

Excellence in Community Engagement 2019 Teaching Finalist

Empowering Individuals to Reduce Lead Exposure from Drinking Water through Community-Based Research



“By drawing attention to this issue, we are empowering individuals and communities to take action to reduce exposure on both the individual (using filters, flushing pipes) and community (identifying resources for filters, ready-to-use baby formula) level.”

Childhood lead poisoning is a challenging social issue that requires the coordination of health, housing, and environmental law and policy. This community-based research collaboration seeks to empower individuals and communities in Mississippi with lead exposure data to enable behavioral and policy changes to minimize lead exposure risks from drinking water. Through drinking water awareness events, the research team collected almost 250 samples of residential tap water and revealed homes and communities experiencing elevated levels of lead in their drinking water. Through this ongoing collaboration, the team has generated new knowledge, which will be used to formulate policy solutions and identify strategies for action to address health inequities related to environmental lead exposure.

Notable Outcomes

- Identification of homes and communities with elevated levels of lead exposure
- Community development and distribution of county-specific factsheets of lead exposure risks
- Enhanced collaboration among research team to partner on future research, curriculum development, and additional funding
- Pending NIH grant proposal
- Development of experiential learning honors course on water resources

Team Members

- Stephanie Otts, Sr. Research Counsel & Director of Sea Grant Programs, Mississippi Law Research Institute/ National Sea Grant Law Center
- Kristie Willett, Chair & Professor of Pharmacology & Environmental Toxicology, Biomedical Sciences, School of Pharmacy
- John Green, Professor of Sociology, Liberal Arts, Center for Population Studies
- Cristiane Surbeck, Associate Professor, Civil Engineering
- Lynn Woo, Research Associate, Liberal Arts, Center for Population Studies
- Catherine Janasie, Research Counsel II, Mississippi Law Research Institute/ National Sea Grant Law Center
- Josephine Rhymes, Tri-County Workforce Alliance
- Sannie Snell, Right! From the Start Initiative
- Beneta Burt, Mississippi Urban League
- Stacey Donaldson, Rosemont Baptist Church