

STRONG CHILDREN'S RESEARCH CENTER

Summer Research Scholar

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ABSTRACT

Title: *Environmental Health Concerns Among Pediatric Primary Care Providers*

Background: New York State has the first statewide network of pediatric environmental health centers, comprised of seven academic centers across the state covering all 62 counties. The Finger Lakes Children's Environmental Health Center (FLCEHC) at the University of Rochester serves a 15-county region to provide education and outreach to address environmental health problems in children and families. Pediatric healthcare providers are vital in identifying and managing environmental health problems for their patients, including exposure to lead poisoning, toxic chemicals, air pollution, and hazardous living conditions. Understanding pediatric providers' perspectives and current practices related to environmental health is crucial to improving care and promoting healthier environments for children.

Objective: To survey pediatric healthcare providers in the Finger Lakes counties in New York State to assess: (1) priority environmental health concerns, (2) knowledge and management of environmental health concerns, including adherence to recommended lead testing guidelines, (3) awareness of environmental health and lactation resources.

Methods: We developed and self-administered a survey that contained multiple-choice and short-answer questions. We invited a convenience sample of pediatric primary care providers in nine Finger Lakes counties (n=267) to participate in the survey via email and informed them that the first 20 respondents would receive a \$30 gift card. Data were collected through REDCap, and responses were anonymous unless compensation was requested. We analyzed survey responses in IBM SPSS Statistics and Microsoft Excel. A two-proportion z-test was conducted to determine response differences by practice type and location.

Results: Of providers who completed the survey (n=40), most classified themselves as MD/DO (n=36), while a smaller proportion were NP or PA (n=4). The location of respondents was highly concentrated in Monroe County (n=39) and urban areas (n=32). All practice types had no significant differences in perceptions of environmental health issues. The most common topics of concern included climate change (53%), community violence and firearm safety (73%), and lead exposure (75%). However, family medicine providers (n=17) and pediatric providers (n=19) differed in other key areas. Family medicine providers were significantly less familiar with environmental health resources such as FLCEHC than pediatric providers (p=0.002). Additionally, family medicine providers reported being less familiar with the new lead testing requirements instated by the New York State Department of Health than pediatricians. Pediatric and family medicine offices also differed in blood lead testing methods, with family medicine providers reporting higher use of Lead Care II testing during visits and less use of in-office venous sample collection (p=0.00002). Family medicine providers also reported significantly more difficulties determining if a child is due for blood lead testing and a higher need for on-site testing staff (n=0.02).

Conclusion: Primary care providers who care for children have a crucial role in managing environmental health concerns for their pediatric patients. More outreach and educational support are needed to support family medicine providers concerned about environmental health

issues affecting their patients. The next steps are to expand outreach, especially to rural areas, and to conduct qualitative interviews to gain more in-depth information about effective ways to provide environmental health resources to practices.