Health Equity: Building a Better Indiana

Indianapolis Coalition for Patient Safety
Aug. 29, 2019

Kris Box, MD, FACOG
Indiana State Health Commissioner
Health Equity Defined

Health equity exists when all people have a fair and just opportunity to be healthy, especially those who have experienced socioeconomic disadvantage, historical injustice, and other avoidable systemic inequalities that are often associated with social categories of race, gender, ethnicity, social position, sexual orientation and disability.

- World Health Organization
Why use a Health Equity Lens?
Why use a Health Equity Lens?
Community Indicators for Health and Quality of Life

1. Access to Recreation and Open Space
2. Access to Healthy Foods
3. Access to Medical Services
4. Access to Public Transit and Active Transportation
5. Access to Quality Affordable Housing
6. Access to Economic Opportunity
7. Completeness of Neighborhoods
8. Safe Neighborhoods and Public Spaces
9. Environmental Quality
10. Green and Sustainable Development and Practices
Health Disparities in Indiana

- Infant mortality
- Chronic disease
- Tobacco use
- Lead

It’s hard to be healthy without access to good jobs and schools and safe, affordable homes. Health equity means increasing opportunities for everyone to live the healthiest life possible, no matter who we are, where we live, or how much money we make.
Infant Mortality by Race & Ethnicity
Indiana 2010-2017
SUIDS Rates by Race, Indiana 2014-2017
**Incidence Rates for Cancer**

**Indiana 2011-2015**

**Age-adjusted cancer rates**

- Indiana’s cancer mortality rate was 10% higher than the national rate, 185.2 v. 168.5 per 100,000 people.

- Age-adjusted mortality rate for all cancers was significantly higher for rural counties than the state (186.2 v. 180.4 per 100,000 people).

- The African-American cancer mortality rate was 17 percent higher than the rate for whites.

*Significantly different (higher or lower) than the state rate (P<.05)*

Technical Note: This map presents age-adjusted county incidence rates using a smoothed interpolated surface and is intended to provide a generalized depiction of rate variability throughout the state.

Source: Indiana State Cancer Registry
Adult Asthma Prevalence by Race & Gender, Indiana 2017

- Overall: 10.0%
- Male: 6.8%
- Female: 13.1%
- White, Non-Hispanic: 9.7%
- Black, Non-Hispanic: 13.4%
- Multiracial, Non-Hispanic: 19.5%
Percentage of Adults with Diabetes by Race/Ethnicity

- Indiana: 11.5%
- White: 11.4%
- Black: 16.2%
- Other: 7.5%
- Multiracial: 12.7%
- Hispanic: 8.8%

2016 Indiana Behavioral Risk Factor Surveillance System
Percentage of Adults with Diabetes by Educational Attainment

- Indiana: 11.5%
- < High School: 15.4%
- High School or G.E.D.: 13.1%
- Some Post High School: 10.5%
- College Graduate: 8.2%

2016 Indiana Behavioral Risk Factor Surveillance System
Indiana Diabetes Mortality Rates
Per 100,000
## Indiana Cardiovascular Outpatient Rates by Race and Ethnicity

<table>
<thead>
<tr>
<th>Year</th>
<th>White</th>
<th>Black</th>
<th>Asian or Pacific Islander</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>58.7</td>
<td>102.8</td>
<td>2.8</td>
<td>25.3</td>
</tr>
<tr>
<td>2008</td>
<td>62.8</td>
<td>91.9</td>
<td>27.4</td>
<td>32.6</td>
</tr>
<tr>
<td>2009</td>
<td>58.6</td>
<td>90.7</td>
<td>44.5</td>
<td>24.5</td>
</tr>
<tr>
<td>2010</td>
<td>64.8</td>
<td>87.3</td>
<td>10.6</td>
<td>19.3</td>
</tr>
<tr>
<td>2011</td>
<td>65.0</td>
<td>85.0</td>
<td>4.5</td>
<td>17.3</td>
</tr>
<tr>
<td>2012</td>
<td>69.0</td>
<td>93.7</td>
<td>14.4</td>
<td>18.3</td>
</tr>
<tr>
<td>2013</td>
<td>71.3</td>
<td>95.1</td>
<td>14.9</td>
<td>25.0</td>
</tr>
<tr>
<td>2014</td>
<td>71.2</td>
<td>92.0</td>
<td>45.6</td>
<td>21.6</td>
</tr>
<tr>
<td>2015</td>
<td>73.7</td>
<td>102.3</td>
<td>29.1</td>
<td>20.4</td>
</tr>
<tr>
<td>2016</td>
<td>75.2</td>
<td>101.0</td>
<td>26.6</td>
<td>19.4</td>
</tr>
<tr>
<td>2017</td>
<td>80.5</td>
<td>122.8</td>
<td>22.0</td>
<td>25.1</td>
</tr>
</tbody>
</table>

*Indiana Hospitalization Data, Cardiovascular Outpatient Rate, 2007-2017*
### Indiana Stroke Inpatient & Outpatient Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>Black</th>
<th>Asian or Pacific Islander</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>40.7</td>
<td>1.9</td>
<td>3.9</td>
</tr>
<tr>
<td>2008</td>
<td>30.0</td>
<td>17.7</td>
<td>8.1</td>
</tr>
<tr>
<td>2009</td>
<td>28.2</td>
<td>25.6</td>
<td>6.1</td>
</tr>
<tr>
<td>2010</td>
<td>29.9</td>
<td>6.6</td>
<td>6.7</td>
</tr>
<tr>
<td>2011</td>
<td>29.1</td>
<td>1.0</td>
<td>7.9</td>
</tr>
<tr>
<td>2012</td>
<td>28.2</td>
<td>6.0</td>
<td>6.8</td>
</tr>
<tr>
<td>2013</td>
<td>28.2</td>
<td>4.7</td>
<td>7.4</td>
</tr>
<tr>
<td>2014</td>
<td>25.8</td>
<td>11.0</td>
<td>8.2</td>
</tr>
<tr>
<td>2015</td>
<td>26.9</td>
<td>7.2</td>
<td>6.8</td>
</tr>
<tr>
<td>2016</td>
<td>27.1</td>
<td>10.9</td>
<td>8.0</td>
</tr>
<tr>
<td>2017</td>
<td>29.1</td>
<td>8.4</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Indiana Hospitalization Data, Cardiovascular Outpatient Rate, 2007-2017
2017 Smoking Demographics

Percent of Indiana Adults who are Current Smokers, 2017 BRFSS
2017 Smoking by Education & Annual Income

Percent of Indiana Adults who are Current Smokers, 2017 BRFSS

- Overall: 22%
- Less than H.S./GED: 37%
- H.S./GED: 27%
- Some Post H.S.: 21%
- College Graduate: 8%
- < $15,000: 36%
- $15,000-$24,999: 33%
- $25,000-$34,999: 26%
- $35,000-$49,999: 23%
- $50,000-$74,999: 16%
- > $75,000: 13%
Current Smoking – Priority Populations

Percentage of Live Births to Indiana Mothers Who Smoked During Pregnancy, by Insurance Type, 2007-2017 Natality Report

- Medicaid
- Other
- Private Insurance

Year: 2007 - 2017

- 2007: 30.1%
- 2008: 20.6%
- 2009: 15.3%
- 2010: 10.9%
- 2011: 9.2%
- 2012: 8.3%
- 2013: 8.1%
- 2014: 9.8%
- 2015: 16.0%
- 2016: 8.0%
- 2017: 6.0%
Lead Exposure in Children

• Indiana’s current Elevated Blood Lead Level (EBLL) threshold is 10 µg/dL
• Since 2015, we have seen between 127 and 283 new cases of children with elevated blood lead levels annually
• Testing rates are increasing but still reaching only a fraction of at-risk children
• Children living in older housing/poverty at greater risk
• All children insured by Medicaid in Indiana are required to receive a blood lead test at 12 and 24 months of age, or as soon as possible before age 6
• Continued emergence of lead as a regional issue (East Chicago, Hammond/Whiting, Evansville, Indianapolis)
Lead: Regional Racial Disparities

• Studies from other Metro areas in the great lakes region (Detroit, Chicago) have shown
  – In Detroit, African-American children had 2.2 times higher lead levels in the second and third trimesters and 1.9 times higher lead levels postnatally in the first year of life compared to white children.
  – From 1995-2013 in Chicago, blocks with more than 70% Black families regularly had between 75-90% of the highest reported blood lead levels. This compares to White and Hispanic blocks which had less than 10% of the highest blood lead levels.
Lead: Burmese Populations

- In 2016, increased testing revealed acute lead exposure among Asian community members (especially Burmese in Indianapolis, Evansville, and Fort Wayne).
- Among the Asian community in those communities that year, 6.4% of the individuals tested had a blood lead level above 5 µg/dL compared to 3.6% of the rest of the general population statewide.
STRATEGIES TO ADDRESS INEQUITIES
Addressing Health Equity

• Understand that good health is more than medicine
• Recognize need to meet people where they are
• 2018 adoption of formal health equity policy at ISDH
  – Actively pursue & intervene in root causes of health inequity and disparity
  – Develop targeted, collaborative approaches to combat health inequities and disparities in vulnerable communities as a result of deficits in the 5 key areas of social determinants of health (economic instability, education, social & community context, health & health care; neighborhood & built environments)
  – Promote equal opportunities for all people to achieve optimal health through a Health in All Policies approach
  – Create communication strategies targeted at both internal and external stakeholders to share education about reducing health disparities
  – Improve and sustain internal processes, policies and procedures
Good Health is More than Medicine

Accounts for 80% of Health Outcomes

- **Socio-Economic** (40%)
  - Education
  - Employment
  - Family and Social Support
  - Income
  - Safety

- **Health Behaviors** (30%)
  - Alcohol and Drug Use
  - Diet and Exercise
  - Sexual Activity
  - Tobacco Usage

- **Physical Environment** (10%)
  - Air and Water Quality
  - Housing and Transit

- **Clinical Care** (20%)
  - Access to Care
  - Quality of Care
<table>
<thead>
<tr>
<th>Healthy Opportunities Assessment Tool</th>
<th>Yes / No / NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the last 12 months, did you ever eat less than you felt you should because there wasn’t enough money for food?</td>
<td></td>
</tr>
<tr>
<td>In the last 12 months, has your utility company shut off your service for not paying your bills?</td>
<td></td>
</tr>
<tr>
<td>Are you worried that in the next 2 months, you may not have stable housing?</td>
<td></td>
</tr>
<tr>
<td>Do problems getting child care make it difficult for you to work or study? (leave blank if you do not have children)</td>
<td></td>
</tr>
<tr>
<td>In the last 12 months, have you needed to see a doctor but could not because of cost?</td>
<td></td>
</tr>
<tr>
<td>In the last 12 months, have you ever had to go without health care because you didn’t have a way to get there?</td>
<td></td>
</tr>
<tr>
<td>Do you ever need help reading hospital materials?</td>
<td></td>
</tr>
<tr>
<td>Are you afraid you might be hurt in your apartment building or house?</td>
<td></td>
</tr>
<tr>
<td>During the last 4 weeks, have you been actively looking for work?</td>
<td></td>
</tr>
<tr>
<td>In the last 12 months, other than household activities or work, do you engage in moderate exercise (walking fast, jogging, swimming, biking or weight lifting) at least three times per week?</td>
<td></td>
</tr>
</tbody>
</table>
Key Learnings: ~95K Respondents*

*16% Response Rate
*As of 3/25/19
Addressing Health Equity: Infant Mortality

• Bringing Crossroads’ “Understanding and Analyzing Systemic Racism” training to staff to address equity at all levels

• Requiring that any grant proposals describe how they will address racial disparities

• Promoting breastfeeding in African American communities
  – 2020 breastfeeding conference will include 4-hour implicit bias training

• Ensuring safe sleep training is culturally relevant
  – First Ladies luncheons

• Use social determinants of health to guide community-based work
  – OB Navigator Program enlisting community health workers
Addressing Health Equity: Cancer

• Indiana Breast & Cervical Cancer Program
  - Provides access to breast and cervical cancer screening and diagnostic services to women between the ages of 30 to 64, who fall at or below 200% of the federal poverty level – women with or without insurance may qualify
  - ~5,000 women are served through the program, annually

• Cervical cancer strategic plan
  - Includes health equity section illustrating racial/ethnic, socioeconomic status, and geographic disparities
  - Notes disparities among African American women, who are more likely to be diagnosed at late stages of cervical cancer compared to white women
Addressing Health Equity: Asthma

• Implement projects in areas of high burden to improve patient, provider, caregiver and family knowledge through coordinated health promotion and peer-learning

• Community-based engagement (FQHCs, CHCs, and RHCs)
  – Expand access to/delivery of asthma self-management education
  – Expand home visits for asthma trigger reduction
  – Promote referrals to home weatherization assistance programs and promotion of smoke policies.
Addressing Health Equity: Tobacco

- Promote tobacco cessation before, during & after pregnancy
  - Baby & Me-Tobacco Free programs
  - OB Navigator Program
- Local partnerships with minority-based organizations supporting tobacco prevention and cessation efforts
  - Minority Health groups, Indy Pride
- Strategic partnerships to support increasing awareness within the LBGT community, as well as support for tobacco treatment among behavioral health care providers.
- Collaboration with Indiana Medicaid to promote and support tobacco cessation to members and providers
- Statewide standing order for tobacco cessation products
Addressing Health Equity: Lead

- WIC Lead Testing Pilot
- Nursing case management reimbursement through Medicaid
- Provider report cards
- Statewide Lead Advisory Panel
- Abatement and remediation
- Utilize risk mapping and epidemiological support to identify sources of lead risk in communities with increasing EBLL cases
- Partner with FSSA to identify ways to increase testing among daycare populations and Medicaid-covered children
Improving Health Equity: Access to Care

- Hospital/OB shortage areas
  - Paramedicine, community health workers, NFP, Healthy Families, doulas

- Levels of Care system

- Community paramedicine
Improving Health Equity: Access to Care

- Project ECHO & Telemedicine
- Expand recovery housing
  - Fresh Start
- Increase Opioid Treatment Programs
- Embedding behavioral health in primary care
- Rural providers
  - Student loan repayment program/ to increase mental health/addiction providers
    - 13 of 30 of the practitioners are located in high-risk counties
    - 15 of 30 are practicing in mental health and/or addiction disciplines
Final Thoughts

- No one entity can do it alone
- Everyone needs to participate
- Need to think outside traditional roles
- Partnerships are critical
- Recognize implicit bias and different cultural practices
- Meet people where they are, with people and approaches they can trust
Your Turn: Questions?

Contact:
Kris Box, MD, FACOG
Indiana State Health Commissioner
kbox@isdh.in.gov