Neighborhoods, Race, and Health: Neighborhood Distress & Maternal Health in Pittsburgh

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We need to incorporate the neighborhood context AND social policies & programs into our discussion of racial disparities in health.
## Racial Disparities in Birth Outcomes in the U.S.

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Black</th>
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</thead>
<tbody>
<tr>
<td>Infant Mortality Rate</td>
<td>5.2</td>
<td>11.6</td>
</tr>
<tr>
<td>Low birth weight</td>
<td>7.1%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Preterm birth</td>
<td>10.8%</td>
<td>17.1%</td>
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Source: National Vital Statistics Report, CDC, 2010 data
Race & Neighborhood Distress among Children in the U.S.

ACS 2006-10 and O’hare & Mather, 2003
Neighborhood Distress and Racial Disparities in Maternal Health

Racial Inequality in Neighborhood Distress → Exposure to Social & Physical Stressors → Chronic Stress & Risky Coping Behaviors → Adverse Maternal Health Outcomes

Social Policy & Programs
The Pittsburgh Neighborhood Distress & Health (PghNDH) Study

- Gain a deeper understanding of the relationship between place and racial disparities in health
- Target service delivery to neighborhoods in need
- Inform place-based social policies
Data

- Health Outcomes (Allegheny Co. Health Dept)
  - Birth Records (2006–10)
  - Death Records (2006–10)

- Neighborhood Disadvantage (ACS 2005–09)
  - Poverty
  - Unemployment
  - High School Dropout
  - Single-mother families
And Local Data...

- Crime (Pittsburgh Police Dept.; 2006–10)

- Physical Abandonment
  - Vacant Parcels (Allegheny Co. Assessment; 2008–12)

- Fiscal Abandonment
  - Tax delinquency (City of Pittsburgh Finance; 2004–10)
  - Fires in Vacant Parcels

- Housing Market Conditions
  - Housing transactions (County Assessment; 2008–11)
Initial Results: City of Pittsburgh

Total Population: 313,327

- 68% White
- 25% Black
- 22% Poverty
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Total Population: 313,327

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<tr>
<th>Birth Outcome by Race</th>
<th>Black</th>
<th>White</th>
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<tr>
<td>Infant Mortality Rate</td>
<td>17.72</td>
<td>4.25</td>
</tr>
<tr>
<td>Preterm Birth</td>
<td>15.8%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Low Birth Weight</td>
<td>15.2%</td>
<td>7.1%</td>
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</tbody>
</table>

*Notes:* Data from the Allegheny County Health Department (2006–2010)
City of Pittsburgh

Race & Neighborhood Poverty

- Black
- White

High (>30%) Poverty Neighborhood
How are adverse birth outcomes spatially distributed across neighborhoods in the city of Pittsburgh?
Are adverse birth outcomes spatially clustered in distressed neighborhoods? Does it vary by different measures of distress?

1. Percent Poverty

2. Neighborhood Disadvantage Index

3. Built and Social Environment Measures
   a. Crime
   b. Vacancy
   c. Tax Delinquency
Adverse Birth Outcomes (2006-10) by Tax Delinquency

% Delinquent

5% or less
5% to 10%
10% to 20%
20% to 30%
30% or more

Adverse Birth Outcomes Index

-0.5 or less
-0.49 to 0
0.01 to 0.5
0.51 or more

University of Pittsburgh School of Social Work | Pittsburgh Neighborhood Distress & Health (PghNDH) Study
Next Steps

- Understanding the role of tax delinquency
  - A lack of wealth?
  - A symbol of hopelessness?

- Looking at measures of “abandonment”
Policy and Program Implications

- **Focusing Upstream**: Aiming at distress to reduce racial disparities in health
  - Improve housing conditions
  - Anti-violence and safety programs
  - Community-building efforts

- Targeting programs
Thanks!