



Taking Action to Reduce Indiana's Infant Mortality

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Infant Mortality

- Death of infant before his/her 1st birthday
- 2x as many deaths in the first year of life as the next 13 years combined
- Leading indicator of health



Indiana's Infant Mortality



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Indiana's Infant Mortality

14

18

10

3



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Indiana's Infant Mortality



One baby
every 14 hours



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Indiana's Infant Mortality



One baby
every 14 hours



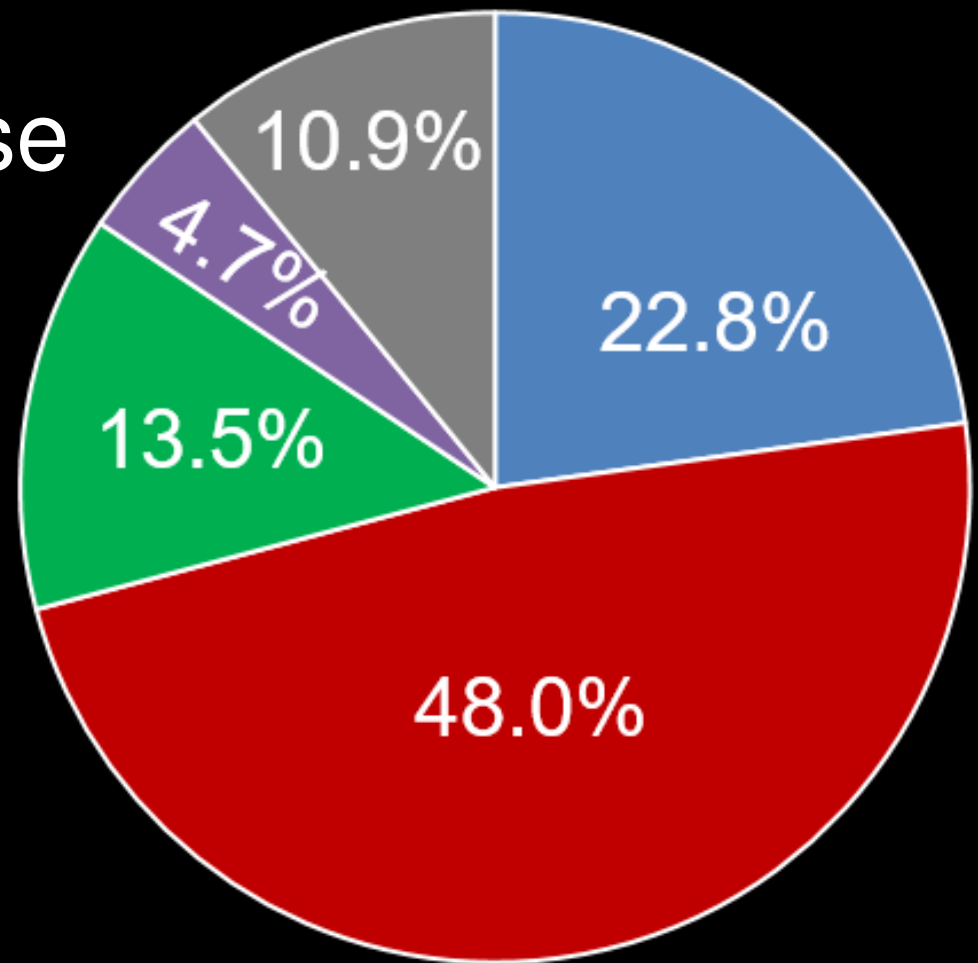
One to two
babies
every day



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% Deaths By Cause Indiana, 2015

- Congenital Malformations
- Perinatal Risks
- SUIDs
- Assaults/Accidents
- Other



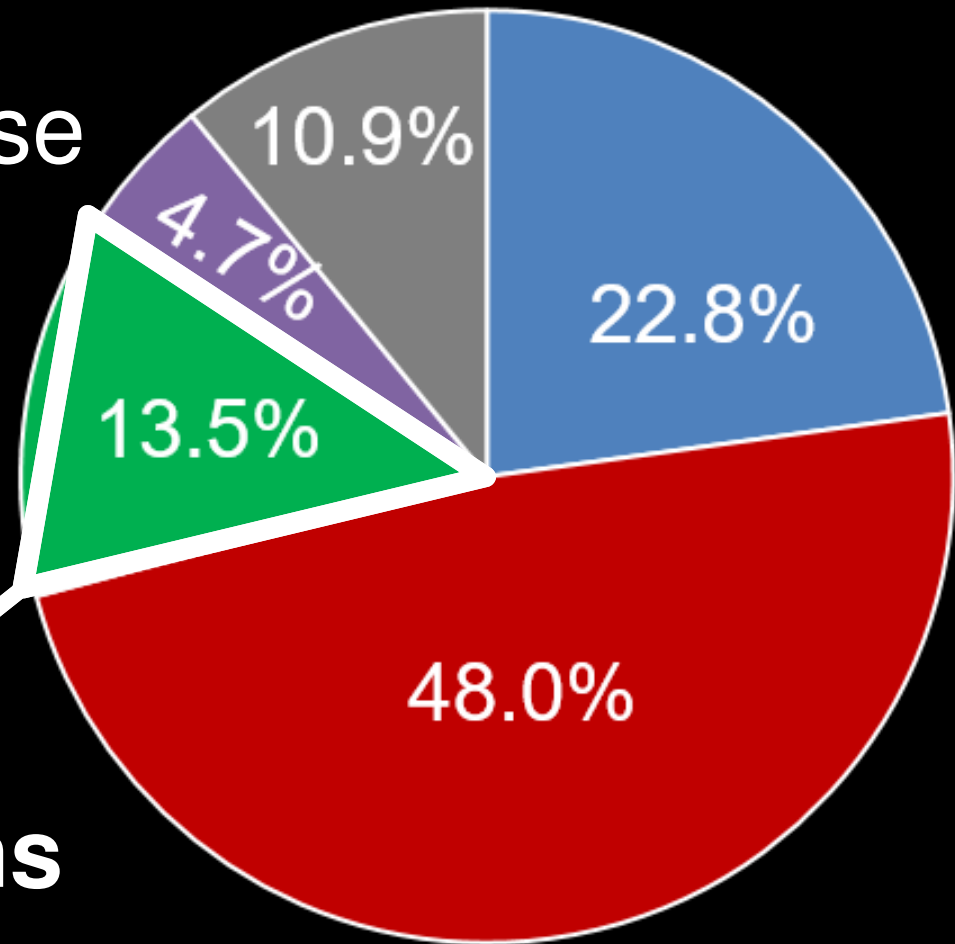


Sudden Unexpected Infant Death



% Deaths By Cause Indiana, 2015

- Congenital Malformations
- Perinatal Risks
- SUIDs
- Assaults/Accidents
- Other



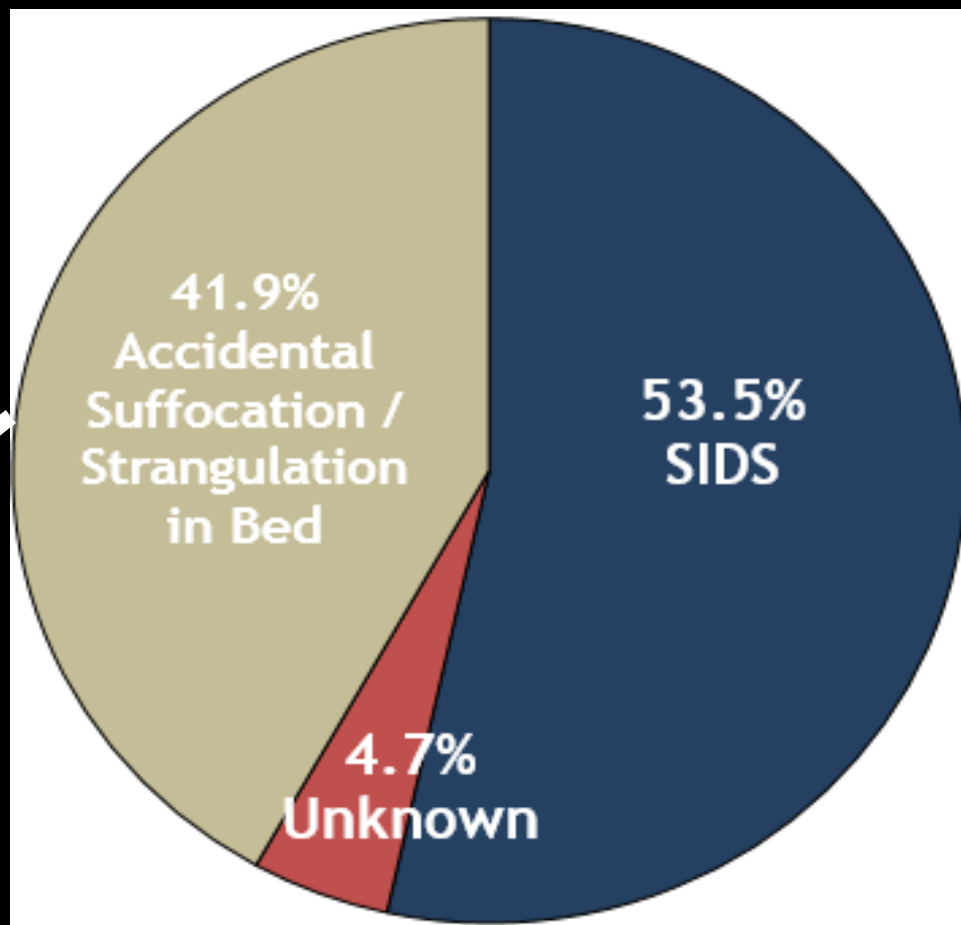
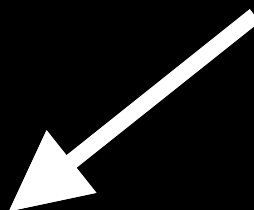
1 out of 8 deaths



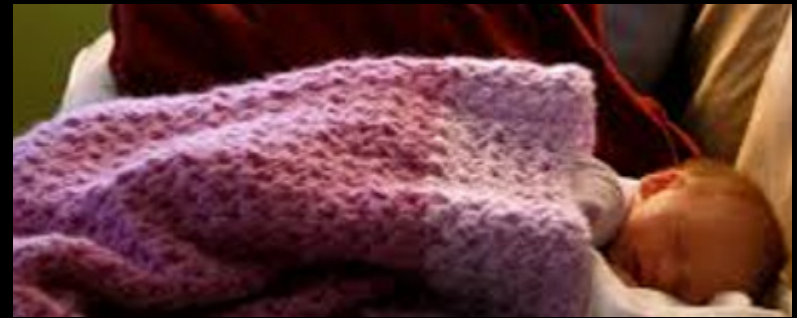
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Percent Distribution of SUIDs Deaths Indiana 2014

1 out of 18 deaths



Source: Indiana State Department of Health, Maternal & Child Epidemiology Division [December 21, 2015]
Indiana Original Source: Indiana State Department of Health, PHPC, ERC, Data Analysis Team





American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™

SIDS and Other Sleep-Related Infant Deaths: Updated 2016 Recommendations for a Safe Infant Sleeping Environment

TASK FORCE ON SUDDEN INFANT DEATH SYNDROME

AAP TASK FORCE ON SUDDEN INFANT DEATH SYNDROME. SIDS and Other Sleep-Related Infant Deaths: Updated 2016 Recommendations for a Safe Infant Sleeping Environment. Pediatrics. 2016;138(5):e20162938



What does a safe sleep environment look like?

The ABC's of Safe Sleep



Alone

Not with other people, pillows, blankets, or stuffed animals.



on my Back

Not on the stomach or side.



in my Crib

Not on an adult bed, sofa, cushion, or other soft surface.





Premature Births



Percent of Live Births and Infant Deaths by Weeks of Gestation, U.S., 2013

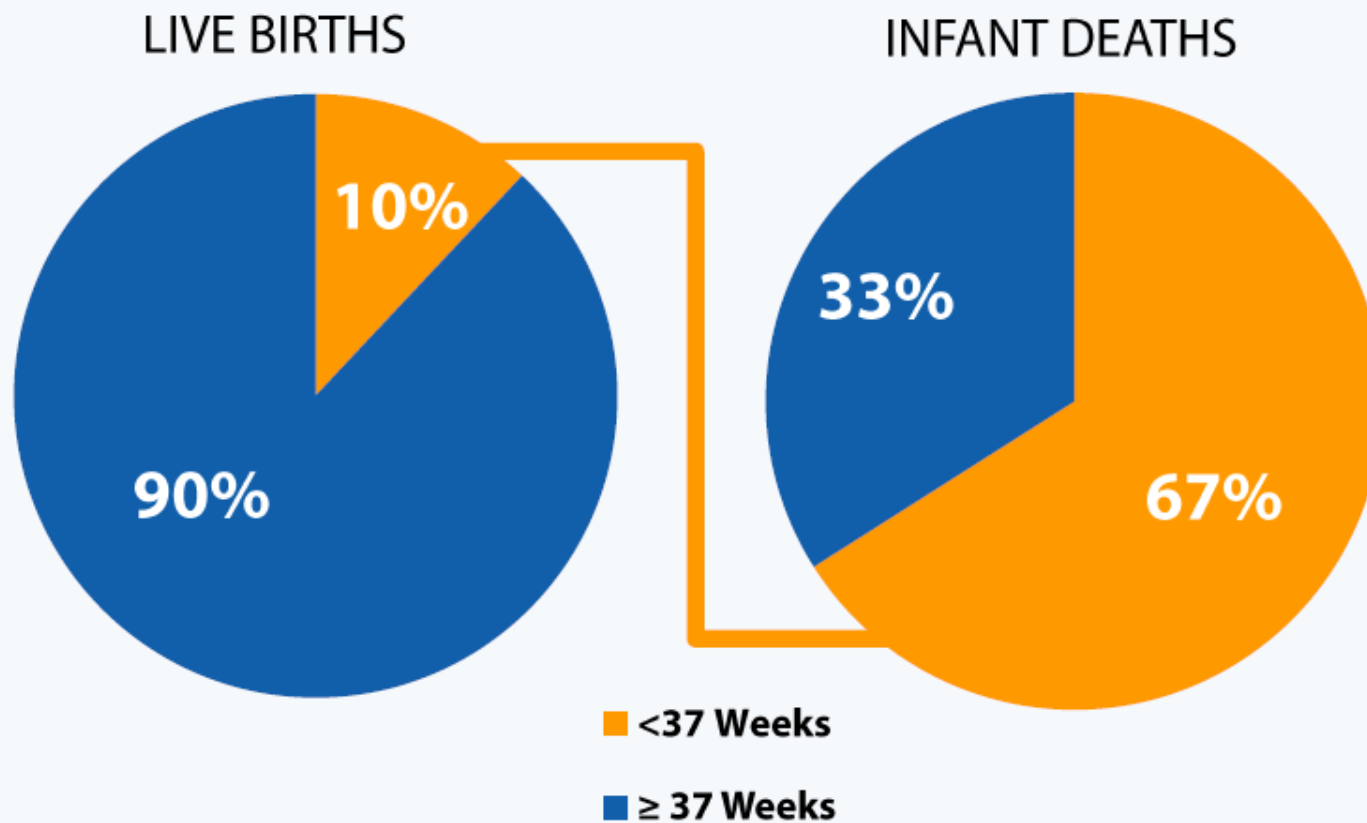
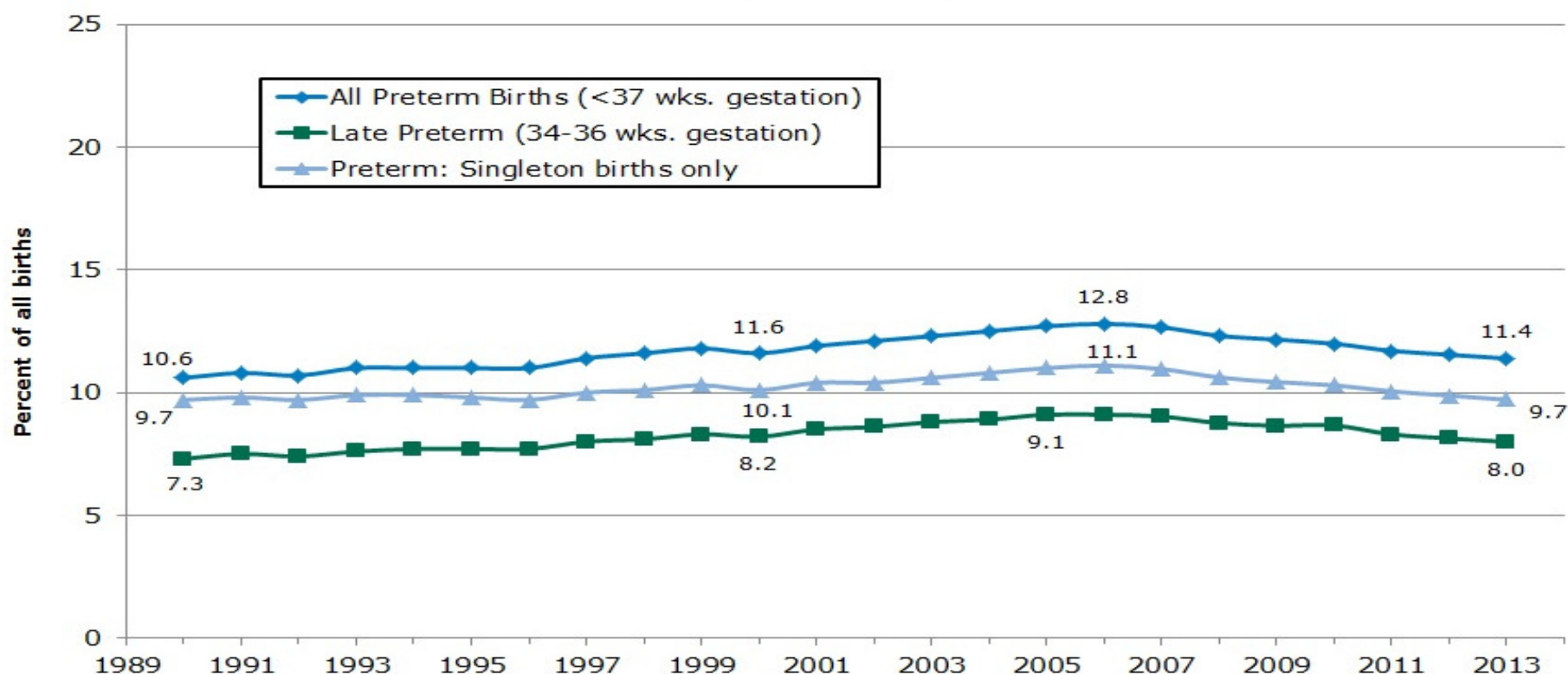


Figure 1

All Preterm and Late Preterm Births, as Percentage of All Births, 1990-2013

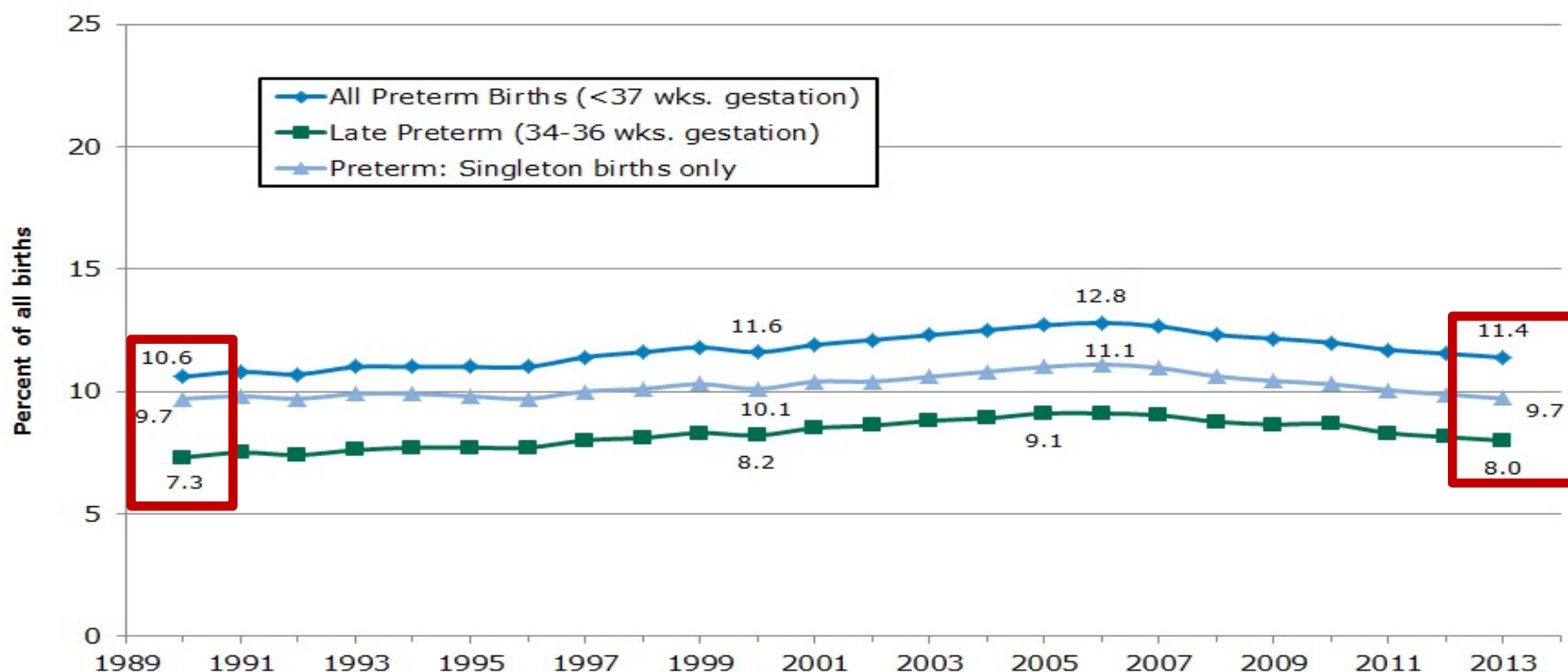


Note: Percentage calculations exclude records missing gestation period data.

Data for 1990-1995: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System. *VitalStats* online tool. Available at www.cdc.gov/nchs/data_access/vitalstats/VitalStats_Births.htm. Data for 1995-2013: Centers for Disease Control and Prevention, National Center for Health Statistics, CDC Wonder online database. Available at: <http://wonder.cdc.gov/nativity.html>

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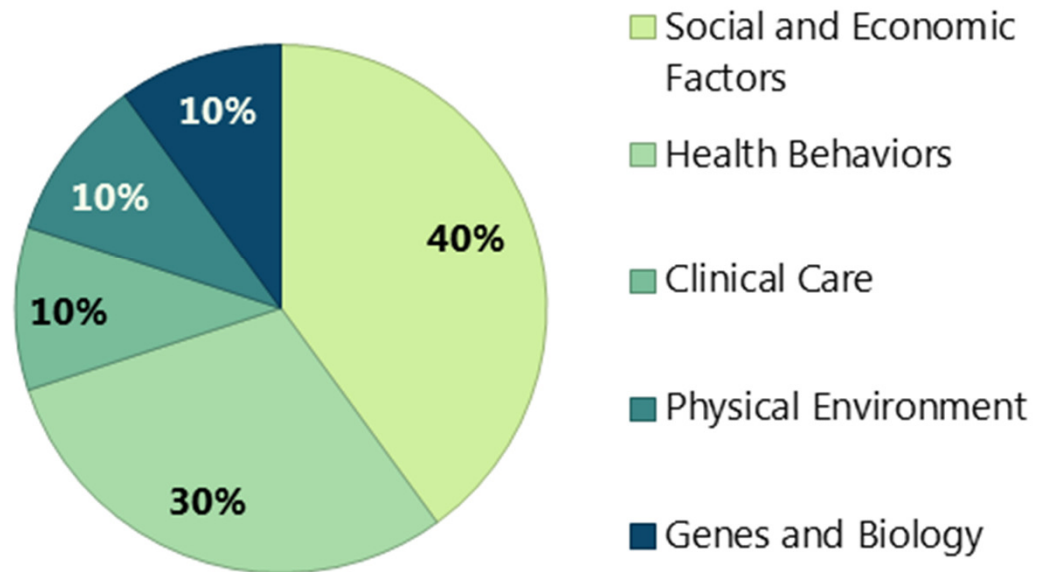


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Factors Influencing Health and Well-Being



http://www.health.state.mn.us/divs/opi/gov/chsadmin/images/_factors_rev.png

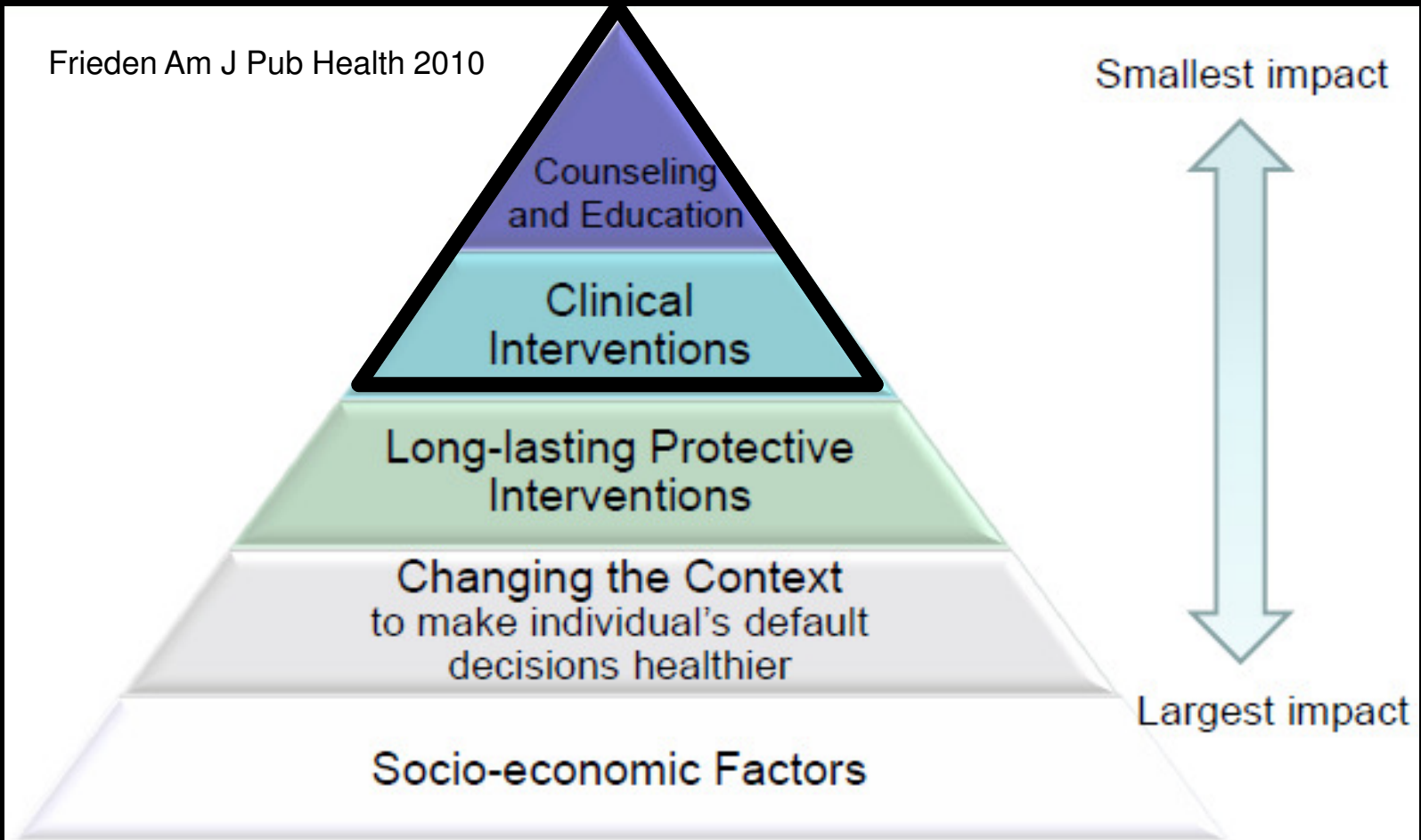
CDC's Impact Pyramid: Factors Affecting Health

Frieden Am J Pub Health 2010



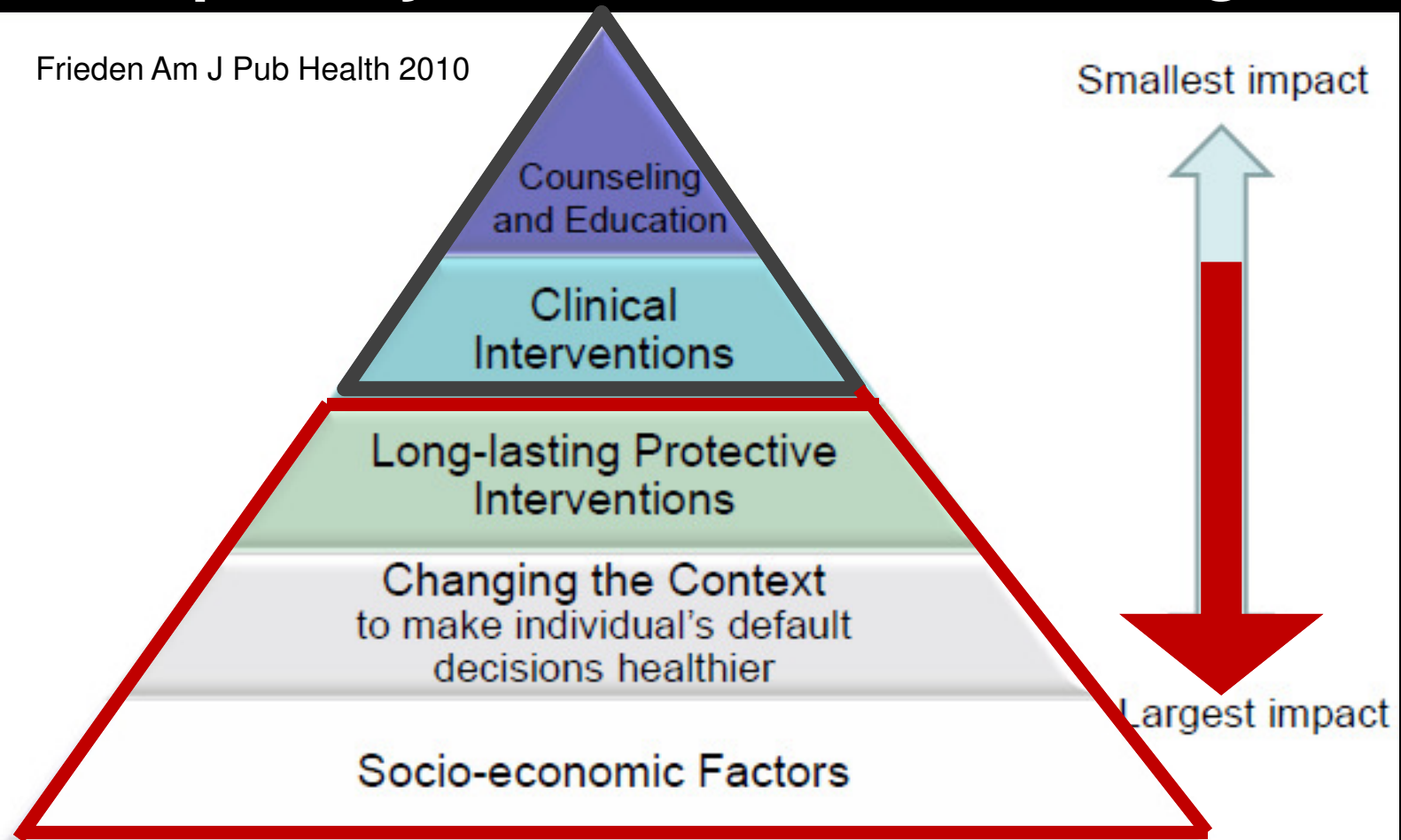
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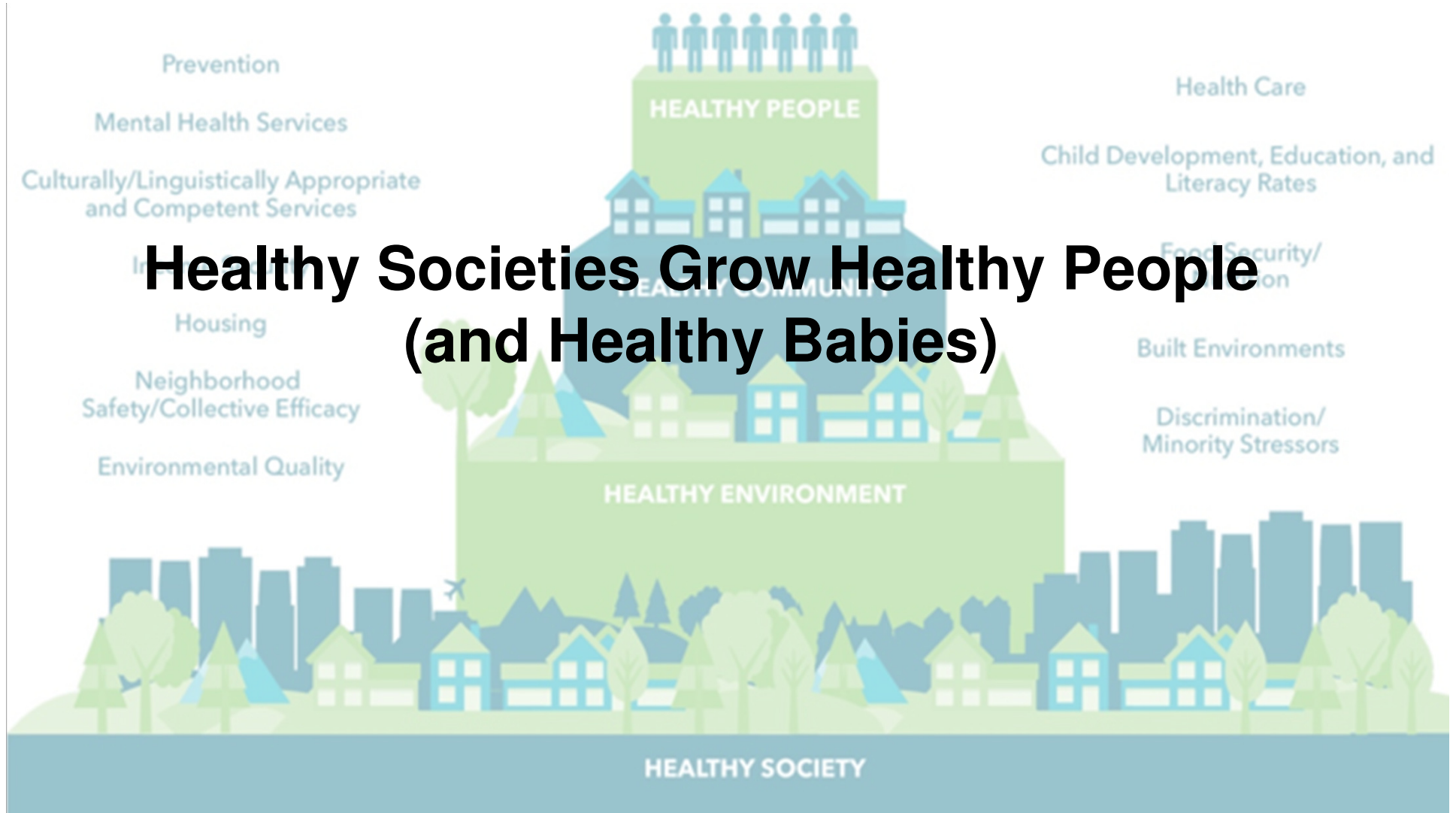


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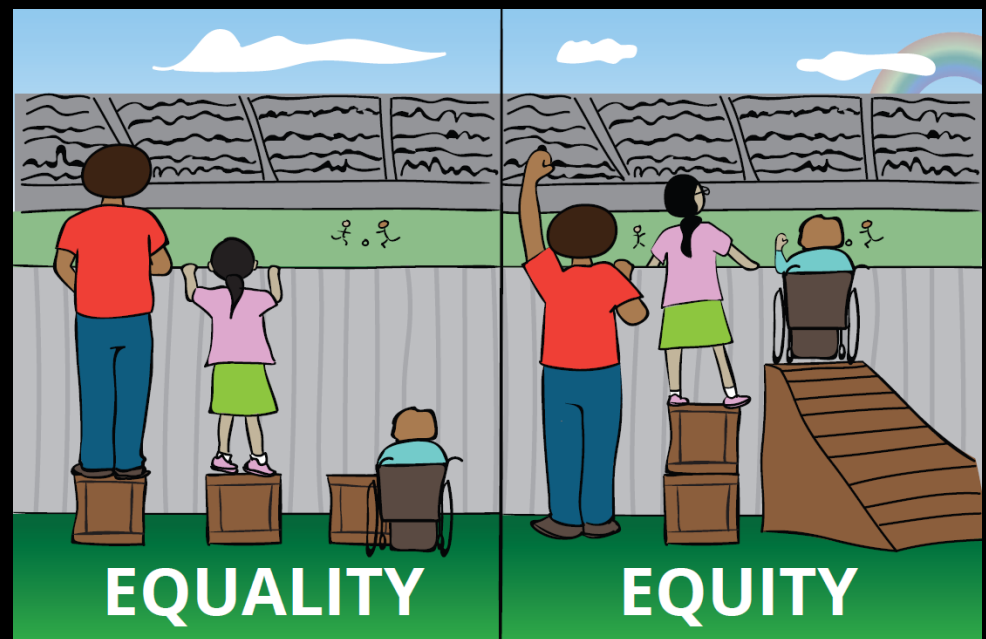


Our Approach

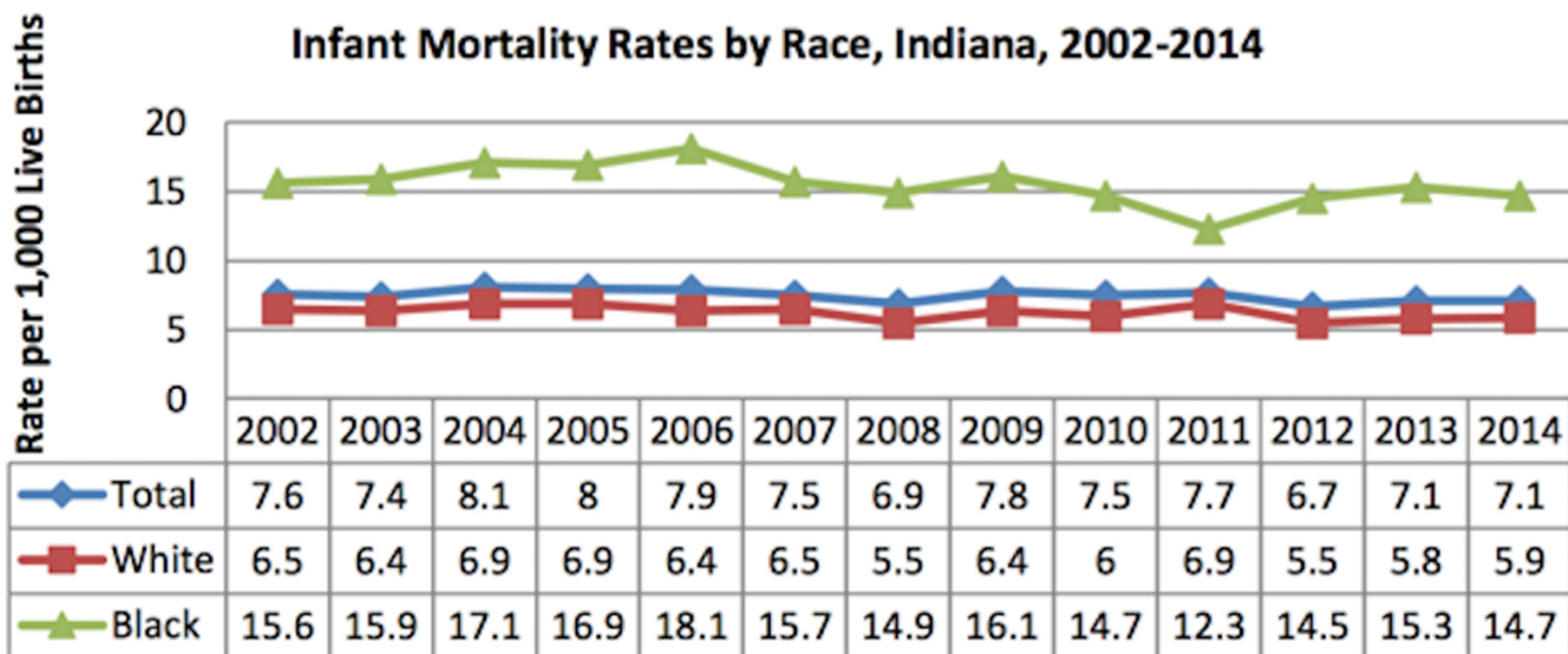


Infant Mortality Is NOT Equally Distributed = Disparity

- Occurs to people based on race, ethnicity, gender, age, socioeconomic status, faith system, disability, sexual orientation, or gender identity (USDOL, 1999)
- Disparity = inequity NOT just inequality (Hebert et al., 2008)



Racial Disparities in Infant Mortality

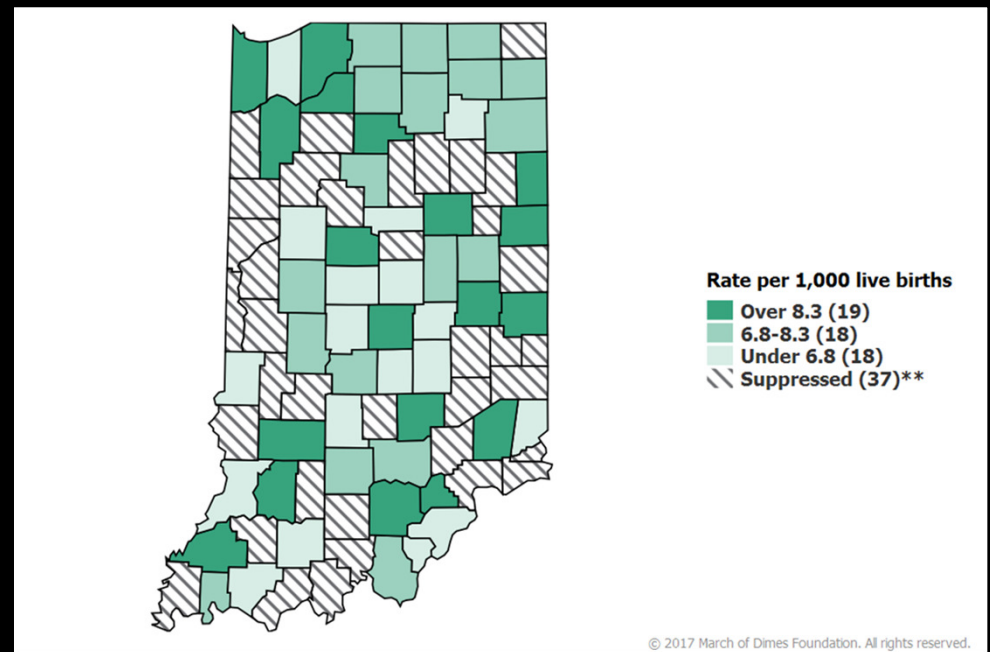


Source: Indiana State Department of Health, Maternal & Child Health Epidemiology Division [April 13, 2015]
 Indiana Original Source: Indiana State Department of Health, PHPC, ERC, Data Analysis Team

2013-2015 Indiana Geographic Disparities in Infant Mortality

More than
1 out of 4 deaths
in 12 of 92 Counties

Original Source: Indiana State Department of Health,
Epidemiology Resource Center, Data Analysis Team

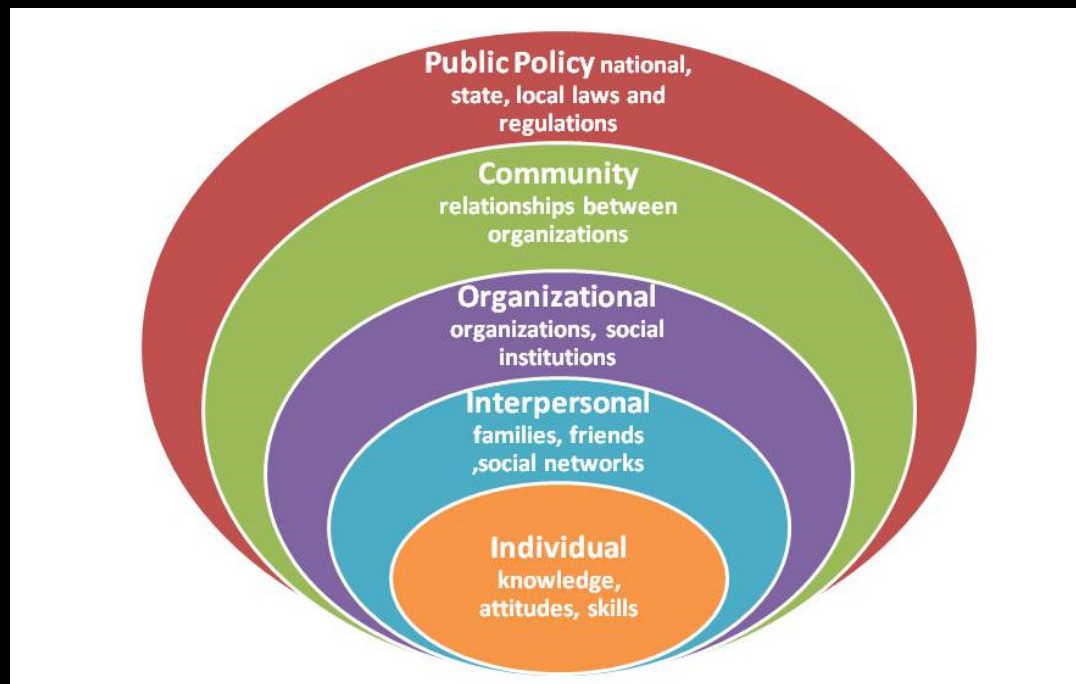


(March of Dimes, 2017)

<u>county</u>	<u># deaths</u> 2011-2015	<u>% state deaths</u>	<u># zip codes in county</u> <u>with >=20 deaths</u>
Marion*	391	13.0%	13
Lake	62	2.1%	2
Allen	54	1.8%	2
Tippecanoe*	52	1.7%	2
Elkhart	48	1.6%	2
Laporte	48	1.6%	2
Bartholomew	31	1.0%	1
Clark	29	1.0%	1
Wayne	28	0.9%	1
Delaware	24	0.8%	1
Howard	20	0.7%	1
Grant	20	0.7%	1
TOTAL	807	27%	29

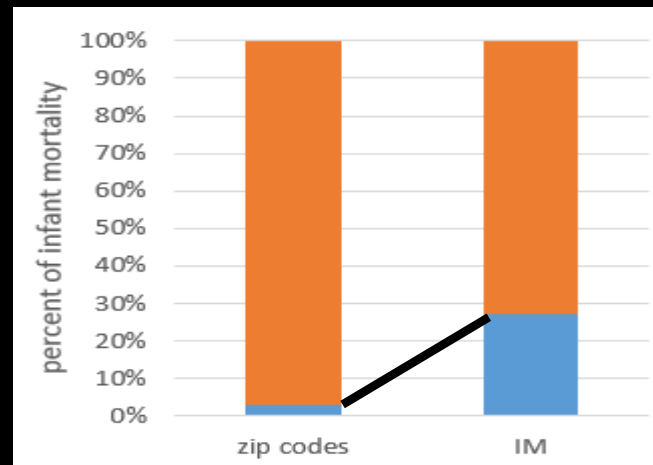
Original Source: Indiana State Department of Health, Epidemiology Resource Center, Data Analysis Team

The Social-Ecological Approach for Health Promotion



A Place-Based Approach – Zip Codes

29/988 (3%) zip codes account for more than 1 out of every 4 infant deaths



Our Guiding Principles

- We must have a **measurable impact** on infant mortality rates
- Efforts initiated must be **sustainable** past the initial funding
- **Public/private partnerships** will engage all sectors of the community
- A systems approach will **support families**
- **Policies and funding** will support the initiatives



Strategic Priorities

1. Improve use of underutilized, evidenced-based health care
2. Assess individual needs and coordinate services/resources
3. Build the leadership capacity of individuals and organizations to reduce infant mortality





Strategic Priority 1

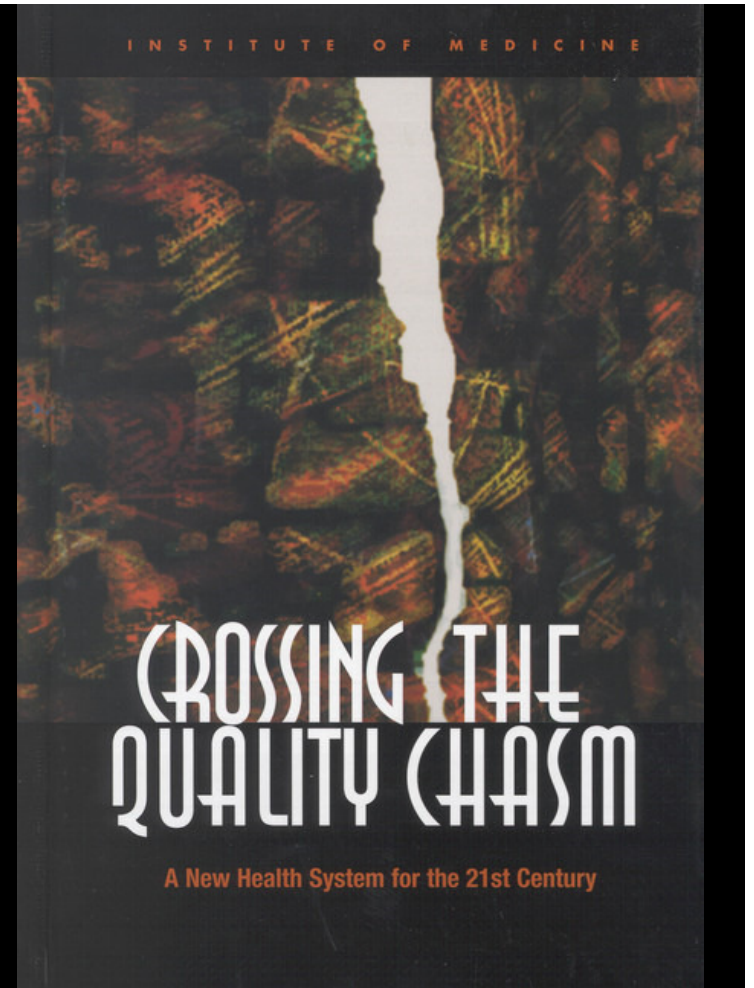
Use System Science to Improve the Use of
Underutilized, Evidenced-Based Health Care

Strategic Priority 1

“Trying harder will not work.
Changing systems
of care will.”



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Strategic Priority 1: Use System Science to Improve the Use of Underutilized, Evidenced-Based Health Care

System science emphasizes innovation, real time implementation and testing in practices to generate learning about what changes, in which contexts are needed to produce measurable and sustainable improvements.

- Progesterone
- Baby Aspirin to Prevent Pre-eclampsia
- Healthy Pregnancy Spacing and Planning
- Safe Sleep, Its Risk and Protective Factors





Strategic Priority 2

**Build a Community Pathways Hub System
to Assess Individual Needs and Coordinate
Services/Resources**

Strategic Priority 2: Community Pathways Hub System to Assess Individual Needs & Coordinate Services/Resources

- Entry through any social service / resource
- Comprehensive risk assessment including health, social, behavioral health and economic factors
- Improve coordination of services through contracted community health workers and a centralized data HUB
- Provides a “value based purchasing” or “pay for performance” model



Strategic Priority 2: Community Pathways Hub System to Assess Individual Needs & Coordinate Services/Resources

COMMUNITY HUB PATHWAYS

- **Adult Education**
- **Behavior Health**
- **Developmental Referral**
- **Developmental Screening**
- **Education**
- **Employment**
- **Family Planning**
- **Health Insurance**
- **Housing**
- **Immunization Referral**
- **Immunization Screening**
- **Lead**
- **Medical Home**
- **Medical Referral**
- **Medication Assessment Chart**
- **Medication Assessment**
- **Medication Management**
- **Postpartum**
- **Pregnancy**
- **Smoking Cessation**
- **Social Service Referral**

**From: Pathways Community HUB Certification
Program Pre-Requisites & Standards, Feb 2017**



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Strategic Priority 3

**Build the Leadership Capacity of Individuals
and Organizations to Reduce Infant Mortality**

Characteristics of Community-Based Health Promotion Programs

- Emphasis on primary prevention
- Implement through multiple community settings
- Involvement of community leaders, social networks, and mass communication campaigns
- Active engagement and influence of community members in all aspects of the program process

(Principles of Community Engagement, 2011)



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- GOAL: Develop 58 community-based Maternal Child Health (MCH) leaders in **Our Framework** the 29 highest-risk zip codes
- 2 leaders from each community go through formal curriculum to build leadership knowledge and skills, then develop their leadership priorities map
- After training, will have 36 months of sustained mentoring and evaluation



Curriculum Details

Knowledge Building

- Being a self-reflective leader
- Women's health across the lifespan
- IMR and adverse birth outcomes at National, State, and Local levels
- Equity in birth outcomes
- Community engagement science

Skill Building

- EvaluLEAD: setting goals/objectives/action plan for community leadership project: individual, organizational, societal levels
- Photovoice/Storytelling
- Policy Advocacy and Development



Conclusions



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14
18
10
3



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Indiana's Infant Mortality

14 hours a baby dies

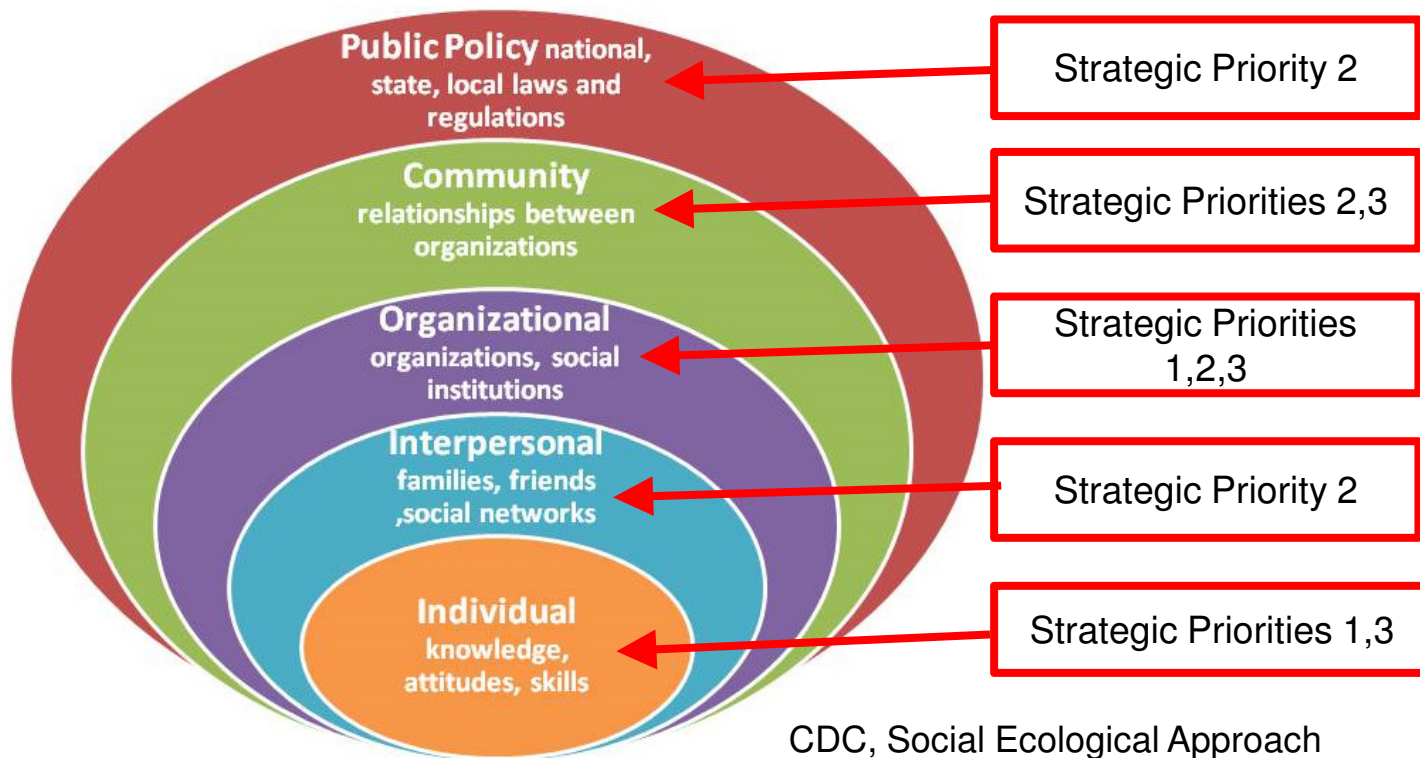
1/18 unsafe sleep =
preventable

1/10 born prematurely

3 strategic priorities



Our Approach Addresses Infant Mortality at Each Level



Truly a Team Effort – Thanks to All the Following for Their Partnership

Indiana Rural Health Association
Indianapolis Urban League
Harrison Art Center
Indiana Institute for Working Families
IN American Academy of Pediatrics
John H. Boner Center
WeCare Plus
Kohl's Caring for Our Kids
Indiana State Department of Health

Marion County Health Department
Indiana March of Dimes
Eskenazi Health
MCHD Fetal Infant Mortality Review
Child Care Answers
United Way of Central Indiana
Indpls Department of Public Health & Safety
Best Babies Zone
FSSA – OECOSL
Cribs for Kids



Let's All Work Together!

A baby's life depends upon it.



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