

poster ABSTRACT



TITLE

Mapping and GIS Analysis of Childhood Lead Poisoning and Developmental Disabilities in Florida

THEME

Build a Sustainable National EPHT Network

KEYWORDS

GIS, geocoding, linkage, lead poisoning, developmental disabilities

BACKGROUND

Since 1993, the Florida Childhood Lead Poisoning Prevention Program (CLPPP) has found 8,600 children in Florida with blood lead levels above 10 mcg/dL. At the same time, the University of Miami's Department of Psychology has been tracking developmental disabilities in Florida school children. This EPHT poster will focus on the process of linking and mapping childhood lead-poisoning data and developmental disabilities data using GIS and geocoding at the sub-county level.

OBJECTIVE(S)

1) Understand the process of mapping databases from multiple agencies over multiple years; 2) Understand the role of GIS in aggregating and analyzing data.

METHOD(S)

Use geocoding to map childhood lead poisoning and developmental disabilities. Produce rates at sub-county level for developmental disabilities. Use GIS to map relevant environmental hazards that could be associated with childhood lead poisoning (including U.S. EPA Toxic Release Inventory).

RESULT(S)

Research results are still pending, but may show that children with developmental disabilities are more likely to have been diagnosed with childhood lead poisoning at some time in the past. Presenting the results of this analysis has been a challenge due to FERPA and HIPAA privacy laws.

DISCUSSION/RECOMMENDATION(S)

GIS is a powerful tool for examining associations between environmental lead and the distribution of developmental disabilities.

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