“Place Matters”
Social Determinants of Infant Mortality

Michigan Call to Action to Reduce and Prevent Infant Mortality Summit
October 17, 2011

Wayne County, Michigan
Department of Health and Human Services

Mouhanad Hammami, MD
Chief of Health Operations

50 Healthiest Cities

San Jose, CA

Detroit, MI

Source: The Sperling report card, Centrum Healthiest Cities Study 2009

Wayne County, Michigan
Department of Health and Human Services

Place Matters

• Nationwide initiative - Joint Center for Political and Economic Studies, Health Policy Institute
• Eliminating Health Disparities by Addressing the Social Determinants of Health
• Identifying complex root causes of health disparities and defining strategies to address them
• Addressing upstream causes of health

Social Determinants of Health

“Conditions in which people are born, grow, live, work and age, … shaped by the distribution of money, power and resources at global, national and local levels, which are themselves influenced by policy choices.

The social determinants of health are mostly responsible for health inequities - the unfair and avoidable differences in health status seen within and between countries …”

WHO 2008
Wayne County, Michigan
Department of Health and Human Services

Upstream Causes of Health

“… a mother’s “life course” – from the moment an egg is fertilized in her mother’s womb – is influenced by factors that either strengthen or damage her reproductive system, as well as other organ systems …”

Dr. Michael Lu, 2003
Assistant professor of obstetrics and gynecology at the University of California at Los Angeles

Racial and Ethnic Disparities in Birth Outcomes: A Life-Course Perspective,

Better Education/Higher Education
Better Jobs
Better Quality of Life
Safer Neighborhoods
Access to Healthy Food
Access to Healthy Living
Healthier Babies

Educated mothers are markedly less likely to smoke.
The 2008 National Health Interview Survey showed that 41.3% of adults with a GED smoked, compared to less than 6% of adults with graduate degrees!

Education

“The task of the modern educator is not to cut down jungles, but to irrigate deserts.”

C. S. Lewis
**Employment**

“Detroit is America’s second worst big city for jobs”

Forbes magazine, 2009

**Higher Income = Lower Mortality**

People with annual incomes (< $15,000) had a premature mortality rate 3.9 times higher than the group in the high-income level (> $70,000).

The U.S. Panel Study of Income Dynamics, 2002

**Place Matters!**

- National average high school graduation rate is 70%.
- In Wayne County high school graduation rate is 78%.
- Only 37% of Detroit students graduate from high school.
- Detroit students score well below average on state standardized tests in reading and math.
- College graduation rate (bachelor’s degree or higher) is 17.2% for Wayne County as a whole, but only 11% for the city of Detroit.

**Healtier Babies**

Better Health

Access to Preventive Healthcare

Affordable Health Insurance

Healthier Living Environment

Better Quality of life

Good Stable Employment

People who lose their jobs are twice as likely to develop a new ailment such as high blood pressure, diabetes or heart disease, poor nutrition, lack of exercise and obesity.

Unemployed are more likely to smoke, drink, be depressed, become isolated, and get sick.

Greater risk of exposure to second-hand smoke; the stress of chaotic, crime-ridden neighborhoods; disrespectful treatment; and challenged schools

Harvard School of Public Health, 2009

**Morbidity Prevalence of Women by Employment Grade Category**

<table>
<thead>
<tr>
<th>Health Problem</th>
<th>Grade 1 (High status jobs)</th>
<th>Grade 6 (Low status jobs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any health problem</td>
<td>60.6%</td>
<td>75.6%</td>
</tr>
<tr>
<td>Self-rated health as average or worse</td>
<td>35.2%</td>
<td>42.1%</td>
</tr>
<tr>
<td>Possible ischemia or stroke</td>
<td>4.5%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>0.0%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Drug therapy for hypertension</td>
<td>3.7%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Asthma</td>
<td>10.3%</td>
<td>27.5%</td>
</tr>
<tr>
<td>Obesity</td>
<td>7.4%</td>
<td>13.2%</td>
</tr>
<tr>
<td>Lack of exercise</td>
<td>12%</td>
<td>31.1%</td>
</tr>
<tr>
<td>Less than daily consumption of fruits</td>
<td>17.7%</td>
<td>43.5%</td>
</tr>
</tbody>
</table>

*Health inequalities among British civil servants: the Whitehall II study.* Marmot, 1991

**IMR by Maternal Education**

Source: 2000-2002 Period Linked Birth/Infant Death Set
Pay Equity

- Women’s median incomes in the U.S. are just 78.2% of men’s median incomes (2009 census)
- Women in Michigan, earn only 71.9% of what men earn
- Michigan has the 43rd worst earnings ratio between men and women in the United States (AAUW, 2010)

Out-of-Pocket Expenses Higher Among Low-Income Earners

- Source: 2009 American Community Survey, U.S. Census Bureau

Earning Comparisons in Michigan

- Source: 2009 American Community Survey, U.S. Census Bureau
Social Isolation

“Friendships are good for your health.”
The Mayo Clinic

“Social isolation is as bad for one’s health as smoking…”
James S. House, PhD
University of Michigan
“Social Isolation Kills, But How and Why”

The Importance of Being Connected

• If girls and women feel connected to teachers, counselors and positive peers, they not only have someone to talk to, they also learn about good nutrition, the importance of exercise, ways to reduce stress, and how to set high standards for their bodies and their futures.
• Being socially connected with people who have high expectations may inspire girls and women to excel in education, careers and personal pursuits.

Social Isolation of Women - why

• Dropping out of school
• Lacking reliable family members due to drug use, incarceration and homelessness
• Avoiding interaction with neighbors in unsafe neighborhoods
• Lacking employment and interaction with coworkers;
• Being in abusive relationships with men who isolate her from friends and family.
• Being a single mother at home with infants, small children and no transportation

IMR by Marital Status

Social Perception of Girls and Women

“I’ve been fortunate. I haven’t had too many auditions. I slept with all the right people.”
Pamela Anderson, Actor, People Magazine.
Social Perception

- Defined as the perceiving of attributes, characteristics, and behaviors of one’s associates or social groups.
- The theory of the perception-behavior link argues that the human tendency is to act in the same way as we see others act.

Media Portrayal of Women

- Advertising tends to promote a set of false ideals that women should strive to achieve.
- The portrayal of women’s bodies as marketing objects further contributes to the continuing gender biased stereotypes of women’s subjugated roles in society.
- Media tend to undervalue women as a whole and are detrimental for women and young girls.

Structural Racism

“Lukewarm acceptance is more bewildering than outright rejection.”
Martin Luther King, Jr.

The Boston Model

- Racism and discrimination are root causes of inequities in health.
- Structural Racism impacts the Social Determinants of Health thereby impacting health outcomes including infant mortality.

IMR by Ethnicity/Race

- Chart showing infant mortality rate (IMR) by ethnicity/race for different regions, including US, Michigan, Wayne County, and Detroit.
Conclusion

• It takes a village to save an infant
• Strategies for better and equitable education are extremely important to overall health and the ability to eventually have a healthy baby.
• Better employment opportunities and equal pay for women is as important as prenatal screening in battling infant mortality.
• Women and girls need supportive networks and social structures before they become pregnant.
• Males should be engaged in the understanding and appreciation of their roles in nurturing healthy, confident girls and women.
• Society needs to develop, establish and maintain efforts to promote positive images of girls and women, through mentoring and multi-media campaigns.

Place Matters Team

• Edith J. Killins
  Director, Wayne County Department of Health and Human Services
• Loretta V. Davis
  Health Officer, Detroit Department of Health and Wellness Promotion
• Dr. Talat Danish
  Medical Director, Wayne County Department of Public Health
• Catharine Oliver
  Community and Maternal Health Services Manager, Wayne County Department of Public Health
• Angela Stevenson
  General Manager, Wayne County Department of Public Health