“Infant Mortality within Racial and Ethnic populations”

Ohio Infant Mortality Commission

August 26, 2015

ANGELA C. DAWSON, EXECUTIVE DIRECTOR
OHIO COMMISSION ON MINORITY HEALTH

Infant Mortality

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

“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 health and well-being of all women, children and families”..SACIM, January 2013

US Department of Human Services – Recent data

August 6, 2015

Ohio ranks 45th nationally in infant mortality, near bottom for deaths of black babies

http://www.cleveland.com/healthfit/index.ssf/2015/08/ohio_ranks_45th_nationally_on.html

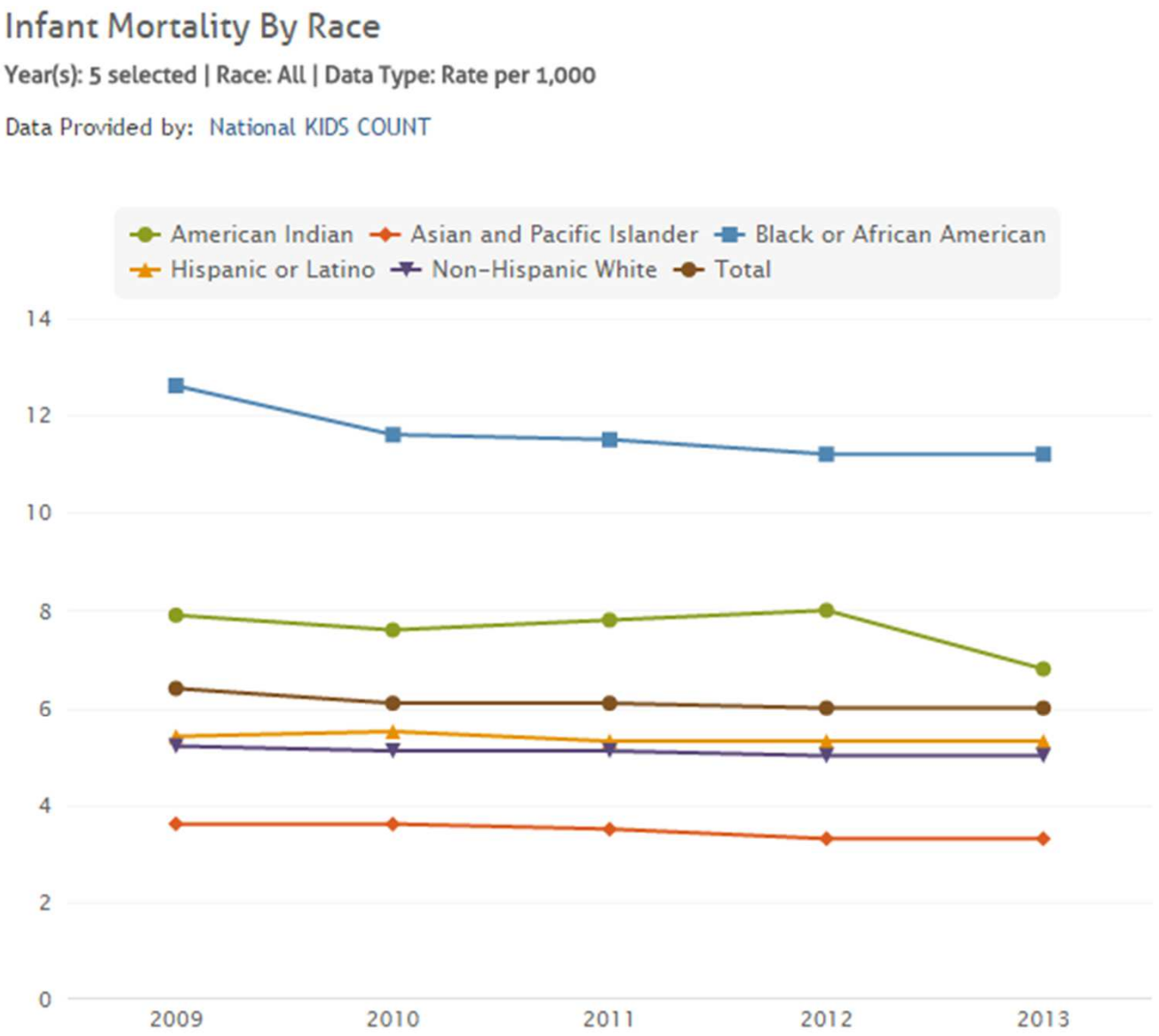
By Brie Zeltner, The Plain Dealer The Plain Dealer

CLEVELAND, Ohio — The number of babies in Ohio who die before their first birthday remains dismally high. The state ranks 45th in infant mortality overall and has one of the highest rates of infant death for black mothers in the country. That's according to the **most recent statistics** released today by the U.S. Department of Health and Human Services.

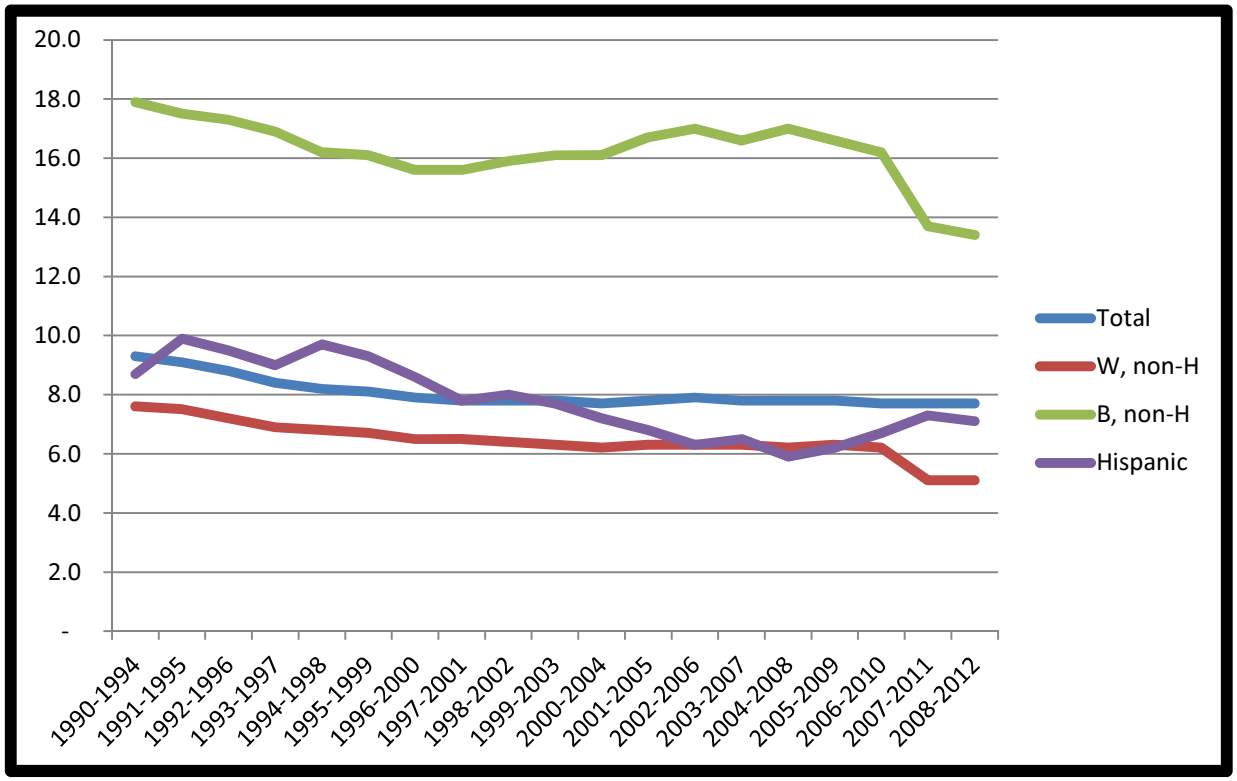
The numbers tell a troubling tale of loss and race-based health disparity for women and babies in Ohio and large swaths of the rest of the country. The data from the National Center for Health Statistics, gathered from linked birth and death certificates, show:

- Infant mortality nationwide in 2013 was at 5.96 deaths per 1,000 live births, about the same as the previous year and a 13 percent drop since 2005. Ohio's rate of 7.33 is 21 percent above the national average.
- Nationally, 11.1 black infants died per 1,000 live births in 2013, compared to 5.96 deaths for white babies that year. That's 2.2 times higher a rate for black babies than white babies.
- In Ohio, the disparity mirrored the national average: infant deaths among black babies was more than twice as high as white babies from 2011 to 2013.
- Ohio's rate of black infant mortality (13.57) was second highest nationally for the 39 states where a rate could be calculated. Only Wisconsin (14) and Kansas (14.18) fared worse.
- In New Jersey, black babies were 3.2 times more likely to die than white babies in their first year, the worst record for the disparity in the country among the 39 states where this ratio could be calculated.
- In no state or territory in the nation was infant mortality equal among black and white babies. The closest state was Kentucky, with the lowest ratio of 1.5.

National Infant Mortality Rates by Race



Ohio Infant Mortality Rates, 1990 – 2012
by 5 year aggregate and by Race



Graph: Ohio Infant Mortality Rates, 1990-2012, by 5-year aggregate and by Race.
W: White, B: Black, AI American Indian, API: Asian or Pacific Islander, NH: non-Hispanic

2011-2013 USA Infant Mortality Rates, by State and by Race, from Worse 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**	***MA**	**6.90**	***IA**	**2.65**

Note that in each IMR group Ohio is the only State amongst the worst "10" in the USA for each group

^Also note 5 of the 6 States that make up Perinatal Region V are amongst the worst for black IMR

***Best Rates in Green**

NCHS: 8/6/2015

Healthy People:

1990
2000
2010
2020

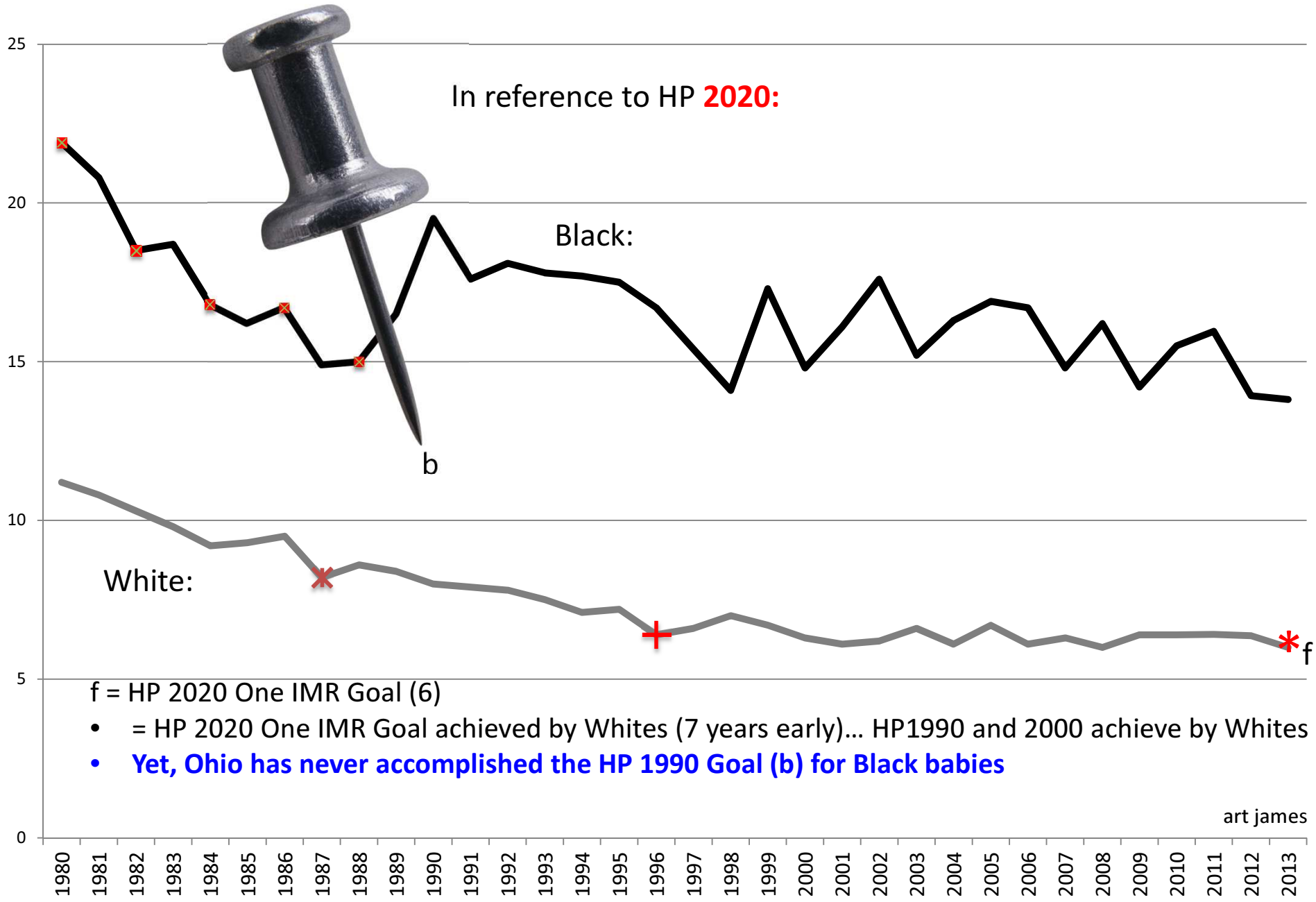
Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. For 3+ decades, Healthy People has established benchmarks and monitored progress over time in order to:

- ***Encourage collaborations*** across communities and sectors.
- ***Empower individuals*** toward making informed health decisions.
- ***Measure the impact*** of prevention activities.

Overarching Goals for Healthy People 2020:

- Attain ***high-quality, longer lives*** free of preventable disease, disability, injury, and premature death.
- **Achieve *health equity, eliminate disparities*, and improve the health of all groups.**
- ***Create social and physical environments that promote good health for all***
- Promote ***quality of life, healthy development, and healthy behaviors*** across all life stages.

Ohio IMR: 1980-2013 (white, “non-white/black”)

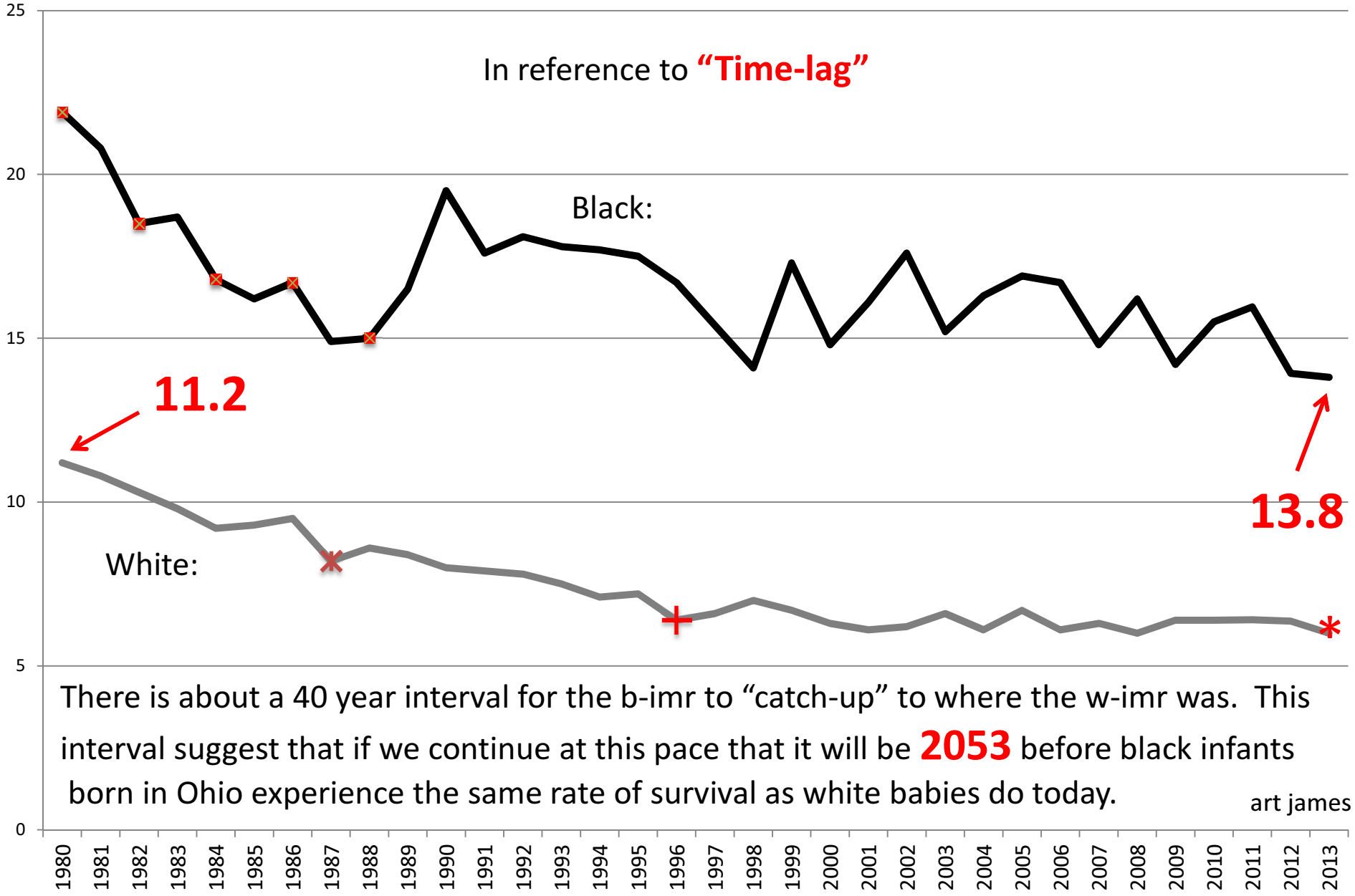


f = HP 2020 One IMR Goal (6)

- = HP 2020 One IMR Goal achieved by Whites (7 years early)… HP1990 and 2000 achieve by Whites
- **Yet, Ohio has never accomplished the HP 1990 Goal (b) for Black babies**

art james

Ohio IMR: 1980-2013 (white, “non-white/black”)



There is about a 40 year interval for the b-imr to “catch-up” to where the w-imr was. This interval suggest that if we continue at this pace that it will be **2053** before black infants born in Ohio experience the same rate of survival as white babies do today.

art james

Report of the Secretary's Task Force on Black and Minority Health (1985)

"Despite the unprecedented explosion in scientific knowledge and the phenomenal capacity of medicine to diagnose, treat and cure disease, Blacks, Hispanics, Native American Indians and those of Asian/Pacific Islander Heritage have not benefited fully or equitably from the fruits of science or from those systems responsible for translating and using health sciences technology."

What Are Health Disparities?

Health Disparities are the disproportionate incidence of disease, disability and death among a particular population or group when compared to the proportion of their population.

RACIAL AND ETHNIC HEALTH DISPARITIES HAVE COMPLEX CAUSES

MAJOR FACTORS ARE:

1. Inadequate Access to Care
2. Poor Utilization of Care
3. Substandard Quality of Care
4. Socioeconomic Status

"*The future health of the nation will be determined to a large extent by how effectively we work with communities to reduce and eliminate health disparities between non-minority and minority populations experiencing disproportionate burdens of disease, disability, and premature death.*"

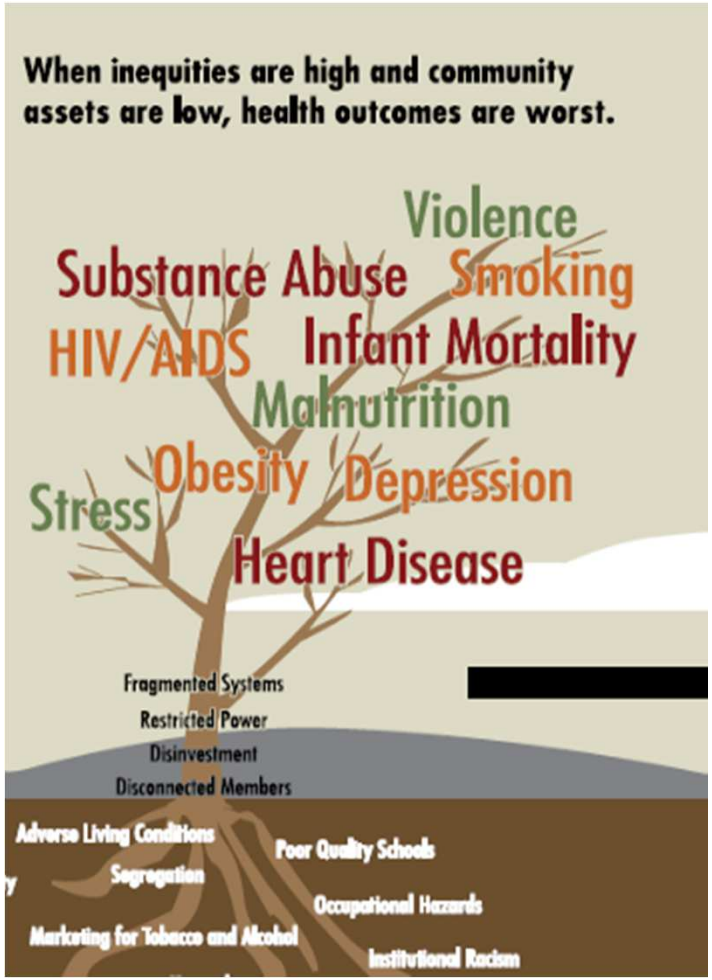
What Are Health Inequities?

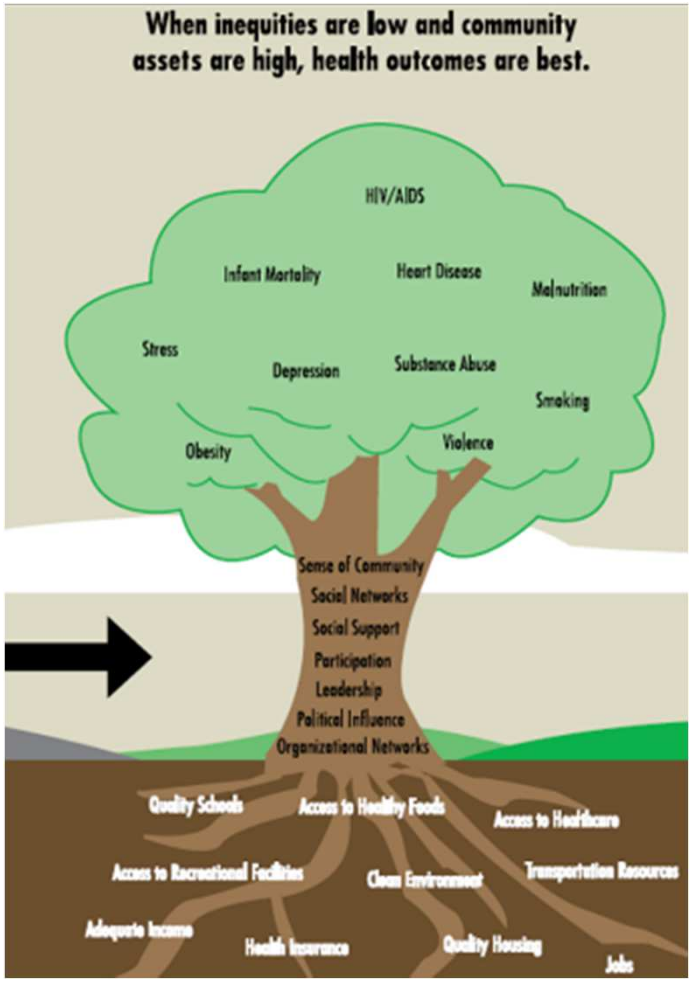
Health disparities are referred to as health inequities when they are the result of the systematic and unjust distribution of the critical resources that impact health.

Social determinants of health are the "life-enhancing resources, such as access to health care, housing, education, income/employment, social relationships, transportation, and food supply, whose distribution across populations effectively determines length and quality of life."

Source: Promoting Health Equity : *A Resource to Help Communities Address Social Determinants of*

Understanding Health Inequities





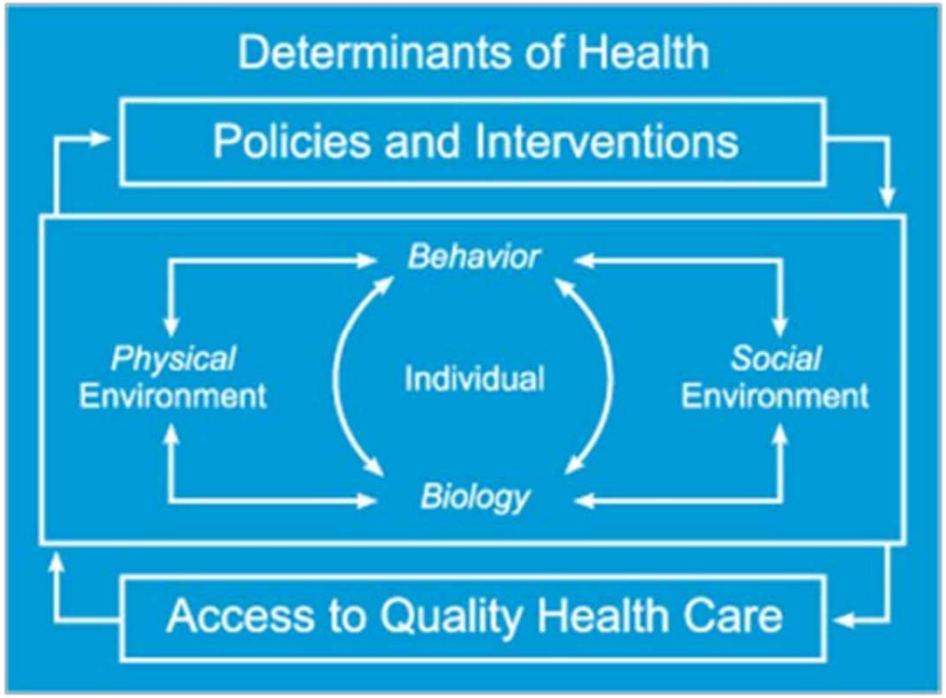
These powerful determinants of health, are ones over which individuals have little or no direct personal control but can only be altered through social and economic policies and political processes."

Social Determinants of Health Approach

"A Social Determinant of Health Approach Challenges us to eliminate the obstacles"

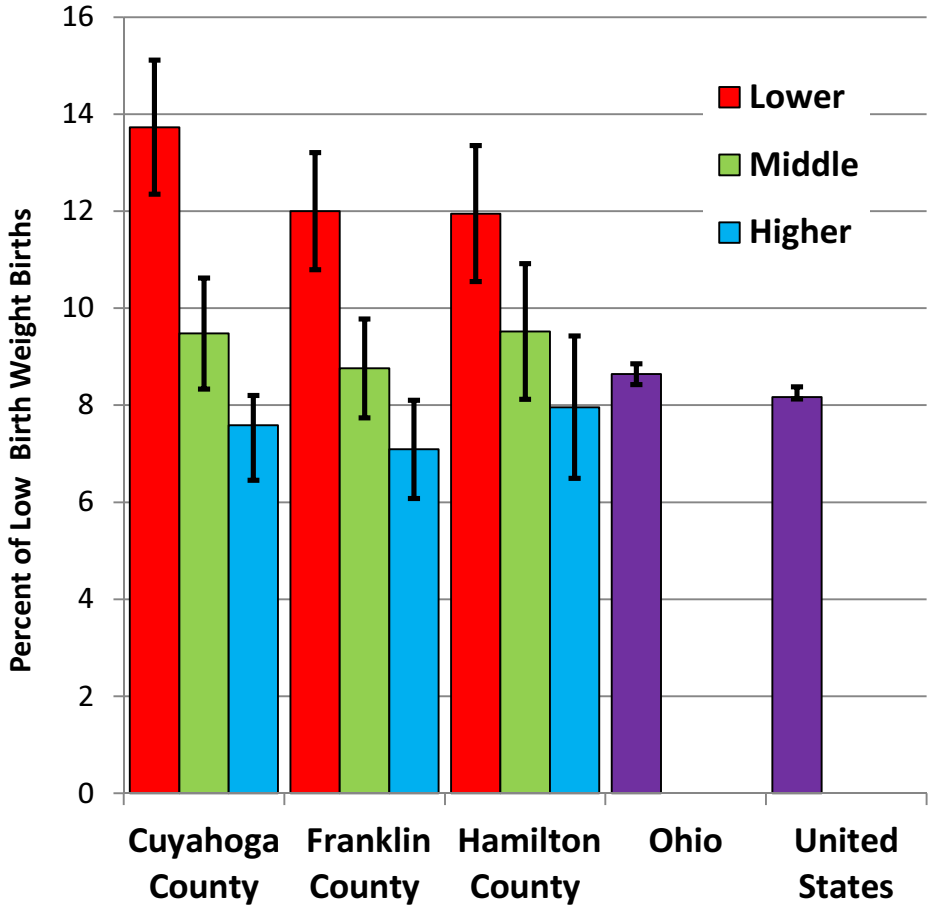
Improving Health: A look at Social Determinants of Health

Figure 2. Determinants of health.



Source. Healthy People 2010: Understanding and Improving Health: DHHS

Low Birth Weight Births–Less than 2,500 grams



	Socioeconomic Tertile[1]	% Low Birth Weight
Cuyahoga County (2007-2011)	Lower SES	13.7
	Middle SES	9.5
	Higher SES	7.6
Franklin County (2007-2011)	Lower SES	12.0
	Middle SES	8.8
	Higher SES	7.1
Hamilton County (2007-2011)	Lower SES	12.0
	Middle SES	9.5
	Higher SES	8.0
Ohio (2007-2011)		8.6
United States (2007-2010)		8.2

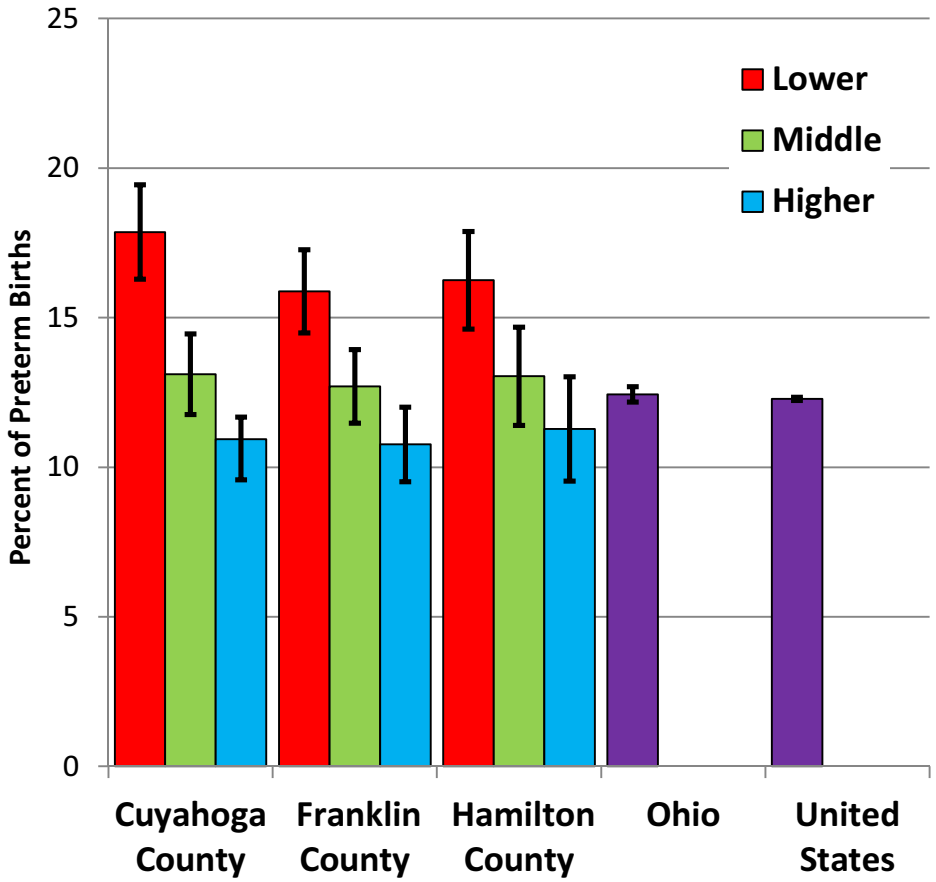
1- Socioeconomic status was defined by median household income and attainment of a bachelor degree by individuals 25 years of age or greater

Sources: Socioeconomic status calculated from American Community Survey 5 year estimates (2007-2011)

Ohio Risk Factor Data from Ohio Department of Health Vital Statistics Birth Files (2007-2011)

United States Estimates from National Vital Statistics System Birth Data (2007-2010)

Preterm Births–Less than 37 weeks gestation



	Socioeconomic Tertile[1]	% Preterm
Cuyahoga County (2007-2011)	Lower SES	17.9
	Middle SES	13.1
	Higher SES	10.9
Franklin County (2007-2011)	Lower SES	15.9
	Middle SES	12.7
	Higher SES	10.8
Hamilton County (2007-2011)	Lower SES	16.3
	Middle SES	13.0
	Higher SES	11.3
Ohio (2007-2011)		17.9
United States (2007-2010)		13.1

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Sources: Socioeconomic status calculated from American Community Survey 5 year estimates (2007-2011)

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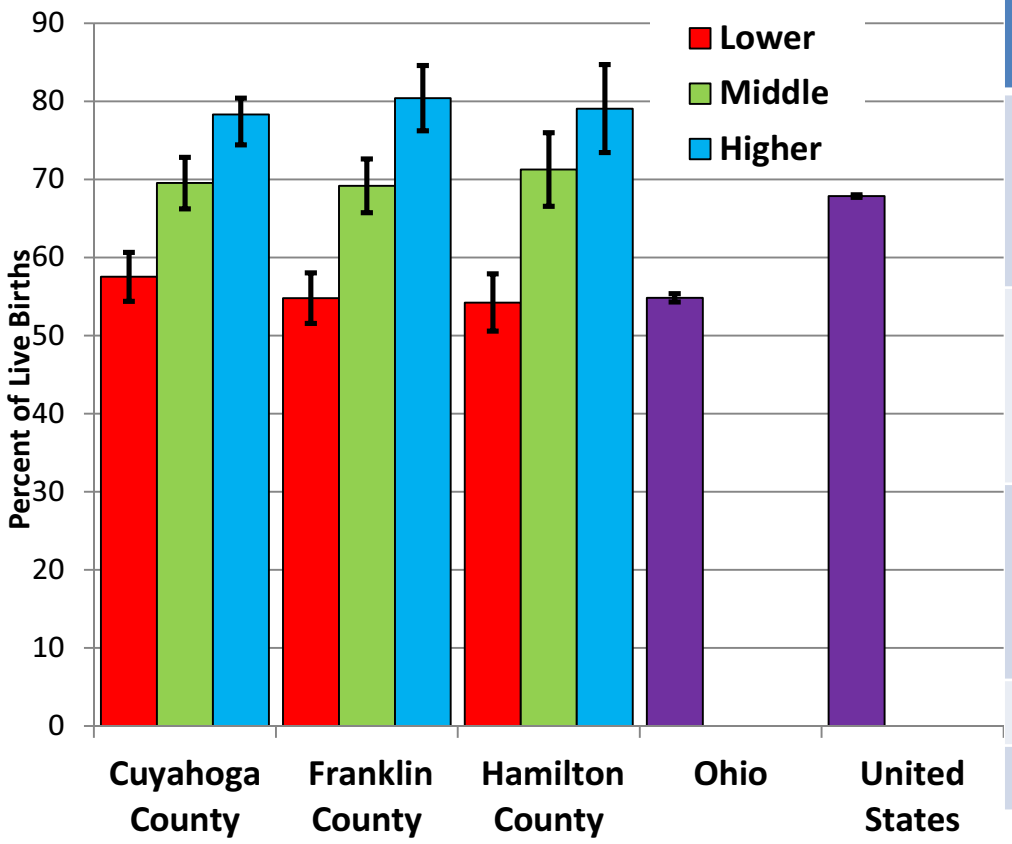
United States Estimates from National Vital Statistics System Birth Data (2007-2010)

Early Prenatal Care – First Trimester



	Socioeconomic Tertile[1]	% with Early Prenatal Care
Cuyahoga County (2007-2011)	Lower SES	57.5
	Middle SES	69.5
	Higher SES	78.3
Franklin County (2007-2011)	Lower SES	54.8
	Middle SES	69.2
	Higher SES	80.4
Hamilton County (2007-2011)	Lower SES	54.2
	Middle SES	71.3
	Higher SES	79.1
Ohio (2007-2011)		54.8
United States (2007-2010)		67.9

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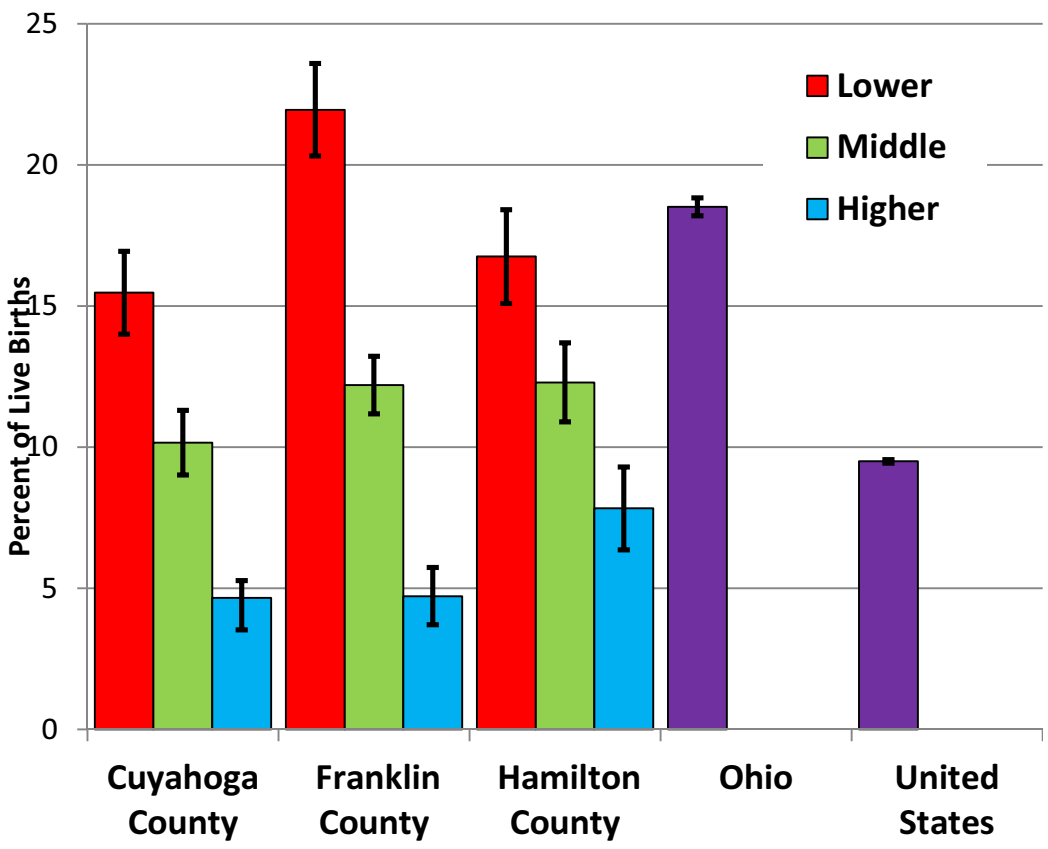
Sources: Socioeconomic status calculated from American Community Survey 5 year estimates (2007-2011)

Ohio Risk Factor Data from Ohio Department of Health Vital Statistics Birth Files (2007-2011)

United States Estimates from National Vital Statistics System Birth Data (2007-2010)

Maternal Smoking During Pregnancy



	Socioeconomic Tertile[1]	% Smoking
Cuyahoga County (2007-2011)	Lower SES	15.5
	Middle SES	10.2
	Higher SES	4.7
Franklin County (2007-2011)	Lower SES	22.0
	Middle SES	12.2
	Higher SES	4.7
Hamilton County (2007-2011)	Lower SES	16.8
	Middle SES	12.3
	Higher SES	7.8
Ohio (2007-2011)		18.5
United States (2007-2010)		9.5

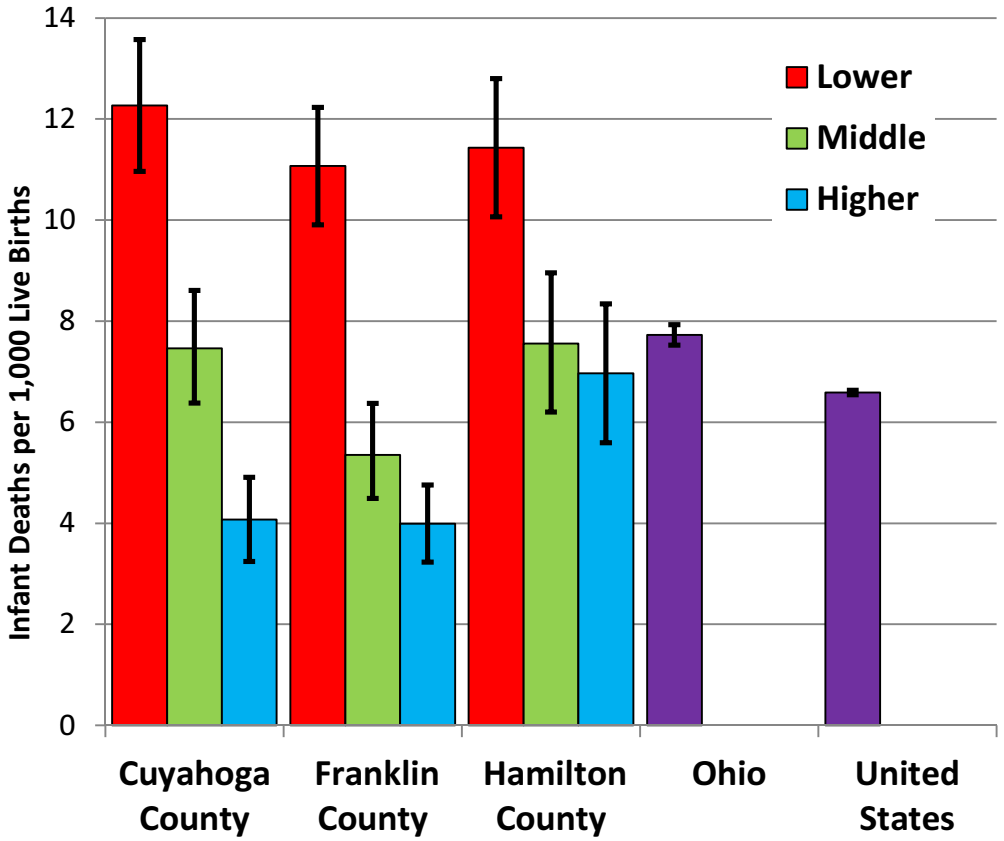
1- Socioeconomic status was defined by median household income and attainment of a bachelor degree by individuals 25 years of age or greater

Sources: Socioeconomic status calculated from American Community Survey 5 year estimates (2007-2011)

Ohio Risk Factor Data from Ohio Department of Health Vital Statistics Birth Files (2007-2011)

United States Estimates from National Vital Statistics System Birth Data (2007-2010)

Infant Mortality Rate – per 1,000 live births



	Socioeconomic Tertile[1]	Infant Mortality Rate
Cuyahoga County (2007-2011)	Lower SES	12.3
	Middle SES	8.6
	Higher SES	4.1
Franklin County (2007-2011)	Lower SES	11.1
	Middle SES	6.2
	Higher SES	4.0
Hamilton County (2007-2011)	Lower SES	11.4
	Middle SES	8.9
	Higher SES	7.0
Ohio (2007-2011)		7.7
United States (2007-2010)		6.6

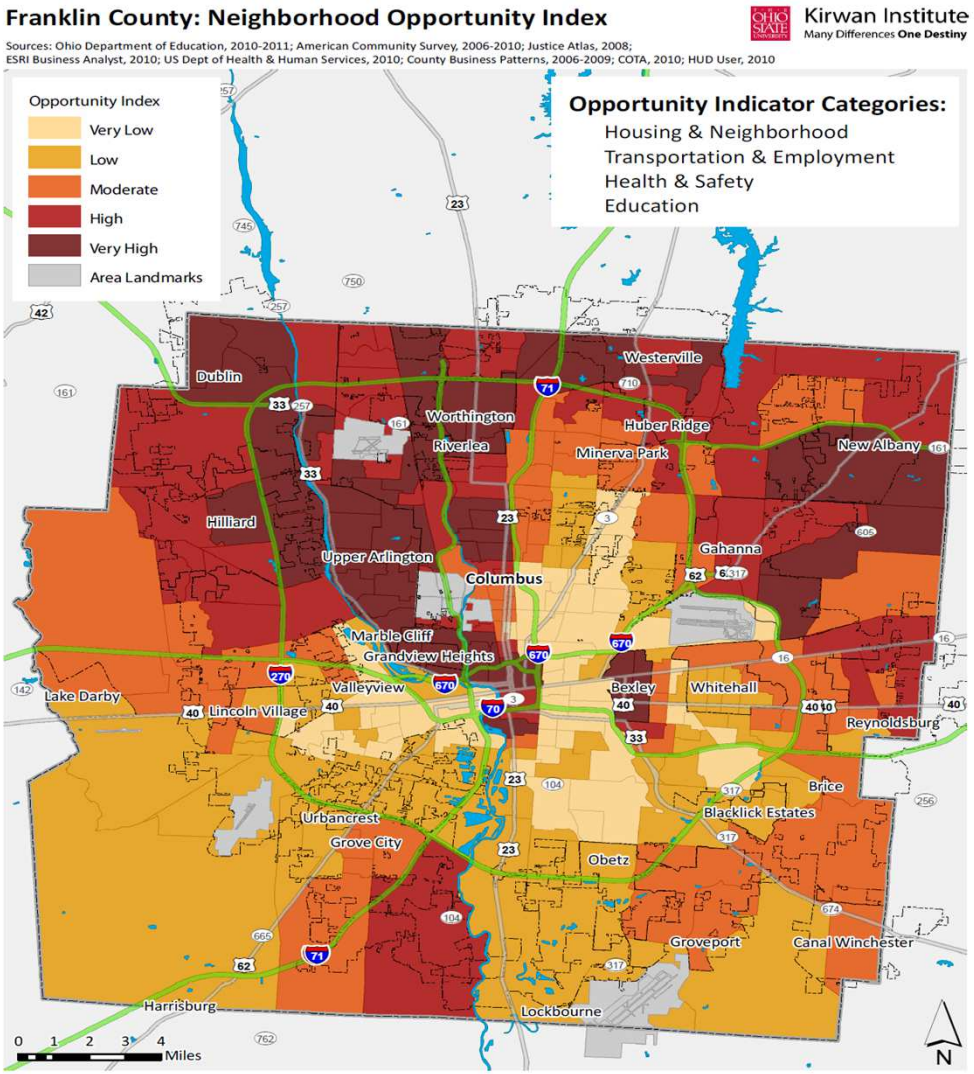
1- Socioeconomic status was defined by median household income and attainment of a bachelor degree by individuals 25 years of age or greater

Sources: Socioeconomic status calculated from American Community Survey 5 year estimates (2007-2011)

Ohio Risk Factor Data from Ohio Department of Health Vital Statistics Birth Files (2007-2011)

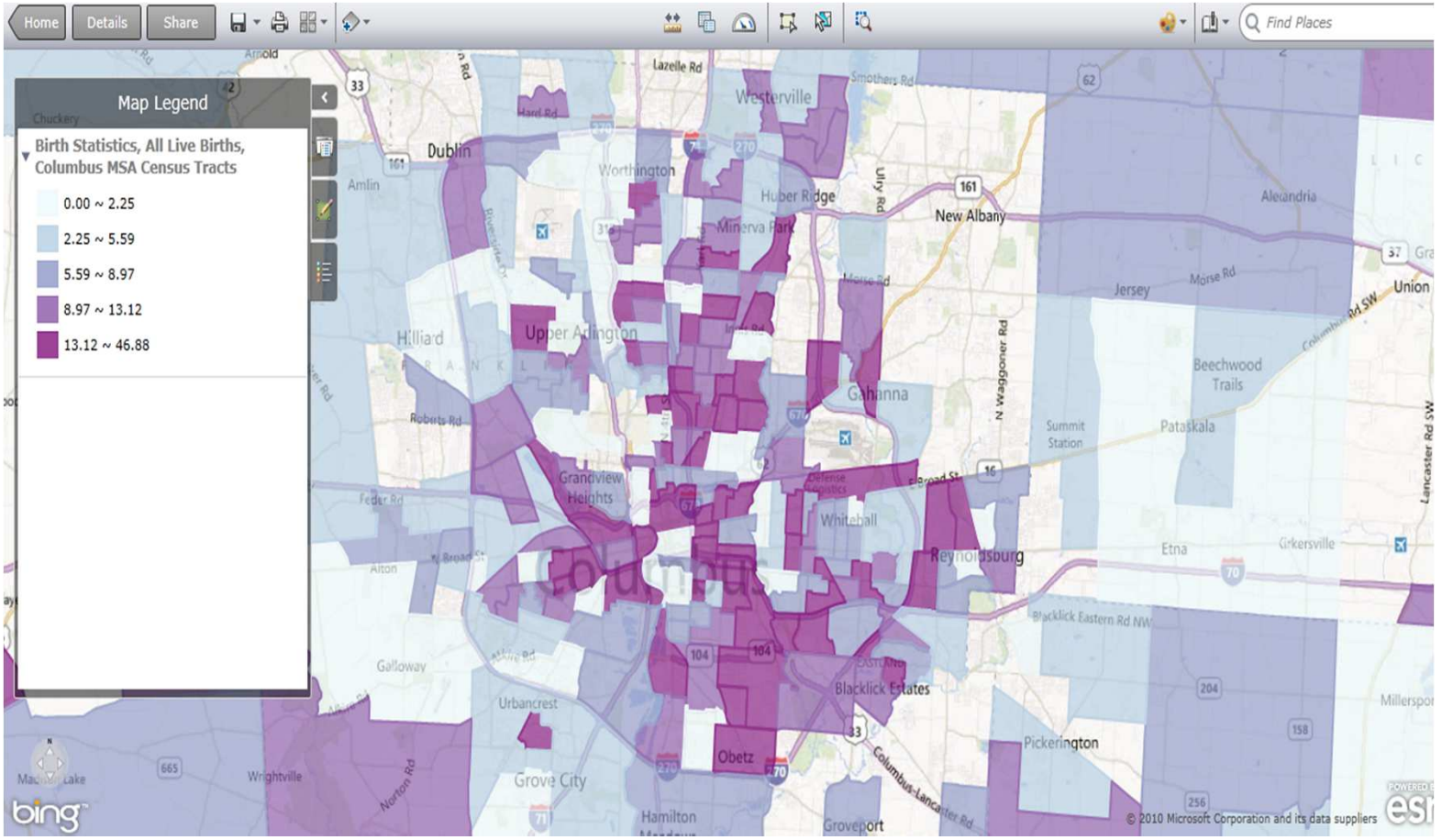
United States Estimates from National Vital Statistics System Birth Data (2007-2010)

Opportunity Mapping



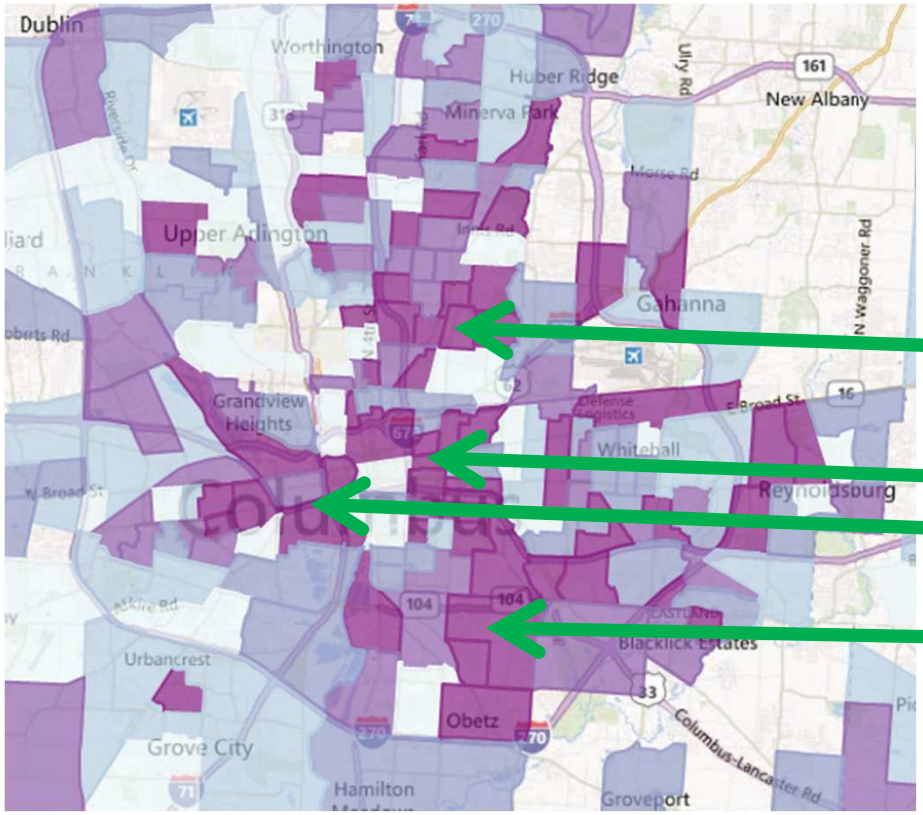
Ohio Department of Education 2010-2011; American Community Survey 2006-2010; Justice Atlas, 2008; US Dept. of HHS, 2010; County Business Partners, 2006-2009, COTA, 2010

Live Births and Premature Births, Columbus, Ohio -2010

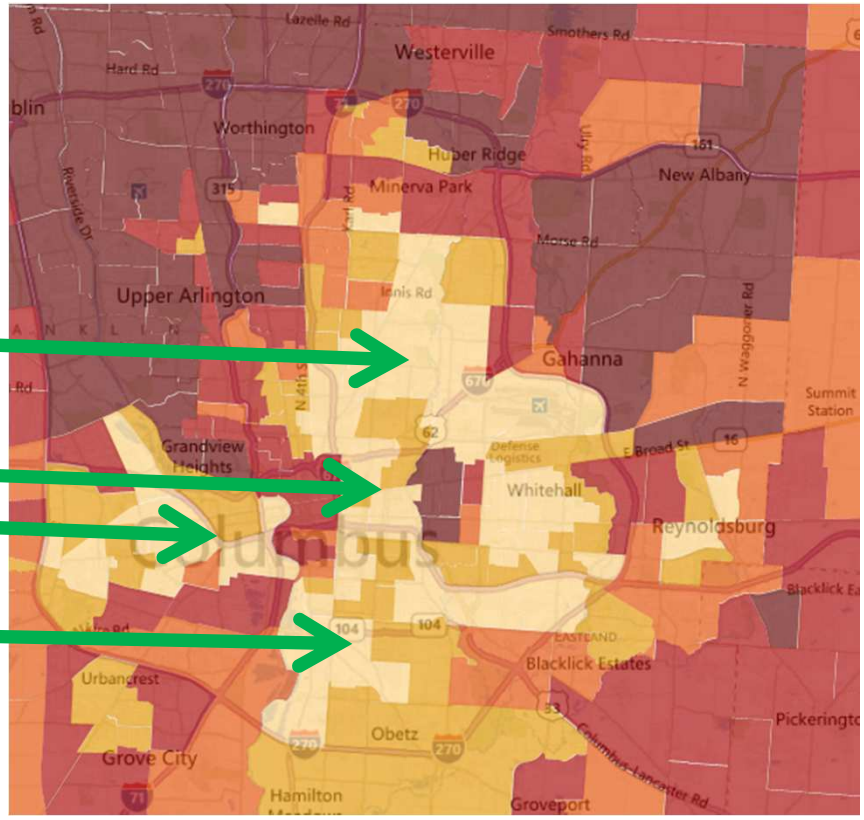


Live and Pre-term Births & Social Economic Status

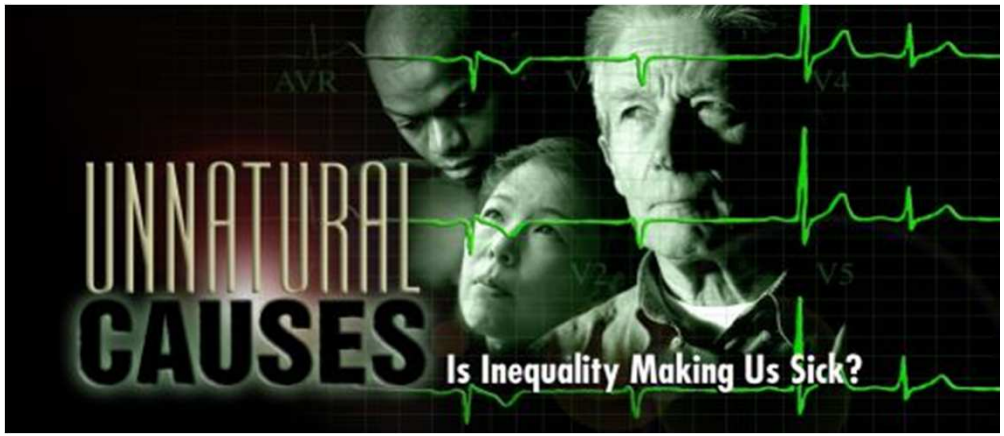
Concentration of Live and Pre-Term Infant Births

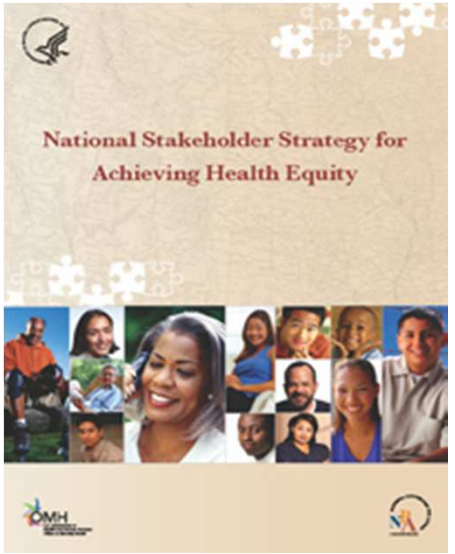


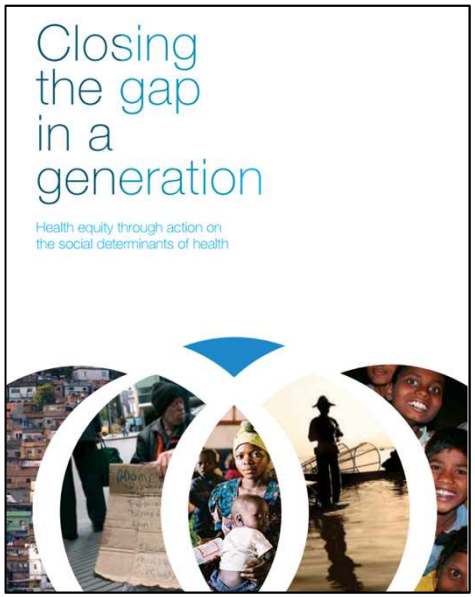
Low Social Economic Neighborhoods



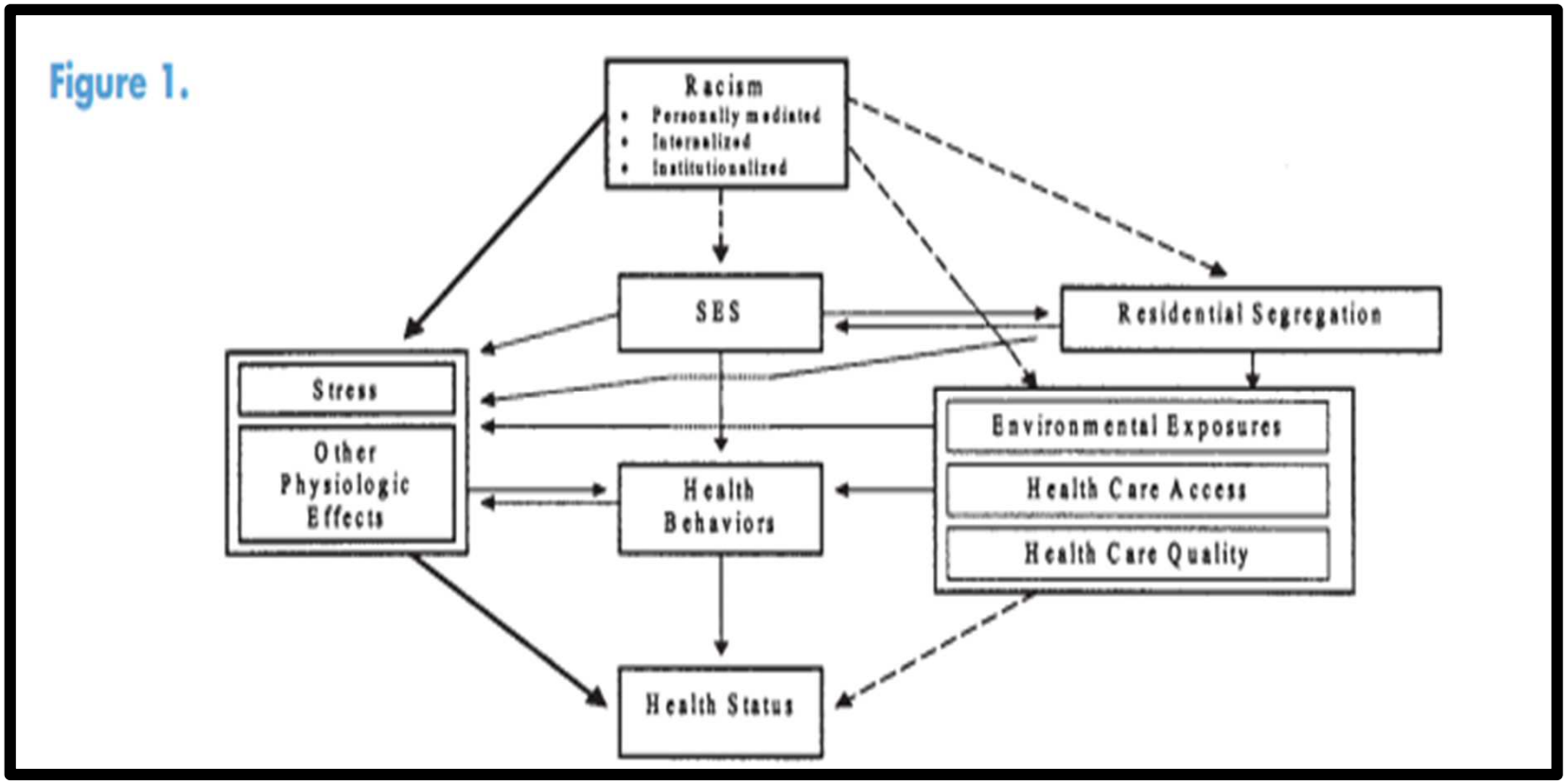
The Research is Driving New Ways of Thinking About Public Health Problems







Effects of racism on Health Status



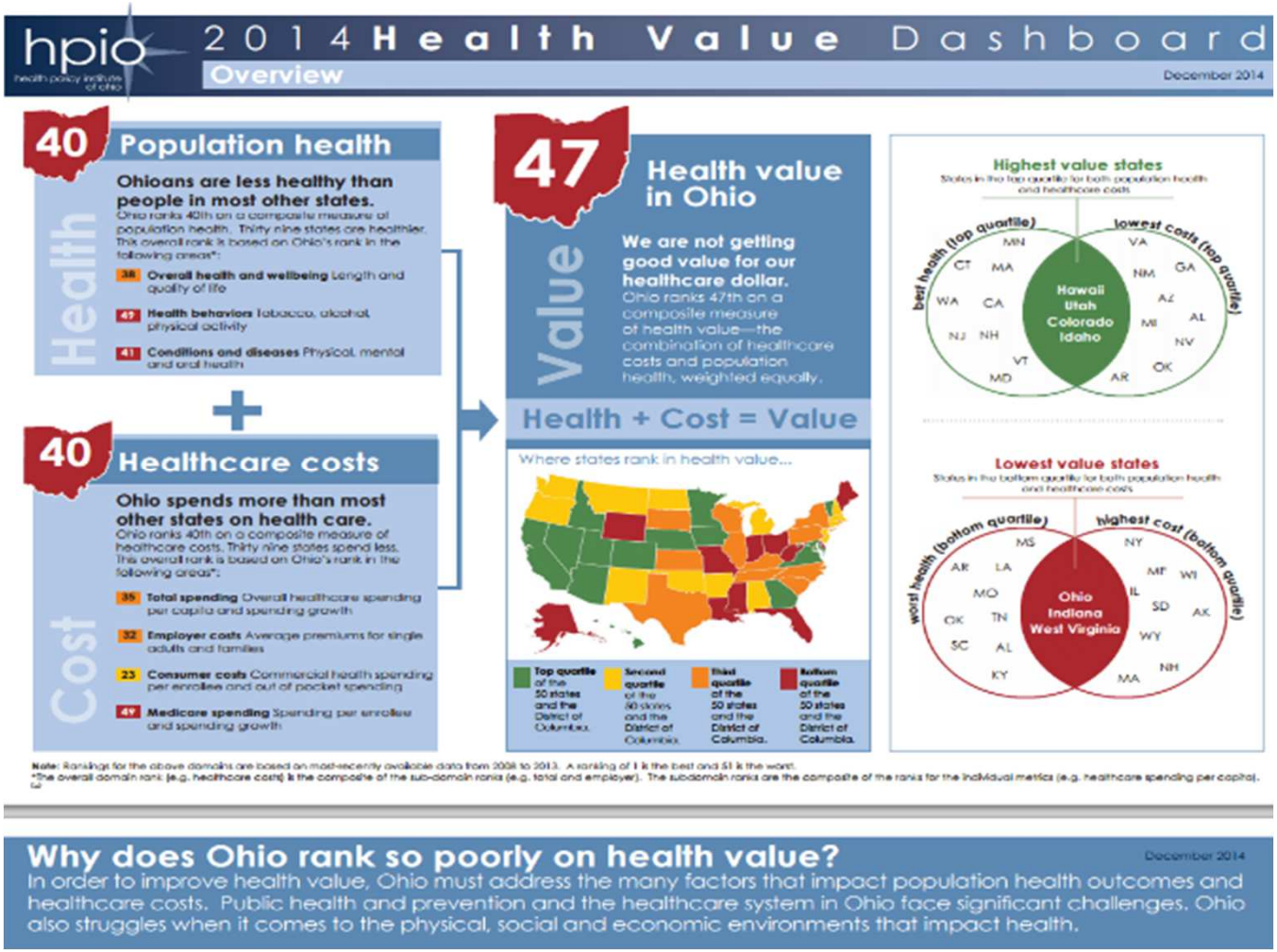
Undoing Racism in Public Health: A Blueprint for Action in Urban MCH

World Health Commission on the Social Determinants of Health (2008)

The social conditions in which people are born, live and work are the single most important determinant health and life expectancy.

The conditions in which people live and die are, in turn, shaped by political, social, and economic forces."

2014 Ohio Health Value Dashboard



House CONCURRENT RESOLUTION #12:

"To declare Ohio's rate of infant mortality a public health crisis and urge comprehensive preterm birth risk screening for all pregnant women in Ohio"

(131st General Assembly)
(Amended House Concurrent Resolution Number 12)

A CONCURRENT RESOLUTION

To declare Ohio's rate of infant mortality a public health crisis and urge comprehensive preterm birth risk screening for all pregnant women in Ohio.

Be it resolved by the House of Representatives of the State of Ohio (The Senate concurring):

WHEREAS, Ohio is ranked among the worst in the nation in infant mortality (47th), with the loss in 2012 alone of 1,047 Ohio babies before their first birthdays; and

WHEREAS, The leading cause of infant mortality is preterm birth. In Ohio, the preterm birth rate for 2013 was 12.1% (the same rate as for 2012 and 2011) and about half of all pregnancy-related costs are driven by preterm births, largely because of expensive care of infants in neonatal intensive care units (NICUs). Among babies born before 32 weeks gestation, 89% are admitted to NICUs at an average cost of $280,000; and

WHEREAS, Socioeconomics, education, geography, and other factors contribute to health access barriers for many Ohio women and a lack of prenatal care increases the risk of preterm birth and infant mortality; and

WHEREAS, Medicaid pays for over 52% of Ohio's pregnancies (in 2013, 70,479 pregnancies). In Ohio, NICU babies account for only 0.2% of the Medicaid population but consume 15% of total Medicaid spending; and

WHEREAS, Cervical length is the best predictor of preterm birth risk. Women with a prematurely short cervix mid pregnancy are at 10 times the risk of an early delivery, which can have tragic consequences; and

WHEREAS, Two technologies that accurately measure the cervix are available: transvaginal ultrasound and use of a cervicometer. Using these technologies, cervical length screening could be performed in any prenatal care setting for pregnant women in Ohio and treatment provided to prevent preterm births and infant deaths; and

WHEREAS, The Society for Maternal-Fetal Medicine and the American College of Obstetricians and Gynecologists have published clinical practice guidelines recommending vaginal progesterone treatment to prevent preterm birth in women pregnant with one baby and a mid-pregnancy short cervical length. In this high risk population, treatment cuts the rates of preterm birth and infant mortality nearly in half while reducing NICU admissions by 25%; and

WHEREAS, Economic analyses of universal cervical length screening and vaginal progesterone treatment prove that this preterm birth prevention strategy is cost-saving. The drug used in this treatment is available in generic form; a full course of treatment costs less than $400. Adoption of this strategy across Ohio could result in savings over $27 million annually, with over $10 million of that total in Medicaid savings; and

WHEREAS, The Ohio Collaborative to Prevent Infant Mortality of the Ohio Department of Health, the Ohio Perinatal Quality Collaborative, and many other state and local organizations have been working diligently to raise awareness and promote the adoption of best practices, including appropriate use of progesterone to prevent preterm birth. Among the top priorities of the Ohio Department of Medicaid is more timely identification of high risk expectant mothers to provide enhanced services, such as ensuring "progesterone without barriers" for Ohio pregnant women; and

WHEREAS, The good health and well-being of Ohio's expectant mothers and their babies will be

enhanced by education on the importance of cervical length measurement as an evidence-based, cost-saving prenatal risk screening test. Beneficiaries of such education should include health care professionals, women and families, Medicaid and private health insurers, government officials, elected officials, and all others who share the mission of reducing preterm birth and infant mortality; now therefore be it

RESOLVED, That we, the members of the 131st General Assembly of the State of Ohio, support and encourage improved education and outreach concerning prenatal care, cervical length measurement, and progesterone treatment; and be it further

RESOLVED, That we, the members of the 131st General Assembly of the State of Ohio, declare Ohio's rate of infant mortality a public health crisis that deserves significant and immediate action by all stakeholders to ensure equitable access to comprehensive preterm birth risk screening for all pregnant women, including cervical length screening; and be it further

RESOLVED, That the Clerk of the House of Representatives transmit duly authenticated copies of this resolution to the Governor of Ohio and the news media of Ohio.

Speaker _____ *of the House of Representatives.*

President _____ *of the Senate.*

Adopted June 30, 2015

131st General Assembly, Ohio House or Representatives (Senate concurring)

Infant Mortality Reduction is not a sprint, it is a "Relay-Marathon" … and we must work as a team to obtain our goal

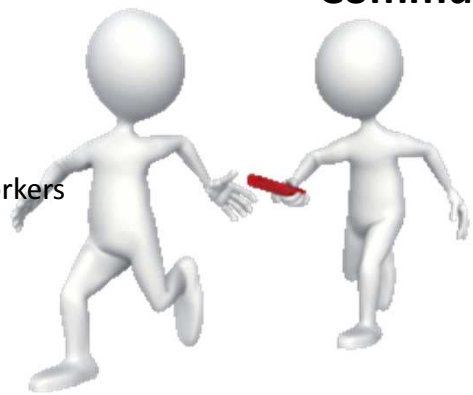
Policy

Systems
Regulations
State Agencies
Family Planning
Health Departments
Justice/Injustice
EQUITY/inequity
Inclusion/Marginalization
Federal/State/Local

Public Health

PCMH
Access
Insurance
Quality Care
Preconception
Inter-conception
Family Planning
Culturally Competent
Language barriers
Community Health Workers

Clinical

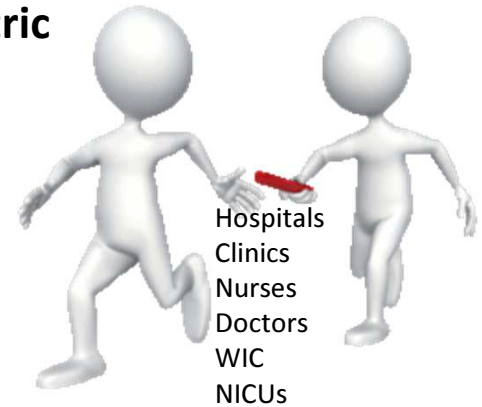


Community:

Business
Schools
Transportation
Jobs/employment
Housing
Local Government
Pubic Safety
Racism
Green Space
Etc.

Obstetrical

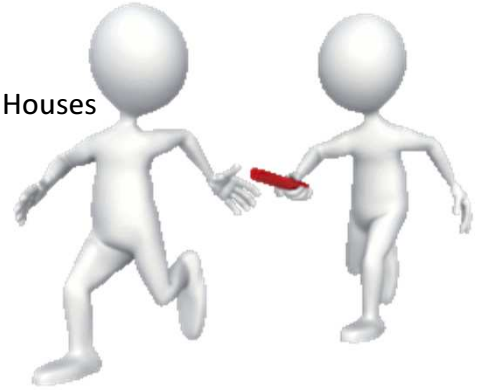
Pediatric



Hospitals
Clinics
Nurses
Doctors
WIC
NICUs
Breastfeeding
Safe Sleep
LBW/Preterm

Neighborhood

Church
Food security
Safety
Support Network
Crime
Drugs
Abandoned Houses
Day Care
Gangs



Mother & Family

Father involvement
Married
Single parenthood
IPV
Poverty
Diet
Age
Health
Capacity of parents to care for themselves & their children

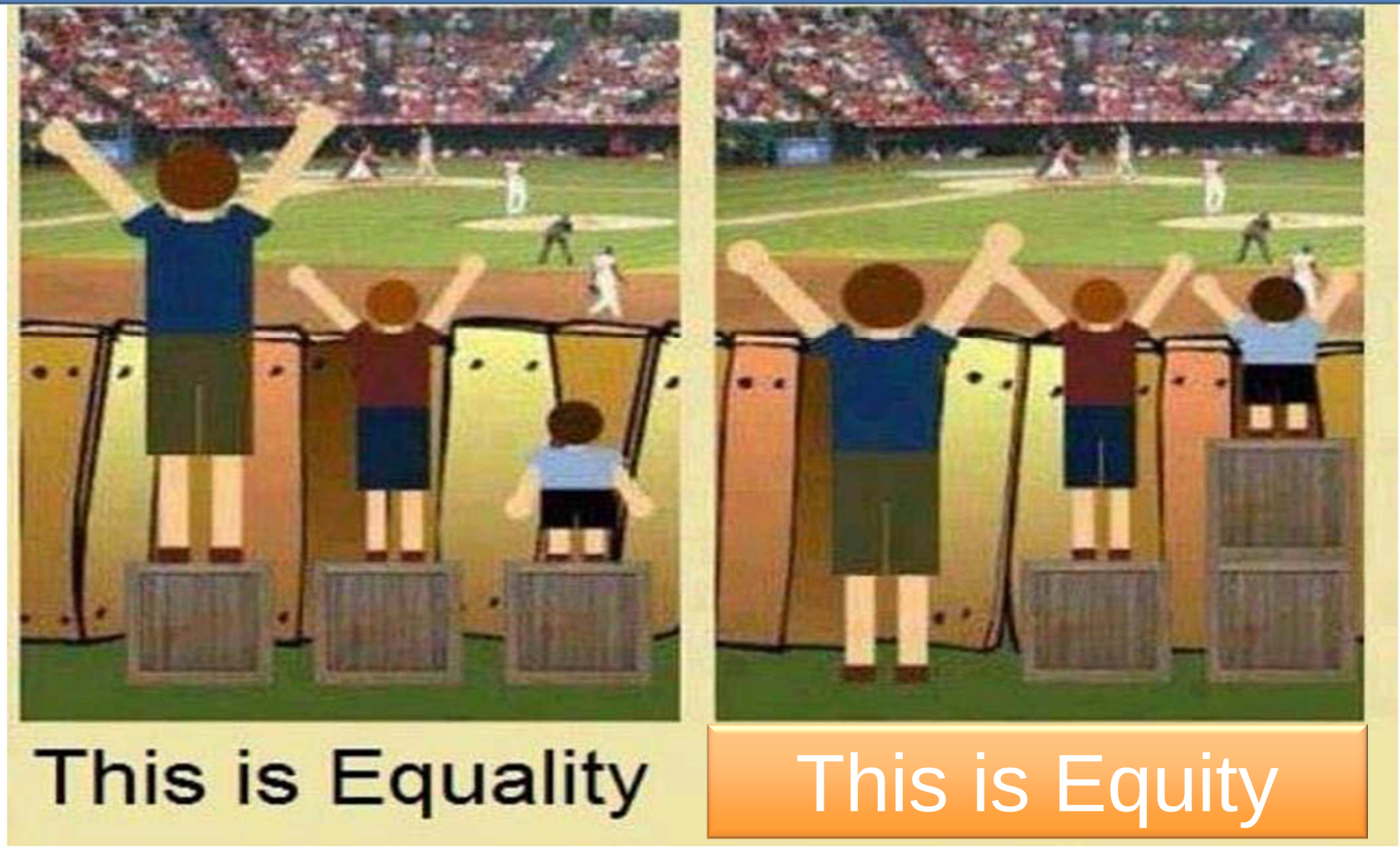
Arthur James


Infant Mortality:
Premature Births
Congenital Anomalies
SUID
Maternal pregnancy Complications
Placental or cord anomalies
Arthur R. James


Infant Mortality:
Premature Births
Congenital Anomalies
SUID
Maternal pregnancy Complications
Placental or cord anomalies
Disparities
Social Determinants of Health
Arthur R. James


Medical Problems:
Disparities in Birth Outcomes:
Social Determinants of Health:
Racism
Housing
Incarceration rates
Unemployment
Fatherless households
Neighborhoods
Hopelessness
Policies
No Insurance
Stress
Poverty
"Medical baggage"
Limited Access to Care
Smoking
Substance Use
Lower graduation rates
Under-Education
Family Support
Poor Working Conditions
Teen Births
Nutrition
A. R. James

With Equity, inputs may need to be different to achieve equal outcomes



MDCH, Health Equity Learning Labs 2013, provided by Hogan, V., Rowley, D., Berthiaume, R. and Thompson, Y, University of North Carolina at Chapel Hill. Adapted from http://indianfunnypicture.com/search/equality+doesn%27t+mean+justice