

Housing and Infant Mortality...

Ohio data regarding Infant Death.

Arthur R. James MD, FACOG

July 18, 2018

Infant Mortality:

Definition: The death of any live born baby prior to his/her first birthday.

"The most sensitive index we possess of social welfare."

Julia Lathrop, *Children's Bureau*, 1913



Slide prepared by R. Fournier RN, BSN
State of Michigan FIMR Director

"Infant mortality is a community mirror, reflecting our collective capacity to promote and protect the health and well-being of our very youngest and most vulnerable."

(from [redacted] is, 9:2, p1)

Infant Mortality is:

Multi-factorial. Rates reflect a society's commitment to the provision of:

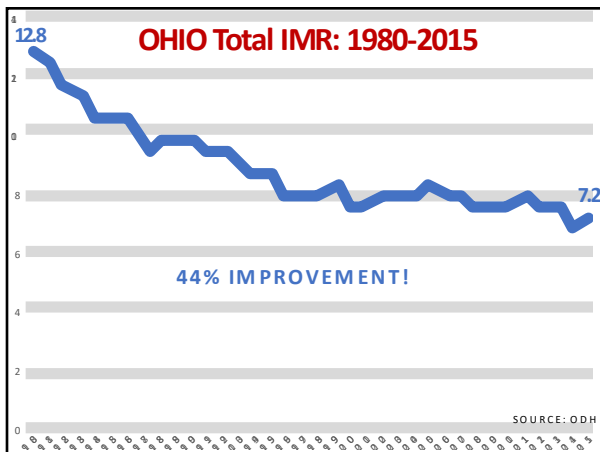
1. High quality health care
2. *Adequate food and good nutrition
3. *Safe and stable housing
4. *A healthy psychological and physical environment
5. *Sufficient income to prevent impoverishment

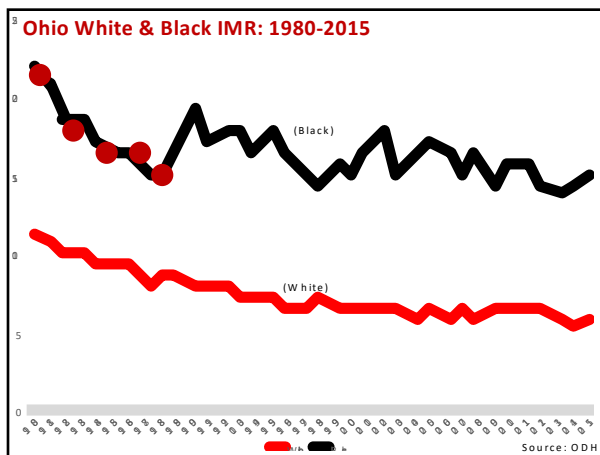
"As such, our ability to **prevent infant deaths and to address long-standing disparities** in infant mortality rates between population groups is a barometer of our society's commitment to the health and well-being of all women, children and families."

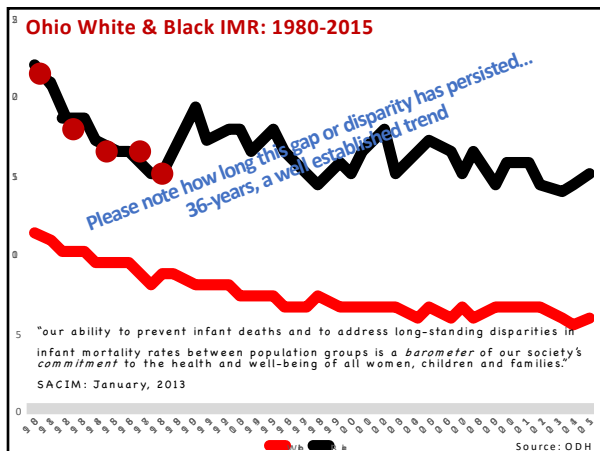
* = non-clinical measure

SACIM, 1/2013

Ohio Infant Mortality Data:

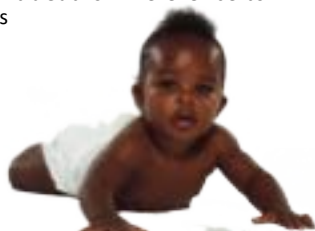


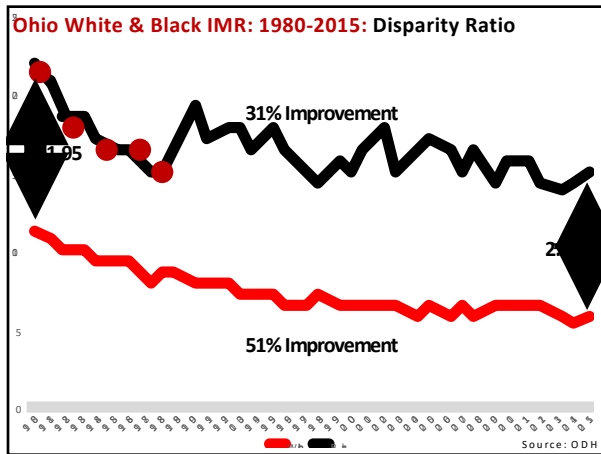


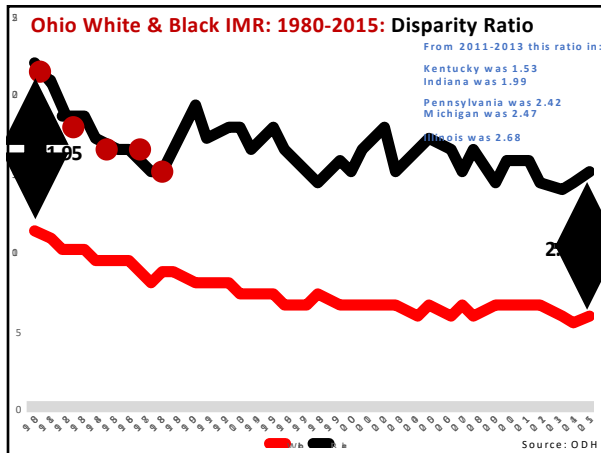


Black to White Racial Disparity in Infant Mortality:

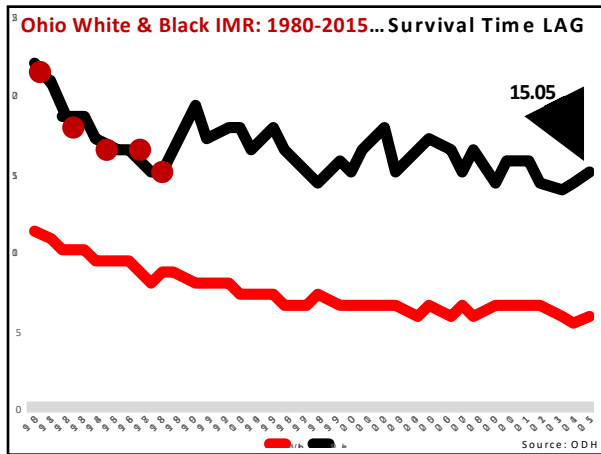
- 1. Disparity Ratio:** Black infant deaths more than 2x that of Whites
- 2. Survival Time-lag** between black and white infants
- 3. Healthy People:** Infant deaths in reference to Healthy People Goals

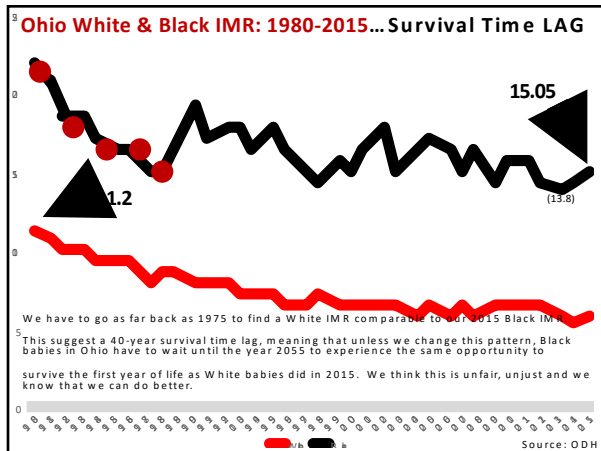


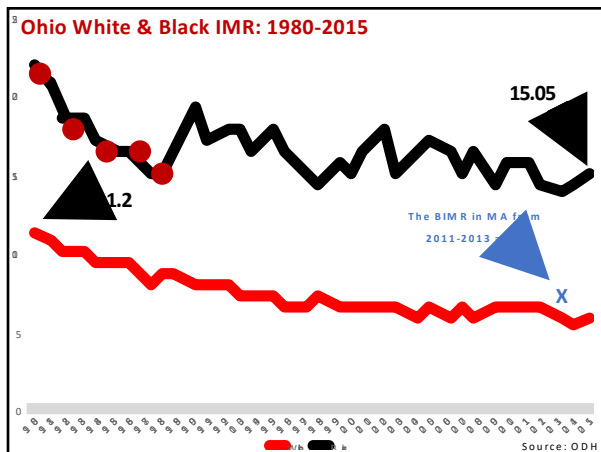


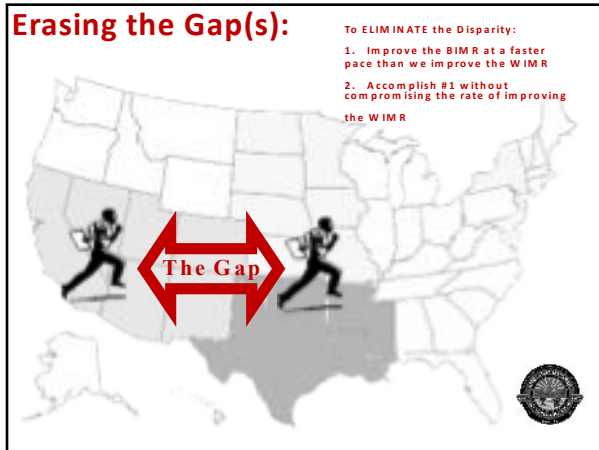


Survival Time Lag:









NCHS Data Brief • No. 120 • April 2013

What's new?

Recent Declines in Infant Mortality in the United States, 2005–2011

Marion F. MacDonn, Ph.D., Donna L. Hoyert, Ph.D., and T.J. Mathews, M.S.

Key findings

- Following a plateau from 2000 through 2005, the U.S. infant mortality rate declined 12% from 2005 through 2011. Declines for neonatal and postneonatal mortality were similar.
- From 2005 through 2011, infant mortality declined 16% for non-Hispanic Black women and 12% for non-Hispanic white women.

Infant mortality is an important indicator of the health of a nation (1–3). This report describes the recent decline in the U.S. infant mortality rate from 2005 through 2011. Changes in infant mortality rates over time are measured by age at death, neonatal rate and etiology, cause of death, and race. The linked birth/infant death data set (linked file) is generally the preferred source for infant mortality rates by race and ethnicity (4–6). This is particularly important for racial and ethnic groups other than non-Hispanic white, non-Hispanic black, and Hispanic. For these three groups, rates calculated from the mortality and linked files have been very similar for many years, and trends are unlikely to differ (7–9). Thus, data from the periodic file are used for this analysis because of their greater equivalence (4,6). Data for 2011 are preliminary (1). Because preliminary data are not available by race, data for the 2007–2010 period were used for the geographic analysis.

<http://www.cdc.gov/nchs/data/databriefs/db120.pdf>

National Vital Statistics Reports

Volume 41, Number 4
Infant Mortality Statistics from the 2009 Period Linked Birth/Infant Death Data Set
By T.J. Mathews, M.S., and Marion F. MacDonn, Ph.D., Division of Vital Statistics

Abstract

Objective: This report presents 2009 period infant mortality statistics from the linked birth/infant death data set, linked file by maternal and infant characteristics. The linked file differs from the mortality file which is based exclusively on death certificate data.

http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_08.pdf

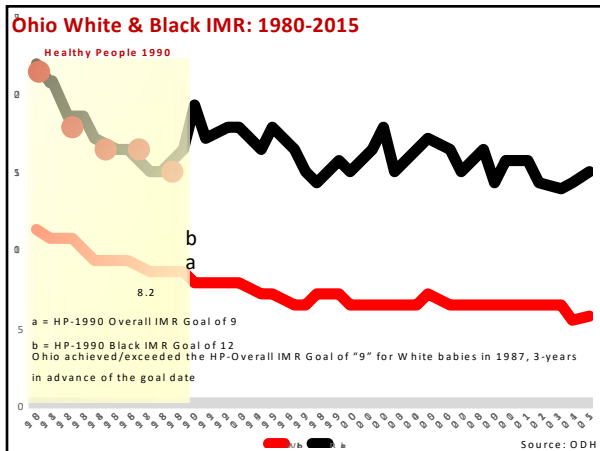
Recent Declines in Infant Mortality in the United States, 2005–2011

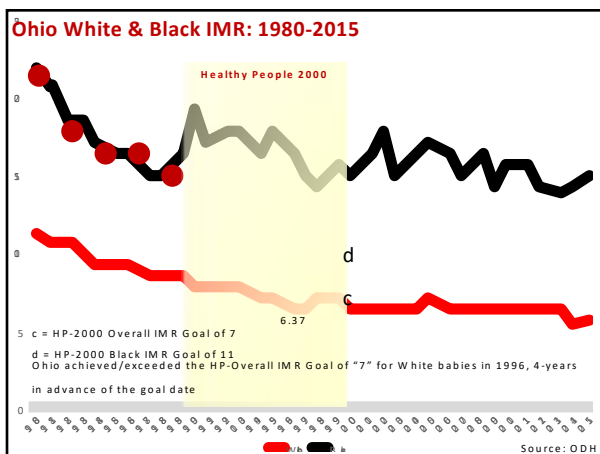
- Following a plateau, from 2000 through 2005, the US IMR declined 12% from 2005–2011.
 - Declines in the neonatal and post neonatal mortality rates were similar
- From 2005–2011 IMR declined**
 - 16% for Black women**
 - 12% for White women**
 - 9 % for Hispanic women**
- IMR declined for 4 of the 5 leading causes of infant death from 2005–2011.

NCHS Data Brief, #120, April 2013

"Healthy People" History:

- 1990-Healthy People
- 2000-Healthy People
- 2010-Healthy People
- 2020-Healthy People





Healthy People 2010:

■ 2 Overarching Goals

- Increase the quality and years of healthy life
- Eliminate health disparities

• Only one IMR Goal (4.5) for the entire population

■ 28 Focus Areas

- Maternal Child Health

■ 467 specific objectives

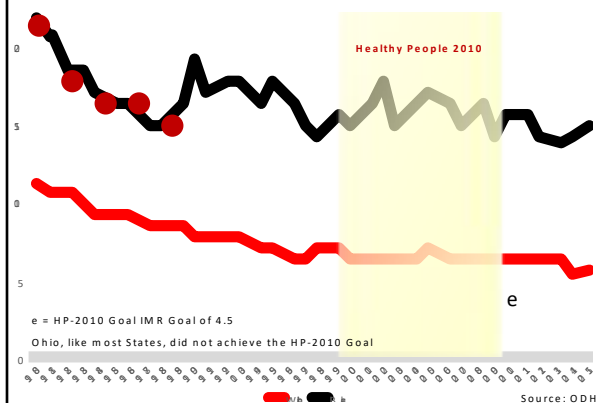
- Infant Mortality: goal of 4.5 deaths/1,000 live births
- For the first time... one goal for all races

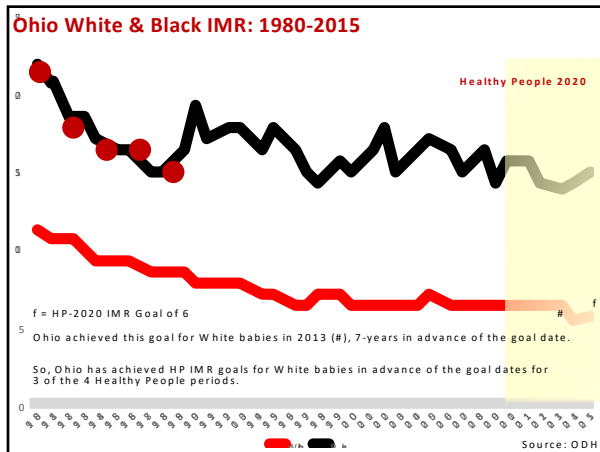


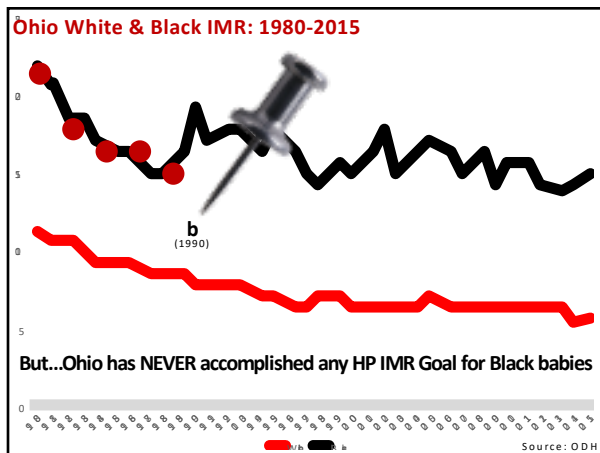
Office of Disease Prevention and Health Promotion
U.S. Department of Health and Human Services



Ohio White & Black IMR: 1980-2015





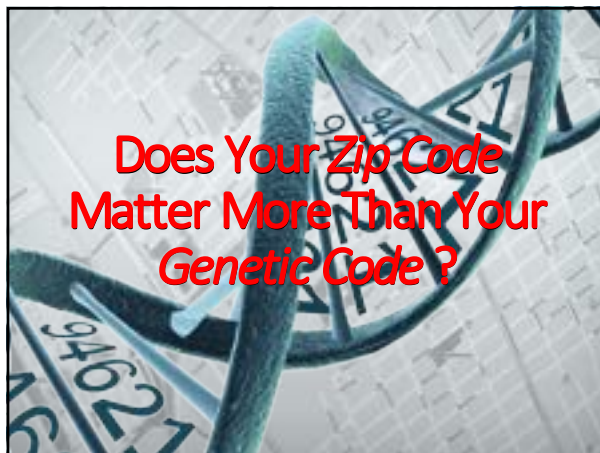


“State” Matters...

2011-2013 USA Infant Mortality Rates, by State and by Race, from Worst to Best:

	Overall:		White:		Black:		Hispanic:
USA	6.01		5.06		11.25		5.09
MS	9.25	WV	6.99	KS	14.18	RI	7.22
AL	8.57	AL	6.92	WI	14	PN	6.99
LA	8.35	ME	6.77	OH	13.57	OH	6.92
DE	7.64	MS	6.76	MI	13.13	KS	6.84
OH	7.6	AR	6.7	IL	12.93	KY	6.75
AR	7.41	OK	6.51	AL	12.9	ID	6.68
SC	7.23	IN	6.46	UT	12.89	OK	6.54
NC	7.2	KY	6.4	IN	12.87	MS	6.35
IN	7.19	OH	6.31	DE	12.82	AR	6.15
OK	7.17	LA	6.15	PN	12.66	IN	6.09
TN	7.16	TN	6.09	NC	12.57	MO	6.08
	*MA 4.21	*NJ 3.20		*VA 6.90		*IA 2.65	

*Best Rates in Green NCHS: 8/6/2015





Place Matters...

Housing and Infant Mortality:

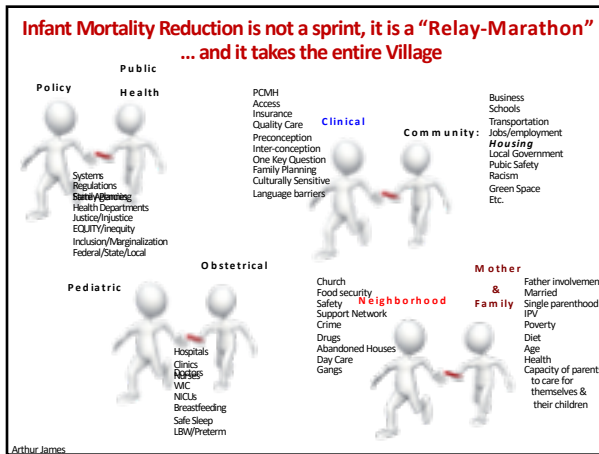
Why a SDOH approach?

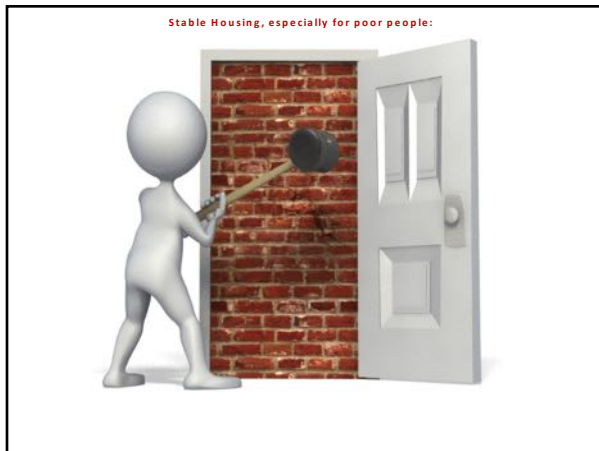
“The social determinants approach holds promise for reducing persistent health disparities, defined as health differences that are closely linked with social, economic, and environmental disadvantage... [In Healthy People 2020].

Addressing the broader social determinants of health held the promise of complementing the traditional efforts of the health care and public health sectors with new cross-cutting efforts involving many diverse sectors of society — The broader social determinants approach also reinvigorates efforts to tackle complex health disparities in a way that engages people in all sectors and communities to become advocates for change.”

From Koh et al., 2011 based on Braveman et al., 2011; Braveman, Kumanyika, et al., 2010; Koh et al., 2010; Koh 2010; and Kumanyika & Morssink, 2006.







In a 3/2017 periodical of the Coalition on Homelessness and Housing in Ohio (COHHIO), they stated:

"State lawmakers are currently working on SB 332, a much needed response to Ohio's shamefully high IMR. COHHIO welcomed legislature's recognition that housing insecurity contributes to high IMRs - something advocates have known for years, as evidenced in this WPA poster from the 1930s."

COHHIO successfully advocated for an amendment to authorize Ohio Housing Finance Association to establish a 3-year pilot rental assistance program to low income pregnant women and new mothers.

Senate Bill 332

In March 2016, the Ohio Commission on Infant Mortality issued a report to the Governor and leaders of the General Assembly. The report included several specific recommendations for state agencies and the legislature designed to reduce infant mortality, and **acknowledged the critical importance of reducing racial disparities and addressing contributing factors inside and outside the healthcare system.**

Most of the recommendations from the Commission's report were enacted in 2017 through Senate Bill 332 (SB 332), co-sponsored by Senators Shannon Jones and Charleta B. Tavares. **SB 332 required the Legislative Service Commission (LSC) to contract with a nonprofit organization to convene a stakeholder group and issue a report regarding the social drivers of infant mortality.**

Source: HPIO

Priority populations

As described in part two of this HPIO report, infant mortality rates vary widely by race, ethnicity, education level, geography and other factors. In order to target resources to the areas of greatest need, this study focuses on babies born to the following groups of Ohioans most at risk for infant mortality and related risk factors:

- African American/black Ohioans
- People with low levels of educational attainment
- People with low income
- Residents of infant mortality hot spot communities

It is important to note that racism and inequities in the social, economic and physical environment drive the increased risk of infant mortality for African Americans.

Source: HPIO

Summary: How do social determinants contribute to infant mortality and disparities?

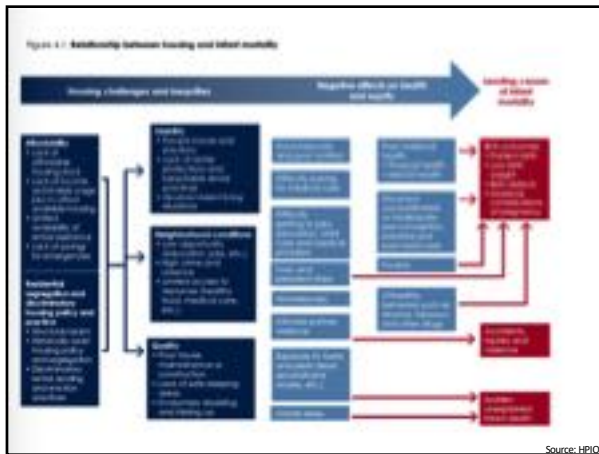
Infant mortality is the result of complex interactions between biological, behavioral, social, political and environmental factors. In some cases, research has identified direct causal links between social determinants of health and infant mortality. In other cases, the relationships are indirect or not well understood.

Infant mortality reduction requires a comprehensive approach that touches on many different public policy challenges. The research summarized above suggests that in order to make meaningful progress in reducing infant mortality and disparities, strategies should:

- Reach priority populations across the life course, with a focus on early childhood and "two generation" approaches that promote optimal health for children and their parents
- Prevent trauma and violence, build stress reduction and coping skills among vulnerable families and include trauma-informed services
- Specifically address the underlying causes of inequities, including poverty and racism

As specified in SB 332, this study focuses on four specific aspects of this complex picture: **housing**, transportation, education and employment.

Source: HPIO





Mayor Andrew Ginther, 7/17/2018

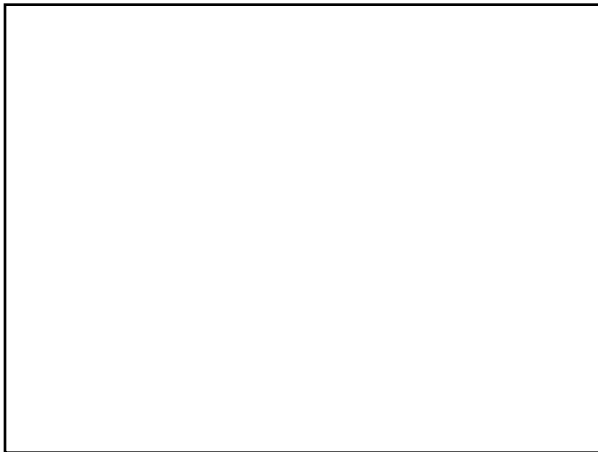
Research has shown that “a woman who experiences housing instability or a shelter stay during her pregnancy, increases her risk of having a premature birth by 200%.”

Prematurity is the leading cause of infant deaths before age 1.

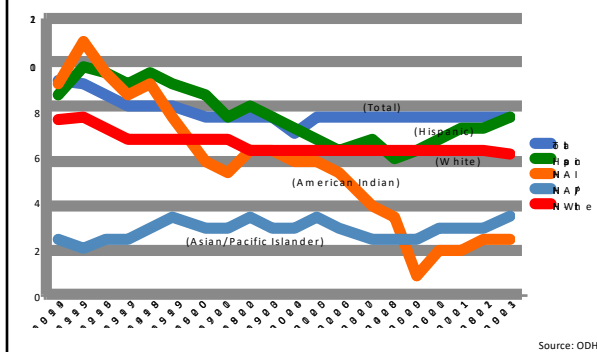
In 2016, our shelters saw over 160 pregnant women. In 2017 that number was nearly 300.

There is no more important time to ensure that someone has stable housing than when there is a baby on the way or in the first year of life. How do you get off to a good start when you, literally, don’t know where you are starting from?”

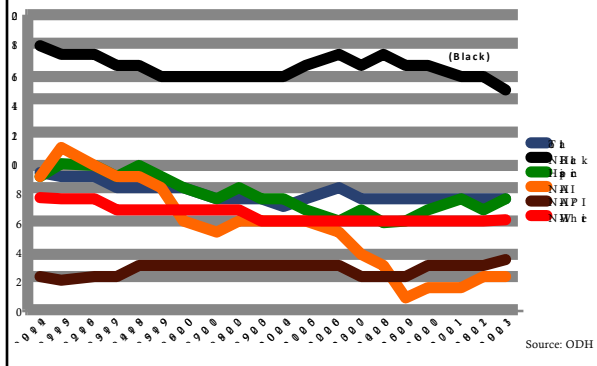
Thank you

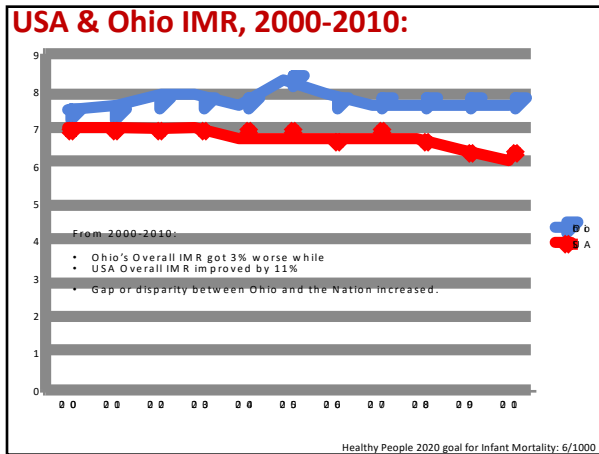


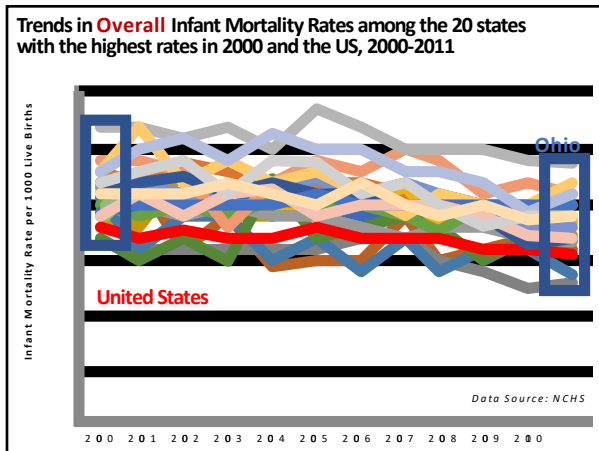
Ohio IMR: 1990-2013 by Race, 5-year aggregates (excluding Blacks)

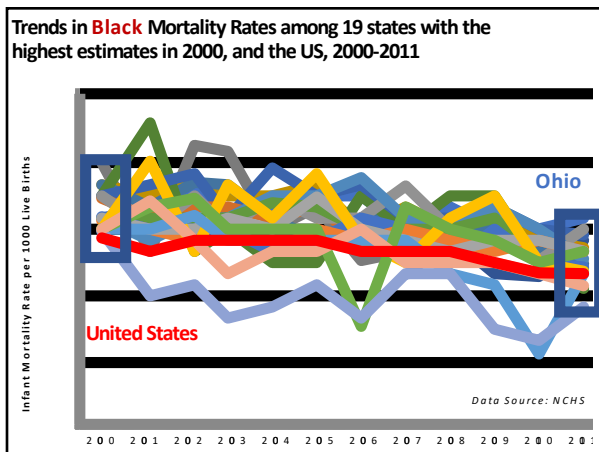


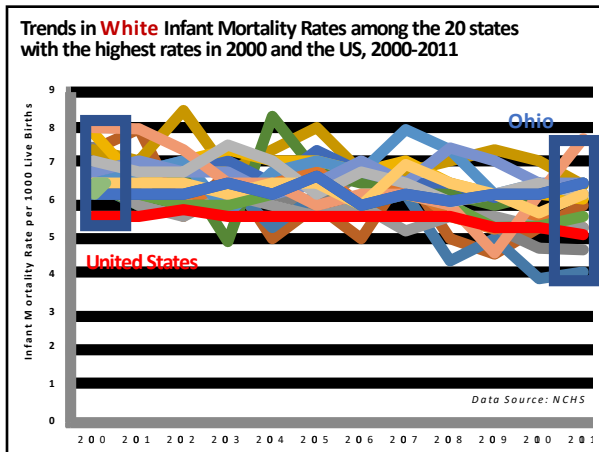
Ohio IMR: 1990-2013 by Race, 5-year aggregates











HEALTHY START

For the past 26 years...

- In different neighborhoods
- Different demographics
- Different Races: Ghettos, Barrios, Reservations
- Despite inadequate funding
- No matter how high risk the population
- No matter how under-resourced the community

HS has REPEATEDLY produced IMRs better than the national average...

More than most MCH Organizations in this country, HS has proven to us that this disparity does not have to exist.

"2015 preliminary (100-site) Cumulative HS IMR = 4.8"
