

Addressing the Social Determinants of Health: Why it Matters

July 19, 2018

Presented by:

Terry Allan, Health Commissioner
Cuyahoga County Board of Health
Board Member, St. Luke's Foundation

Objectives

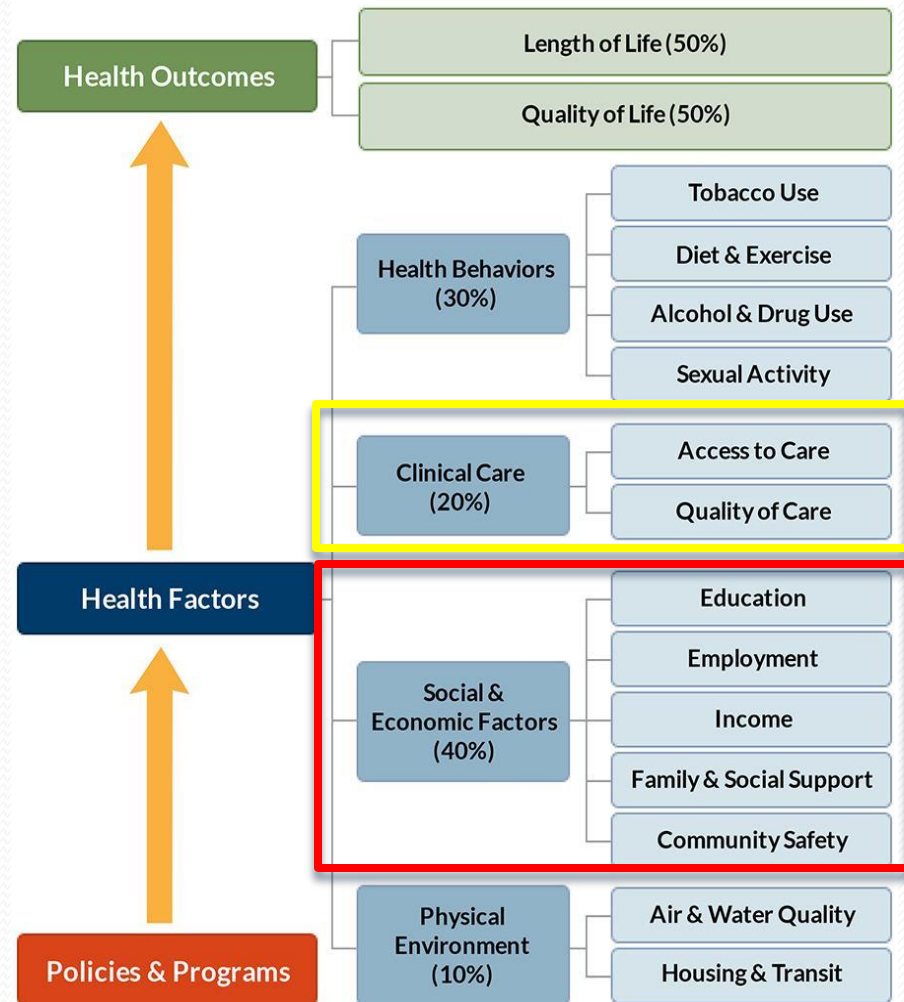
- Define the Social Determinants of Health
- Describe the factors that influence and create health
- Practical application of the social determinants
- Toxic stress and its impact on health
- Race, Racism and the impact of Cleveland's Redlining history on health and well being today
- Examples of models to explain and address the social determinants
- The St. Luke's Foundation Strategic Plan Goals and Strategies

Social Determinants of Health

- The complex, integrated, and overlapping social structures and economic systems that are responsible for most health inequities.
- These social structures and economic systems include the social environment, physical environment, health services, and structural and societal factors.
- Social determinants of health are shaped by the distribution of money, power, and resources throughout local communities, nations, and the world (CDC)

Cuyahoga County

- Cuyahoga County ranks in the bottom third of all 88 counties in Ohio for residents' health outcomes.
- Even though Cuyahoga County ranks consistently in the top 10 in the state for clinical care (measured by access to and quality of care), this has not made our residents healthier.
- The conditions that shape health are not spread equitably across the county.
- There are significant differences in life expectancy, depending on where someone lives and their race/ethnicity.

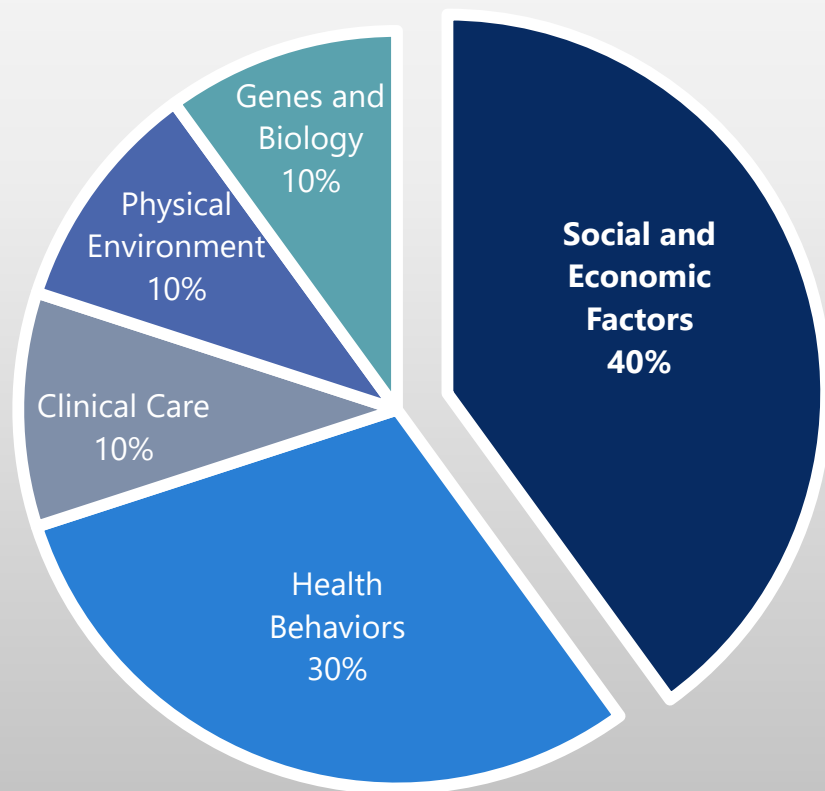


County Health Rankings model © 2014 UWPHI

*2017 County Health Rankings by University of Wisconsin Population Health Institute

Consider What Creates Health

Determinants of Health



• Necessary conditions for health (WHO)

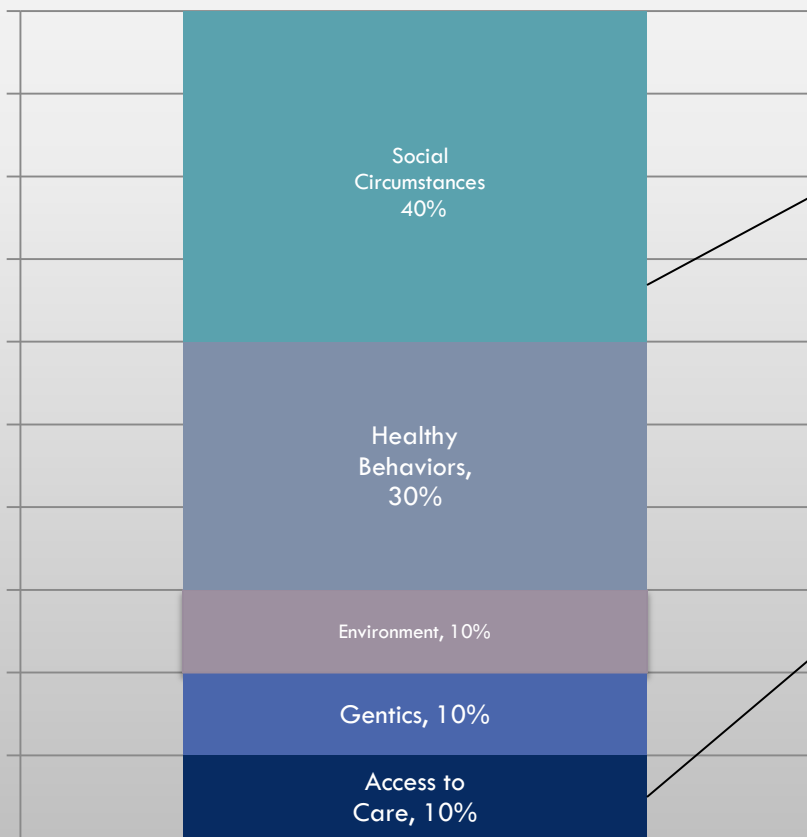
- ☀ Peace
- ☀ Shelter
- ☀ Education
- ☀ Food
- ☀ Income
- ☀ Stable eco-system
- ☀ Sustainable resources
- ☀ Mobility
- ☀ Social justice and equity

Determinants of Health Model based on frameworks developed by: Tarlov AR. *Ann N Y Acad Sci* 1999; 896: 281-93; and Kindig D, Asada Y, Booske B. *JAMA* 2008; 299(17): 2081-2083.

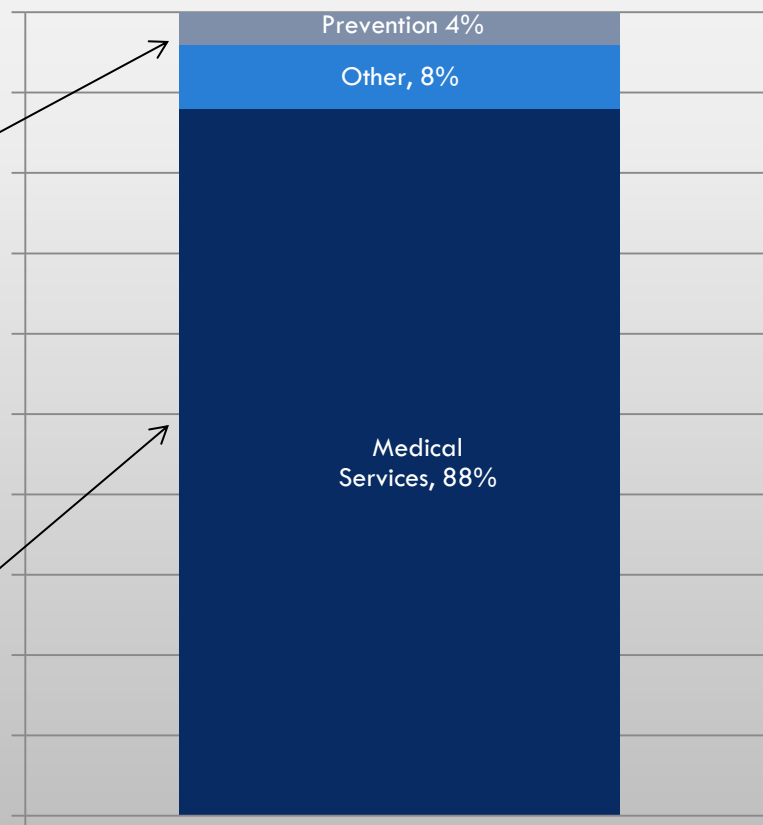
World Health Organization. Ottawa charter for health promotion. International Conference on Health Promotion: The Move Towards a New Public Health, November 17-21, 1986 Ottawa, Ontario, Canada, 1986. Accessed July 12, 2002 at <<http://www.who.int/hpr/archive/docs/ottawa.html>>.

Spending Mismatch: Health Care and Other Key Determinants of Health

Determinants



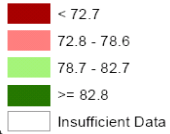
National Health Expenditures



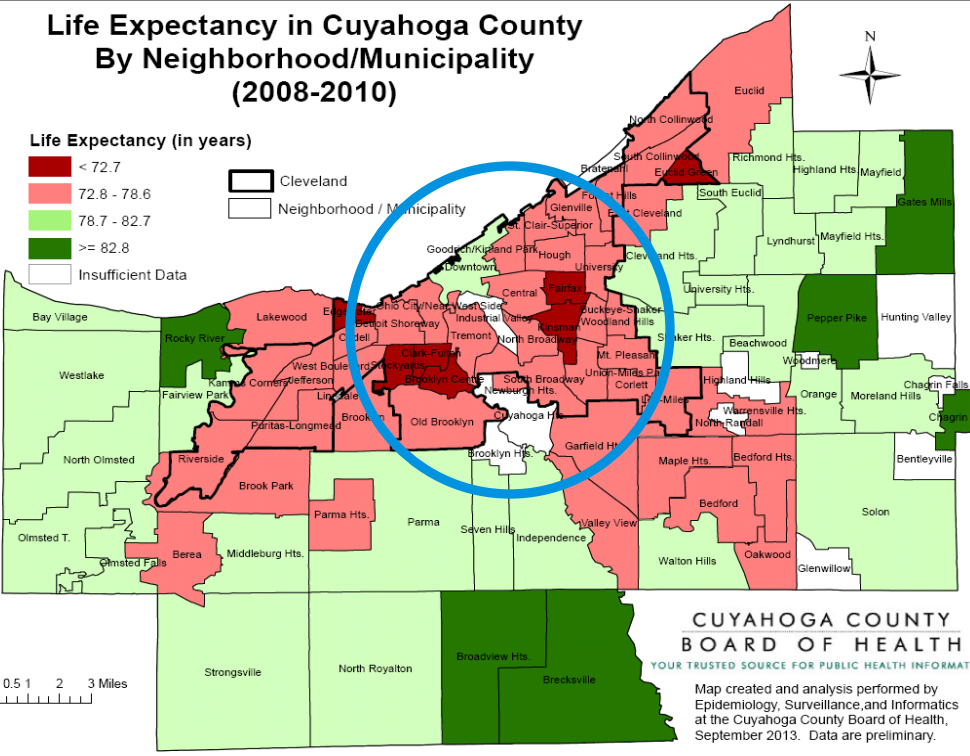
Cuyahoga County

Life Expectancy in Cuyahoga County By Neighborhood/Municipality (2008-2010)

Life Expectancy (in years)



Cleveland
 Neighborhood / Municipality

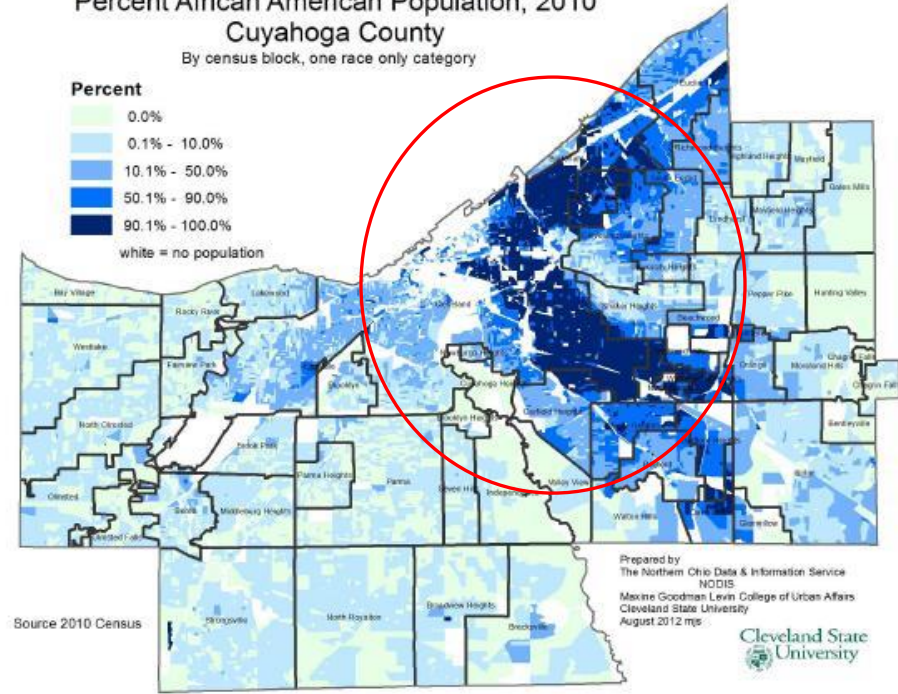
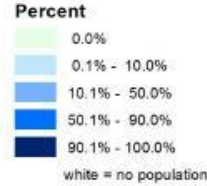


CUYAHOGA COUNTY BOARD OF HEALTH
 YOUR TRUSTED SOURCE FOR PUBLIC HEALTH INFORMATION

Map created and analysis performed by Epidemiology, Surveillance, and Informatics at the Cuyahoga County Board of Health, September 2013. Data are preliminary.

Percent African American Population, 2010 Cuyahoga County

By census block, one race only category

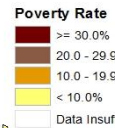


Source 2010 Census

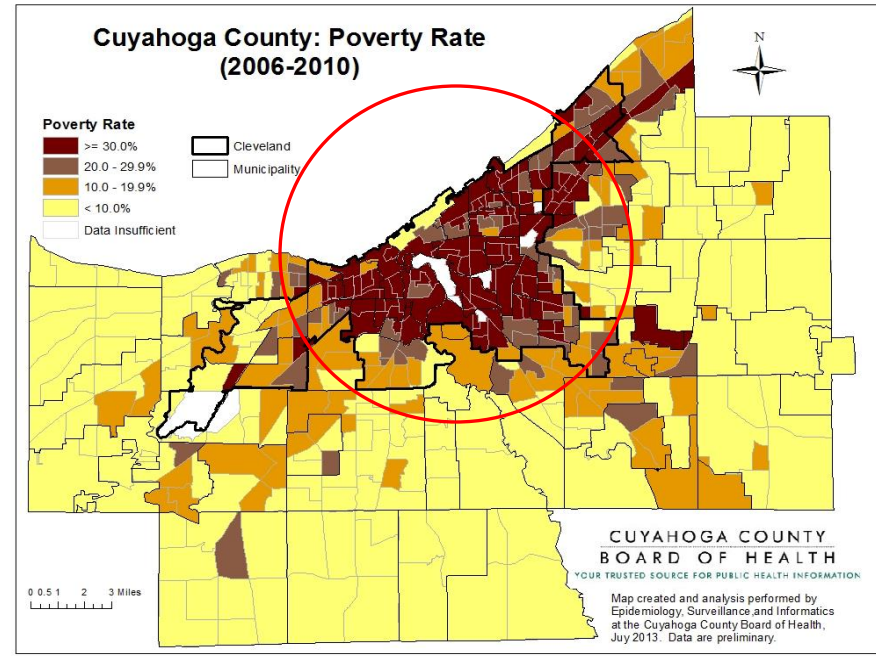
Prepared by
The Northern Ohio Data & Information Service
NODIS
Maxine Goodman Levin College of Urban Affairs
Cleveland State University
August 2012 mps



Cuyahoga County: Poverty Rate (2006-2010)



Cleveland
 Municipality



0 0.5 1 2 3 Miles

CUYAHOGA COUNTY BOARD OF HEALTH
 YOUR TRUSTED SOURCE FOR PUBLIC HEALTH INFORMATION

Map created and analysis performed by Epidemiology, Surveillance, and Informatics at the Cuyahoga County Board of Health, July 2013. Data are preliminary.

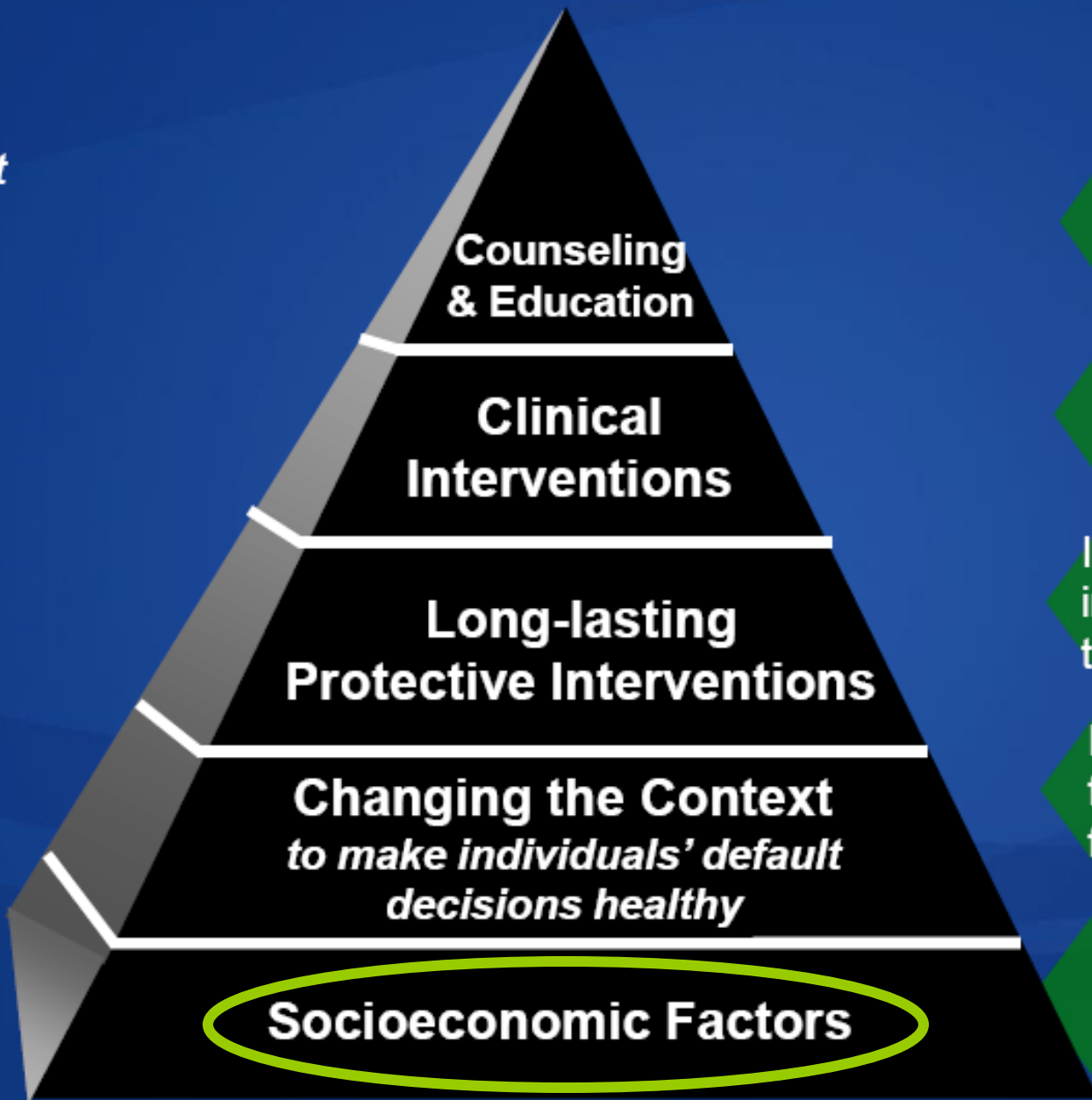
“Social Determinants of Health”

- Social-Physical-Economic-Services Determinants
 - Income & income inequality
 - Education
 - Race/ethnicity/gender & related discrimination
 - Built Environment
 - Stress
 - Social support
 - Early child experiences
 - Employment
 - Housing
 - Transportation
 - Food Environment
 - Social standing

Source: California Department of Health

Factors that Affect Health

Smallest
Impact



Counseling
& Education

Clinical
Interventions

Long-lasting
Protective Interventions

Changing the Context
*to make individuals' default
decisions healthy*

Socioeconomic Factors

Examples

Eat healthy, be
physically active

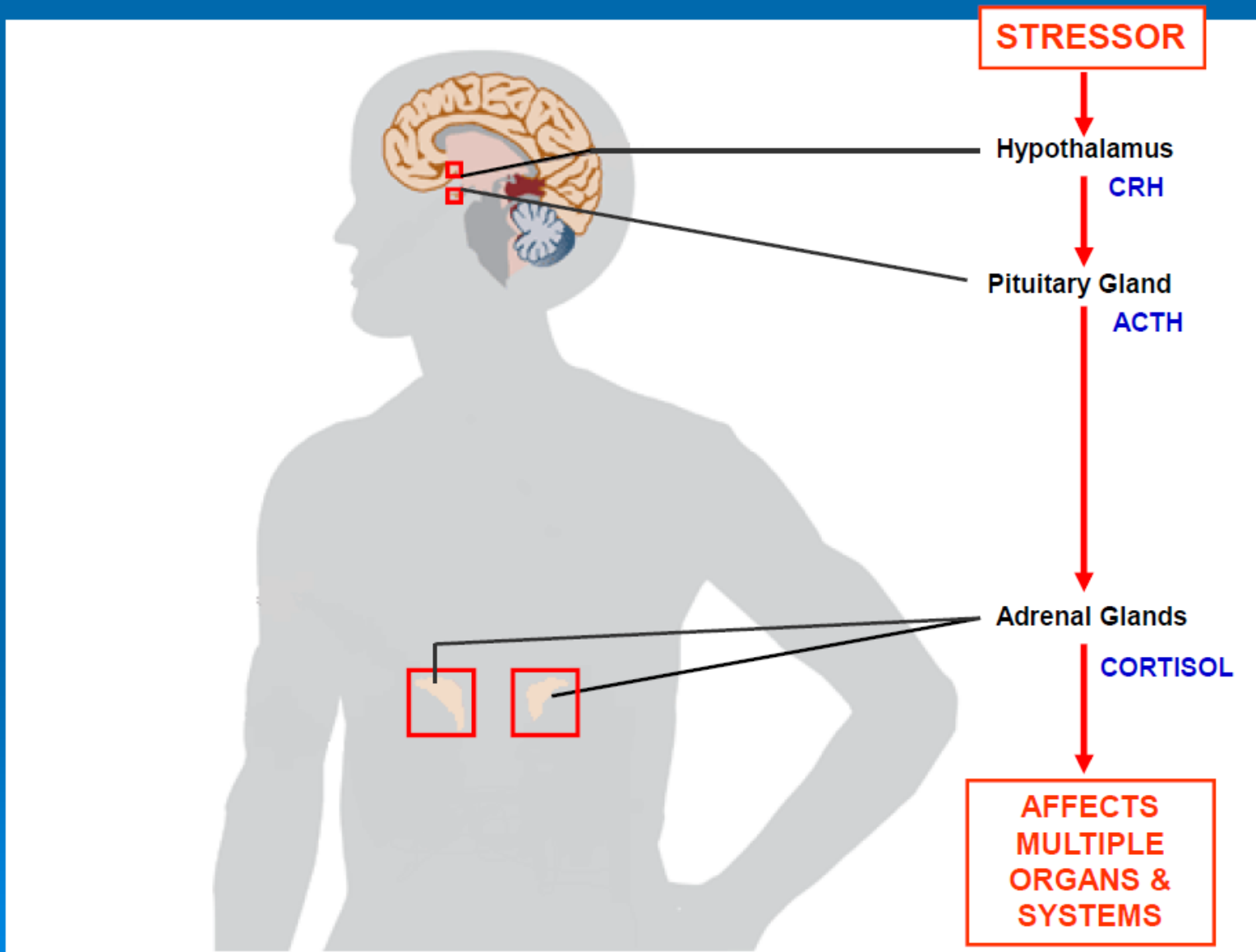
Rx for high blood
pressure, high
cholesterol, diabetes

Immunizations, brief
intervention, cessation
treatment, colonoscopy

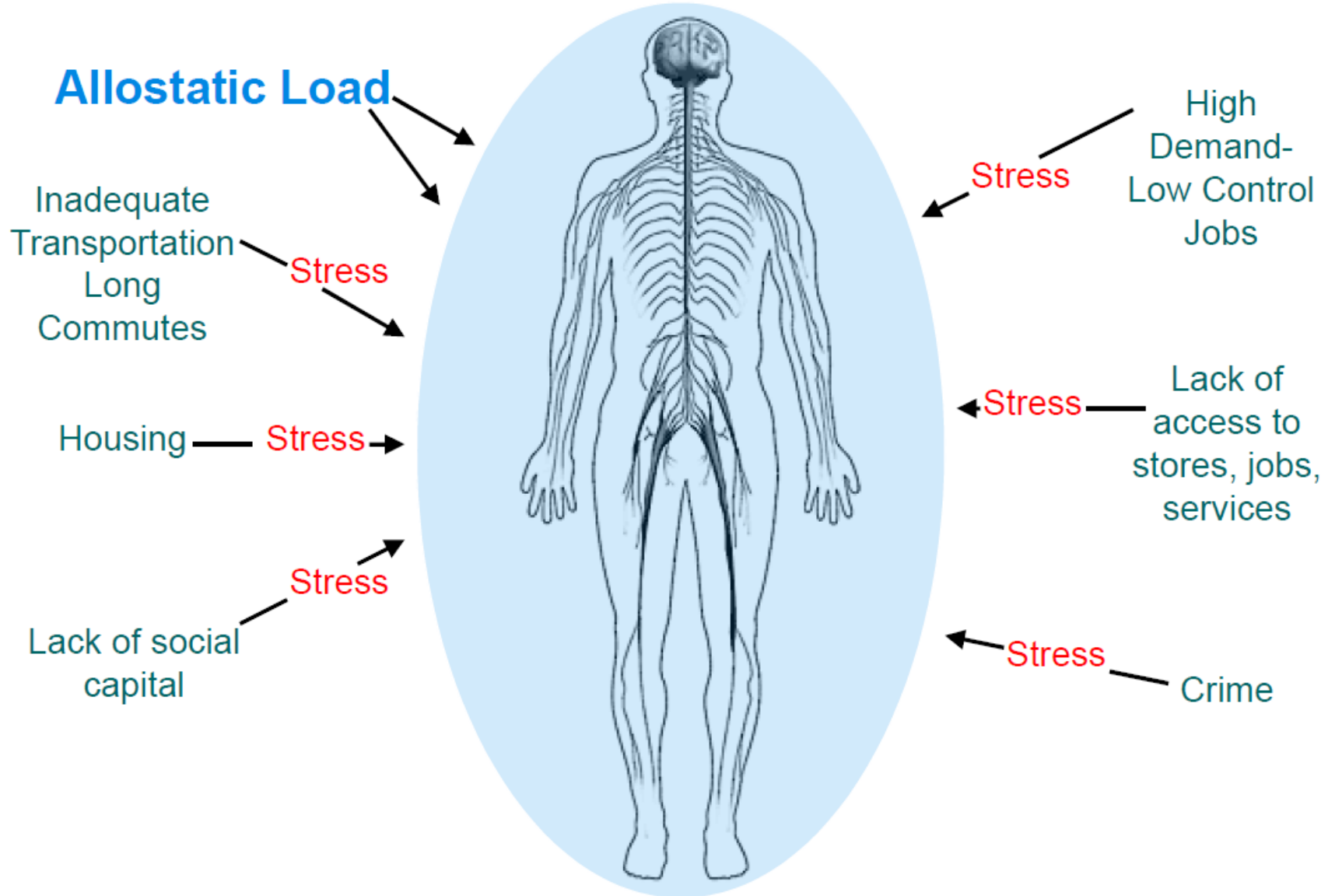
Fluoridation, 0g trans
fat, iodization, smoke-
free laws, tobacco tax

Poverty, education,
housing, inequality

Stress pathway from brain to body



When the external becomes internal: How we internalize our environment



Estimated Deaths Attributable to Social Factors in the US - 2000

- Low education: 245,000
- Racial segregation: 176,000
- Low social support: 162,000
- Individual level poverty: 133,000
- Income inequality: 119,000
- Area level poverty: 39,000

- In comparison:
 - Acute MI: 192,898
 - Cerebrovascular disease: 167,661
 - Lung cancer: 155,521

Estimated Deaths Attributable to Social Factors in the US. Galea S et.al. AJPH:June 16,2011;eprint.



Equality

doesn't mean

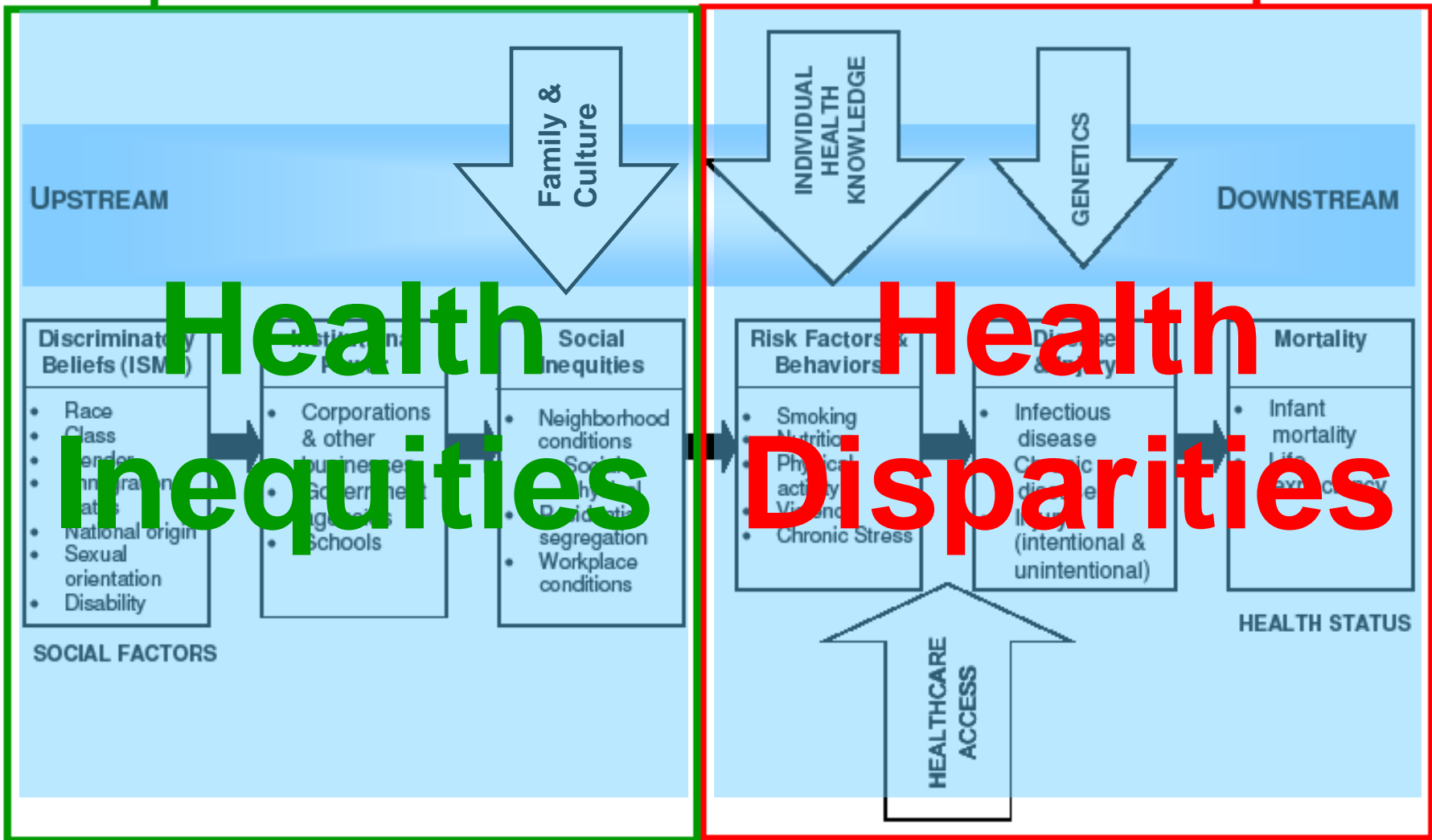


Equity

A Framework for Health Equity

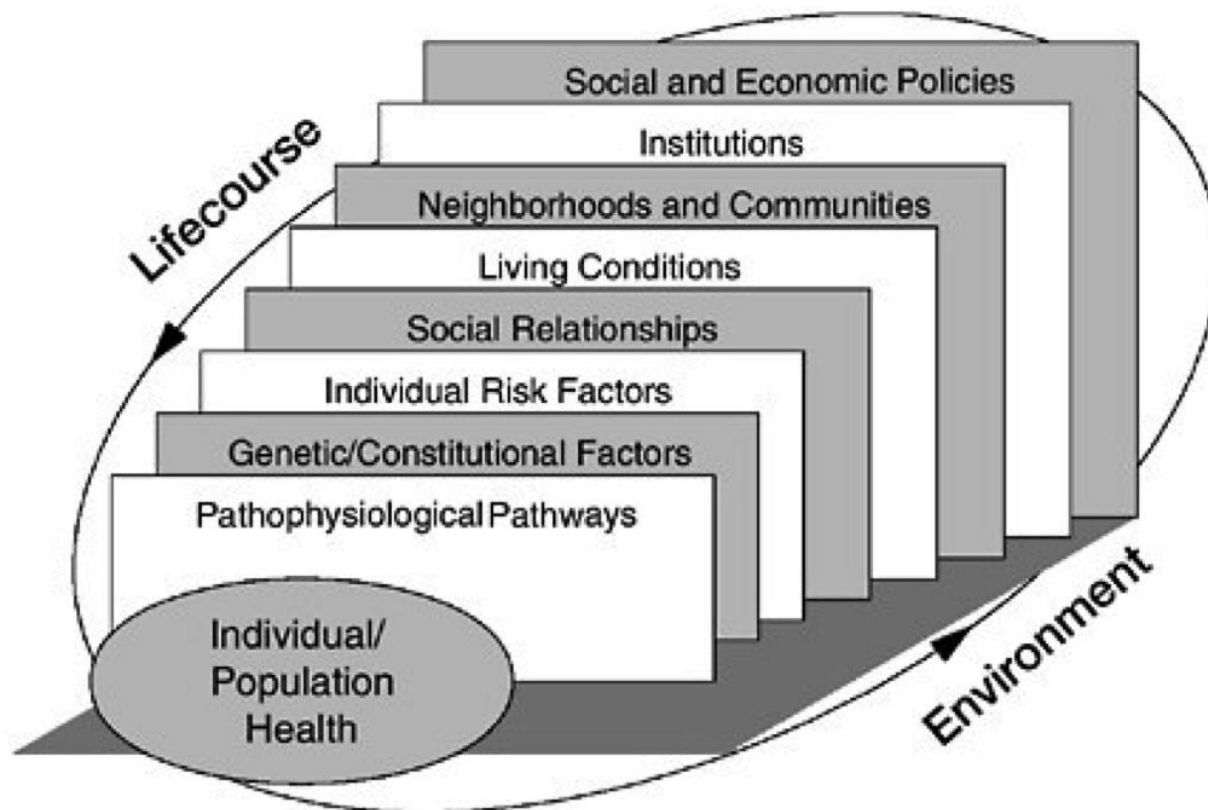
Socio-Ecological

Medical Model



Health Inequities

Health Disparities



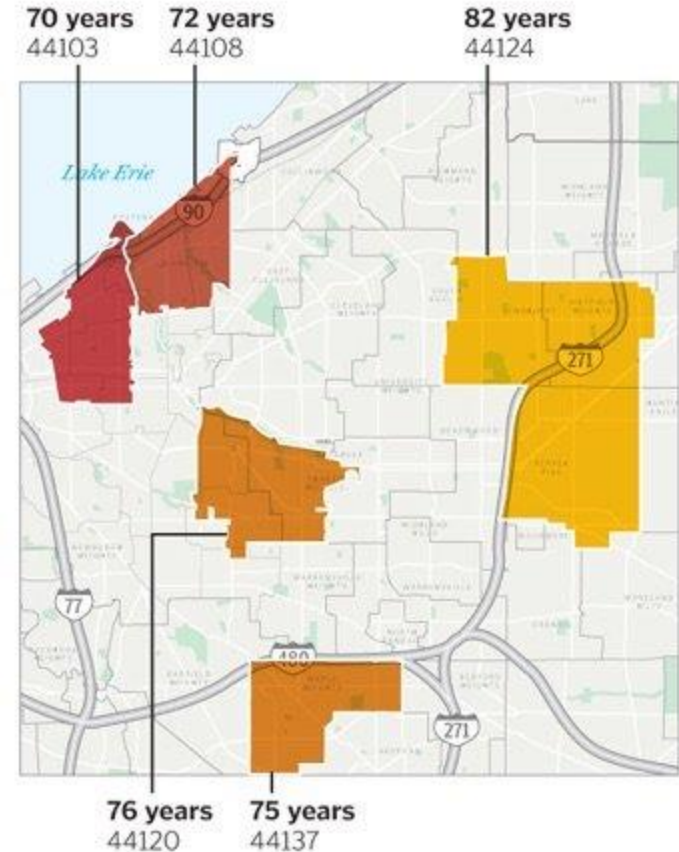
Reference: IOM (Institute of Medicine). 2000. Promoting Health: Intervention Strategies from Social and Behavioral Research, p. 43. Washington, DC: National Academy Press.

Place Matters...

- Where you live impact your health, opportunity and life expectancy
- Communities just 8 miles apart have a 10 year difference in life expectancy
- The choice you make are often the choices you have

Your zip code can affect your life expectancy

If you travel less than ten miles from Cleveland's northeastern neighborhoods to more affluent eastern outer-ring suburbs, life expectancy can differ by as much as 12 years.

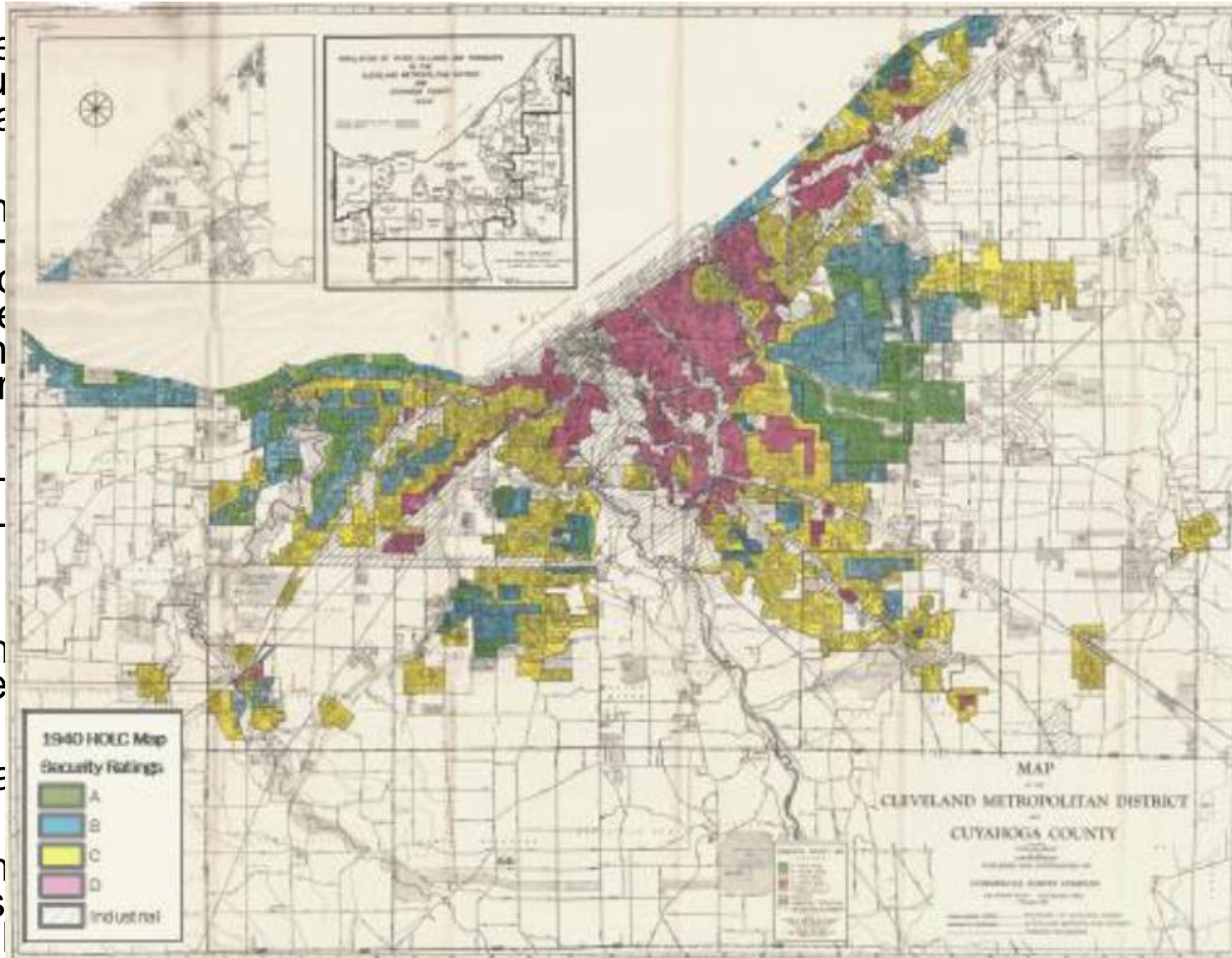


SOURCES: Virginia Commonwealth University;
Robert Wood Johnson Foundation

THE PLAIN DEALER

The Impact of Redlining

- Re
- Th
- Th
- Ra
- Th



d map
ng a

ration
nce
35,
cities
curity

acking
ny

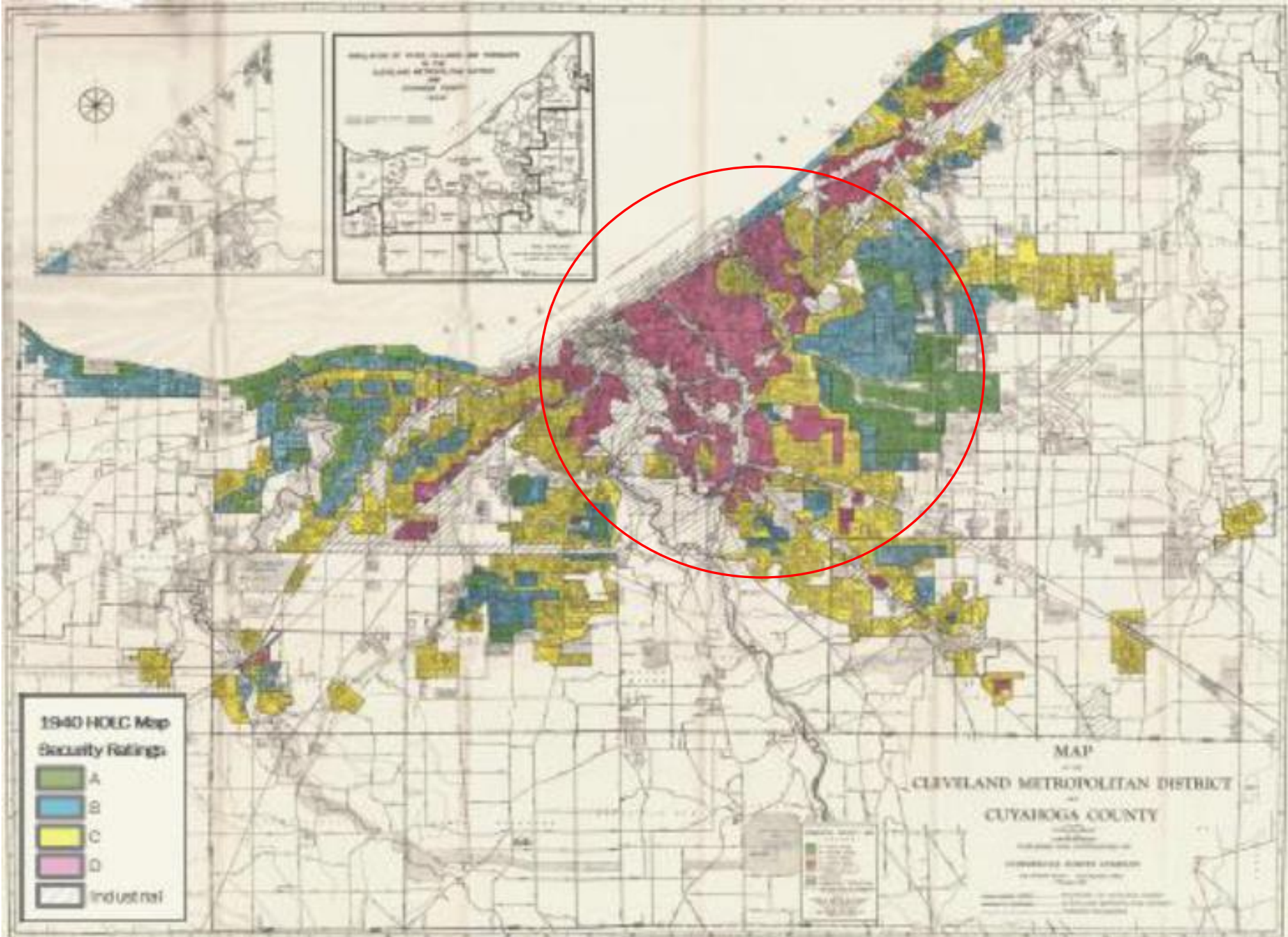
ices

ity.

op the

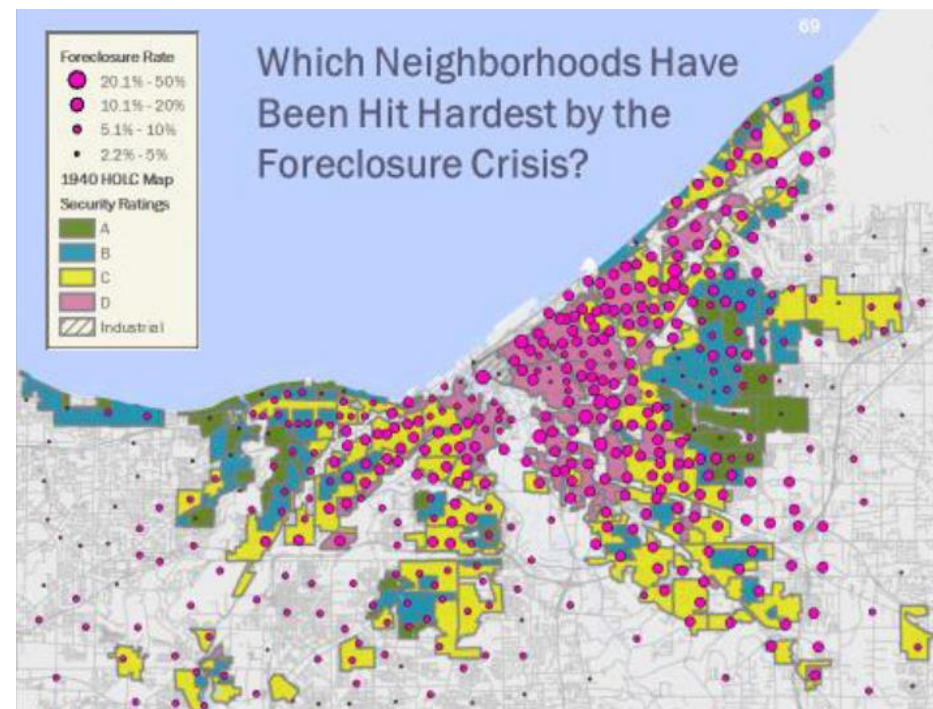
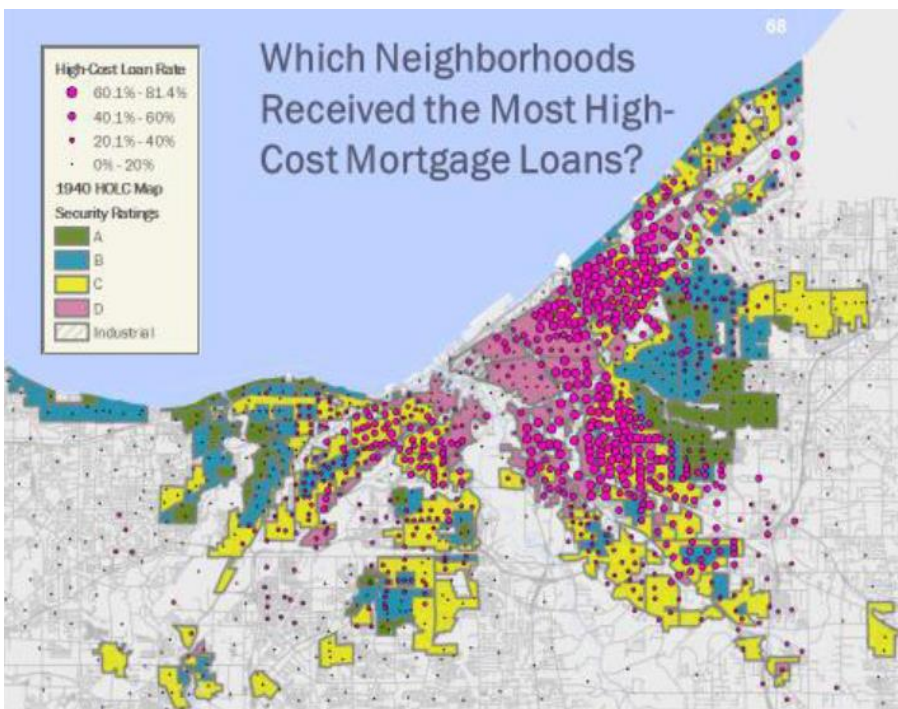
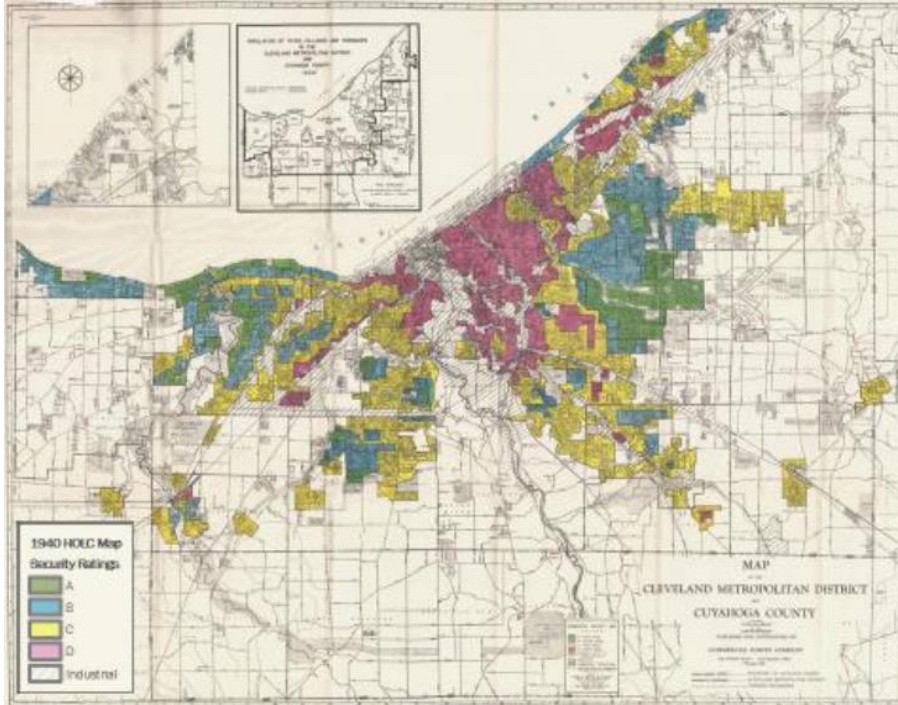
Source:

Kirwan Institute and The Ohio State University

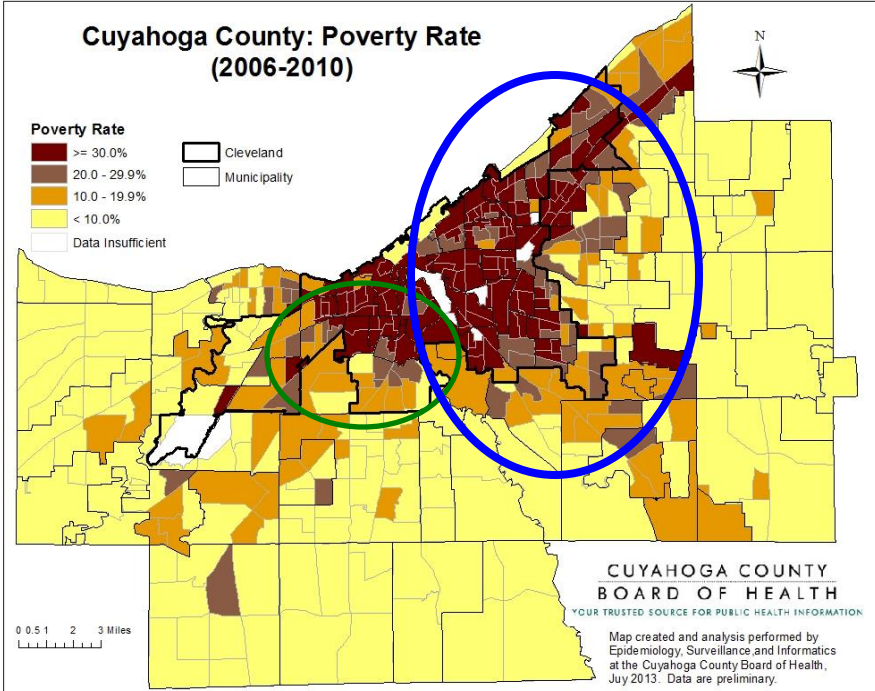


Source: History Matters: Understanding the Role of Policy, Kirwan Institute for the Study of Race and Ethnicity at the Ohio State University, February 2015.

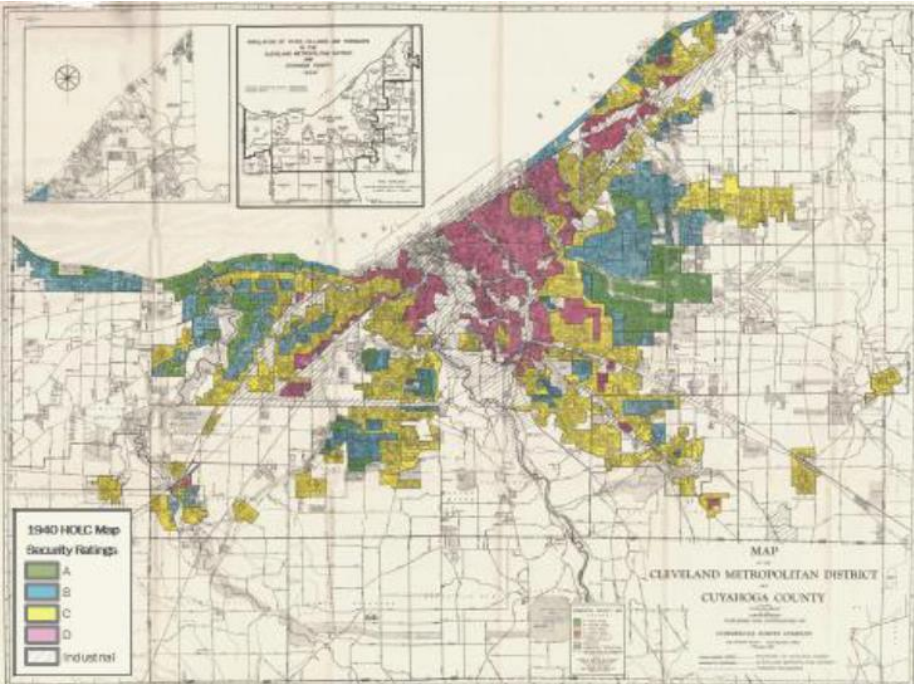
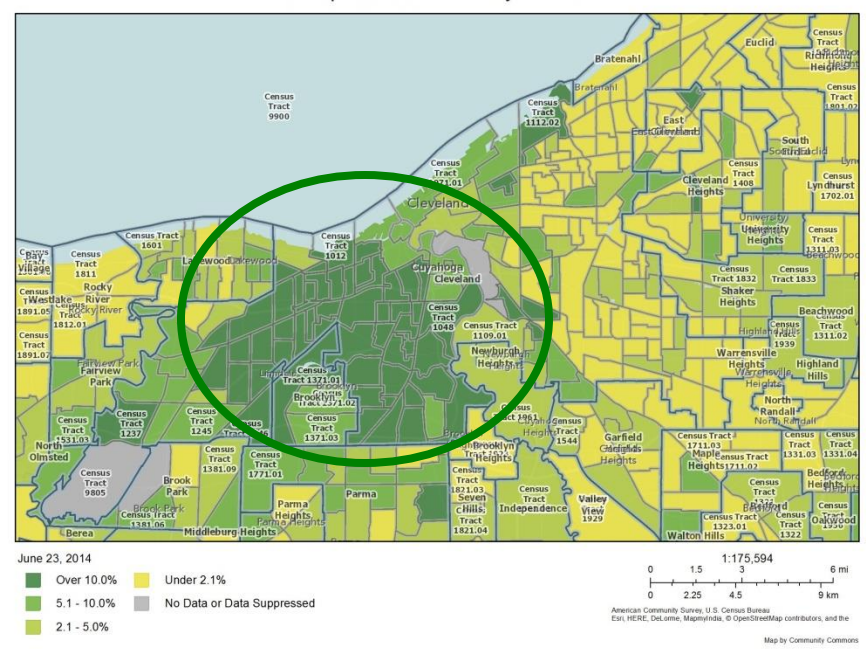
Comparisons between “Redlining”, High-Cost Mortgage Loans, and the Areas Hardest Hit by the Foreclosure Crisis



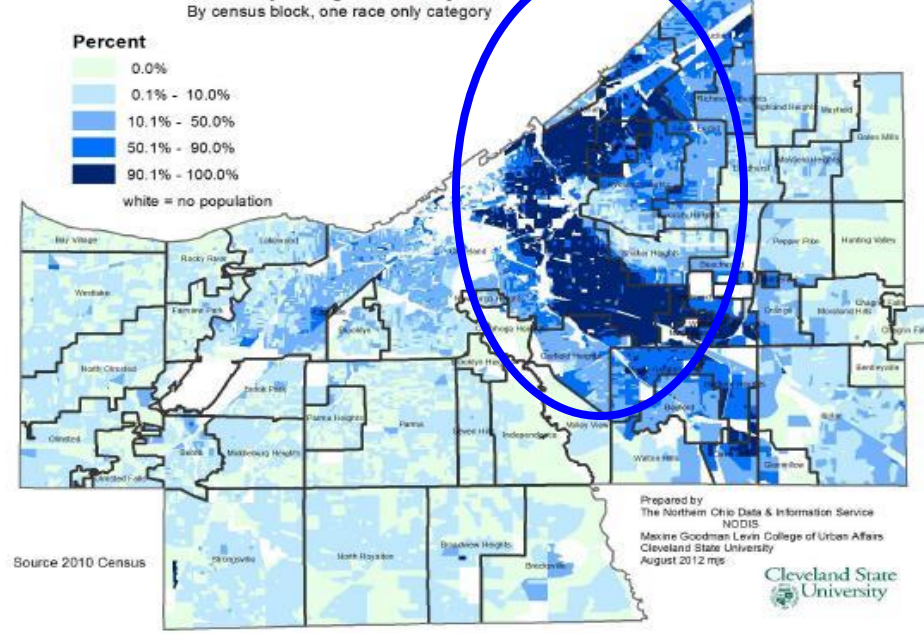
Cuyahoga County: Poverty Rate (2006-2010)



CC % Hispanic 2008-2012 by census tract

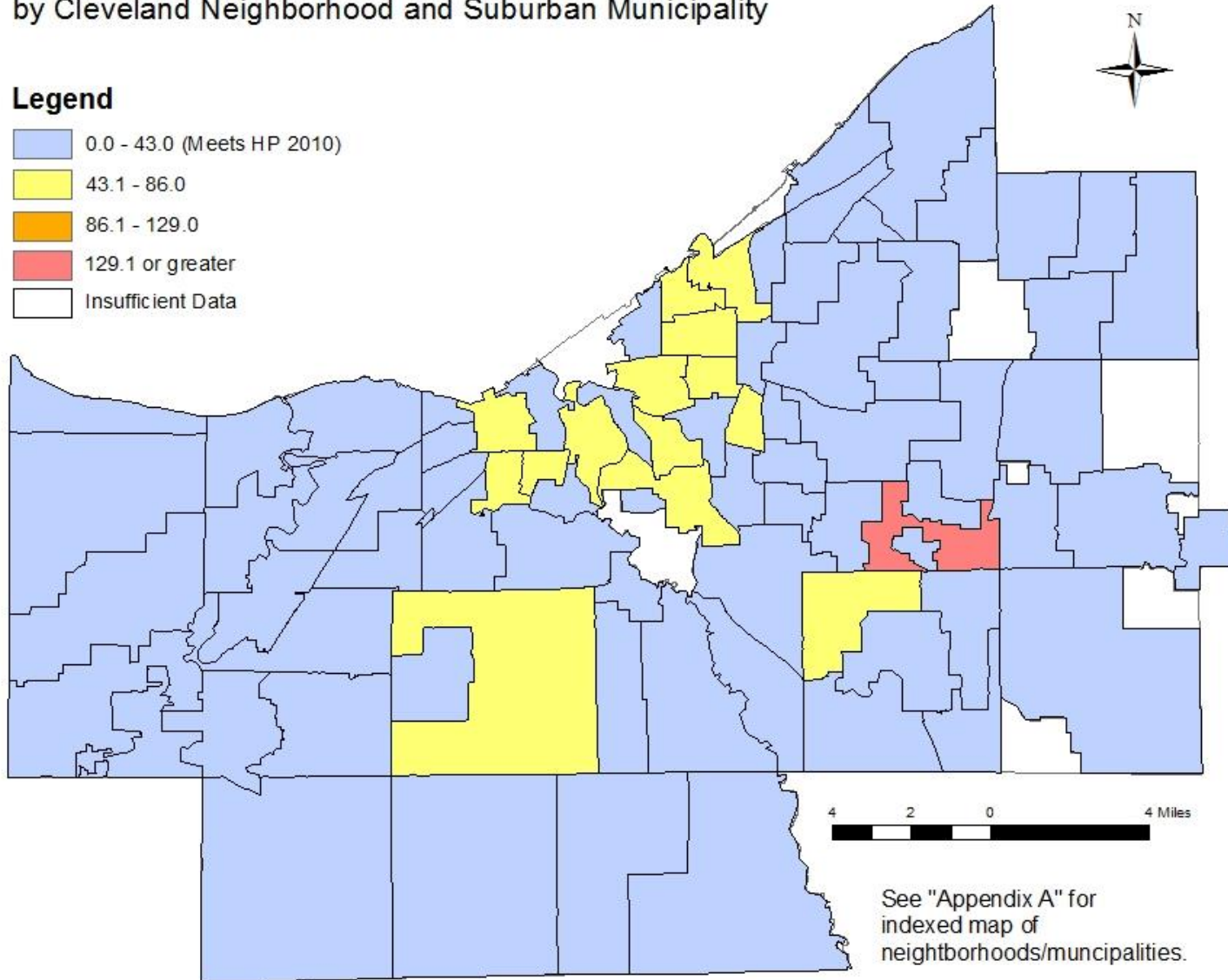
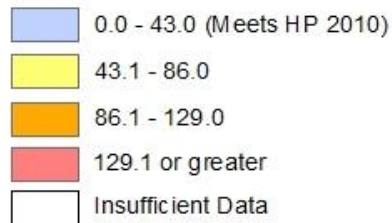


Percent African American Population, 2010 Cuyahoga County



2008-2010 Birth Rate among Adolescents Aged 15-17 Years by Cleveland Neighborhood and Suburban Municipality

Legend



See "Appendix A" for
indexed map of
neighborhoods/municipalities.

Distribution of Poverty and Race for Child Deaths Cuyahoga County, Ohio (2007-2016) [n=1,953]

Race*

- All Other Races (24)
- ▲ Black (1,289)
- White (638)

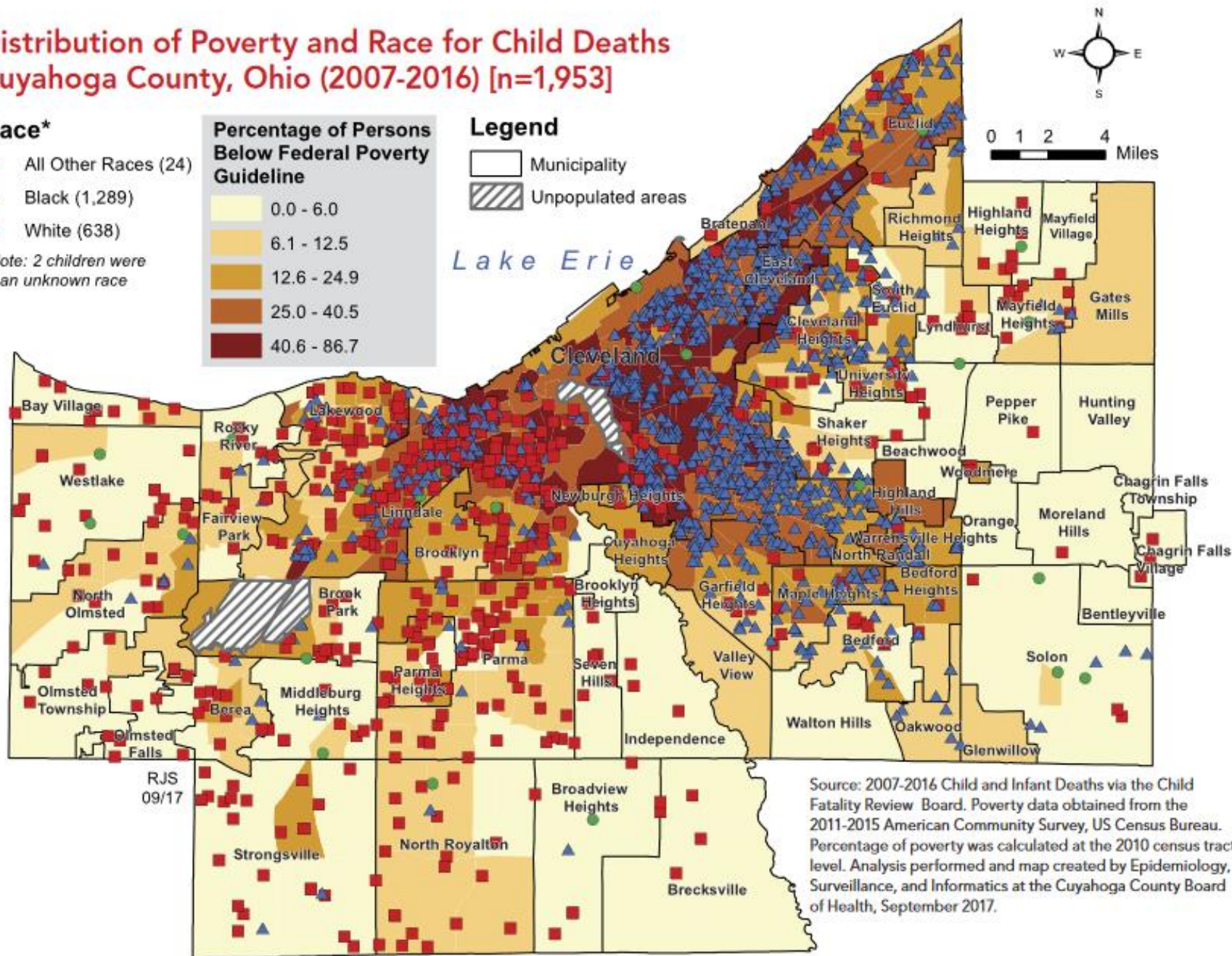
*Note: 2 children were of an unknown race

Percentage of Persons Below Federal Poverty Guideline

- 0.0 - 6.0
- 6.1 - 12.5
- 12.6 - 24.9
- 25.0 - 40.5
- 40.6 - 86.7

Legend

- Municipality
- ▨ Unpopulated areas



Source: 2007-2016 Child and Infant Deaths via the Child Fatality Review Board. Poverty data obtained from the 2011-2015 American Community Survey, US Census Bureau. Percentage of poverty was calculated at the 2010 census tract level. Analysis performed and map created by Epidemiology, Surveillance, and Informatics at the Cuyahoga County Board of Health, September 2017.

RJS
09/17

★ Major Grocery Store

Food Desert Areas

By Miles to Nearest Grocery

0.0 - 0.5 (Non-food Desert)

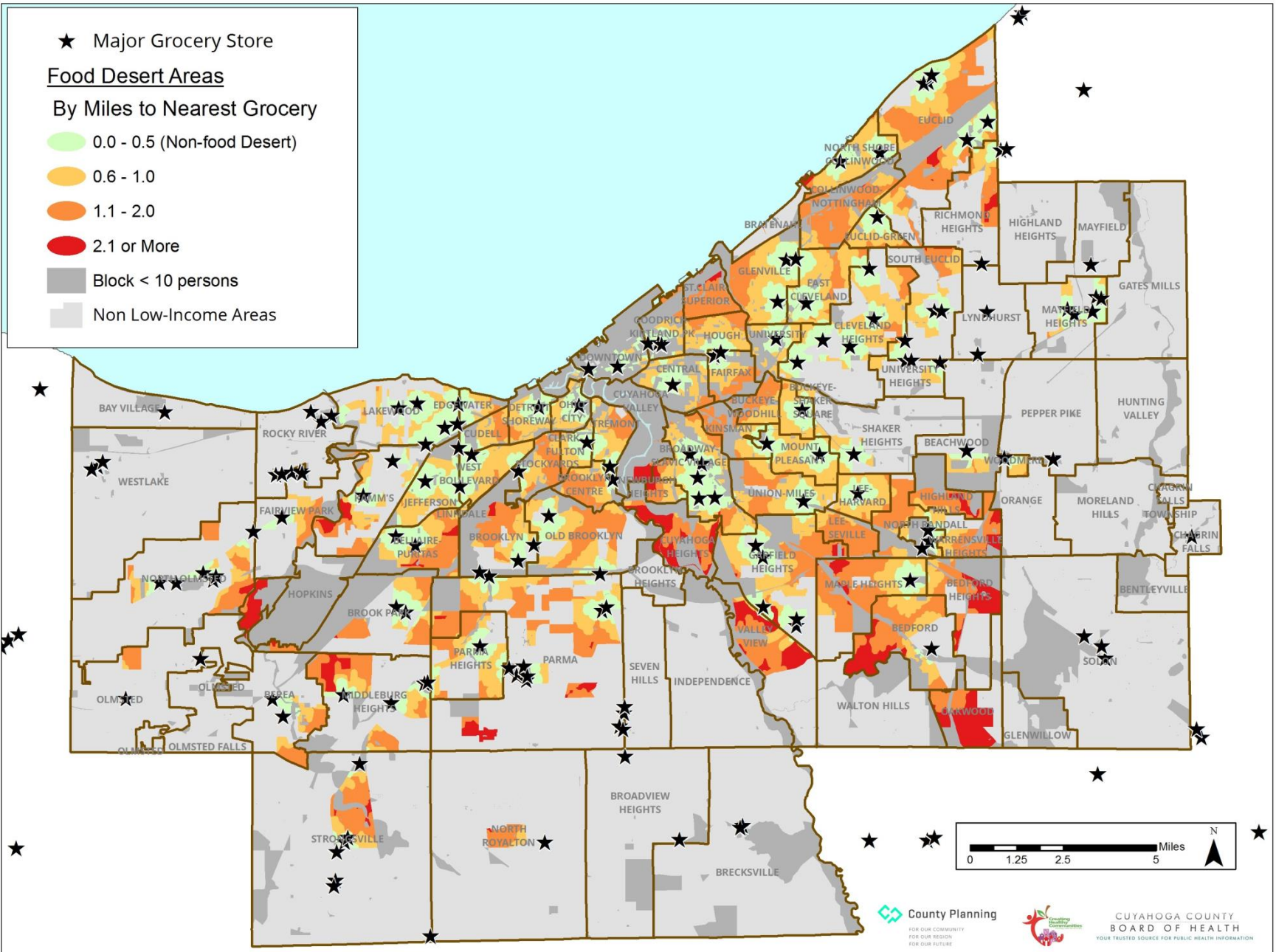
0.6 - 1.0

1.1 - 2.0

2.1 or More

Block < 10 persons

Non Low-Income Areas



**Disease Deaths by Tract
Composite Quartile Score***

4

5 - 8

9 - 12

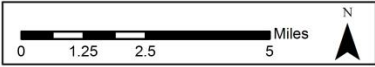
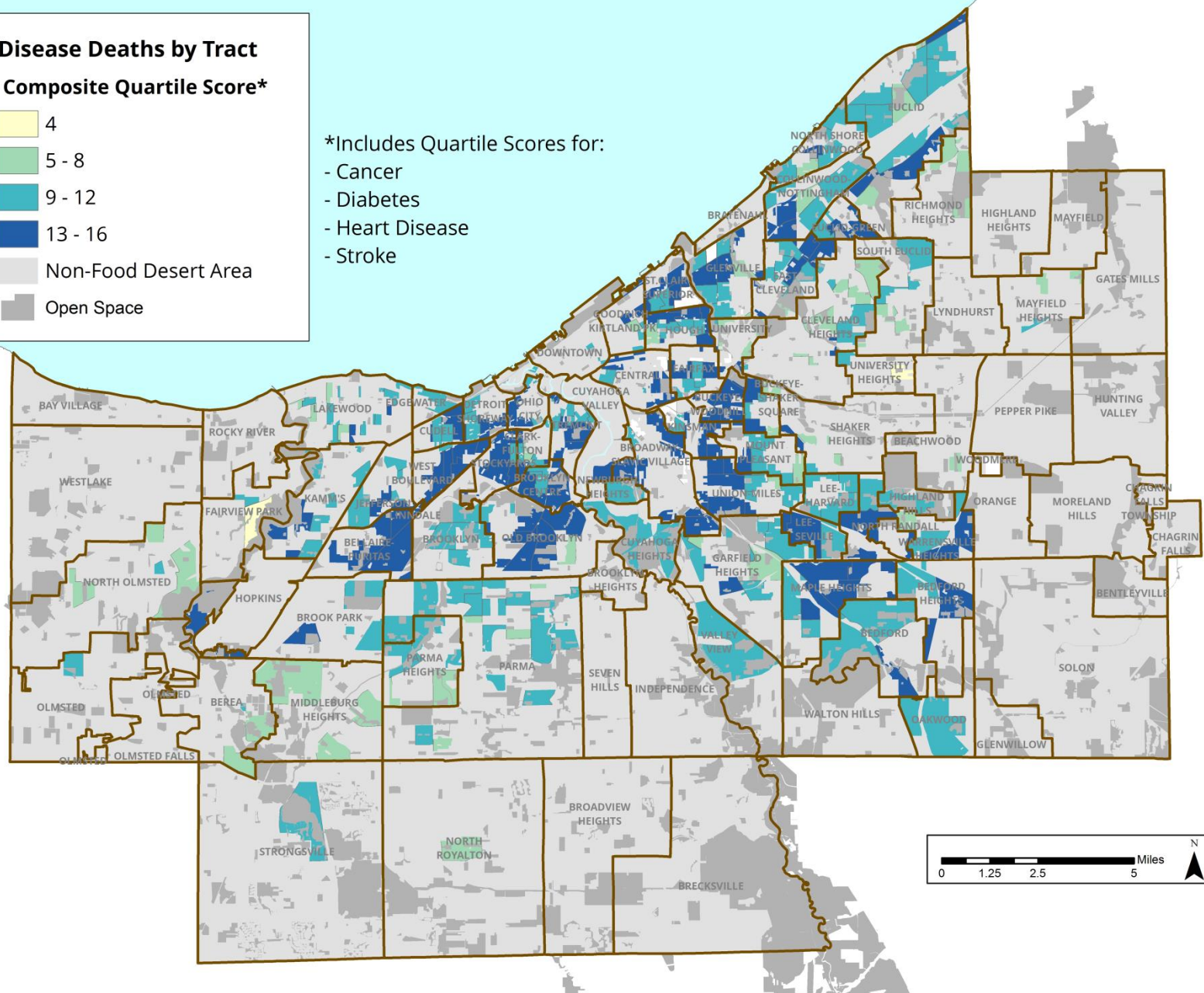
13 - 16

Non-Food Desert Area

Open Space

*Includes Quartile Scores for:

- Cancer
- Diabetes
- Heart Disease
- Stroke



Life Expectancy in Cuyahoga County By Neighborhood/Municipality (2008-2010)

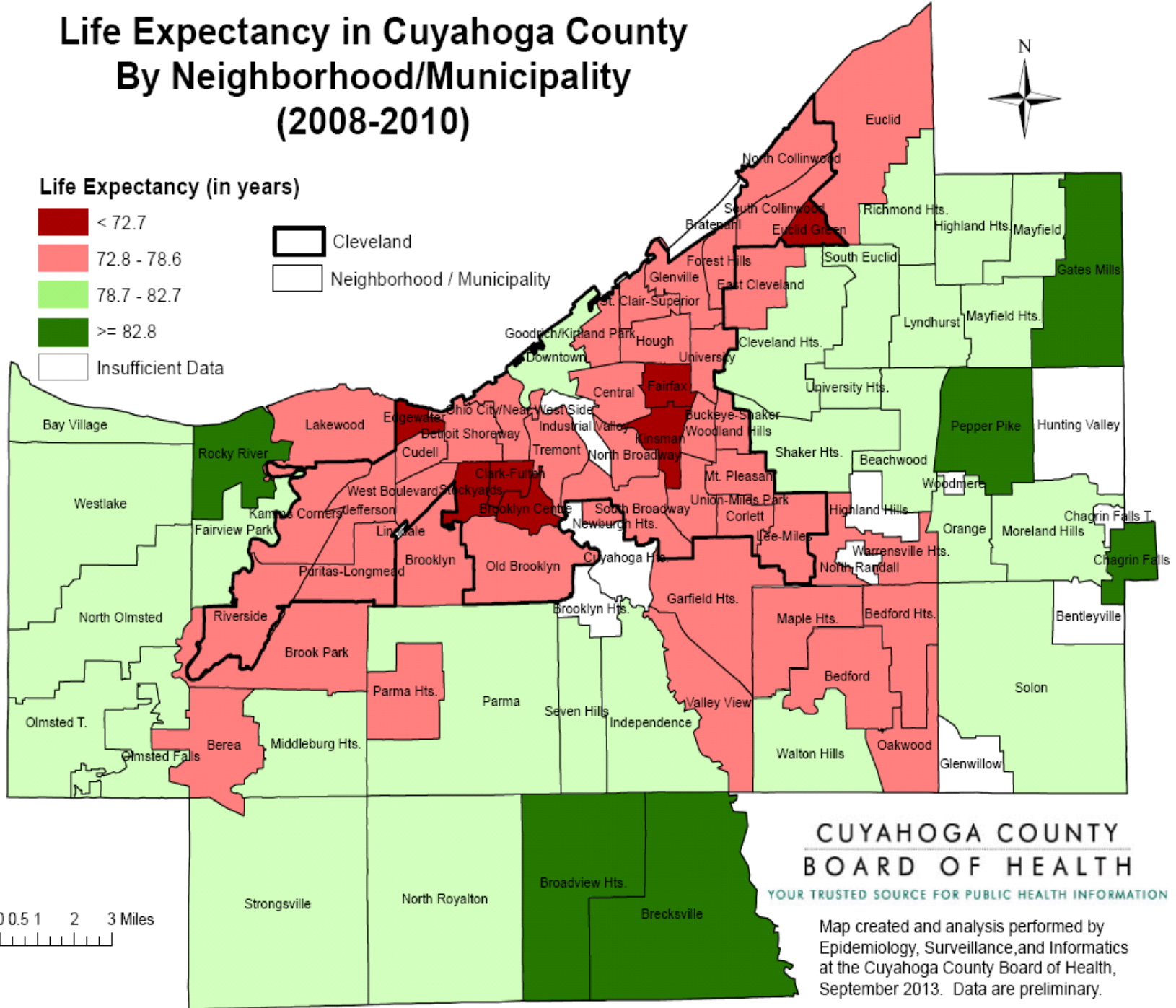


Life Expectancy (in years)

- < 72.7
- 72.8 - 78.6
- 78.7 - 82.7
- >= 82.8

- Cleveland
- Neighborhood / Municipality

Insufficient Data



**CUYAHOGA COUNTY
BOARD OF HEALTH**

YOUR TRUSTED SOURCE FOR PUBLIC HEALTH INFORMATION

Map created and analysis performed by
Epidemiology, Surveillance, and Informatics
at the Cuyahoga County Board of Health,
September 2013. Data are preliminary.

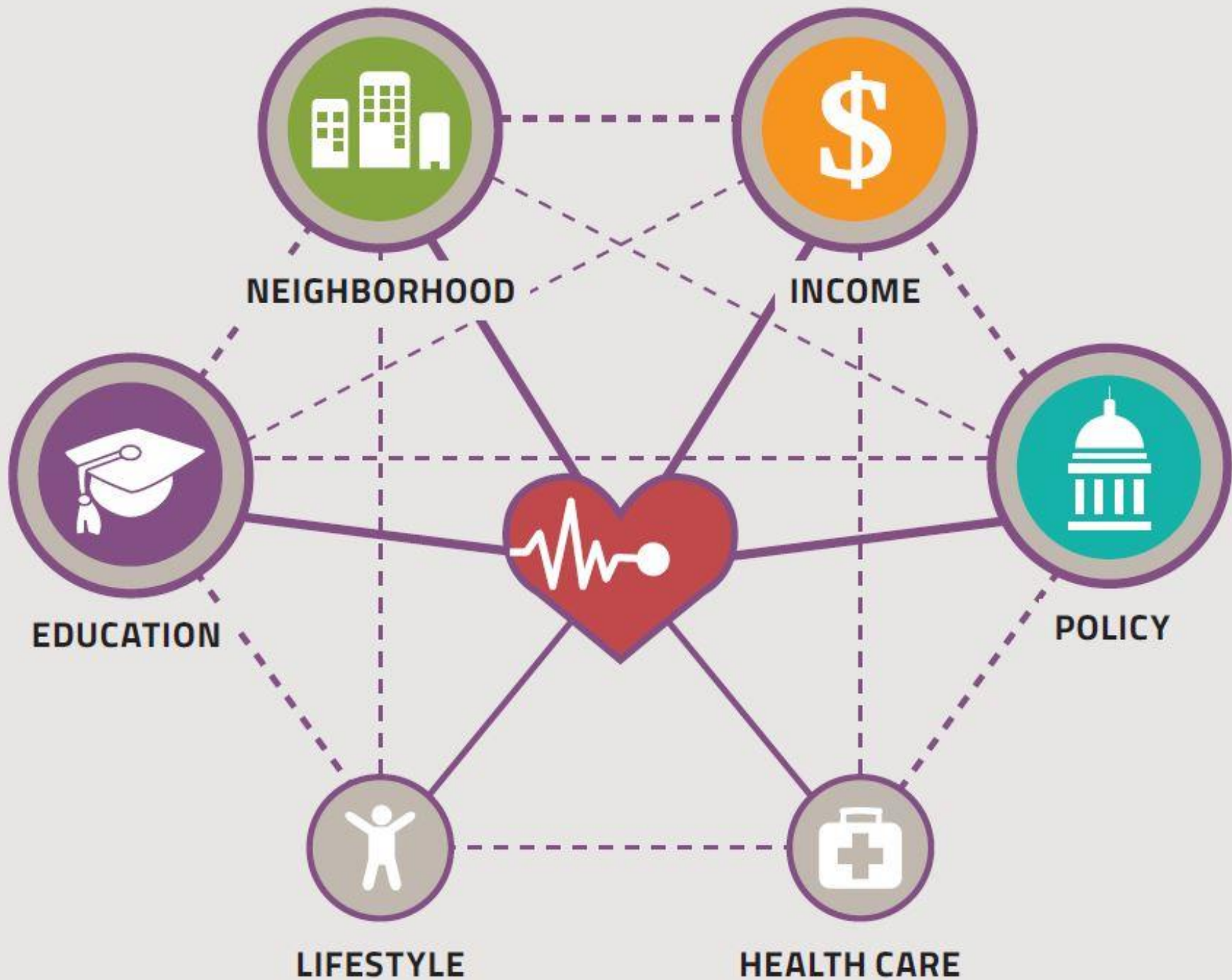


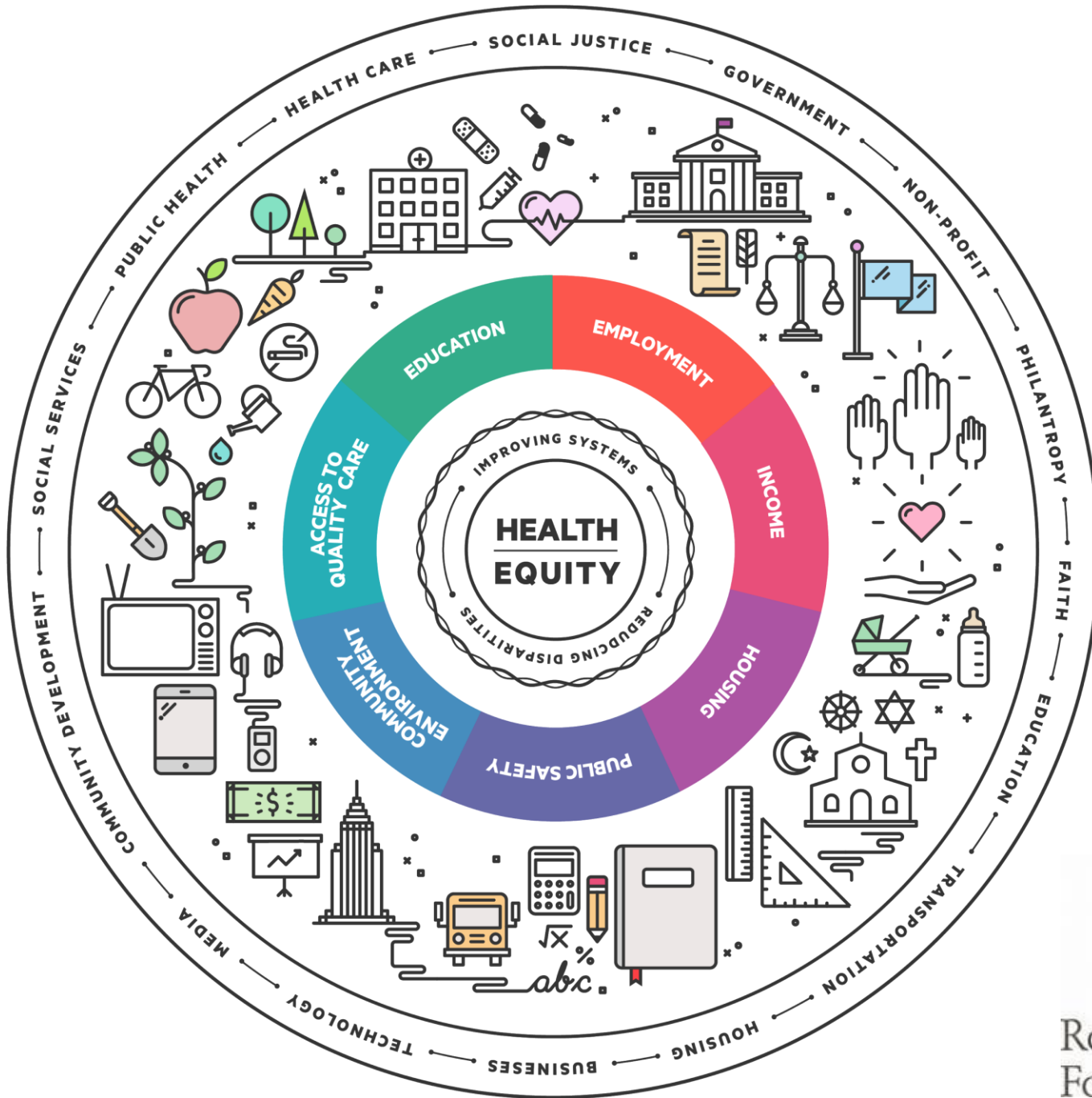
Upstream interventions and strategies focus on improving fundamental social and economic structures in order to decrease barriers and improve supports that allow people to achieve their full health potential.

Downstream interventions and strategies focus on providing equitable access to care and services to mitigate the negative impacts of **disadvantage** on health.

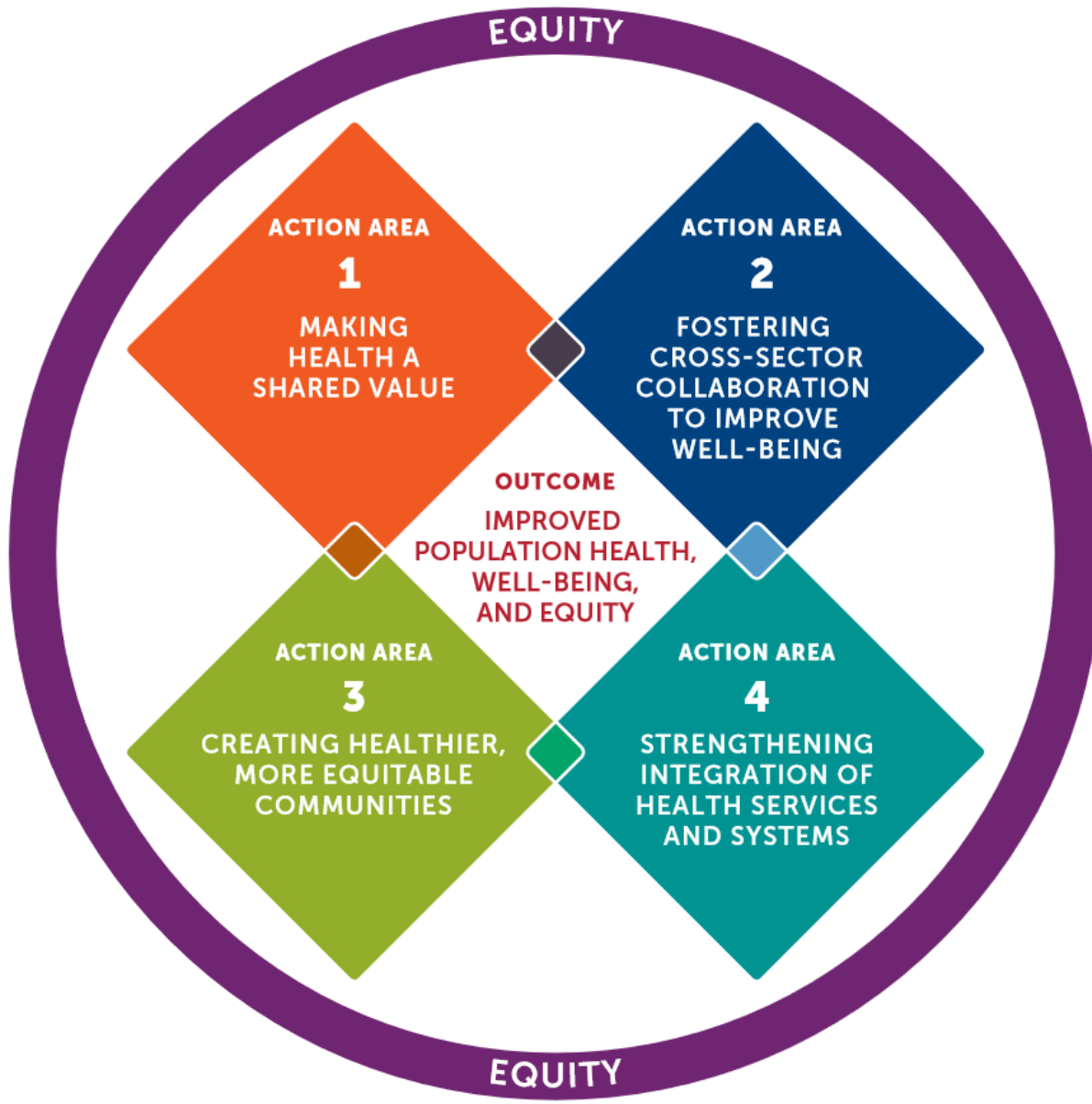
Downstream vs Upstream

- Legal Needs/Services
- Physical Inactivity
 - Unsafe Neighborhoods/Access
- Hypertension
 - Insurance
 - Management Education
- Community Policing/Neighborhood Engagement
- Concentrated Poverty/Racial & Economic Segregation
 - Housing Policy
- Alcohol outlet density
- Food Deserts
- Land Use/Zoning



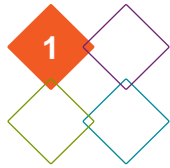


Robert Wood Johnson
Foundation



Robert Wood Johnson
Foundation

ACTION AREA



MAKING HEALTH A SHARED VALUE

DRIVERS

**MINDSET AND
EXPECTATIONS**

**Value on health
interdependence**

Value on well-being

**Public discussion on
health promotion and
well-being**

**SENSE OF
COMMUNITY**

Sense of community

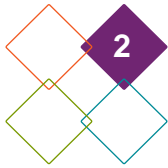
Social support

**CIVIC
ENGAGEMENT**

Voter participation

Volunteer engagement

ACTION AREA



FOSTERING CROSS-SECTOR COLLABORATION TO IMPROVE WELL-BEING

DRIVERS

NUMBER
AND QUALITY
OF PARTNERSHIPS

Local health
department collaboration

Opportunities to improve health for
youth at schools

Business support
for workplace health
promotion and
Culture of Health

INVESTMENT IN
CROSS-SECTOR
COLLABORATION

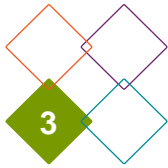
U.S. corporate giving
Federal allocations for
health investments
related to nutrition and
indoor and outdoor
physical activity

POLICIES
THAT SUPPORT
COLLABORATION

Community relations
and policing
Youth exposure to advertising
for healthy and unhealthy
food and beverage products
Climate adaptation and mitigation
Health in all policies
(support for working families)



ACTION AREA



CREATING HEALTHIER, MORE EQUITABLE COMMUNITIES

DRIVERS

**BUILT ENVIRONMENT/
PHYSICAL CONDITIONS**

Housing affordability
Access to healthy foods
Youth safety

**SOCIAL AND ECONOMIC
ENVIRONMENT**

Residential segregation
**Early childhood
education**
Public libraries

**POLICY AND
GOVERNANCE**

Complete Streets policies
Air quality



ACTION AREA



STRENGTHENING INTEGRATION OF HEALTH SERVICES AND SYSTEMS

DRIVERS

ACCESS

CONSUMER EXPERIENCE AND QUALITY

BALANCE AND INTEGRATION

Access to public health

Access to stable health insurance

Access to mental health services

Routine dental care

Consumer experience

Population covered by an Accountable Care Organization

Electronic medical record linkages

Hospital partnerships

Practice laws for nurse practitioners

Social spending relative to health expenditure



IMPROVED POPULATION HEALTH, WELL-BEING AND EQUITY

OUTCOME AREA

ENHANCED INDIVIDUAL
AND COMMUNITY
WELL-BEING

Well-being rating
Caregiving burden

MANAGED CHRONIC
DISEASE AND REDUCED
TOXIC STRESS

Adverse child experiences
Disability associated
with chronic conditions

REDUCED
HEALTH CARE COSTS

Family health care cost
Potentially preventable
hospitalization rates
Annual end-of-life
care expenditures

Define Individual Health in Context of Community Health

Community Indicators for Health and Quality of Life



ECONOMY:
The New Economic Development

Healthy Communities
Anti-blight
Public safety
Preferred housing types
Affordable housing
Homeownership & rental opportunities
Neighborhood retail and amenities

**Business
Growth**

Innovation
Commercialization of discoveries
Connections to markets, strategic partners
Economic inclusion commitments for M/W/LBE
Management assistance
Entrepreneurship support
Risk capital
Networks

**CITY
ECONOMIC
HEALTH**

**Workers'
Knowledge &
Skills**

Family literacy
Pre-conception health
0-3 child development
Pre-K – 12 education
Substance abuse treatment
Ex-offender re-entry
Higher education
Skills training
Asset building

Source: Marsha R. B. Schachtel, Johns Hopkins Institute for Policy Studies
Bloomberg School of Public Health
Provost's Symposium on the Social Determinants of Health, May 2012

SLF Goals

Goal #1: Close the health equity gap



Goal #2: Advocate for more equitable and responsive policies and practices that reduce the unfair treatment and disparate impact of structures, institutions and systems



Goal #3: Be a High Performing Foundation



SLF Strategies



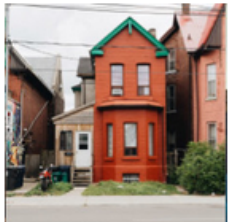
Educational Attainment

Among the factors that contribute to health inequity is the quality and duration of education - from early childhood through post-secondary education and/or job training.



Financial Stability

According to data from the Robert Woods Johnson Foundation (RWJF), it really is simple: adult life expectancy increases with increasing income. People in the highest-income group can expect to live at least six and a half years longer than poor men and women.



Housing Safety and Stability

According to research compiled by the Robert Woods Johnson Foundation, the affordability of housing has clear implications for health. Housing is a social determinant of health for three main reasons: adequate and safe housing conditions, affordability, and residential stability. Housing instability can involve trouble paying rent, overcrowding, moving frequently, staying with relatives, or spending the bulk of household income on housing (spending more than 30% of their income on housing is considered "cost burdened").



Social Connections

Social isolation is a state in which a person lacks a sense of belonging, isn't engaging with others, and has few social connections and quality relationships. Social connections help give our lives purpose and meaning. When we have family, friends, and coworkers to celebrate and commiserate with, and when we feel part of our communities, we live longer, healthier lives.



Healthy Eating & Active Living

All communities need access to healthy foods and safe places to play and be active—but not all communities have equal access. Low-income communities, particularly communities of color, are more likely to lack access to healthy foods and safe places to play and be active.



Saint Luke's Neighborhood

There is a growing body of research that illustrates the connection between "place" and health - and it is well documented that a person's zip code can influence health more than their genetic code. The commission to build a Healthy America tells us that our homes and communities have enormous impact on our health.

“It’s the decisions that we make as a collective that matter more than any choice we make on our own.”

The Secret to a Longer Life? Don't Ask These Dead Longevity Researchers



By Pagan Kennedy

March 9, 2018



NY Times Columnist on Science, Technology and Innovation



“Wise statesmen as they were, they knew the tendency of prosperity to breed tyrants, and so they established these great self-evident truths, that when in the distant future some man, some faction, some interest, should set up the doctrine that none but rich men, or none but white men, were entitled to life, liberty and pursuit of happiness, their posterity might look up again to the Declaration of Independence and take courage to renew the battle which their fathers began...”



-Abraham Lincoln on the Declaration of Independence, 1858



Health is determined by “the water”...our environment and social context