

Improving the health and well-being of African Americans in St. Louis



# For the Sake of All: Improving Health and Well-Being in St. Louis Post-Ferguson

Jason Q. Purnell, PhD, MPH 16<sup>th</sup> Annual Cambio de Colores Conference University of Missouri – St. Louis June 14, 2017



## Social determinants of health

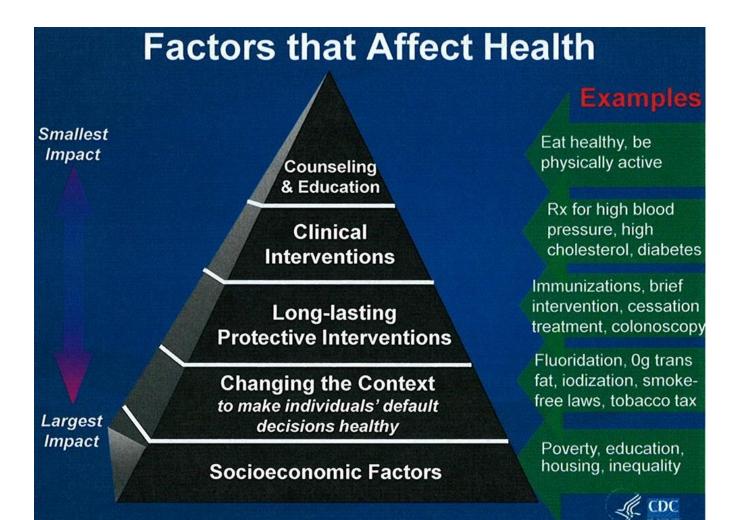
"The social determinants of health are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies and political systems."

- World Health Organization

"Health happens where we live, learn, work and play." - Robert Wood Johnson Foundation



## Health impact pyramid

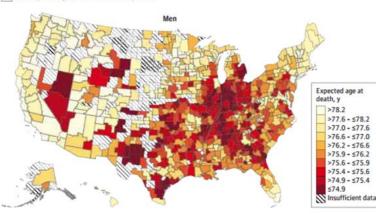


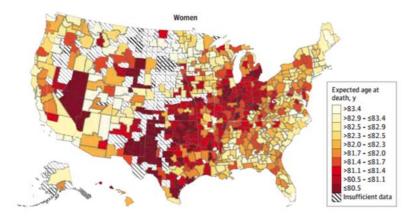


#### Income and life expectancy in the U.S.

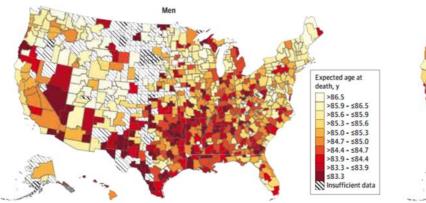
Figure 5. Race- and Ethnicity-Adjusted Life Expectancy by Commuting Zone and Income Quartile, 2001-2014

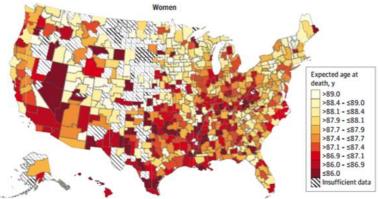
A Life expectancy for bottom income quartile





B Life expectancy for top income quartile







## Phase 1 goals

- 1. Inform the public about the social determinants of health as they impact African Americans, as one of the populations most impacted by health disparities.
- 2. Present the regional economic and health consequences of intervening (or failing to intervene) on social determinants of health.
- 3. Provide evidence of the impact of persistent disparities on all members of the region.
- 4. Influence the policy agenda on health disparities by broadening the conversation beyond personal responsibility and the delivery of medical care.



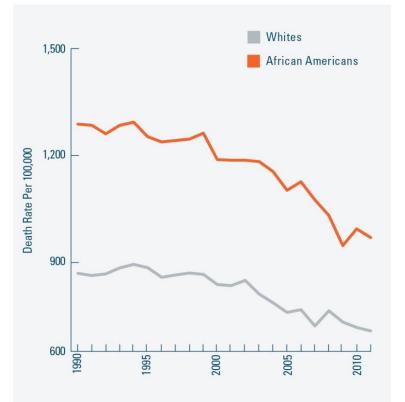
## Report release at community conference – May 2014





## Social and economic factors influence health

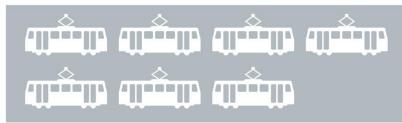
**Figure 2.** Death rates among St. Louis County and St. Louis City residents of all ages



Rates are age-adjusted using the US 2000 standard population. Source: Death MICA, Missouri Department of Health and Senior Services **305 DEATHS** DUE TO POVERTY

263 DEATHS DUE TO LESS THAN HIGH SCHOOL EDUCATION

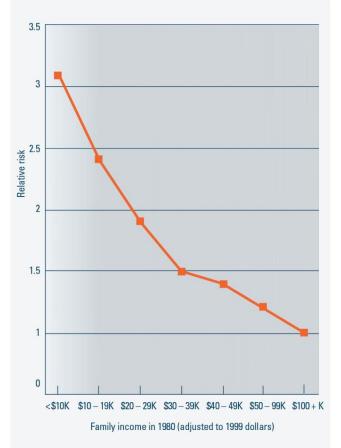
combined the number of deaths could fill over **7 METROLINK CARS** 





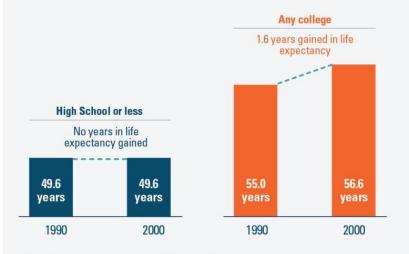
### The SES gradient in health

**Figure 4.** Relative risk of premature death by family income (U.S. Population)



#### \*Age and sex adjusted relative risk of dying prior to age 65 Based on 9-year mortality data from the National Longitudinal Mortality Survey

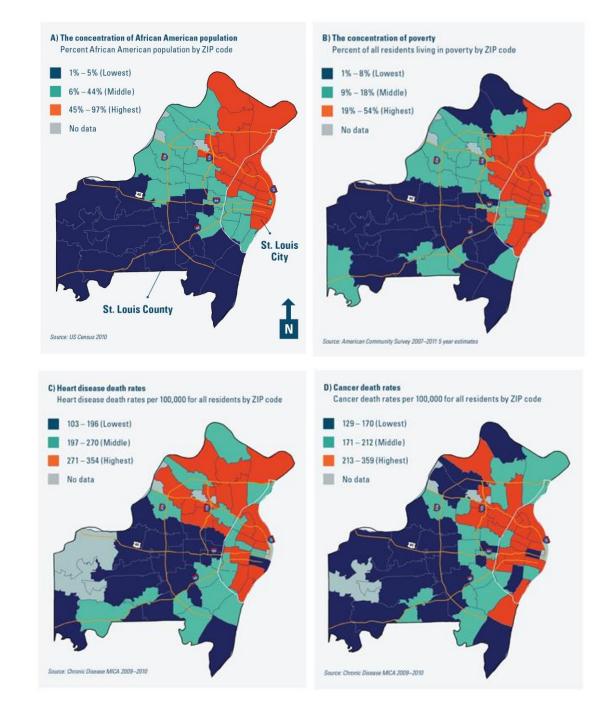
#### **Figure 5.** Years of life remaining at age 25 by education level<sup>1</sup>



Source: Authors' calculations using data on non-Hispanic blacks and whites in the National Longitudinal Mortality Study (NLMS) and death certificate data from the Multiple Cause of Death (MCD) files linked to census data.

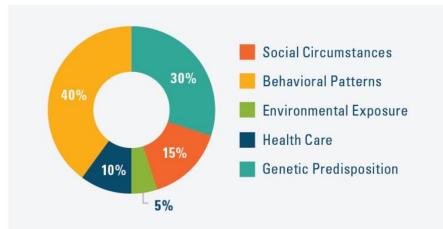








#### Figure 3. Factors Contributing to Premature Death



Source: Schroeder, SA. We can do better-improving the health of the American people. New England Journal of Medicine 2007;357:1221-8. Adapted from McGinnis, JM, Williams-Russo, P, Knickman, JR. The case for more active policy attention to health promotion. Health Affairs 2002;21:78-93.

#### HEALTHY LIFESTYLES HELP PREVENT CHRONIC DISEASE

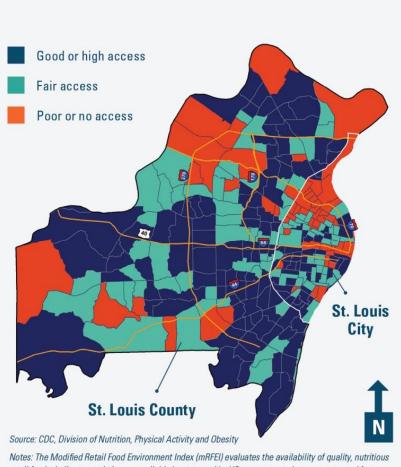




	St. Louis City		St. Louis County	
	Whites	African Americans	Whites	African Americans
Consider neighborhood to be safe	65%	<b>39%</b>	<b>87</b> %	<b>62%</b>
Find it easy to buy healthy food	86%	66%	91%	<b>73</b> %



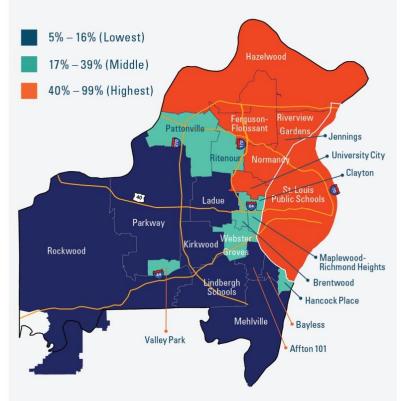
## **Figure 23**. Availability of quality nutritious retail foods by census tract in 2011



retail foods. Indicator statistics are available by state and by US census tract; data was extracted from University of Missouri's CARES 2013



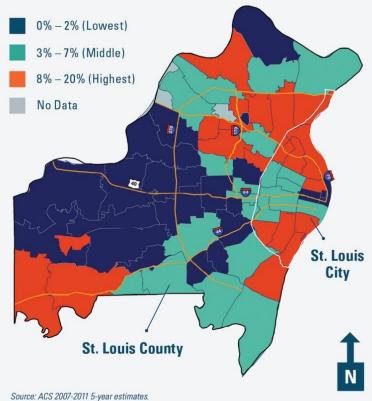
#### Figure 25. Percent African American enrollment by school district in St. Louis City and St. Louis County



Source: Missouri Department of Elementary & Secondary Education (DESE)

Note: Rockwood extends beyond the boundaries of St. Louis County; data does not include students enrolled in Special School District

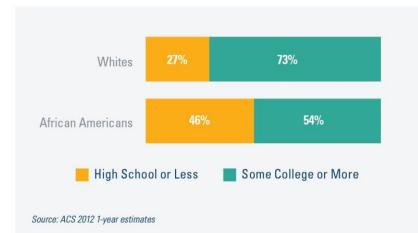
#### Figure 24. Percent high school dropout by ZIP code



Note: % civilian population 16 to 19 years: not high school graduate, not enrolled [dropped out]

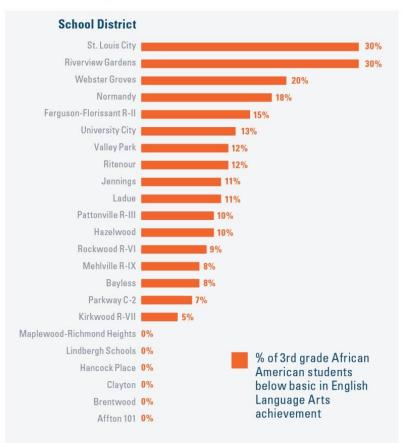


## **Figure 30.** Highest level of education among those 25 and older in St. Louis City and St. Louis County



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# **Figure 26**. Percent of 3rd grade African American students below basic in English Language Arts achievement by school district in 2013

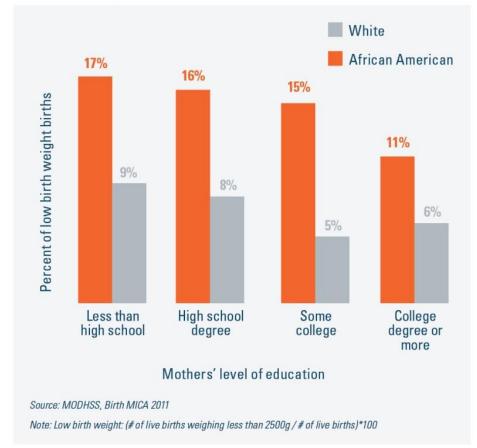


Source: Missouri Department of Elementary & Secondary Education (DESE); Missouri Assessment Program (MAP) 2013

Note: Data does not include students enrolled in Special School District



# **Figure 32**. Percent of low birth weight births in 2011 by mothers' level of education, St. Louis County and St. Louis City





# St. Louis County

#### Figure 51. Infant death rate in St. Louis County



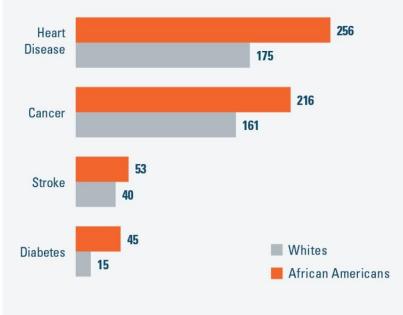
# St. Louis City

#### Figure 52. Infant death rate in St. Louis City





## **Figure 40.** Chronic disease death rates by race in St. Louis County and St. Louis City in 2011

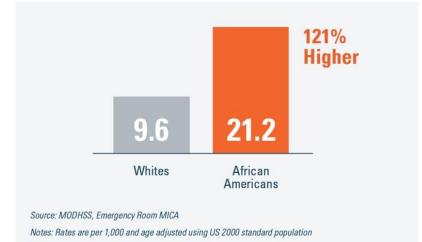


Source: MODHSS, Chronic Disease MICA

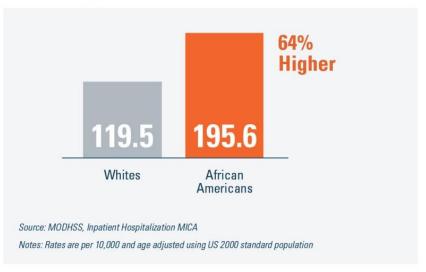
Notes: Rates are per 100,000 and age adjusted using 2000 standard population; stroke: cerebrovascular disease



**Figure 56.** Emergency room rates due to mental health conditions by race in St. Louis County and St. Louis City in 2011

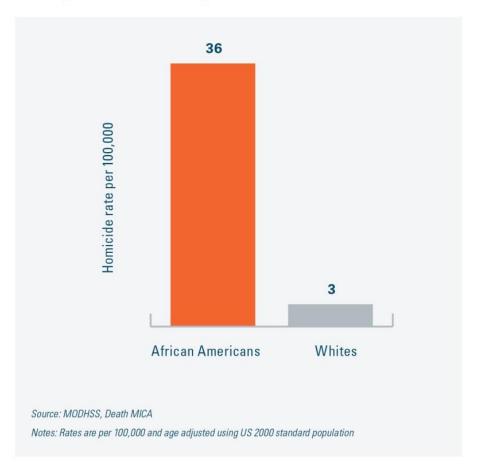


**Figure 57.** Inpatient hospitalization rates due to mental health conditions by race in St. Louis County and St. Louis City in 2011





# **Figure 58.** Homicide death rates by race in St. Louis County and St. Louis City in 2011





## **Economic impact**

#### 305 DEATHS DUE TO POVERTY

#### 263 DEATHS DUE TO LESS THAN HIGH SCHOOL EDUCATION

# the estimated cost of this loss of life is approximately \$4.0 BILLION

1,000 new graduates, combined, would likely do the following:



**\$1.1 BILLION** HOSPITAL CHARGES FOR HEART DISEASE, CANCER, AND DIABETES IN ST. LOUIS

WHICH IS EQUIVALENT TO BUYING 3 EDWARD JONES DOMES EVERY YEAR!



Annual hospital charges for mental health conditions in 2011 in St. Louis

**\$96 million** 

#### **\$230 million** ALL ST. LOUIS RESIDENTS



## Recommendations

- Invest in quality early childhood development for all children.
  - Help low-to-moderate income families create economic opportunities.
  - Invest in coordinated school health programs for all students.



3

- Invest in mental health awareness, screening, treatment, and surveillance.
- 5
- Invest in quality neighborhoods for all in St. Louis.



Coordinate and expand chronic and infectious disease prevention and management.



# Phase 2 goals



- 1. Continue to inform the public and policy makers.
- 2. Engage and mobilize community around recommendations.
- 3. Activate key private and public sector stakeholders for implementation.
- Evaluate impact and determine replicability of project.

# Direct alignment with Ferguson Commission

#### For the Sake of All

- Invest in high quality early childhood development
- Invest in coordinated school health programs for all students
- Help low-to-moderate income families create economic opportunities
  - CDAs
  - Accessible financial advice/services
- Invest in quality neighborhoods for all
- Faith and For the Sake of All

#### **Ferguson Commission**

- Investing in Early Childhood Education
- Schools as Centers of Health
- Create Universal Child Development Accounts
- Financial Empowerment Centers
- Enact Inclusionary Zoning Ordinances
- Use Low Income Housing Tax Credit Funds
- Engage the Faith Community in the Racial Equity Mission



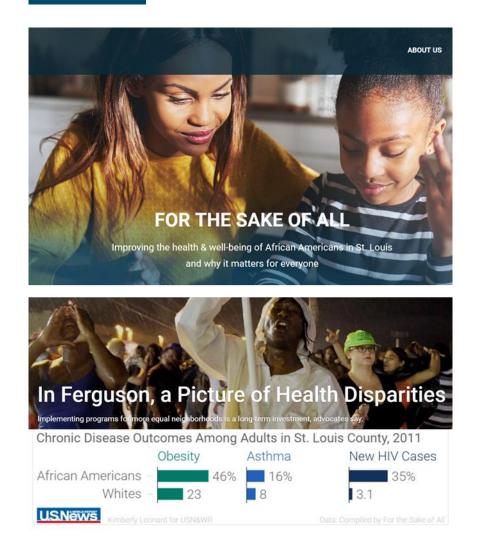
- 1. Early childhood quality improvement and awareness
- 2. Universal Child Development Accounts
- 3. School-based clinics in areas of high need
- 4. Whole School, Whole Community, Whole Child
- 5. Regional mental health data system
- 6. Advocacy organization for affordable, inclusive housing
- 7. Gun violence as a public health problem
- 8. Addressing socioeconomic barriers to health care and expanding role of community health workers

#### Effective, accessible translation



- Policy briefs, report, discussion guides (DGs) and action toolkits (ATs) professionally designed
- Consulted with Health Literacy Missouri for accessibility
- **5,829** policy briefs downloads
- **1,575** reports in print; **6,589** downloads
- **3,711** DGs and ATs downloads

#### Effective, accessible translation



- Website viewed 103,831
  times by 33,692 visitors in the
  U.S. and 130 other countries
- 1,253 Twitter followers of @4theSakeofAll and 10,291 average impressions per month
- **263** community and policy engagement meetings
- **132** media reports, mentions, or program appearances

## Policy, system, and practice change

- Key resource for the Ferguson Commission/Forward
  Through Ferguson, Ready by 21, and the Promise Zone
- Shaping philanthropic priorities regionally
- Cited by City Treasurer Tishaura Jones in establishing
  College Kids savings program and Office of Financial
  Empowerment
- Coordinating with state agencies
- Cited in numerous nonprofit grant applications
- Used in curricula from Pre-K to graduate level



## **Translation strategies**

Translating Evidence into Population Health Improvement: Strategies and Barriers

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- Rigorous science
- Strategic communication
- Understanding decision making context
- Stakeholder engagement



# **Civic education**

#### Article

#### For the Sake of All: Civic Education on the Social Determinants of Health and Health Disparities in St. Louis

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#### Acknowledgements





# Thank you

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