

## Abstract

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### **Collaborative efforts including geographic information system (GIS) mapping to address infant mortality disparities in worcester Massachusetts.**

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#### Issues:

The Worcester Healthy Baby Collaborative began in the 1990's to address Worcester Massachusetts high Infant Mortality Rate (IMR) especially among African Immigrant Woman. The collaborative is a coalition of Maternal and Child Health Professionals and Community Leaders who seek to improve health outcomes for babies and their families – by engaging and working collaboratively with community to reduce health inequities. Real time surveillance with vital records and chart review allows tracking of infant deaths by race. Trend data noted higher IMR among black and Hispanic residents than whites. IMR in Hispanics surpassed that of black residents in 2014. Planning community intervention involving Hispanic families proved to be challenging in part due to the diversity and dispersion among Hispanic residents.

#### Description:

First, we collaborated with Hispanic community leaders at our annual infant mortality summit. Hispanic Leaders voted for an intervention to distribute Baby Boxes to expectant Worcester families. To further analyze our data geographically, we engaged with the local academic collaborative to pair us with student interns from local universities.

#### Lessons Learned:

Geocoding results noted infant death hotspots in both low income downtown census tracts as well in higher income, predominately white neighborhoods with fewer public transportation options. Further refined mapping at census block level noted hotspots in state environmental justice communities, namely those with significant proportion of low English literacy, minority and low income households.

#### Recommendations.

We shared updated results with community leaders and will consider further mapping of preterm births; the largest contributor to infant mortality in Worcester.

Diversity and culture Planning of health education strategies, interventions, and programs Systems thinking models (conceptual and theoretical models), applications related to public health

