THE OHIO STATE UNIVERSITY

Environmental Science Graduate Program Student Seminar Series

Concordance in vulnerable census tracts on the Near East side of Columbus, OH with COVID-19 associated disparate health outcomes

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https://osu.zoom.us/j/98924708162?pwd=VFF1WWNwOGFGd2kzZWN3RXQ0Z09uQT09

Abstract

The COVID-19 outbreak has disrupted life and learning for everyone, particularly high-risk African American children and adults that live in already vulnerable and high-risk neighborhoods. There are several such communities here in Columbus, Ohio and this project is focused on understanding if there is concordance in negative health outcomes in these census tracts with COVID-19 associated disparate health outcomes in the Mt. Vernon community. During the present COVID-19 pandemic, K5 children were abruptly halted from attending their daily learning environment, which poses a significant barrier in learning to communicate effectively. The loss of a normal and routine learning trajectory with respect to reading and math during this period of adhering to “sheltering in place” or “stay at home” orders is referred to as the “COVID-19 developmental slide/slowdown” in kindergarten (K5) children. It may be expected that upon lifting of these orders, and upon K5 children returning, the K5 cohort will be faced with an impediment to learning and that this will be exacerbated by the requirement for teachers and children to wear face masks. In partnership with the Colleges of Nursing and Medicine, the benefits of utilizing a stakeholder-driven interdisciplinary research team (mobile health clinic, providers of health care, Medicare insurance, mental health and developmental learning centers) on the health outcomes of residents in the Mt. Vernon community will be quantified. Maternal and pregnancy health outcome disparities are disproportionate in the Mt. Vernon neighborhood compared to other neighborhoods in Columbus, Ohio. Utilizing the Public Health Exposome (PHE) framework BD2K analytics coupled to our E6 model will provide novel mitigation theories and strategies to reduce disparate health outcomes in African American residents of the Mt. Vernon community. The hypothesis for the Mt. Vernon residents is that overall health indices and the COVID-19 associated developmental slide/slowdown in kindergarten children will each improve between 5% to 20% over the study period in the residents that utilize the mitigation strategies.