, Sucharew H, Kuhnell P, Alden J, Barnas M, Wright R, Parsons PJ, Aldous KM, Praamsma ML, Dalmer CD, Beidler C, Dietrich KN. Neurocognition and Exposure to Manganese in Children Residing in Rural Appalachian Ohio. *Environ Health Perspect.* 2015. 123(10): 1066-71. PMID: 25902278. PMCID: PMC4590758.
2. Fulk F, Succop P, Hilbert TJ, Beidler C, Brown D, Reponen T, **Haynes EN**. Pathways of Inhalation Exposure to Manganese in Children Living Near a Ferromanganese Refinery: A Structural Equation Modeling Approach. *Sci Total Environ.* 2017; 579:768-775. PMID: 27865527
3. **Haynes EN**, Sucharew H, Hilbert TJ, Kuhnell P, Spencer A, Newman N., Burns R, Wright R, Pasons PJ, Dietrich KN. Impact of Air Manganese on Child Neurodevelopment in East Liverpool, Ohio. *Neurotoxicology* 2017 Sept 6. PMID: 28888663 PMCID: PMC5809274 *Named an NIEHS 2017 Paper of the Year
4. Yermaneni S, Yoltan K, Kannan K, Dietrich KN, **Haynes EN**. Serum Cotinine versus Parent Reported Measures of Secondhand Smoke Exposure in Rural Appalachian Children. *J Appalach Health.* 2019;1(1):15-26. doi: 10.13023/jah.0101.03. PubMed PMID: 31179444; PubMed Central PMCID: PMC6553863.
5. **Haynes, EN**, Beidler C, Meloncon L, Parin M, Wittberg R, Kopras E and Dietrich K. Developing a Bidirectional Academic-Community Partnership for Environmental Health Research and Risk Communication. *Environ Health Perspect.* 2011 Oct;119(10):1364-72. PMID:21680278 PMCID: PMC3230433
6. Parin M, Yancey E, Beidler C, **Haynes EN**. Efficacy of Environmental Health E-training for Journalists. *Studies in Media and Communication.* 2014; 2(1): 71-80.
7. Haynes EN, Elam S, Burns R, Spencer A, Yancey E, Kuhnell P, Alden J, Walton M, Reynolds V, Newman N, Wright RO, Parsons PJ, Praamsma ML, Palmer CD, Dietrich KN. Community Engagement and Data Disclosure in Environmental Health Research and Data Disclosure. *Environ Health Perspect*, 2016. 124(2): A24-A27. PMID: 26829152 PMCID: PMC4749085
8. Newman N, Elam S, Igoe C, Jones C, Menrath W, Porter D, **Haynes EN**. A Community-Academic Partnership to Reduce Lead Exposure from an Elevated Roadway Demolition, Cincinnati, Ohio, 2012. *Public Health Reports.* 132 (6): 622-626.
9. **Haynes E**, Lanphear BP, Tohn E, Farr N, Rhoads G. The effects of interior lead hazard control on children's blood lead concentrations: a systematic review. *Environ Health Perspect* 101(1):103-108 (2002). PMID: 11781171 PMCID: PMC1240699
10. **Haynes E**, Lanphear BP, Kalkwarf HJ, Hornung R, Wenstrup R, Dietrich KN. Vitamin D receptor *fok1* polymorphism and blood lead concentration in children. *Environ Health Perspect* 111 (13):1665-1669 (2003). PMID: 14527848 PMCID: PMC1241691

Honors:

2013	Association of American Medical Colleges Mid-Career Women Faculty Professional Development Seminar awardee
2013	Academic-Community Research Partnership Award for service related to my collaborative approach to the Health Impact Assessment for the 6 th Street Viaduct Demolition.
2017	Ohio School Board Association, Business Community Award
2017	NIEHS, Paper of the Year Award
2019	NIOSH, Bullard-Sherwood Research to Practice (r2p) Award

Professional Memberships:

2012-2018	Chair, Appalachian Translational Research Network, Center for Clinical and Translational Science and Training, University of Cincinnati
2012-2018	EPA-Appointed Commissioner, Hamilton County Environmental Action Commission (HCEAC)
2013-2018	International Society for Environmental Epidemiology, Ethics and Philosophy Committee
2013-	International Society for Exposure Science, Technical Organizing Committee
2014-2018	Association of American Medical Colleges (AAMC) Group for Women in Medicine and Science (GWIMS), Designated Representative for the University of Cincinnati College of Medicine
2017-2020	Elected Academic Counselor, International Society for Exposure Science