Measuring up: What we know (and don’t know) about infant and maternal mortality in Pennsylvania

ACHD All For One Summit

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Pennsylvania Department of Health

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Disclosure/Conflicts:

• Disclosure: Woman of Color, Health Services Researcher, Physician/Public Health leader, Advocate and Activist who is solidly invested in achieving health equity across the life course for women of color and their infants with an ultimate goal of improving and promoting a holistic concept of wellness in communities of color and other marginalized groups across this country.

• Conflicts: None
2018 March of Dimes Premature Birth Report Card

PENNSYLVANIA

GRADE C
PRETERM BIRTH RATE 9.4%

- Overall preterm birth rate: 9.4%
  - Allegheny: 9.6% ↑
  - Philadelphia: 10.4% ↓

In Pennsylvania, the preterm birth rate among black women is 46% higher than the rate among all other women.
The Data, (2014-2016)

<table>
<thead>
<tr>
<th>Race or Ethnicity of Mother</th>
<th>No Prenatal Care in First Trimester</th>
<th>Low Birth Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>All Races</td>
<td>111,920</td>
<td>27.5</td>
</tr>
<tr>
<td>White</td>
<td>67,521</td>
<td>23.3</td>
</tr>
<tr>
<td>Black</td>
<td>21,737</td>
<td>40.2</td>
</tr>
<tr>
<td>Asian/PI</td>
<td>5,177</td>
<td>28.9</td>
</tr>
<tr>
<td>Hispanic</td>
<td>16,067</td>
<td>37.5</td>
</tr>
</tbody>
</table>

Source: 2016 Maternal and Infant Health Status Indicators, PA Department of Health
The Data, (2014-2016) cont’d

<table>
<thead>
<tr>
<th>Race or Ethnicity of Mother</th>
<th>No Prenatal Care in First Trimester</th>
<th>Low Birth Weight</th>
<th>Preterm Births</th>
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<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
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<tr>
<td>All Races</td>
<td>111,920</td>
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<tr>
<td>White</td>
<td>67,521</td>
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<td>20,612</td>
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<tr>
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<td>21,737</td>
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<td>7,768</td>
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<td>Asian/PI</td>
<td>5,177</td>
<td>28.9</td>
<td>1,556</td>
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<tr>
<td>Hispanic</td>
<td>16,067</td>
<td>37.5</td>
<td>3,992</td>
</tr>
</tbody>
</table>

Source: Pennsylvania Department of Health, Division of Health Informatics

Source: 2016 Maternal and Infant Health Status Indicators, PA Department of Health
Objective MICH-1.3

**Infant mortality rate (under 1 year of age)**
(per 1,000 live births)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>All infants</td>
<td>6.0</td>
<td>6.1</td>
<td>6.2</td>
<td>6.0</td>
<td>6.7</td>
<td>7.0</td>
</tr>
<tr>
<td>Males</td>
<td>6.0</td>
<td>6.8</td>
<td>6.5</td>
<td>6.3</td>
<td>7.2</td>
<td>7.4</td>
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<tr>
<td>Females</td>
<td>6.0</td>
<td>5.5</td>
<td>5.8</td>
<td>5.6</td>
<td>6.2</td>
<td>6.5</td>
</tr>
<tr>
<td>Whites</td>
<td>6.0</td>
<td>4.6</td>
<td>4.8</td>
<td>4.5</td>
<td>5.1</td>
<td>5.2</td>
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<tr>
<td>Blacks</td>
<td>6.0</td>
<td>14.6</td>
<td>13.0</td>
<td>13.2</td>
<td>13.6</td>
<td>14.3</td>
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<tr>
<td>Hispanics*</td>
<td>6.0</td>
<td>7.4</td>
<td>6.4</td>
<td>7.2</td>
<td>7.7</td>
<td>7.9</td>
</tr>
<tr>
<td>Asian/Pacific Islanders</td>
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<td>2.3</td>
<td>2.8</td>
<td>3.1</td>
<td>2.0</td>
<td>3.2</td>
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*Hispanics can be of any race

Source: Pennsylvania Healthy People 2020, published May 2018
Pennsylvania’s **Healthy People 2020** report

**Objective MICH-5**

<table>
<thead>
<tr>
<th>Maternal mortality rate (per 100,000 live births)</th>
<th>2020 Goal</th>
<th>2012-16 PA</th>
<th>2011-15 PA</th>
<th>2010-14 PA</th>
<th>2009-13 PA</th>
<th>2008-12 PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total maternal deaths</td>
<td>11.4</td>
<td>11.4</td>
<td>10.3</td>
<td>10.9</td>
<td>11.1</td>
<td>11.5</td>
</tr>
<tr>
<td>Whites</td>
<td>11.4</td>
<td>8.7</td>
<td>8.8</td>
<td>9.5</td>
<td>9.3</td>
<td>9.9</td>
</tr>
<tr>
<td>Blacks</td>
<td>11.4</td>
<td>27.2</td>
<td>20.7</td>
<td>23.1</td>
<td>26.4</td>
<td>25.7</td>
</tr>
<tr>
<td>Hispanics*</td>
<td>11.4</td>
<td>DSU</td>
<td>DSU</td>
<td>DSU</td>
<td>DSU</td>
<td>DSU</td>
</tr>
</tbody>
</table>

*Hispanics can be of any race

*DSU: Data statistically unreliable

Source: Pennsylvania Healthy People 2020, published May 2018
Maternal Mortality in Pennsylvania

• From 2012-2016, there was an increase in maternal deaths with 11.4 per 100,000 live births in Pennsylvania
  • White women: rate is lower at 8.7 maternal deaths per 100,000 live births
  • Black women: rate is more than triple that of white women and more than double the state average rate at 27.2 maternal deaths per 100,000 live births
  • PA rate is below national rate at 18.0 pregnancy-related deaths per 100,000 live births
  • US pregnancy-related mortality rate for black women was 40.0 deaths per 100,000 live births
How Maternal Deaths are Reported in PA

- Currently PA tracks maternal deaths, as required by the Abortion Control Act of 1982
- PA is one of only 6 states that require pregnancy-related deaths to be reported as a distinct category
- A report of a maternal death is required within 20 days of the death
- Annual Maternal Death Report is released along with the annual Abortion Report, where data from two years prior is presented
- PA did not adopt the 2003 revision of the US Standard Death Certificate, which includes the pregnancy checkbox, until 2012

29. If Female:

- [ ] Not pregnant within past year
- [ ] Pregnant at time of death
- [ ] Not pregnant, but pregnant within 42 days of death
- [ ] Not pregnant, but pregnant 43 days to 1 year before death
- [ ] Unknown if pregnant within the past year
PA Maternal Mortality Review Committee (MMRC)

- House Bill 1869 of 2018, known as Act 24, established the MMRC
  - Introduced by Rep. Mackenzie (R – Berks, Lehigh)
  - Passed unanimously in the House on December 11, 2017
  - Passed unanimously in the Senate on April 25, 2018
  - Signed into law by Governor Tom Wolf on May 9, 2018

- Purpose: to conduct a multidisciplinary review of maternal deaths and develop recommendations for the prevention of future maternal deaths

- Refers to maternal death as “the death of a woman during pregnancy or within one year after the pregnancy has ended through childbirth, stillbirth, or other means”
• 30 Members of the committee includes:
  • DOH Secretary or designee
  • Obstetrician
  • Maternal fetal medicine specialist
  • Certified nurse-midwife
  • Registered nurse representing maternal health care
  • Psychiatrist
  • Addiction Medicine specialist
  • Social worker or social service provider
  • Medical examiner or coroner responsible for recording deaths
  • Emergency medical services provider
  • Health statistician
  • Representative of Bureau of Family Health
  • 3 individuals specializing in: emergency medicine, family medicine, pathology, anesthesiology, cardiology, critical care or any other relevant medical specialty
  • Additional personnel at the discretion of the Secretary
• Met within 90 days of the bill being passed
• Working with CDC (technical support) to be consistent in definitions, case review, etc.
• Reports with findings and recommendations are to be made public every three years
• Similar to the Child Death Review Act
• Philadelphia MMR to remain active and covers evaluation of maternal deaths in Philadelphia county
Greatest Barriers to Decreasing Maternal and Infant Mortality

• “Clinical” risk factors that can lead to complications for both mother and infant during pregnancy, e.g. obesity, smoking, use of alcohol or drugs, and depression

• “Non-clinical” risk factors: Adverse childhood events (ACEs), trauma (singular or plural), unsafe neighborhoods, social isolation, and single parenting cause disparities in birth outcomes and complications

• For black women, social and built environments that reinforce discrimination and racism result in an increase in allostatic load, or stress, at a different rate compared to those who are not subjected to systematic discrimination and racism

• Biases of healthcare, clinicians, and other service providers: “It’s not me/us, it’s ______.”
Lessons learned in working to reduce maternal and infant mortality

• We need to focus on where the maternal and infant death and health disparities are – our Black communities

• Maternal and infant mortality are bipartisan issues – we should be working together to rally against these afflictions to our communities
Lessons learned in working to reduce maternal and infant mortality

• What works: partnering with organizations that care about the role of the social determinants of health in maternal and infant outcomes, and will integrate the SDOH in conversations surrounding perinatal health issues and implement policies that address these. This includes:
  • Increasing minimum wage
  • Provisions for paid family leave
  • Increasing flexible work schedules
  • Ensuring workplace breastfeeding support
  • Providing access to quality child care
  • Providing supports for educational attainment
  • Supporting policies to reduce or mitigate effects of poverty
  • Having conversations about and addressing the “isms” at the root of health inequities
Major Knowledge Gaps

• Accurate and complete reporting of maternal and infant mortality data

• Better understanding of the risk factors associated with poor birth outcomes and the populations most likely to be affected by those behaviors, including the influences of the behavioral health, social determinants of health, adverse childhood experiences, and experiences of discrimination and racism in service provision

• Better understanding of mothers’ concerns (what is working/what isn’t)

• Better view of Neonatal Abstinence Syndrome (NAS) in Pennsylvania
  • PA is fortunate to have national leaders like Magee-Women’s Hospital’s Pregnancy Recovery Center, which offers comprehensive and compassionate care for opioid addiction hand-in-hand with prenatal and postpartum care to pregnant women with opioid use disorder
Racial Disparities and How to Narrow the Gaps

• Better (and culturally responsible) prenatal care, specifically targeted for our Black moms, in order to:
  • reduce the number of low birth weight babies, reduce the number of preterm births, and increase the number of prenatal visits and breastfeeding rates (listen to what moms say they need)

• Preconception and inter-conception care, including the education of family planning and LARCs, checking on the health of mothers during well-child visits

• Acknowledgement that racism plays a role
Interventions to Reduce Maternal and Infant Mortality

Opportunities to promote the health of women before they become pregnant and enabling of women to make informed choices about pregnancy planning and infant care

Prenatal care centered around connecting women to resources, especially those with mental health issues and those experiencing intimate partner violence

Maternal screening for behavioral health issues
Interventions to Reduce Maternal and Infant Mortality

Home visiting programs which work to improve the health of women in the prenatal and postnatal period to reduce adverse birth outcomes

Formal education and training around implicit bias, racism, and microaggressions for healthcare workers, healthcare leadership, nurse midwives, doulas, home visitors, social services organization, state staff, _____
Last Suggestions...

Train culturally diverse and culturally respectful providers: Doctors, Nurses, Doulas, Midwives, CHWs, PTs, OTs, Social Workers, etc

Empower patients, Empower communities

Ask the “difficult” questions: Who is not in the room? Who needs to hear this/learn this?
Questions?