

Greater Philadelphia
Business Coalition on Health

Why a Culture of Health Needs to Extend Beyond the Workplace into the Community

Donald F. Schwarz, MD, MPH, MBA

Being healthy
and staying
healthy is an
**esteemed
social value**

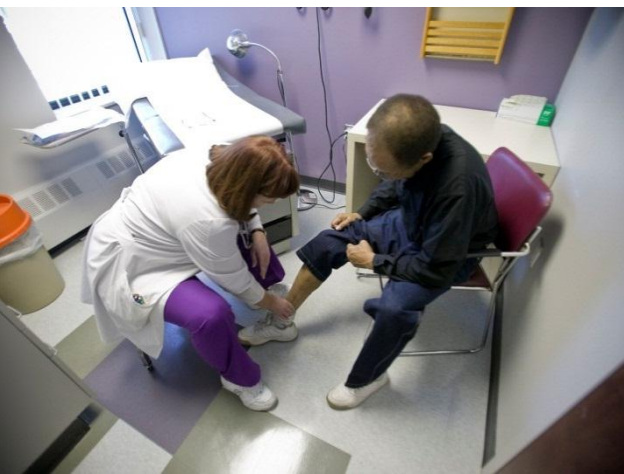


Health of the population guides public and private decision-making



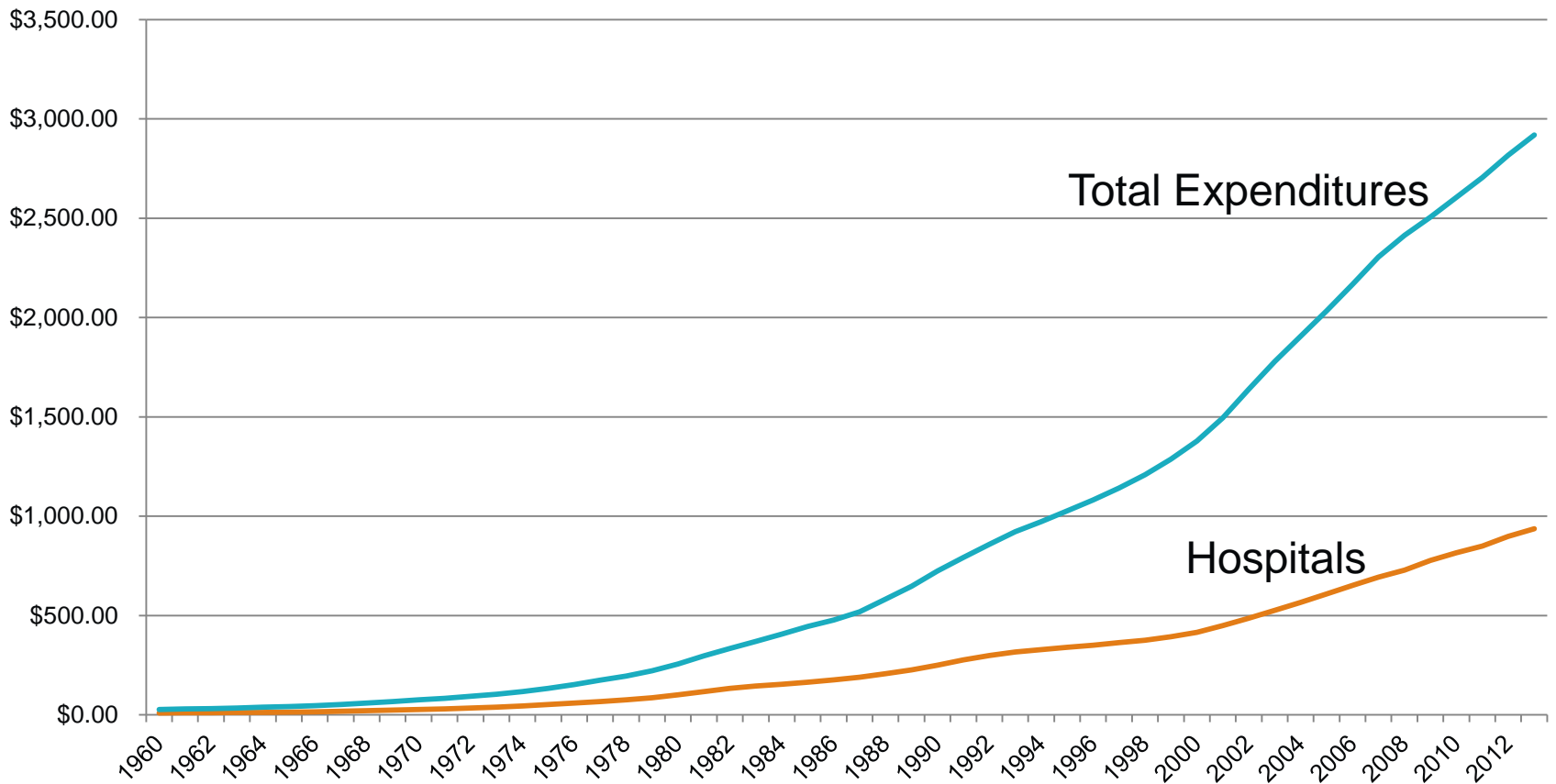


We, as a nation, will strive together to create a culture of health enabling all in our diverse society to lead healthy lives, now and for generations to come.

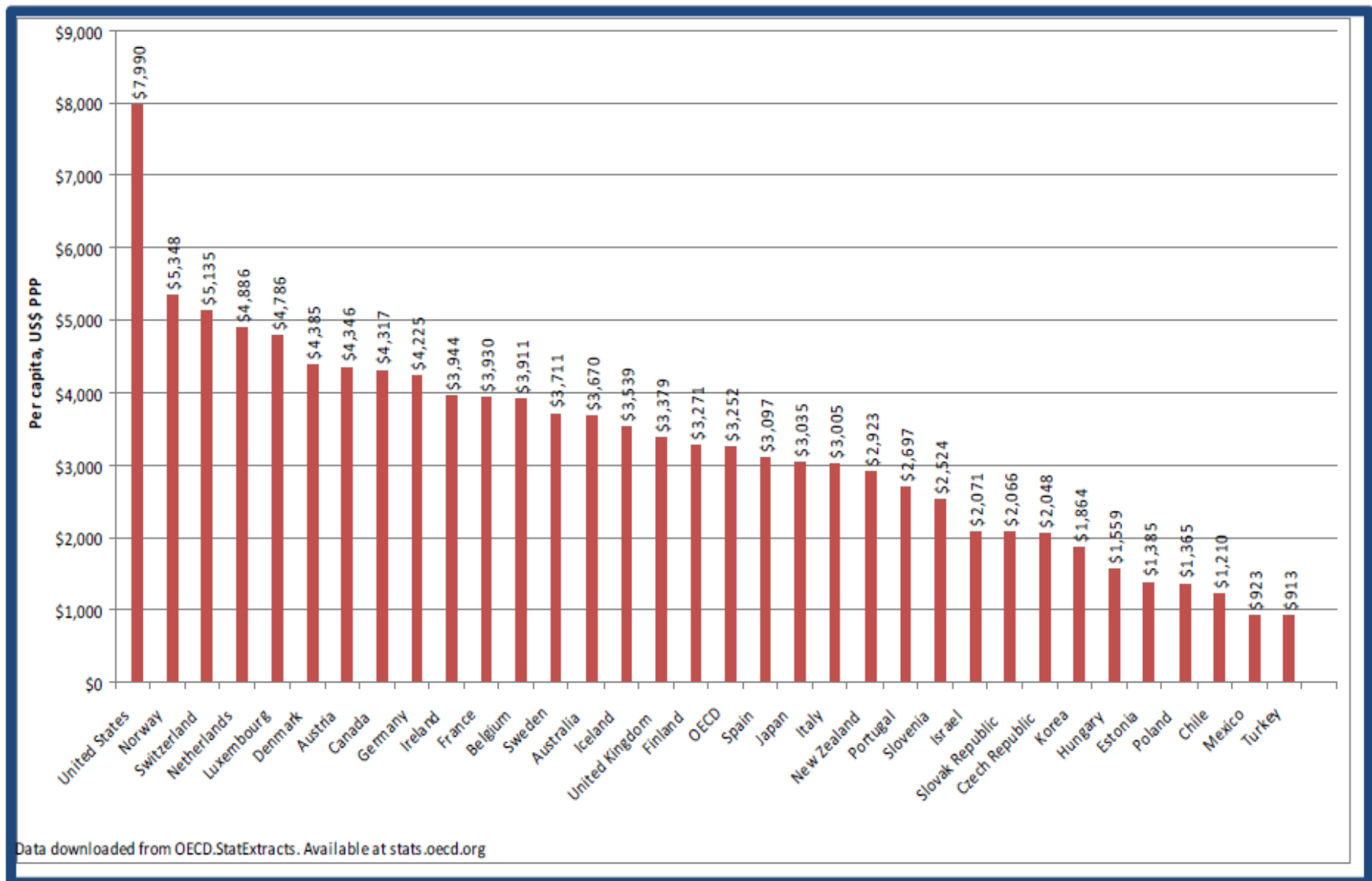


There is more to good health than health *care*. Medical care is important, but where people live, learn, work, and play can significantly influence how long and how well they live.

US Healthcare Expenditures (\$ Billions)

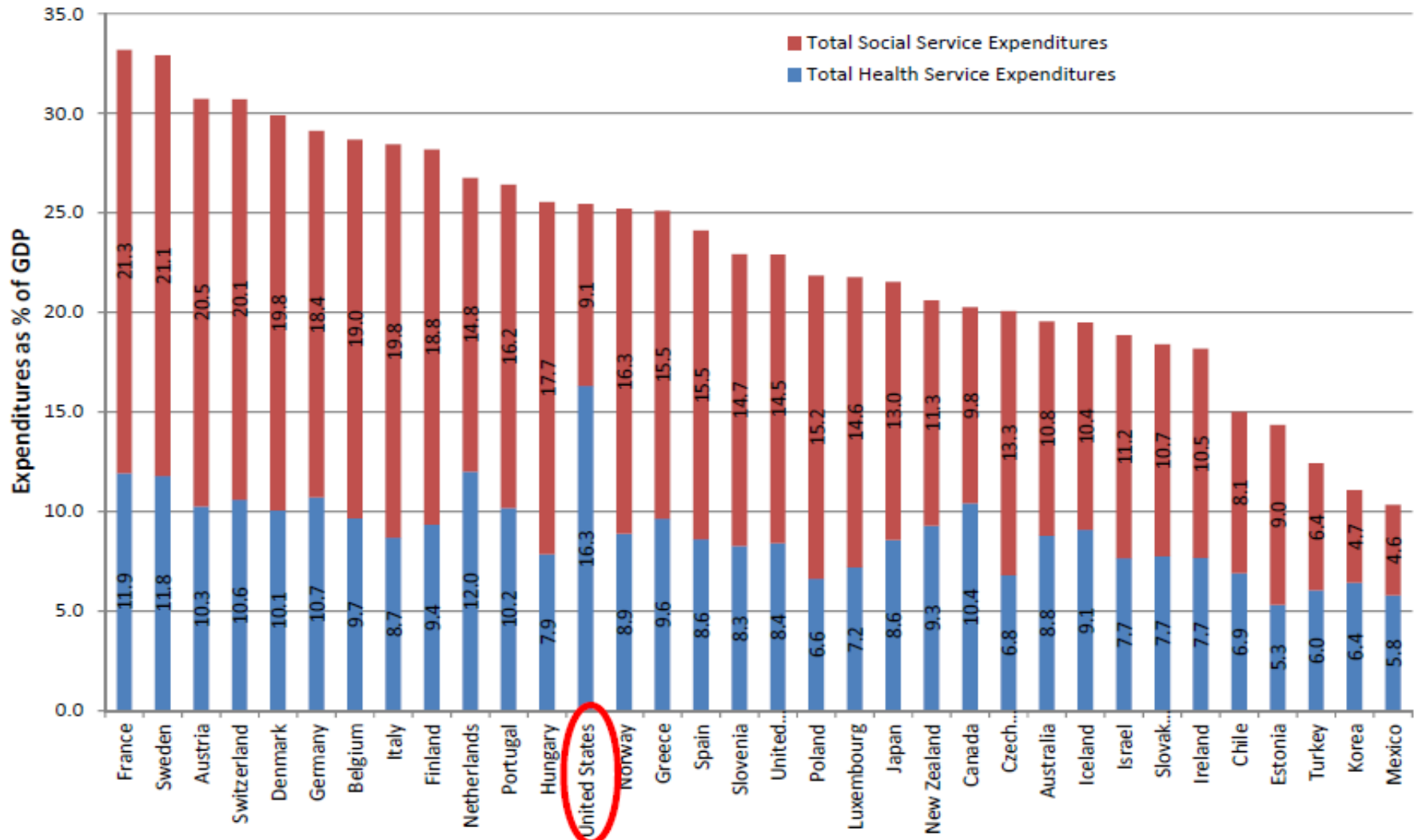


We spend a lot on healthcare



Source: Bradley and Taylor, Academy Health, 2013.

We Spend Differently Than Other Nations



In OECD, for every \$1 spent on health care, about \$2 is spent on social services
 In the US, for \$1 spent on health care, about 55 cents is spent on social services

Spending on Health Makes a Difference

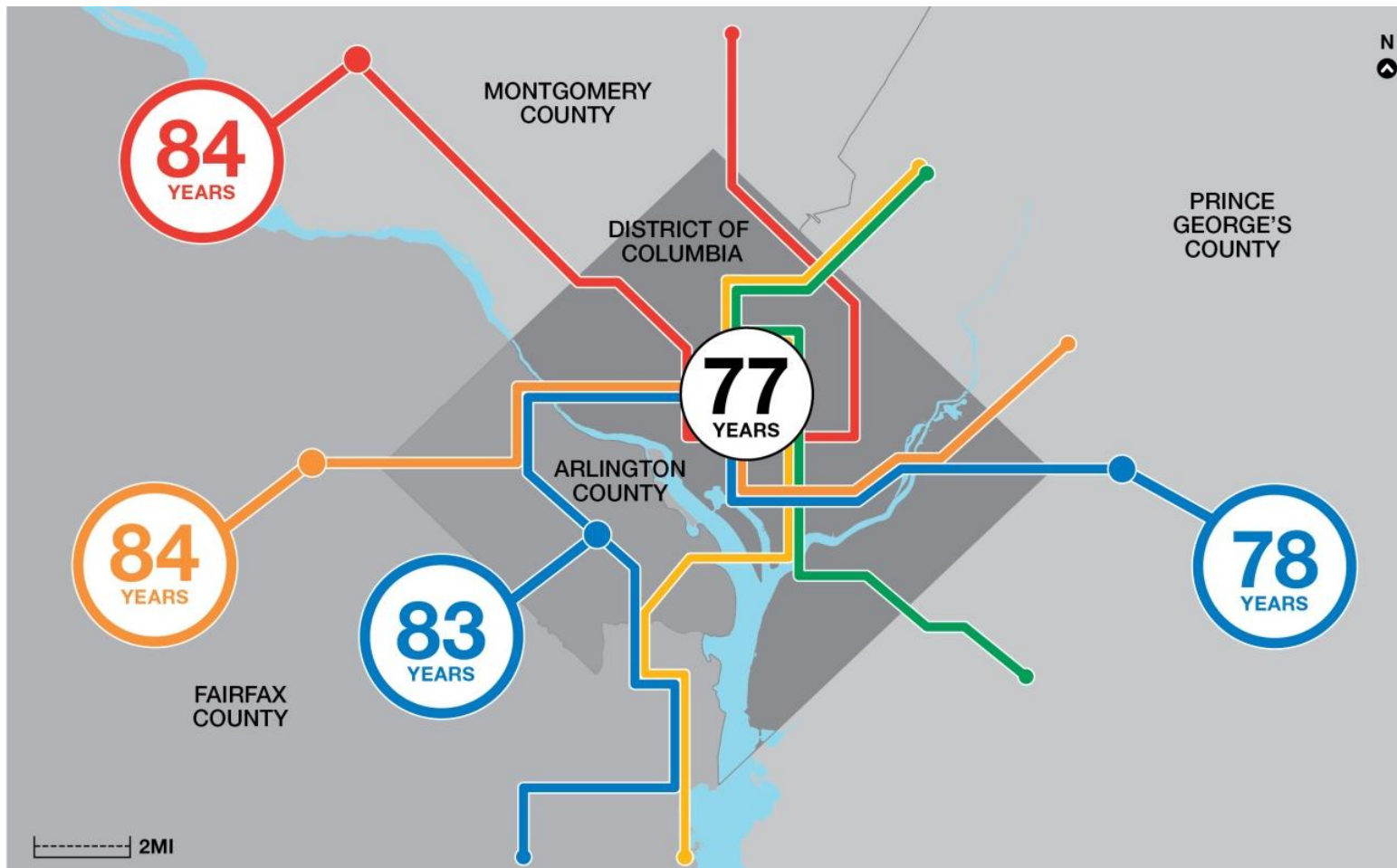
For each \$1 spent on healthcare, other Western nations spend **\$2** on social services; we spend **55 cents**.

The ratio of social to health spending is significantly associated with better health outcomes:

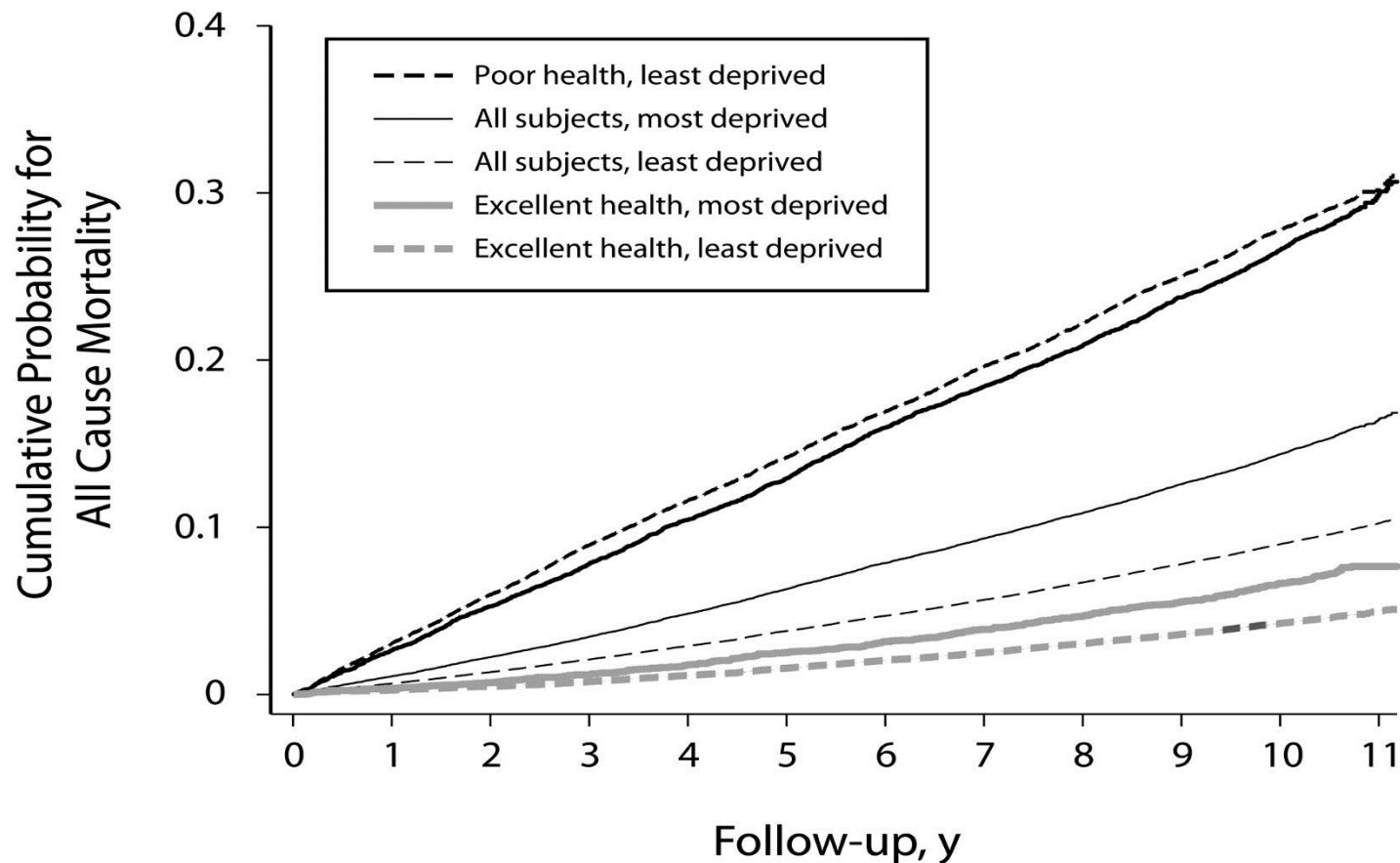
- Lower infant mortality, low birthweight birth, premature death, longer life expectancy
- Not a significant factor in maternal mortality



Short Distances Make Large Differences to Health: Life Expectancy at Birth



Mortality Rate Is Affected by Neighborhood



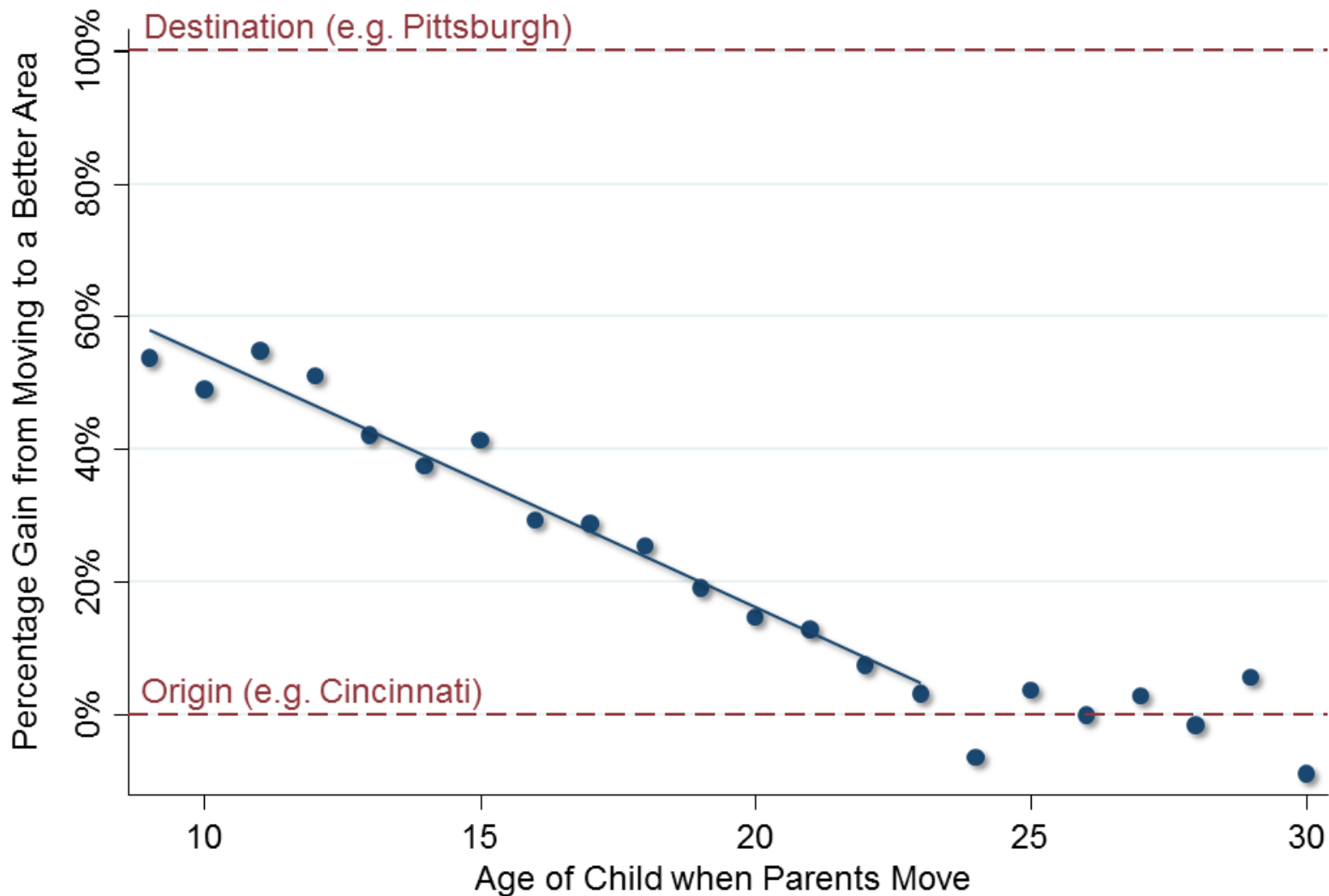
Note. Least deprived is first quintile; most deprived is fifth quintile, adjusted for age, gender, marital status, race/ethnicity, and state of residence health status.

Doubeni, C A, et al. 2012. *AJPH*,102 (4): 680–8.



Childhood Exposure Effects

Each additional year in a better area improves long-term outcomes

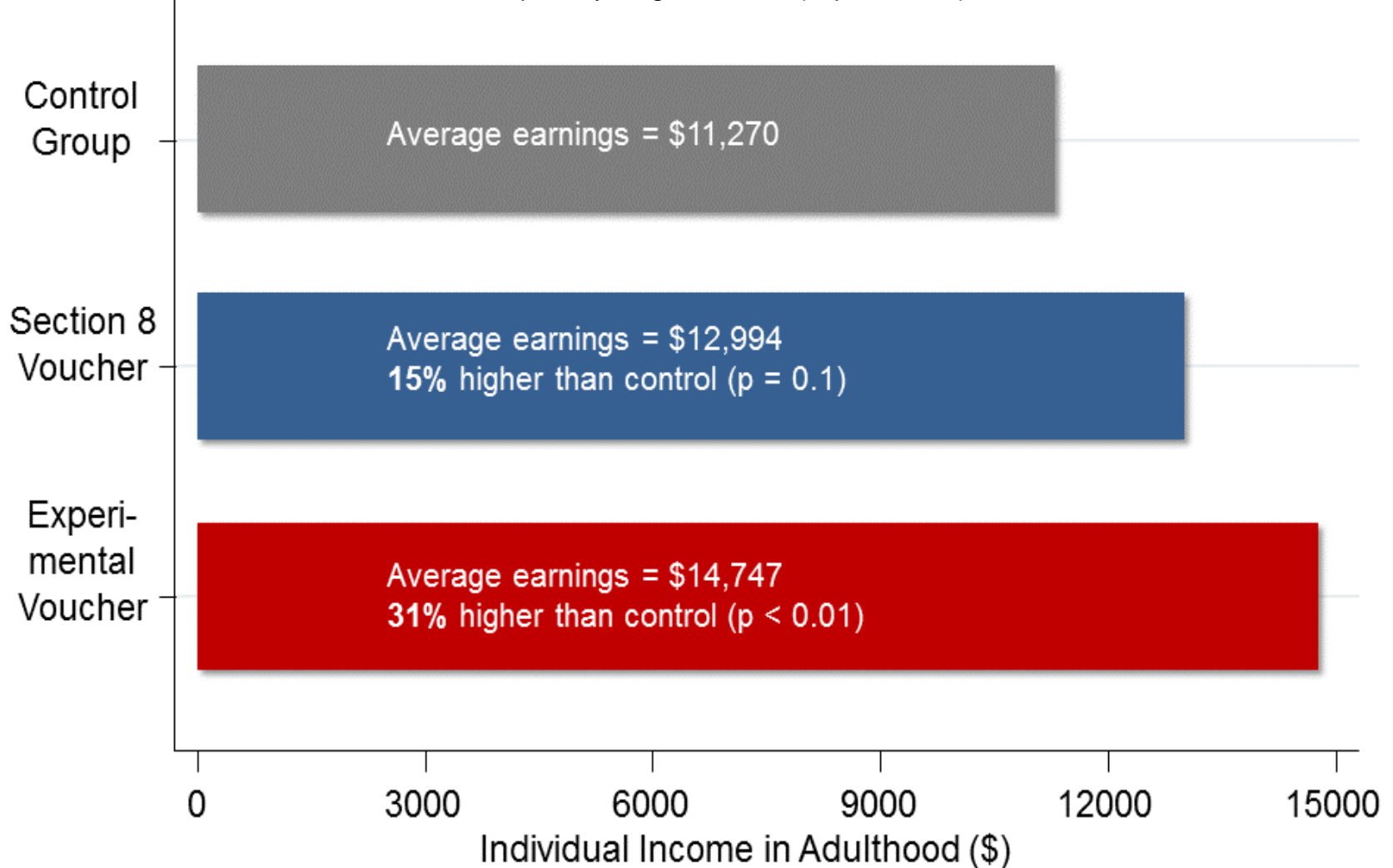


This figure plots the percentage gain from moving to a better area by the age at which the child moves. For example, children who move at age 9 have outcomes that are about 50% between the outcomes of children who grow up permanently in the origin and destination areas.

Cost Effective Policy

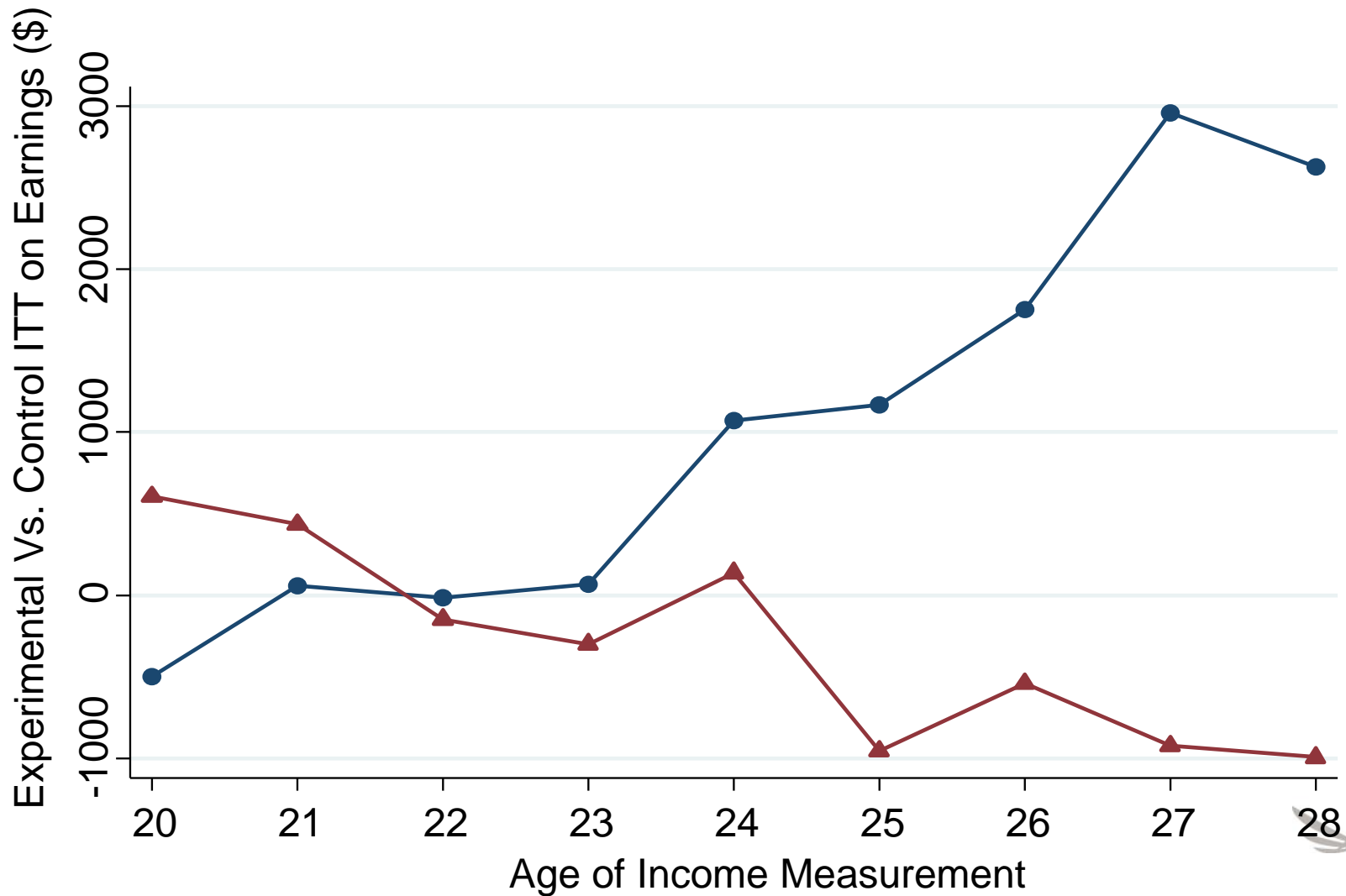
The Moving to Opportunity experiment increased incomes by 31% for children who moved before age 13

This figure shows the average earnings of three groups of children whose families enrolled in the MTO Experiment before they turned 13: those who grew up in public housing projects (Control), those who received standard Section 8 housing vouchers, and those who received vouchers to move to low-poverty neighborhoods (experimental).

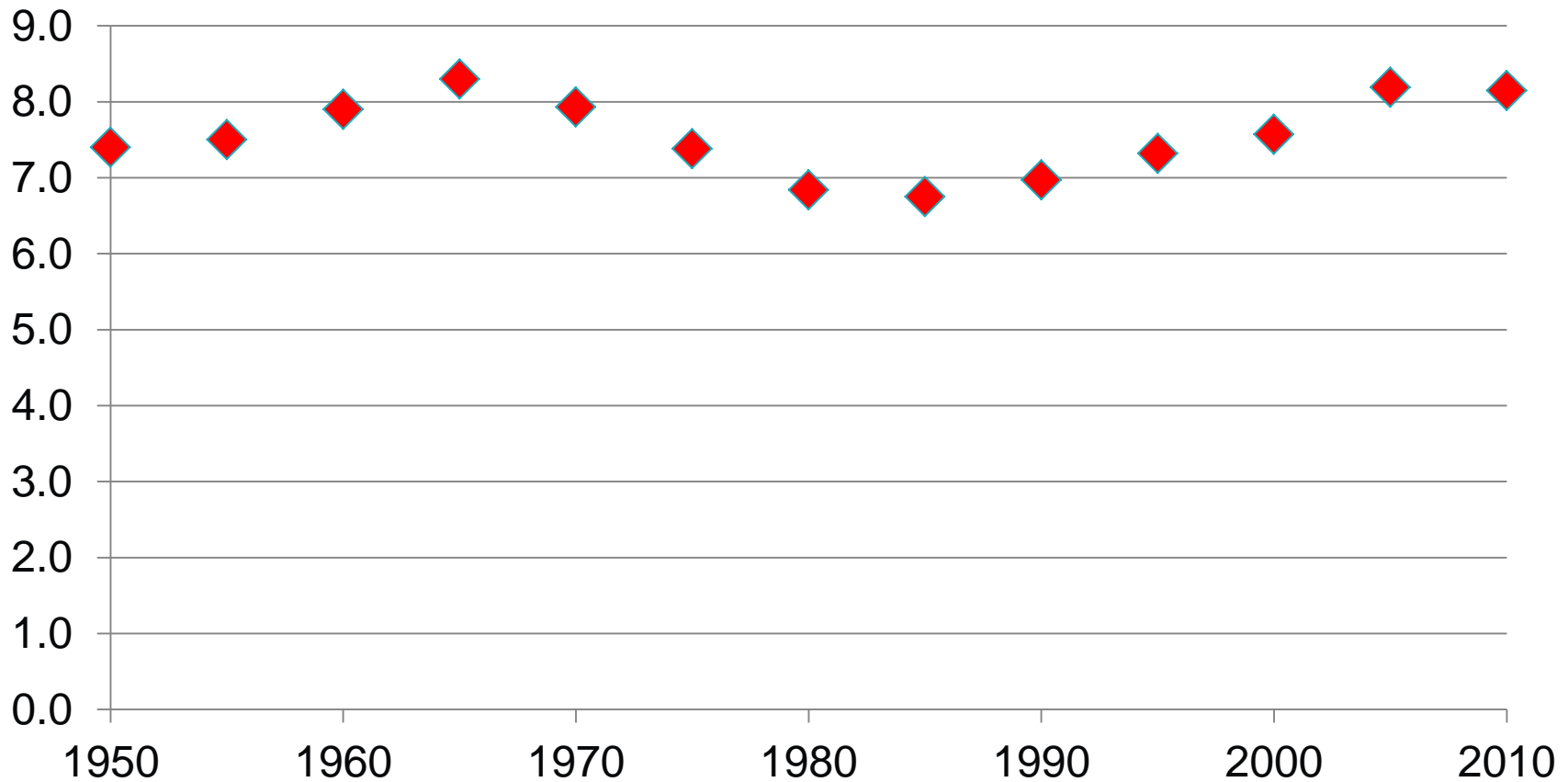


Moving to Opportunity Experiment

Age of Move and Long-Term Earnings



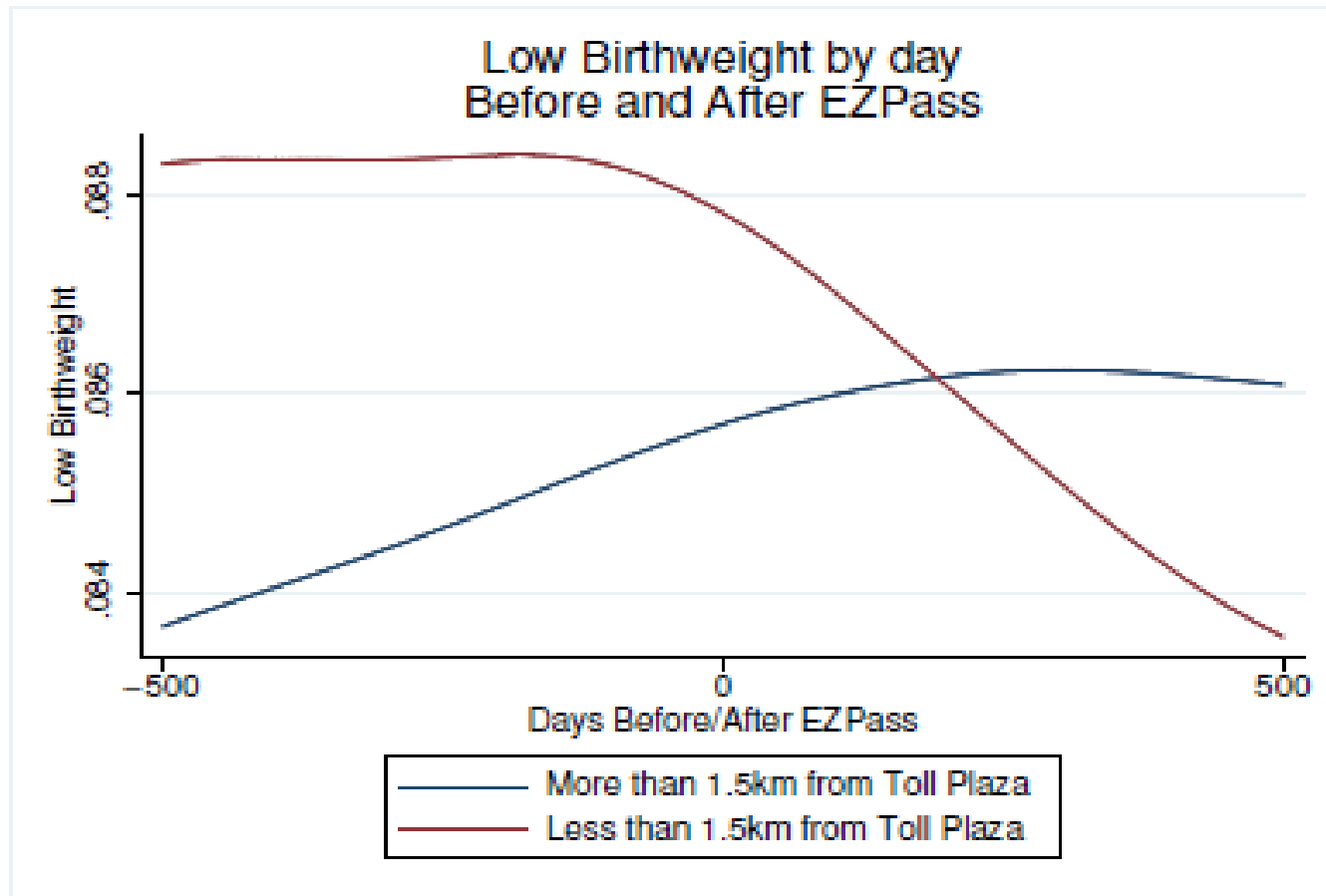
Low Birthweight Birth Rate United States, 1950-2010



CDC, NCHS, HealthUSA.



Figure 5: Low Birthweight by Day: Before and After



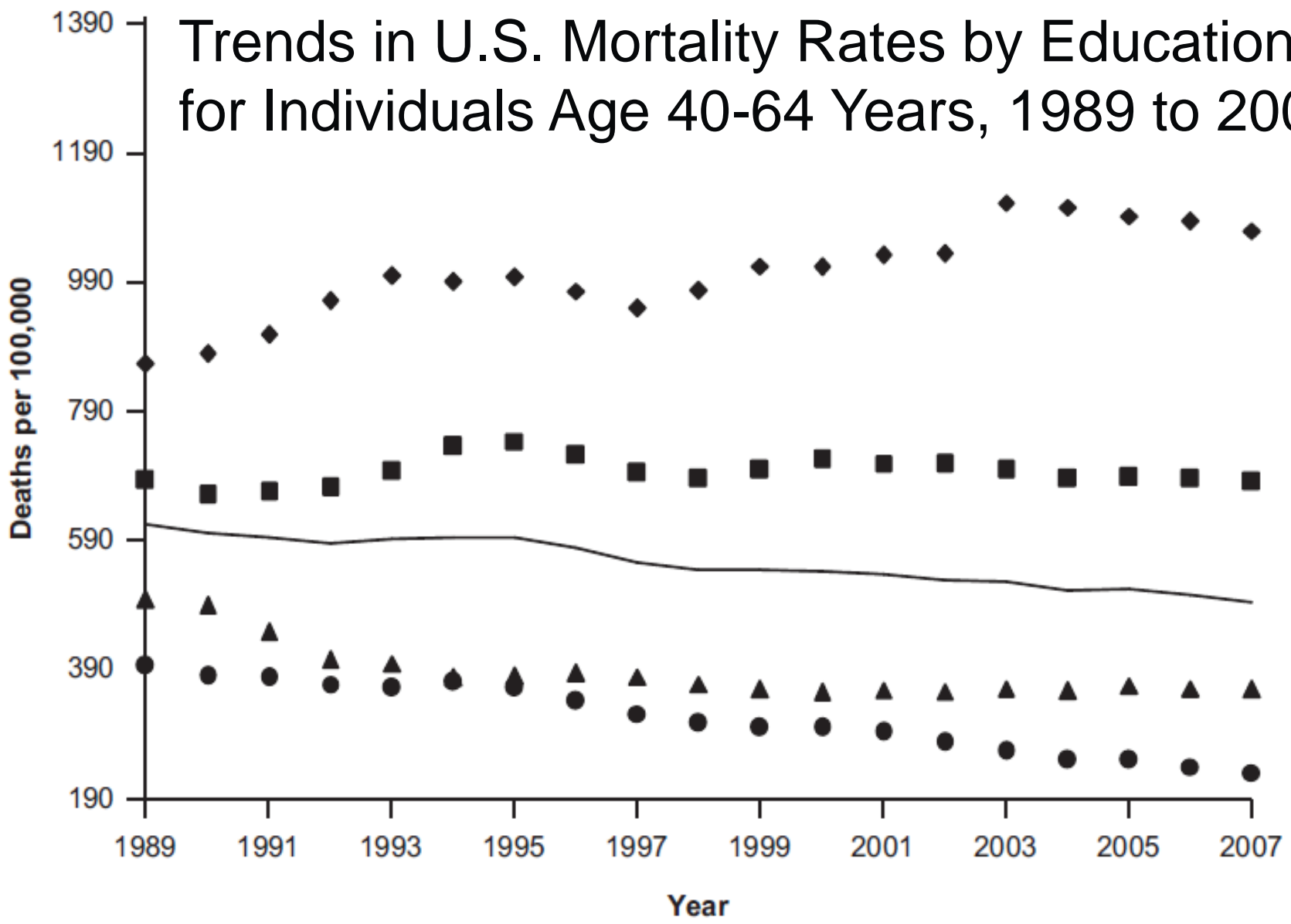
NOTE: Smoothed plots of treatment and control groups using locally weighted regression. The weights are applied using a tricube weighting function (Cleveland 1979) with a bandwidth of 1.

Low Birthweight and Prematurity Declined After E-Zpass in NJ, PA

- **Among families living within 2 kilometers of expressway toll booths, premature births fell by between 6.7 percent and 9.2 percent after the installation of E-ZPass tolling systems.**
- **The incidence of low birth weight fell by between 8.5 percent and 11.3 percent.**
- **Reducing traffic congestion with open-road tolling limits pollution and contributes to better infant health—and saves \$440 million in health care costs.**

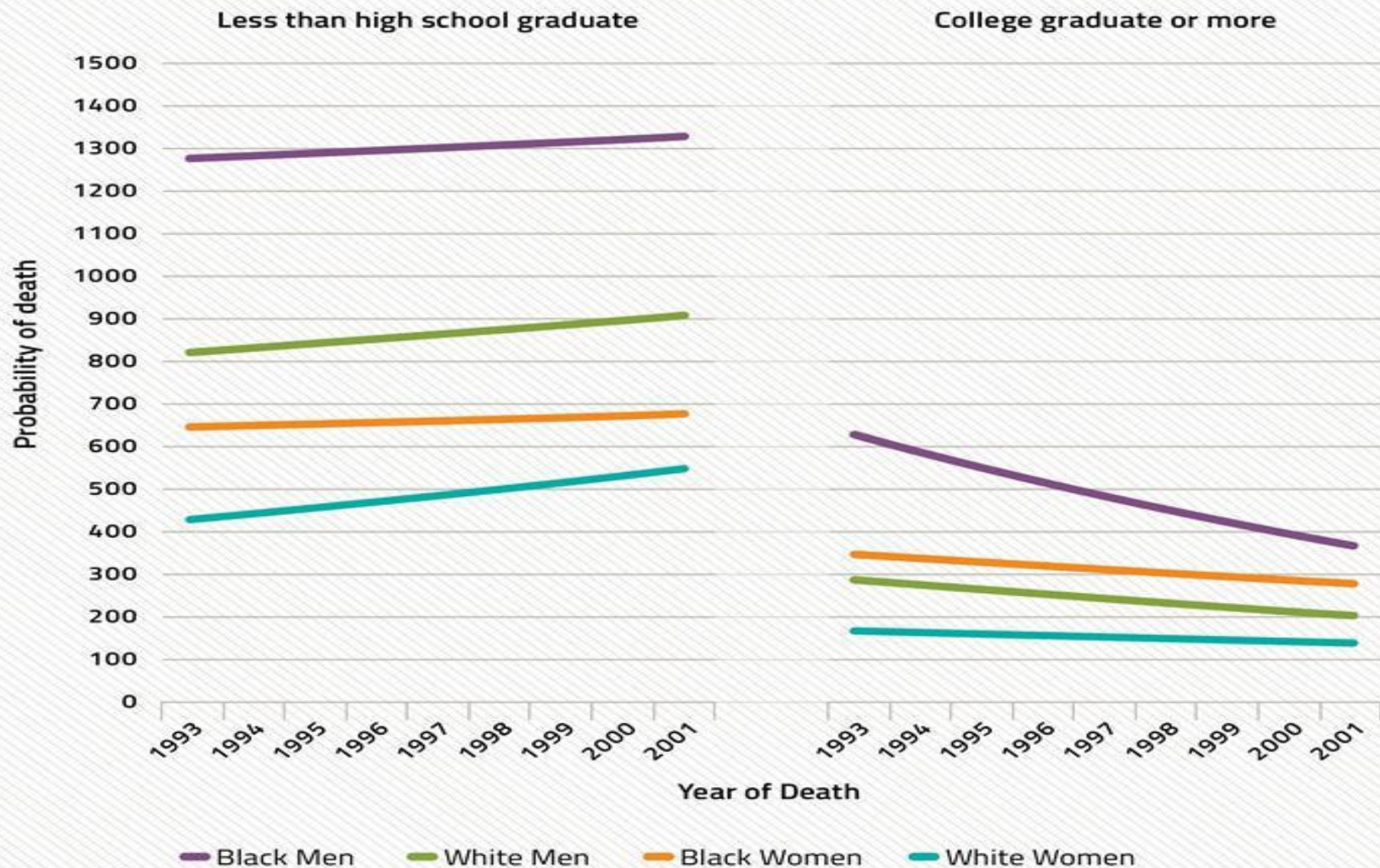


Trends in U.S. Mortality Rates by Education for Individuals Age 40-64 Years, 1989 to 2007



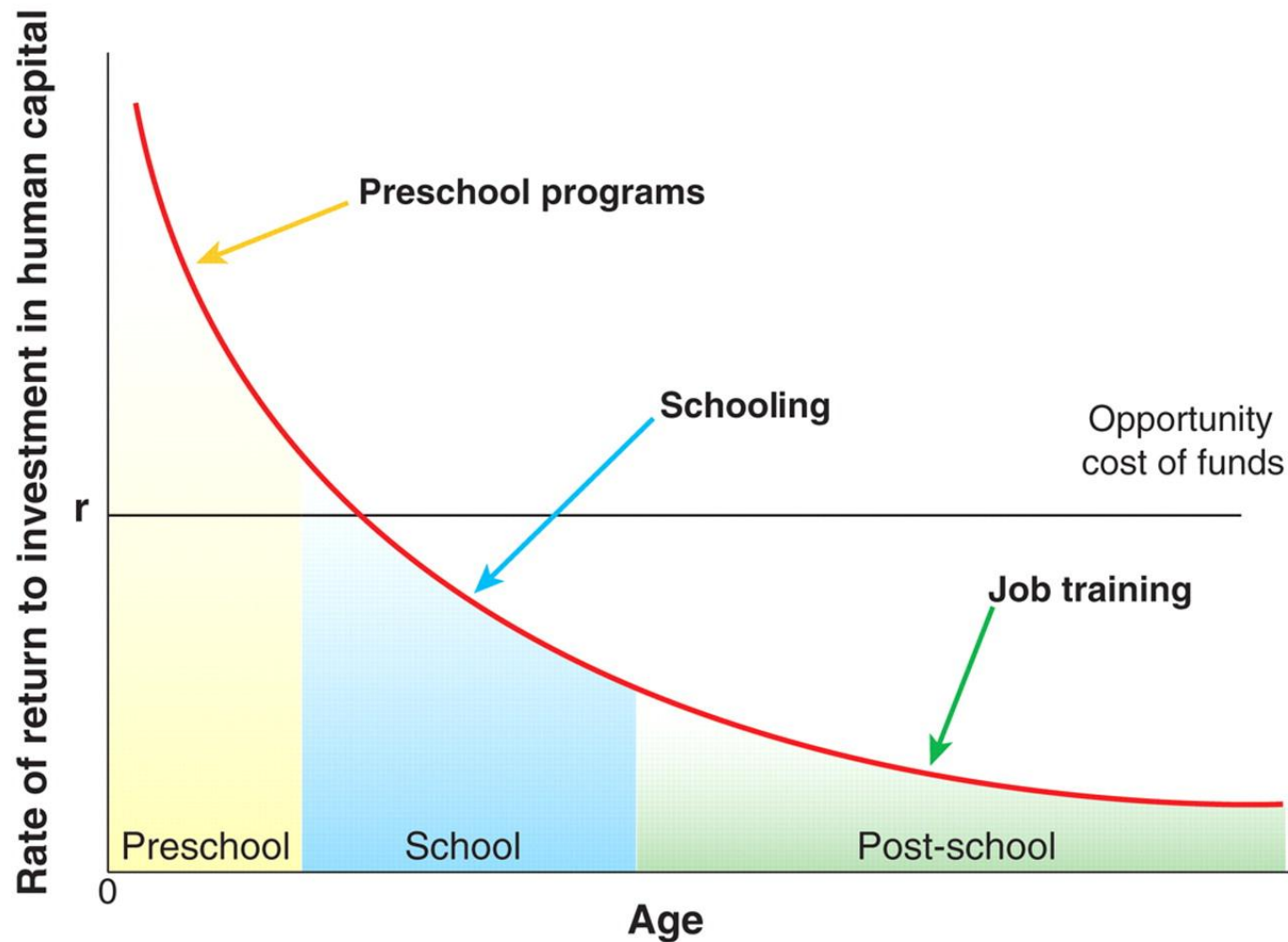
◆ Less than 12 years educ. ■ 12 years educ. ▲ 13-15 years educ. ● 16+ years educ. — Overall trend

Death rates by educational attainment, 1993–2001

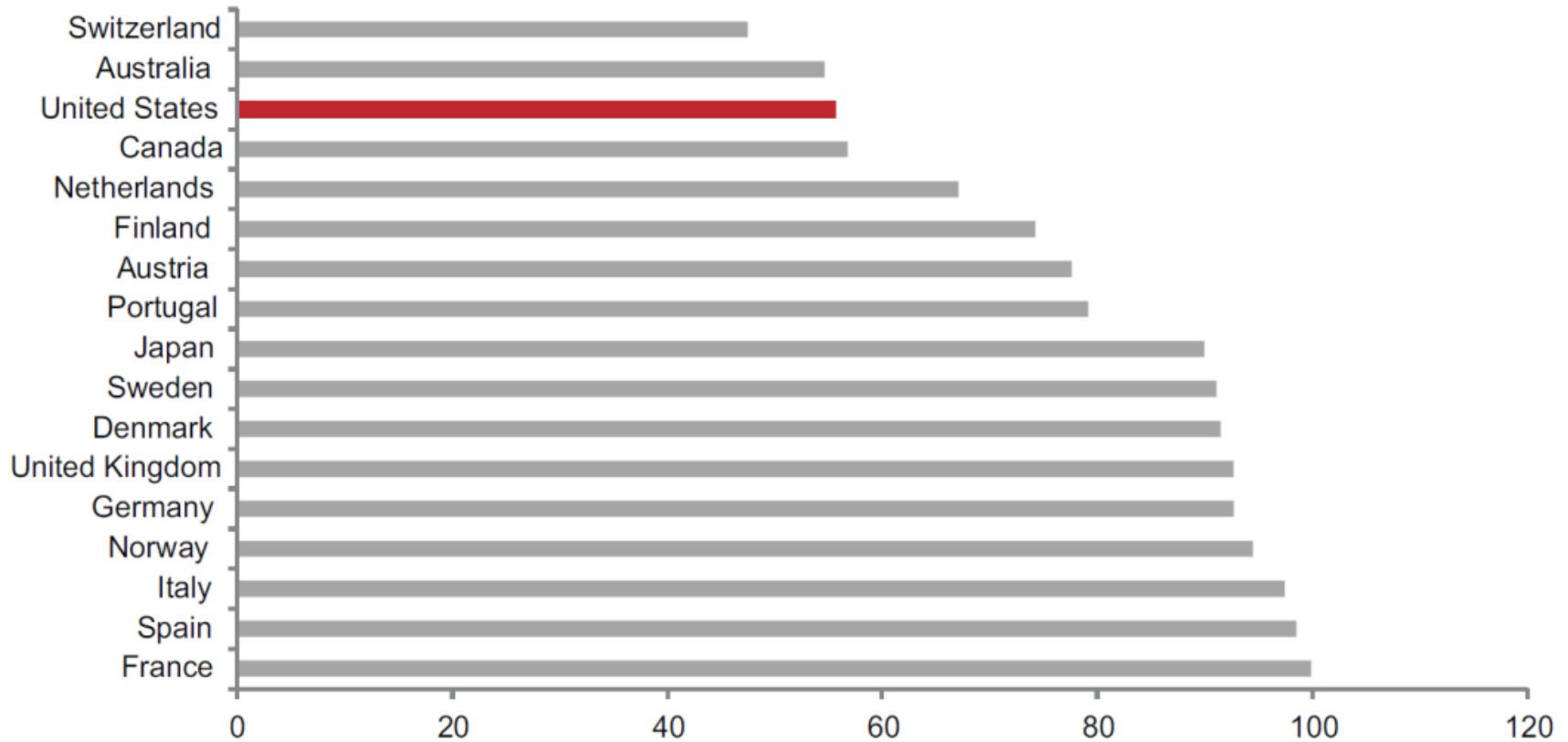


Death rates increased for those with less than a high school education. Data age-standardized for adults age 25-64 years. Reprinted from Jemal et al. Widening of socioeconomic inequalities in U.S. death rates, 1993-2001. PLoS One. 2008;3:e2181.

Rates of Return to Human Capital Investment in Disadvantaged Children



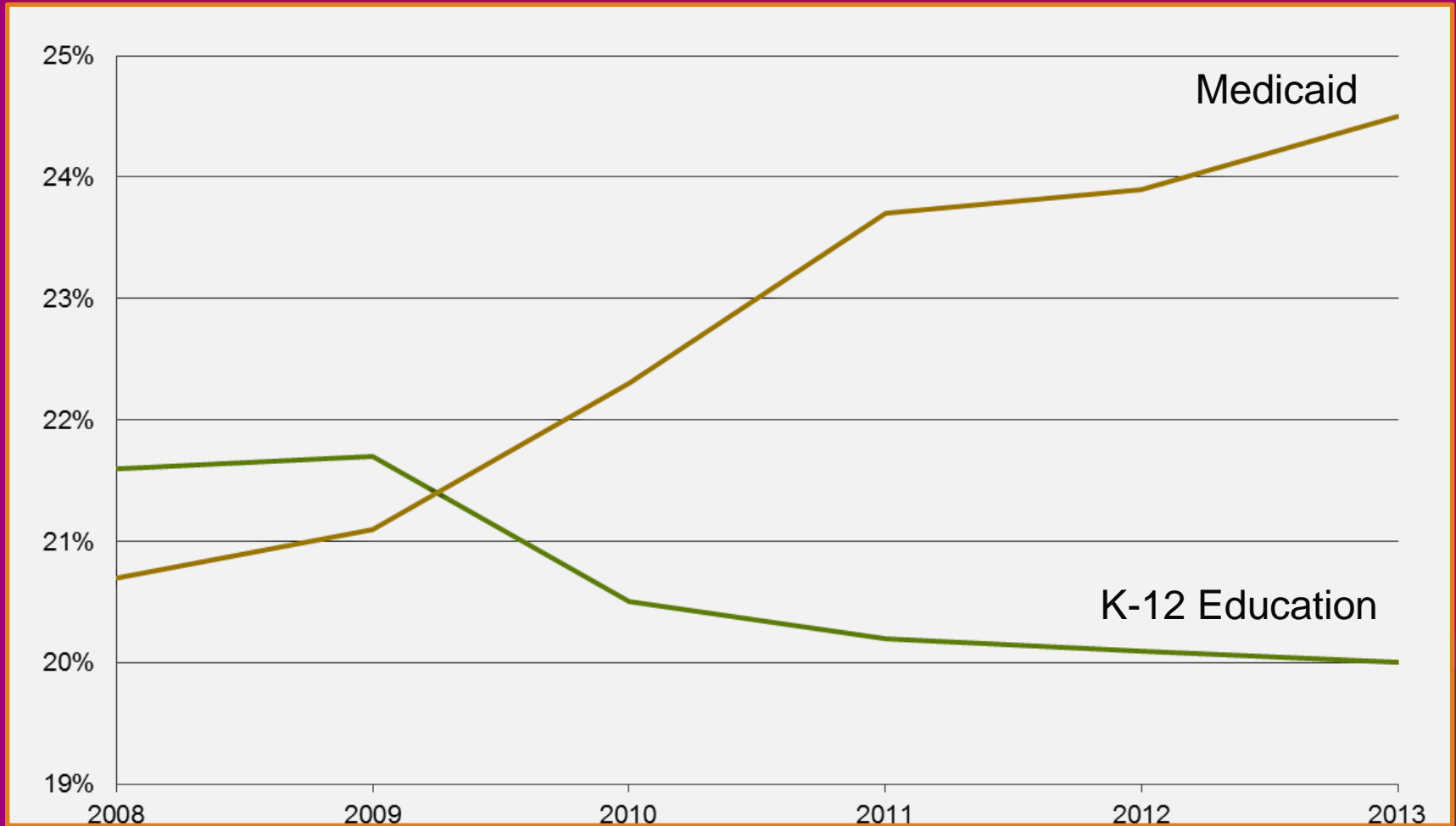
Proportion of Children in Preschool



Source: OECD, 2008



State Expenditures on Medicaid and K-12 Education as Percentage of Total, 2008-2013



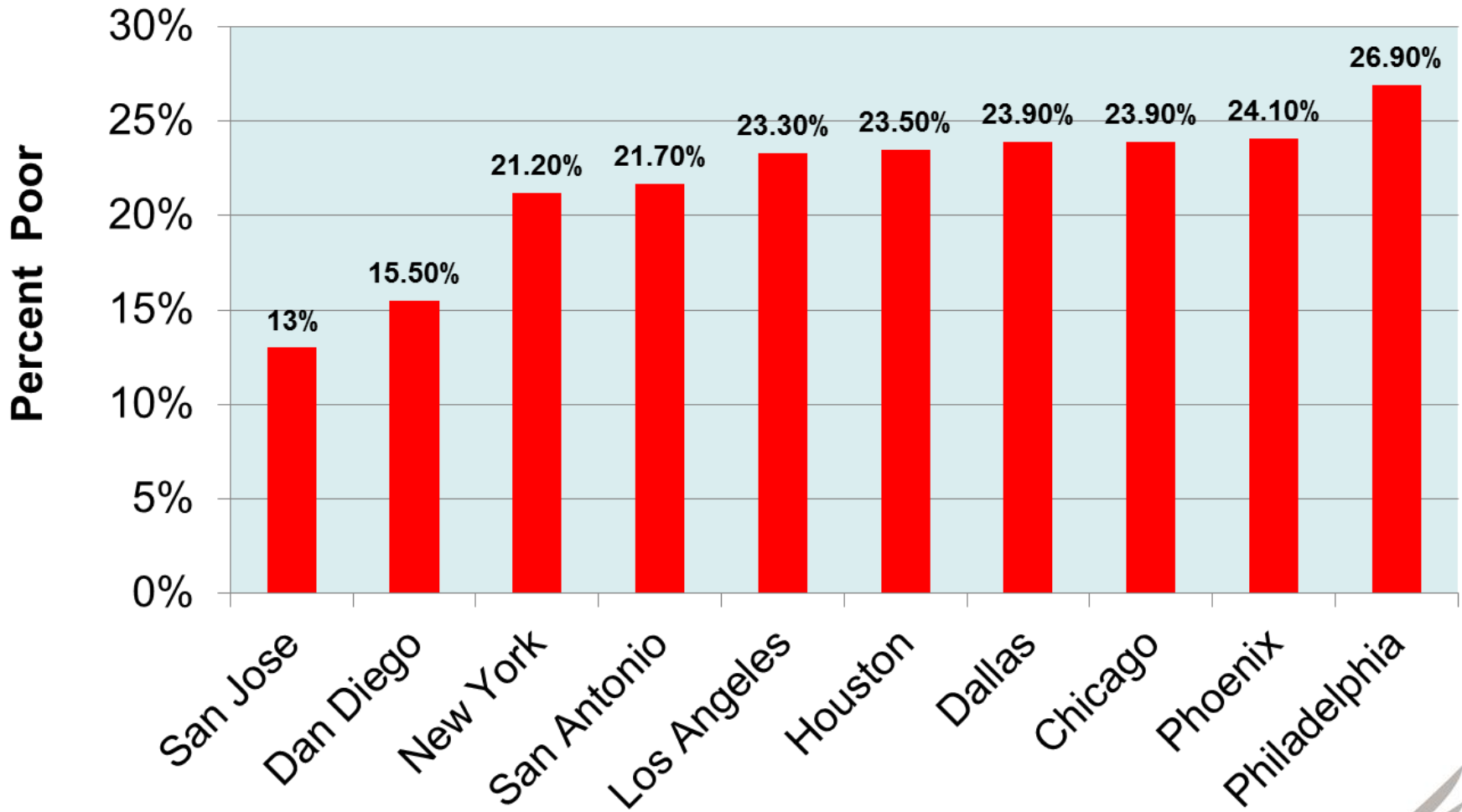
Source: NASBO State Expenditure Reports

Building Healthy Communities

The Philadelphia Story



Poverty Rate for Largest US Cities, 2012



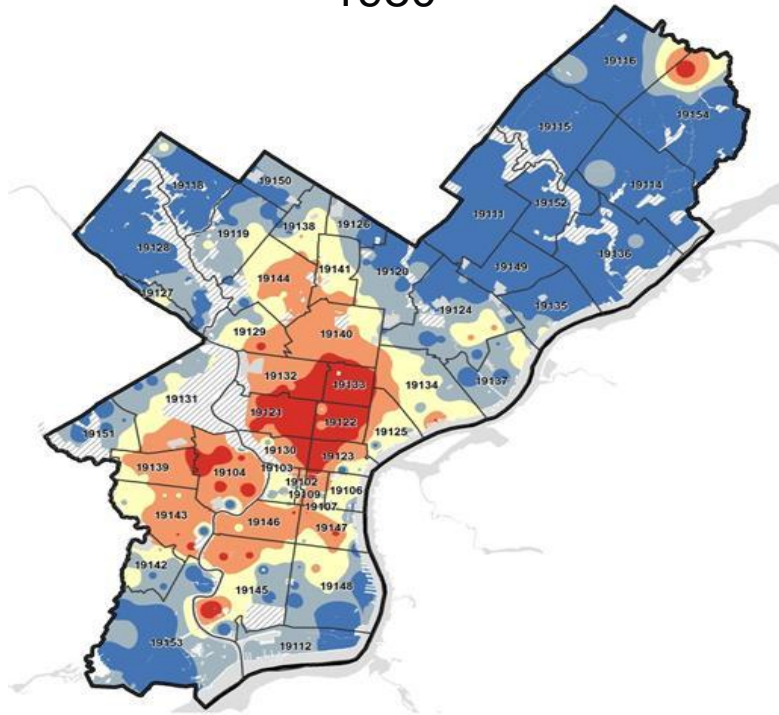
Source: US Census Bureau, American Community Survey, 2012



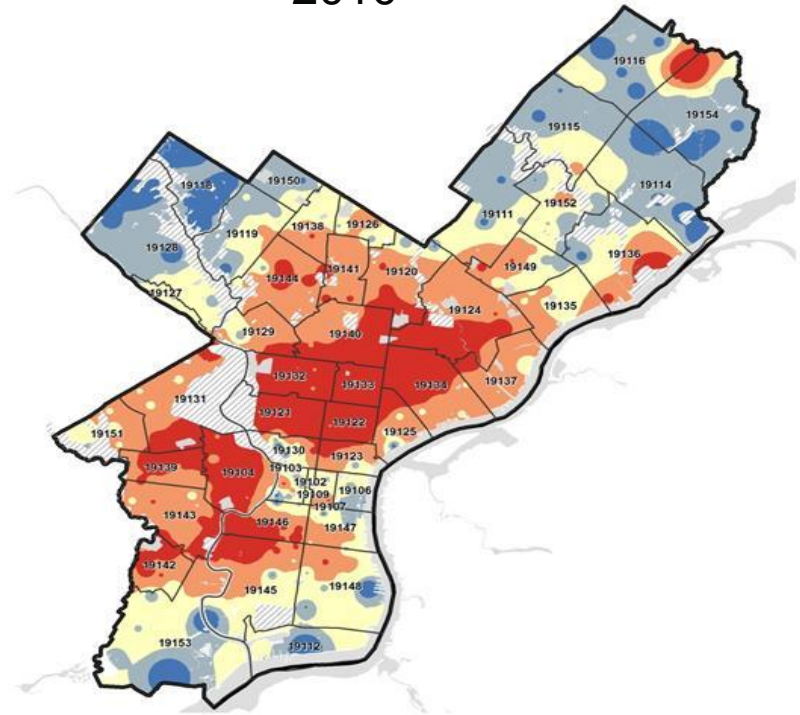
Philadelphia Poverty Rates

PERCENT OF POPULATION LIVING BELOW POVERTY
[RATIO TO POVERTY LEVEL]

1980



2010



% below poverty level

<10%

11-15%

16%-24%

24%-40%

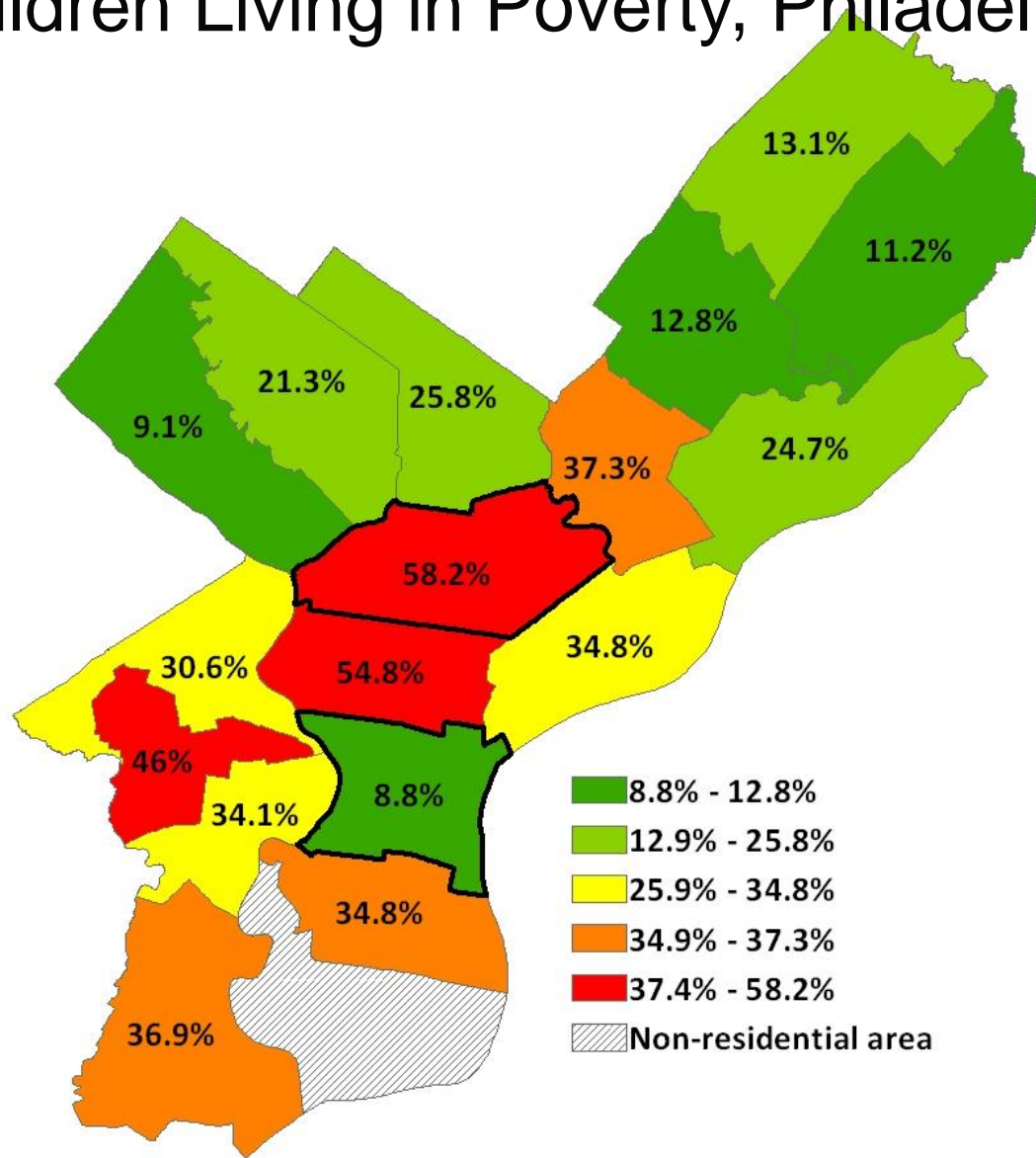
>40%

Data Sources:

1980 Ratio to Poverty, 1980 Decennial Census, SF3 P88 from National Historical Geographic Information System.

2010 Ratio to Poverty, American Community Survey, 2006-2010 5yr Estimate, C17002.

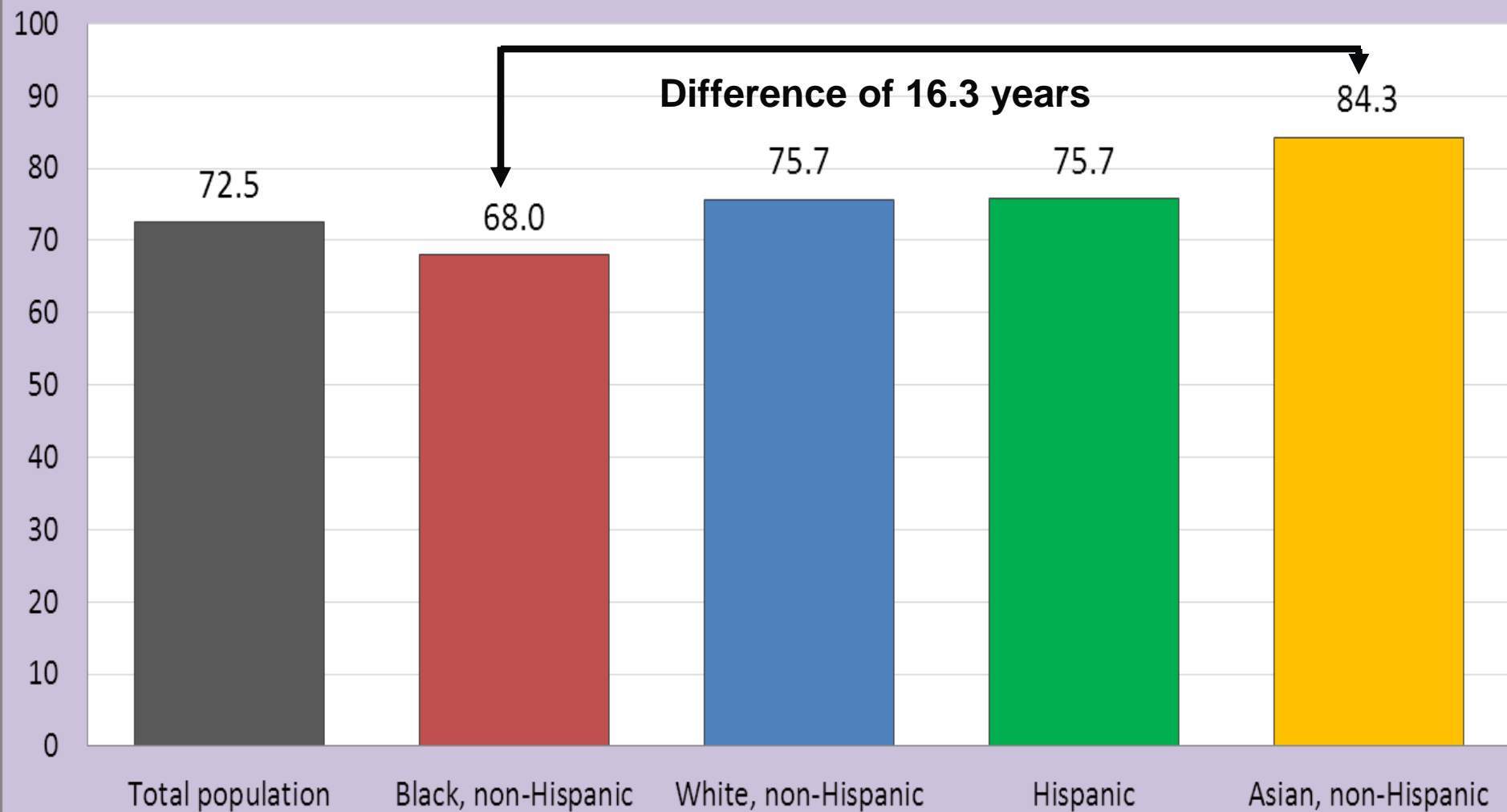
Children Living in Poverty, Philadelphia, 2011



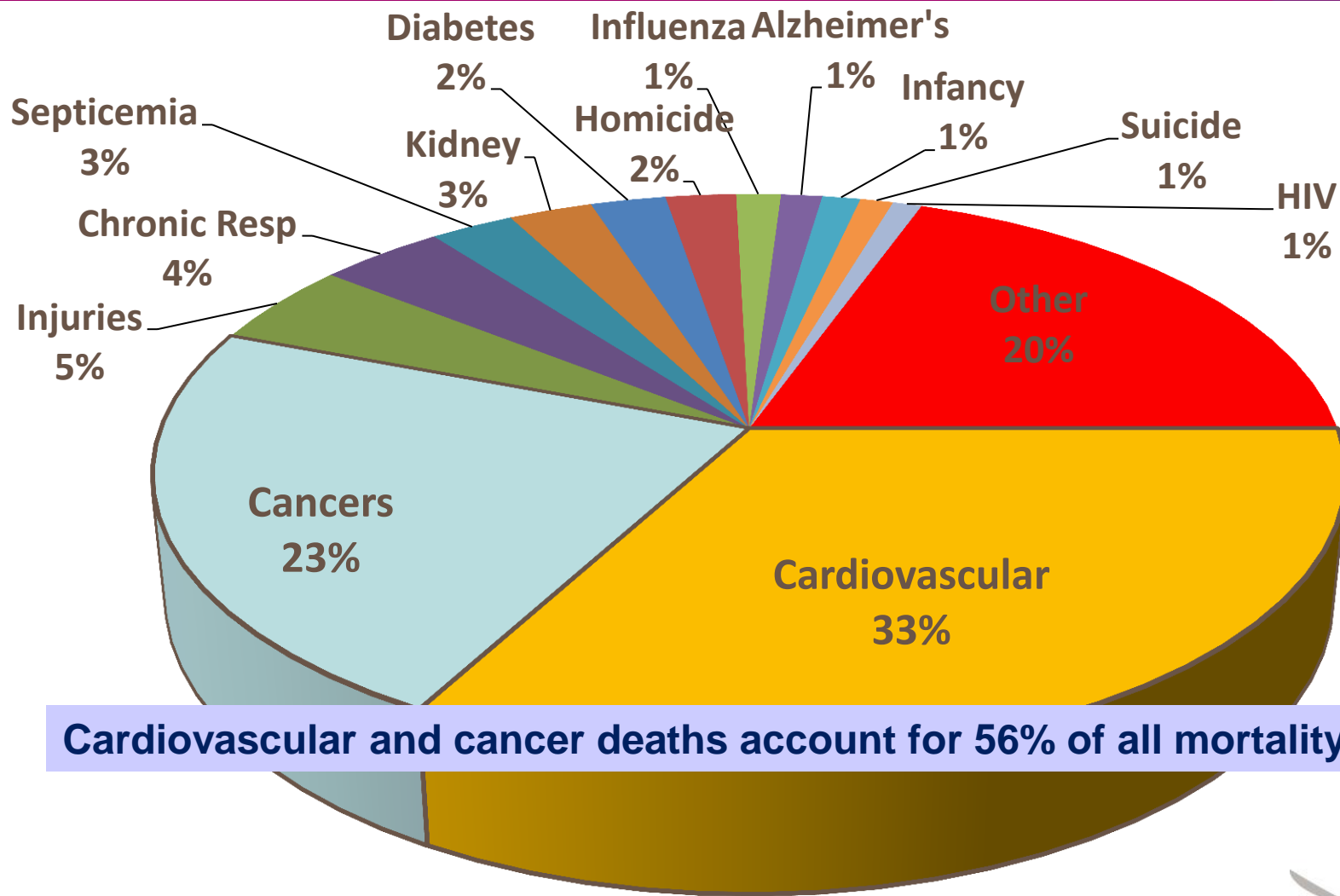
Source: American Community Survey, 2007-2011

Life Expectancy

Males, Philadelphia, 2011

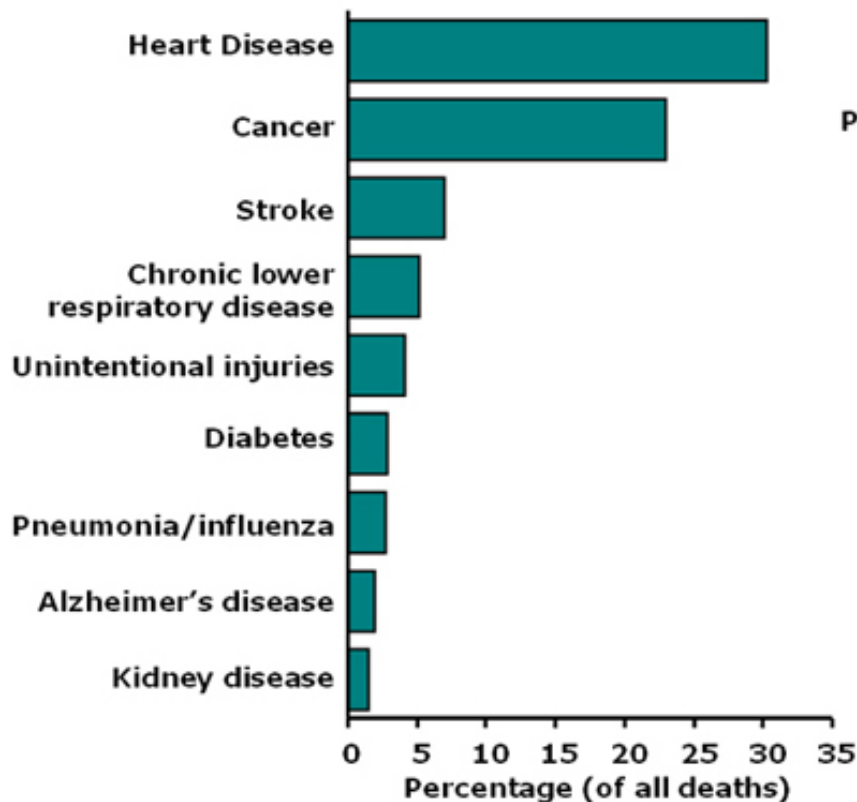


Leading Causes of Death Philadelphia, 2010

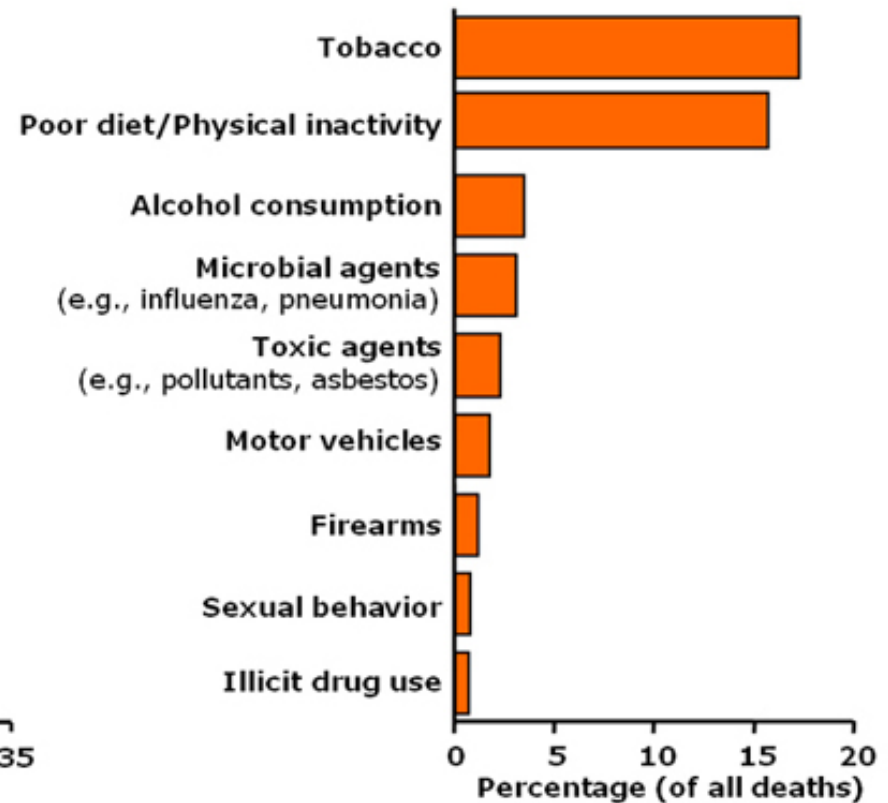


Leading vs. Actual Causes of Death: 2000

Leading Causes of Death*
United States, 2000



Actual Causes of Death†
United States, 2000

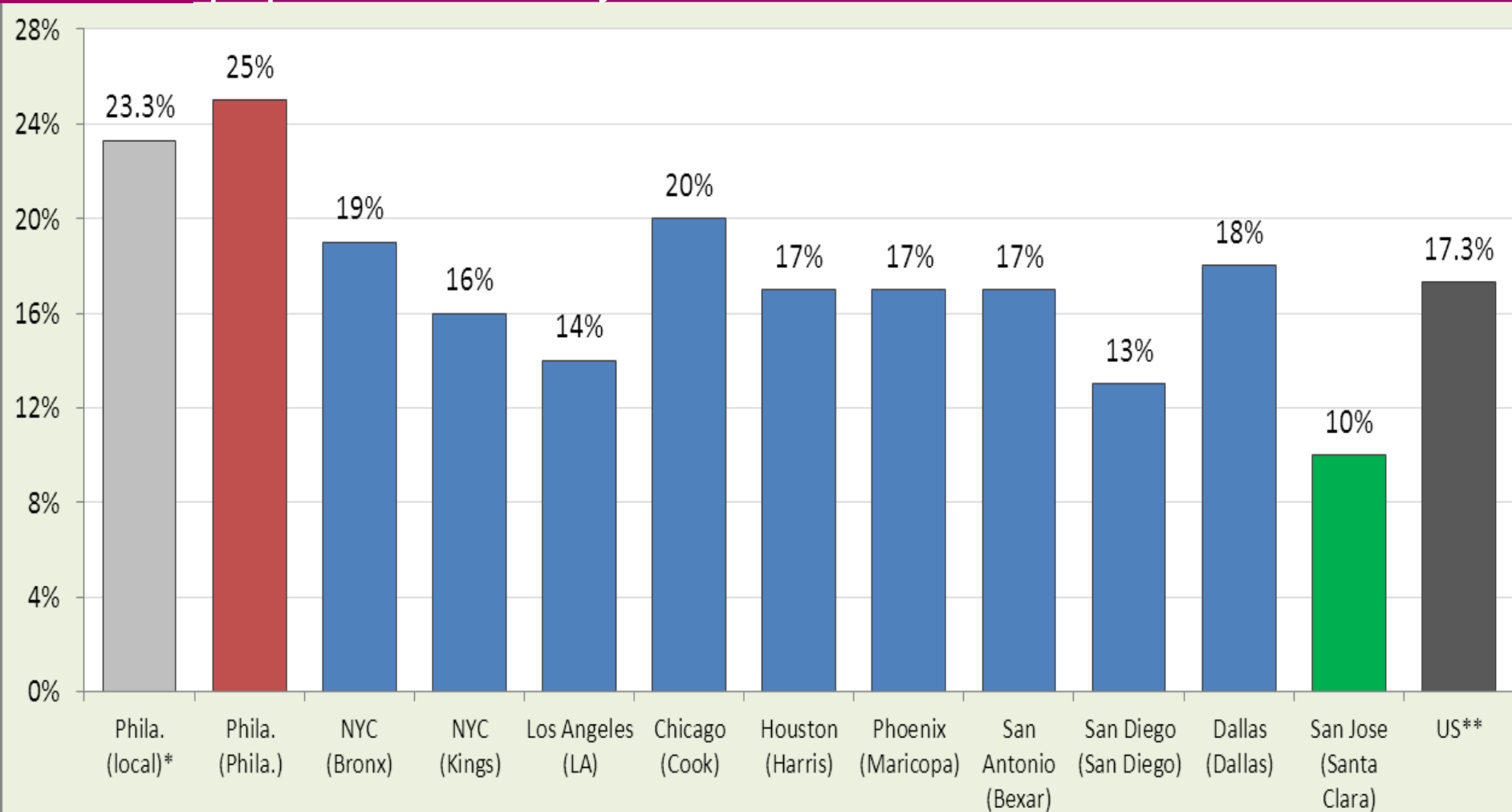


* Miniño AM, Arias E, Kochanek KD, Murphy SL, Smith BL. Deaths: final data for 2000. National Vital Statistics Reports 2002; 50(15):1-120.

† Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Actual causes of death in the United States, 2000. JAMA. 2004;291(10):1238-1246.

Adult Smoking

Counties with More Than 1 million people and highest population density*



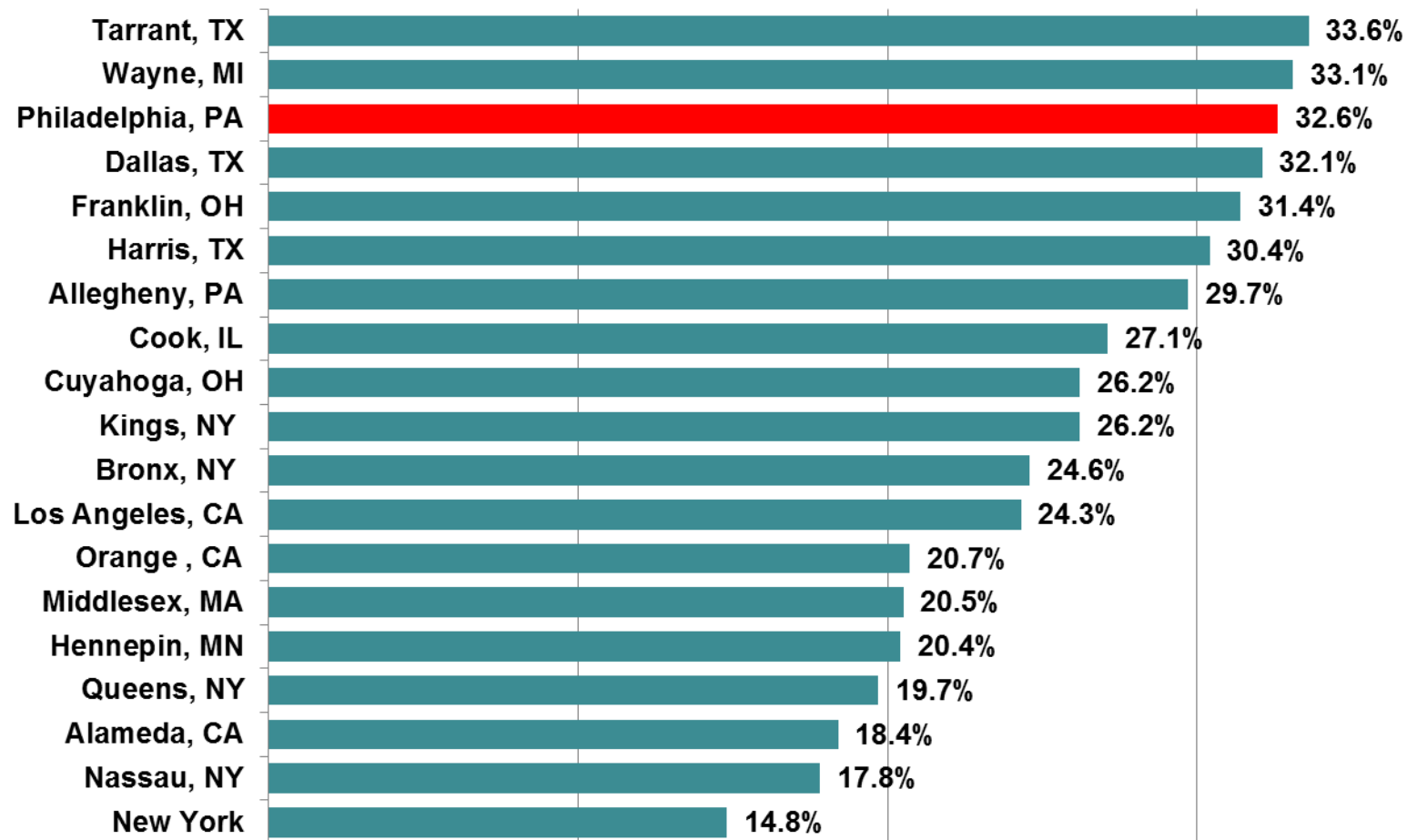
Source: Behavioral Risk Factor Surveillance System, 2004-2010

*Local source: Public Health Management Corporation (PHMC) Household Health Survey, 2012

**US source: Behavioral Risk Factor Surveillance System, 2010

Adult Obesity

Counties with More Than 1 million people and highest population density*

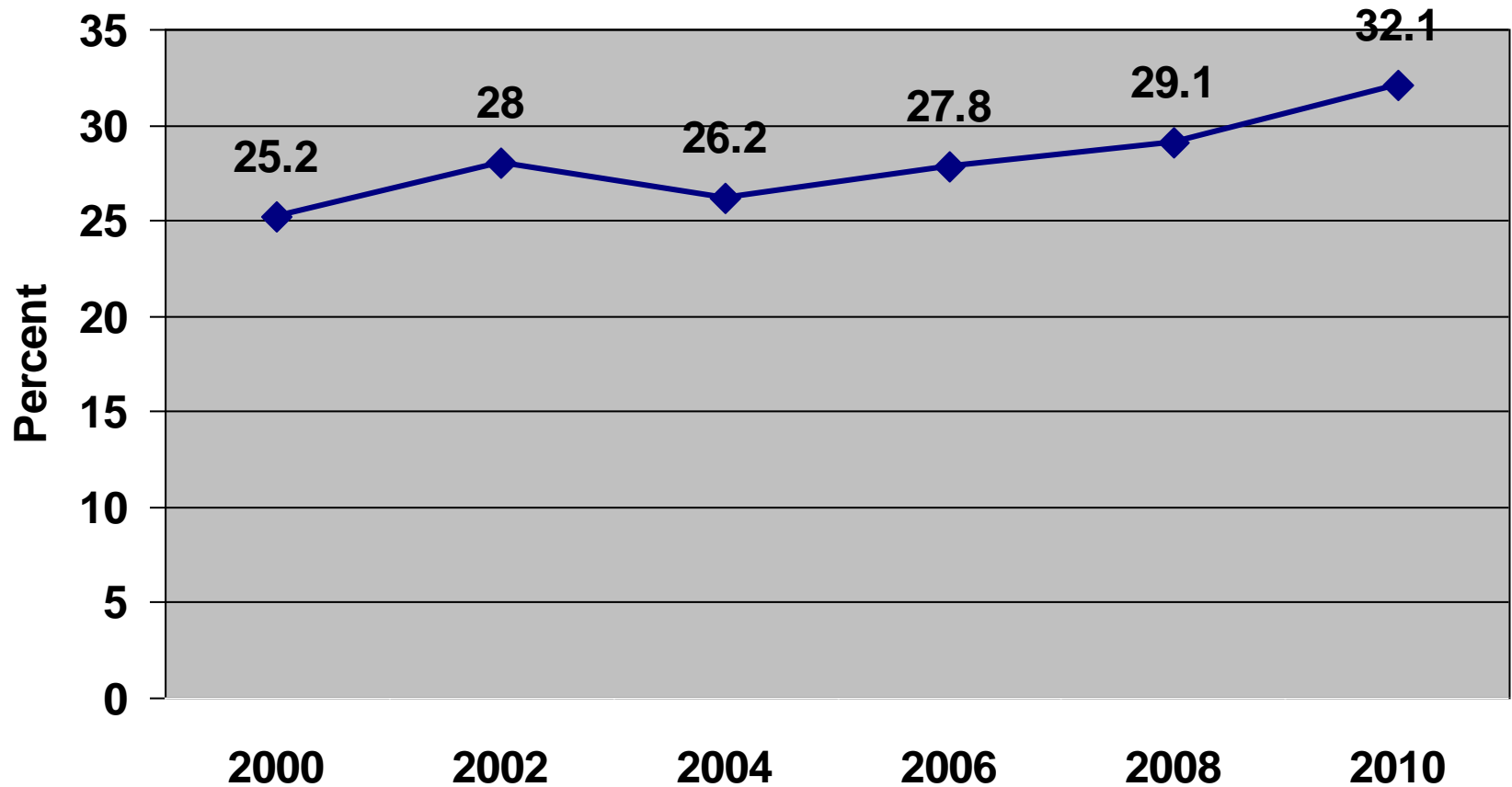


* Data for counties with > 1 million people and population density > 1,500 people per square mile. Data for Fairfax Co, VA are not available.

Source: 2010 Census and Behavioral Risk Factor Surveillance System.



Adult Obesity Philadelphia

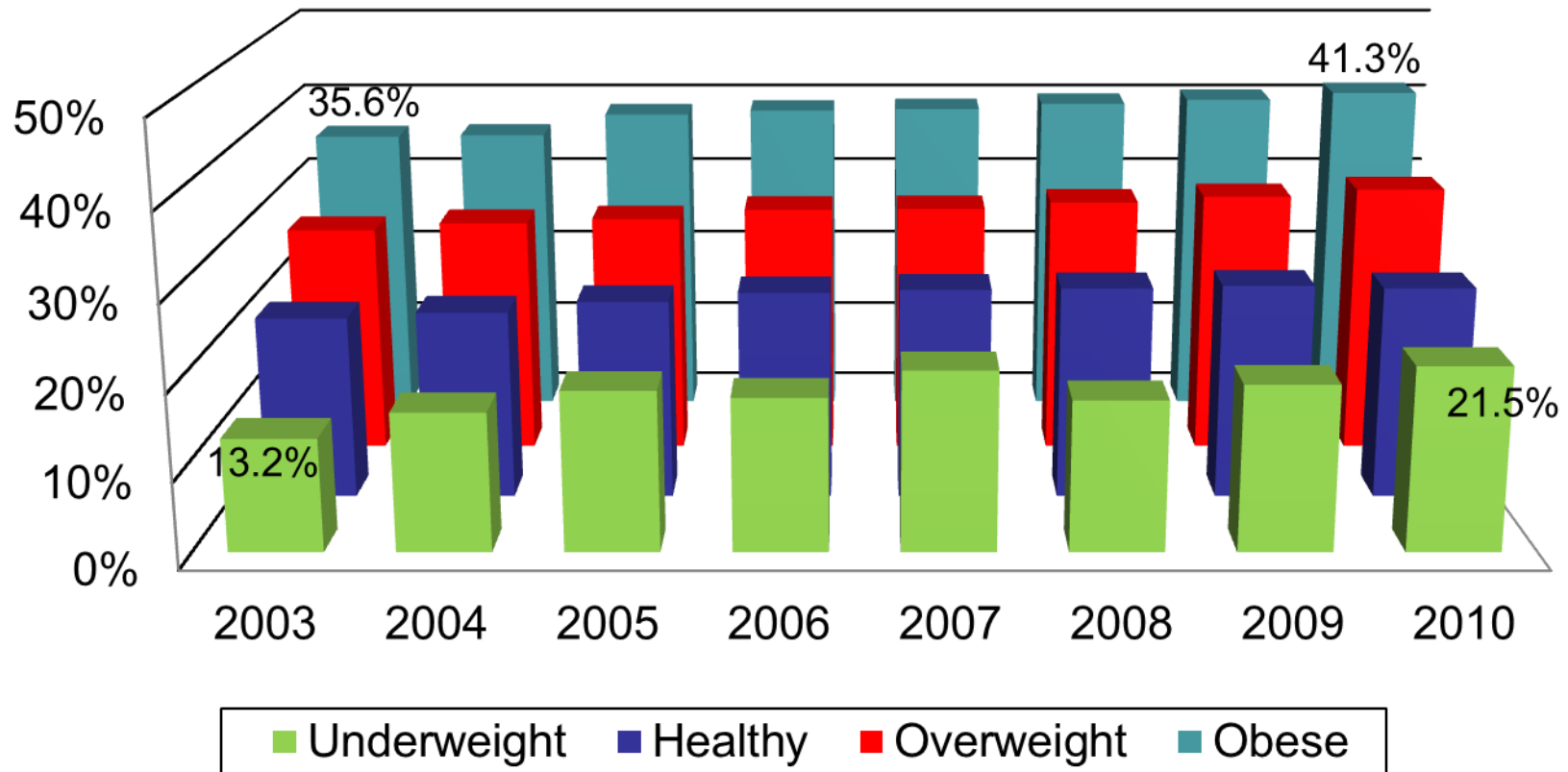


Source: PHMC Household Health Survey, 2000-2010



Cesarean Section Rates By Maternal Pre-Pregnancy BMI

Percentage of Philadelphia Resident Women Giving Birth via Cesarean Section by BMI Category, 2003-2010



Screen Time Among High Schoolers Philadelphia, 2013

(Percent reporting)	White	Black	Hispanic
Used computer 3 or more hours per day, not for school work	54.9	43.8	45.7



Screen Time Among High Schoolers Philadelphia, 2013

(Percent reporting)	White	Black	Hispanic
Used computer 3 or more hours per day, not for school work	54.9	43.8	45.7
Watched TV 3 or more hours per school day	25.6	48.2	32.9





Health Impact Pyramid

Examples

Eat healthy, be physically active, don't smoke

Treat asthma, lung disease, heart disease

Bariatric surgery, CPAP, immunization

Smoke-free laws; counter-advertising campaigns; healthy corner stores; biking paths, breastfeeding policies

Minimum wage, universal preschool, low income tax credits

Counseling & Education

Clinical Interventions

Long-lasting Protective Interventions

Changing the Context
to make individuals' default decisions healthy

Socioeconomic Factors

Smallest Impact

Largest Impact

How can we make it easier for Philadelphians to engage in healthy behaviors?

MEDIA



Schools and Universities



WORKPLACES



RETAIL ENVIRONMENT



Legislation and Regulation



BUILT ENVIRONMENT

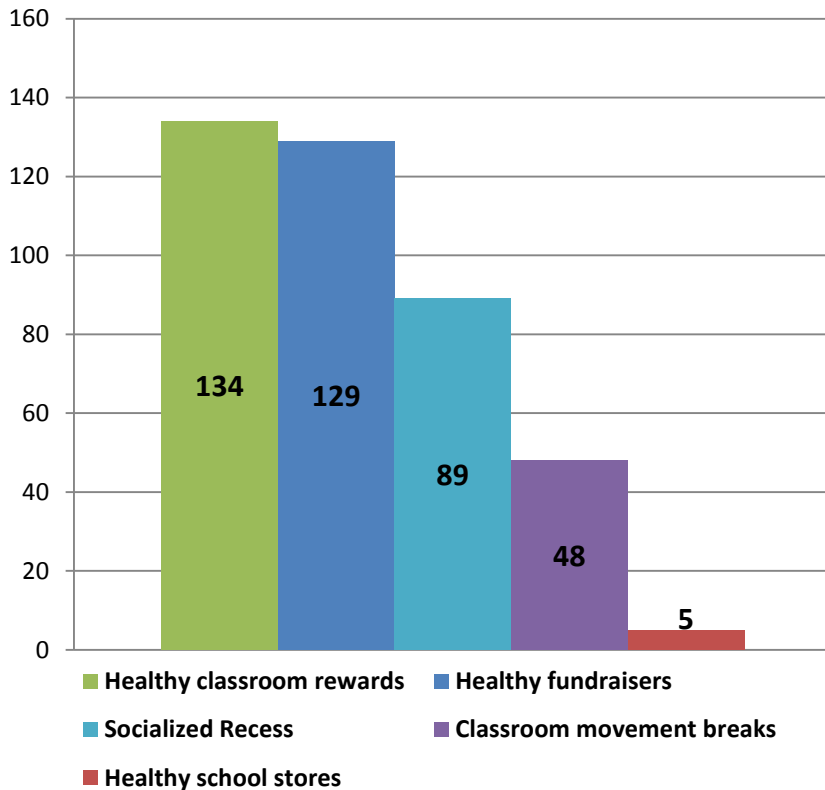


Health Insurers and Providers

Schools

Policy and Program Change

School Wellness Council Interventions, 2010-2012
Number of Schools Selecting Wellness Goals



• 1990s

Universal feeding “pilot”

• 1999

Nutrition education for all SNAP-eligible children

• 2004

Comprehensive school nutrition policy

• 2009

1% milk and no fryers in school kitchens

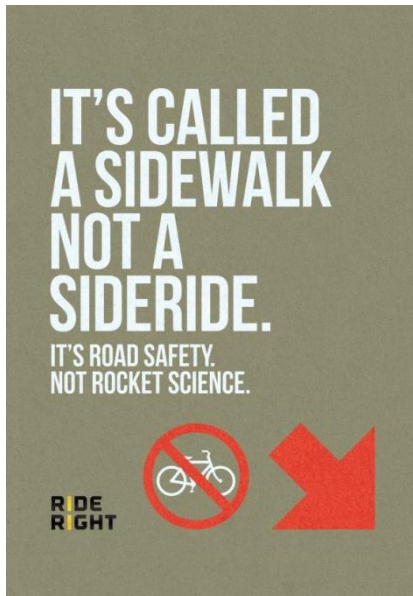
• 2011

170 schools created Wellness Councils made up of teachers, principals, students, and parents



Built Environment: Safer Walking and Biking

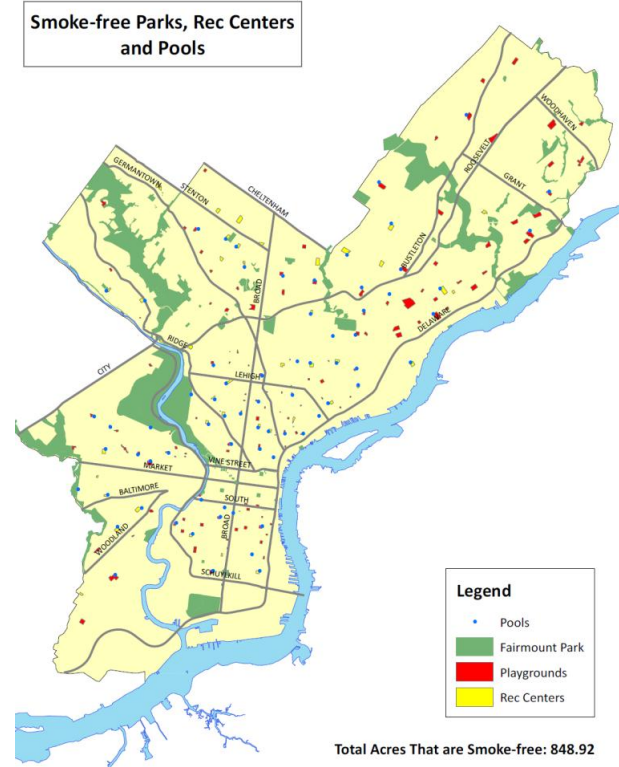
- Over 25 miles of new bike lanes and 350 bicycle way-finding signs
- Pedestrian and bicyclist safety social marketing campaign
- 43,000 2nd and 5th graders provided pedestrian and bicycle safety lessons
- Over 200 intersections with low-cost safety improvements



Built Environment

Smoke-free Rec Centers, Playgrounds, Pools

- 183 smoke-free recreation centers, playgrounds, and pools, affecting over 2 million annual visits
- 850 new smoke-free acres!



Retail Environment

Preventing Youth Tobacco Sales & Use

- Penalties raised for tobacco sales to minors
- Over 2,700 tobacco merchants educated about youth sales prevention
- New tobacco retailer permitting requirement



Illegal tobacco sales to minors decreased by 20%!



Retail Environment: Healthy Corner Stores



- 650 healthy corner stores
- Approximately 300 stores “mini-conversions” to healthy grocery
- Improved availability of healthier foods



Health Care Insurers and Employers Value-based Insurance Design

Smoking

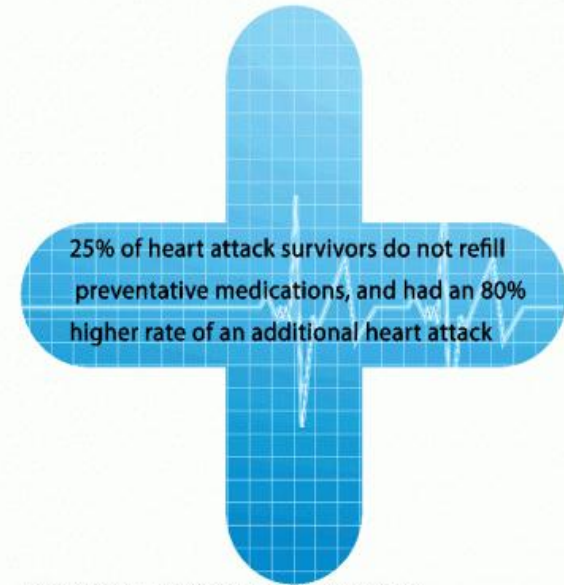
- Include all NRTs on your formulary without prior authorization, including patches, gum, and lozenges, which are OTC, and
- Eliminate co-payments for all NRTs and bupropion, and
- Eliminate or reduce co-payments for varenicline

Hypertension

- Eliminate co-payments for all generic hypertension medications (diuretics, ACE inhibitors, AR blockers, beta blockers, calcium channel blockers), and
- Reduce co-payments by 50% for all brand hypertension medications, or
- Reduce co-insurance to 10% for all hypertension medications

High cholesterol

- Eliminate co-payments for all generic statins, and
- Reduce co-payments by 50% for all brand high cholesterol medications



Journal of General Internal Medicine, online February 4, 2010.



Adherence Non-Adherence

Journal of General Internal Medicine, online February 4, 2010.

Insurers and Hospitals Promoting Breastfeeding

- 2011 Philadelphia Hospital Breastfeeding Summit
- 2012 and 2013 Philadelphia Urban Mother-Baby Summit
- 5 of 6 birthing hospitals now officially registered with Baby Friendly USA
- 2 hospitals have banned formula bags



Citywide Nutrition Standards

Human Services, Parks & Rec, Prisons, Procurement, Office of Supportive Housing



Annual Budget

\$17,050,000



Annual Meals Served

21,665,000



Annual Population Served

63,500 including over 25,000 youth

Legislation: Menu Labeling and Exemption from Federal Preemption

- Philadelphia's 2008 law requires not just calories but also sodium, fat, and carb counts on menus
- 2010 federal menu labeling preempts Philadelphia
- Exemption petition
 - Local response to local problem
 - Local law pre-dates federal law
 - Restaurants are generally complying

HICKORY-SMOKED BAR-B-QUE COMBO
Can't decide? Get the best of our Smokehouse!
Your Choice of Bar-B-Que Ribs, Bar-B-Que Chicken or Smoked Pulled Pork. Served with seasoned fries, ranch beans and fresh coleslaw.

Duo Combo	18.75	1,429 calories	5,362 sodium
Trio Combo	22.75	1,823 calories	6,743 sodium

	Calories	Satur. Fat	Trans Fat	Carb Grams	Sodium Mg
KIDS MENU					
Kids Hamburger with fries	1,087	10	1	50	1,672
Add Cheese	70-82	<i>see cheeses section under burgers</i>			
Cheesy Mac	1,012	34	0	89	1,407
Pasta w/ Red Sauce	945	15	0	93	1,616
Hot Dog	698	8	1	61	2,128
BBQ Drum Sticks	693	5	3	56	2,607

Menu Labeling: Evaluation

	Customers in unlabeled restaurants (n=321)	Customers in labeled restaurants (n=327)	Adjusted difference*	P-value
Calories in food purchased	1,691 kcal	1,556 kcal	-151 kcal (-270.0, -32.6)	0.013
Sodium in food purchased	3,315 mg	3,111 mg	-224 mg (-457.0, 8.0)	0.059
Saturated fat in food purchased	36.5 g	33.5 g	-3.7 g (-7.4,-0.1)	0.047
Carbohydrates in food purchased	131 g	115 g	-14.7 g (-25.8,-3.6)	0.010

*Adjusted for age, race/ethnicity, income, education, day of the week, frequency of dining out, and body size

Auchincloss A et al. Customer responses to mandatory menu labeling at full-service restaurants. *American Journal Preventive Medicine*. 2013 Dec;45(6):710-9.



Buses, Subway, Corner Stores



YOU SAID YOU WERE QUITTING.

1-800-QUIT-NOW
SmokeFreePhilly.org



QUIT WITH HELP. QUIT FOR GOOD.

Media:

Do you know what your kids are drinking?

Key themes:

- Obesity leads to diabetes
- High sugar content of sugary drinks
- Parents' responsibility
- Seen or heard over 40 million times

**A large soda has
as much sugar as
how many candy bars?**

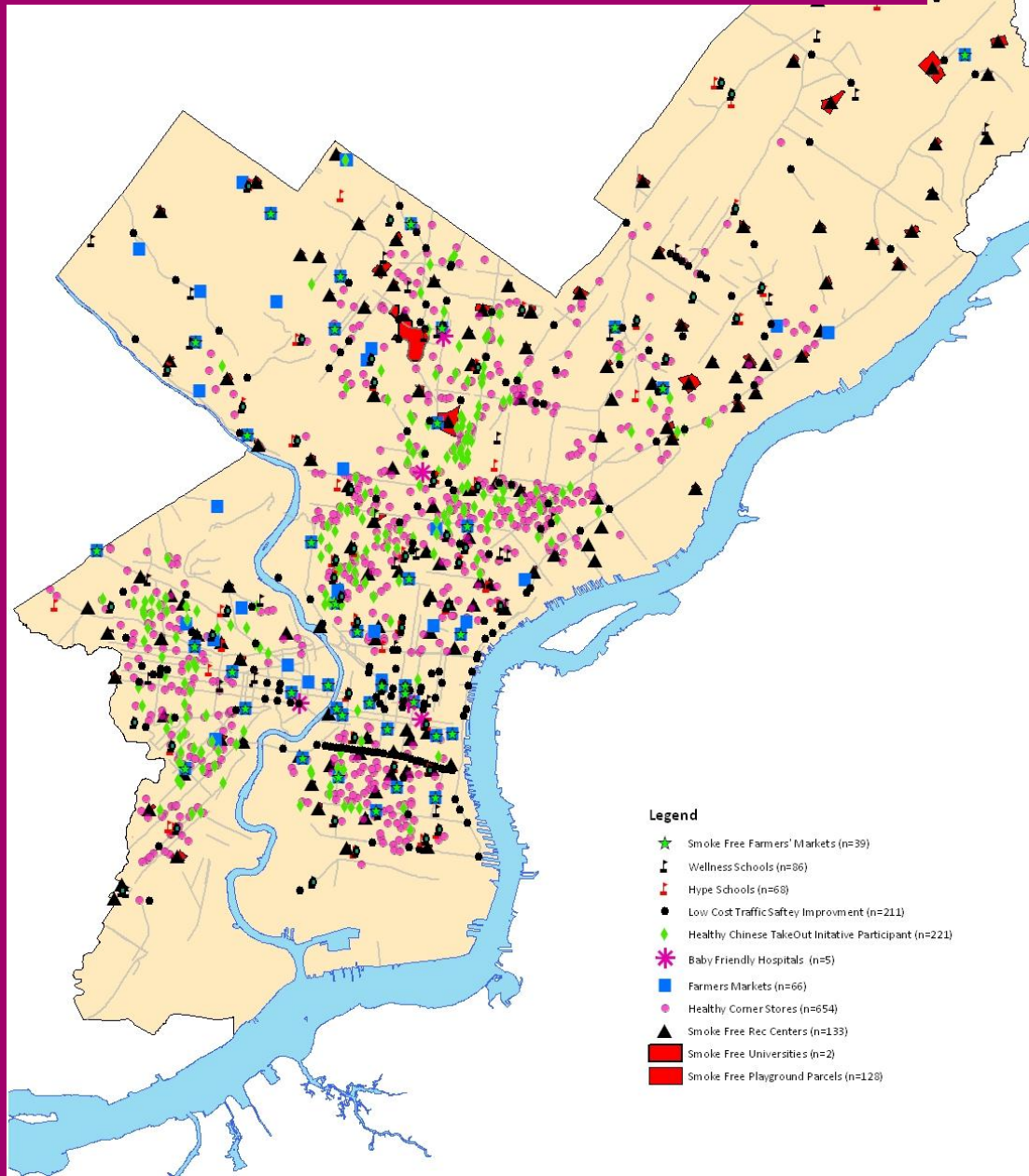
To find out, text "FACT4" to 30364.

Message and data rates may apply. Text STOP to end. Text HELP for help.



Jordan A et al. Developing media interventions to reduce household sugar-sweetened beverage consumption. *The Annals of the American Academy of Political and Social Science*. 2012;640(March):118-135.

Get Healthy Philly Campaigns, 2013



High Poverty and Low to No Access to Healthy Foods

PLANNING DISTRICT - LOWER NORTH

2010

Legend

- ★ Supermarkets (Score = 25 to 400)
- Corner Stores (Score = 2)
- Chain Convenience Stores (Score = 10)
- Produce Carts (Score = 2)
- ▲ Farmer Markets (Score = 5)
- Non Residential
- High Poverty and Low to No Walkable Access

High Poverty - Census tracts where 20% or more live in poverty as defined by household income <100% of the federal poverty level. (Source 2005 – 2009 US Census, American Community Survey)

Low to No Access - Areas with a walkable access to healthy food score of 20 or lower based on a combined, weighted proximity to healthy food retail outlets.

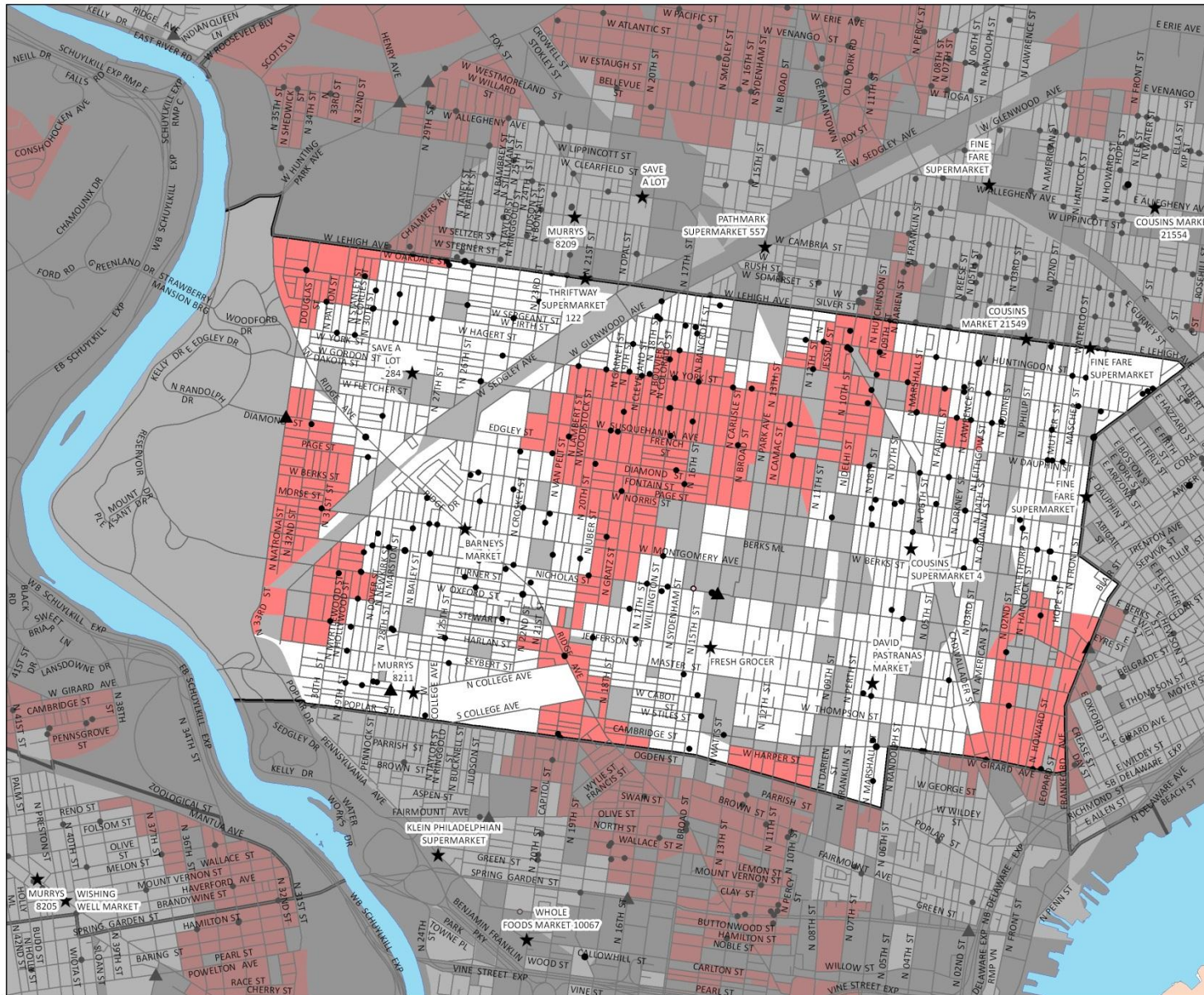
Area of Study



Created by Jonathan Sinker at the Philadelphia Department of Public Health on 7/26/2012
 Email: jonathan.sinker@phila.gov
 Phone: 215-686-5212



0 0.25 0.5 1 Miles



~61,000 fewer Philadelphians living in low-income neighborhoods with limited access to healthy foods

High Poverty and Low to No Access to Healthy Foods

PLANNING DISTRICT - LOWER NORTH
2012

Legend

- Corner Stores (Score = 2)
- Chain Convenience Stores (Score = 10)
- * Enhanced Healthy Corner Store (Score = 10)
- ◆ Healthy Corner Store (Score = 5)
- ▲ Farmers Markets (Score = 5)
- Produce Carts (Score = 2)
- ★ Supermarket (Score Range = 10 to 400)
- Non Residential
- High Poverty and Low to No Walkable Access
- Blocks With Improved Access Since 2010

High Poverty - Census tracts where 20% or more live in poverty as defined by household income <100% of the federal poverty level. (Source 2005 – 2009 US Census, American Community Survey)

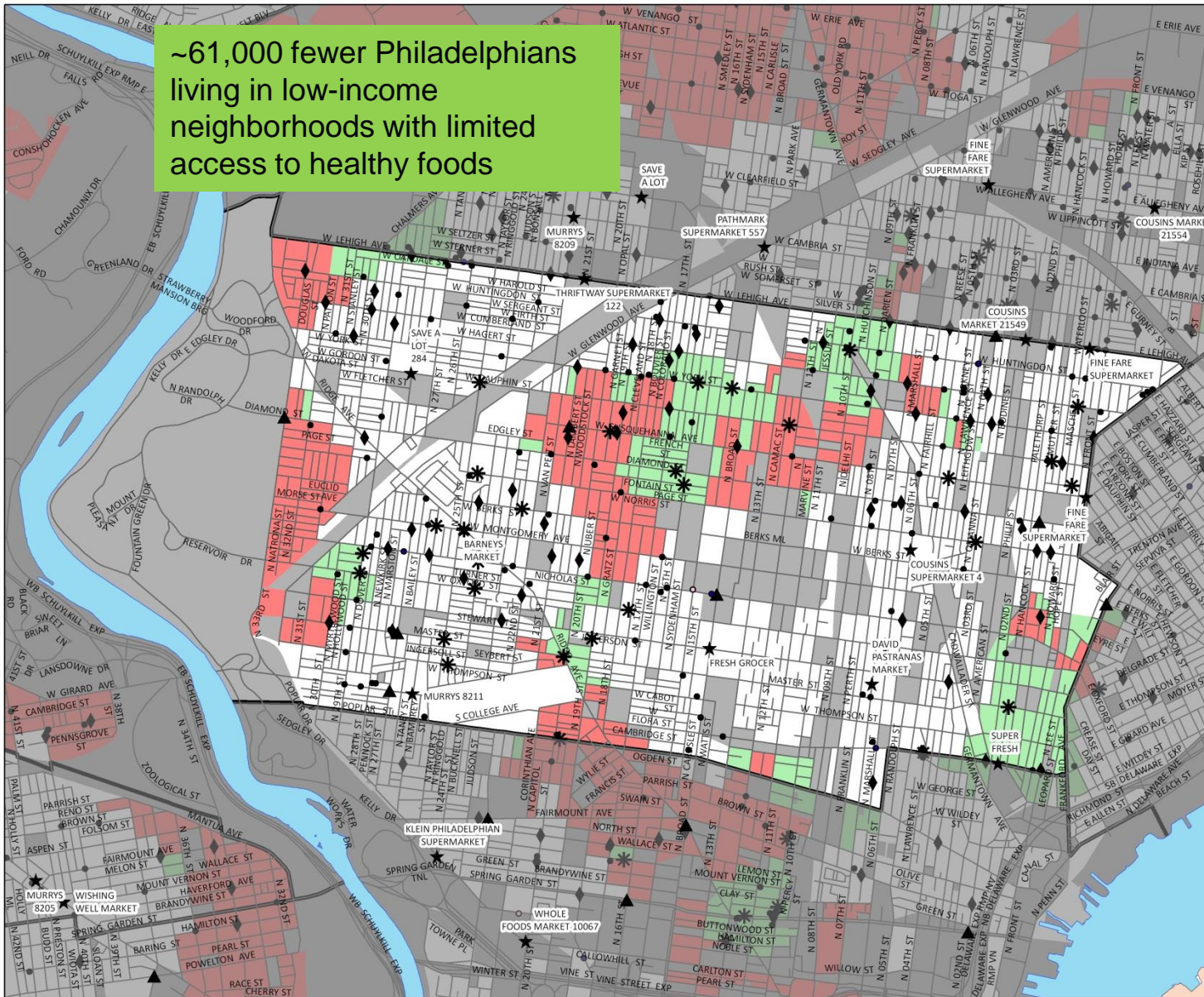
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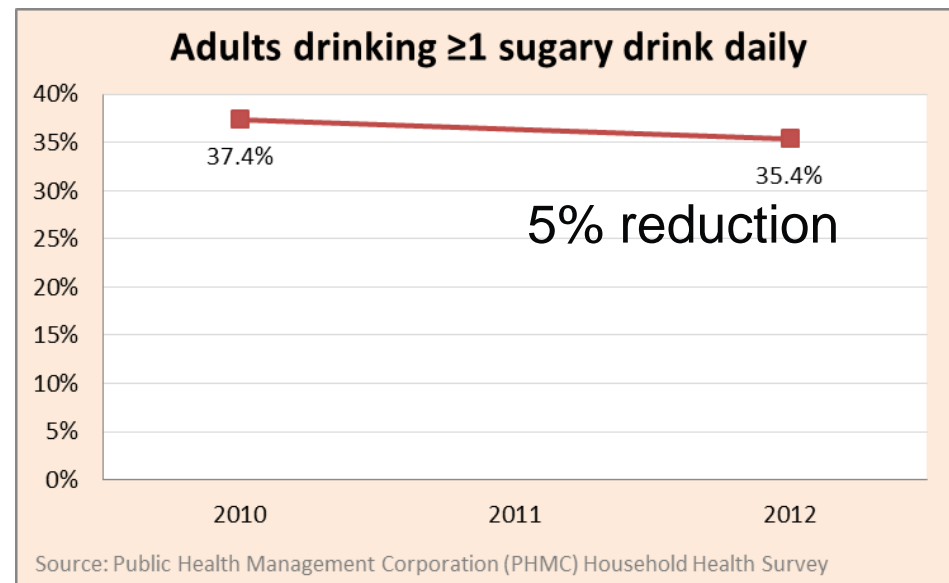
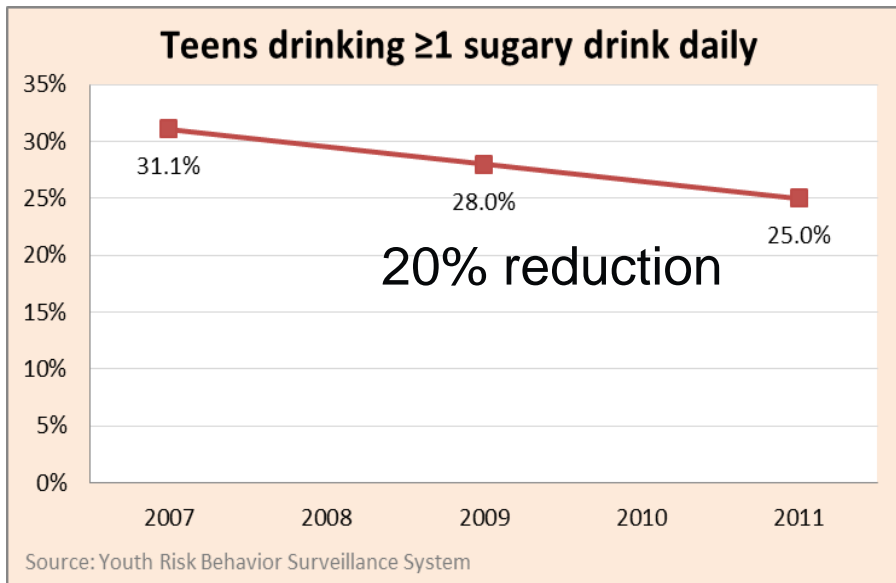


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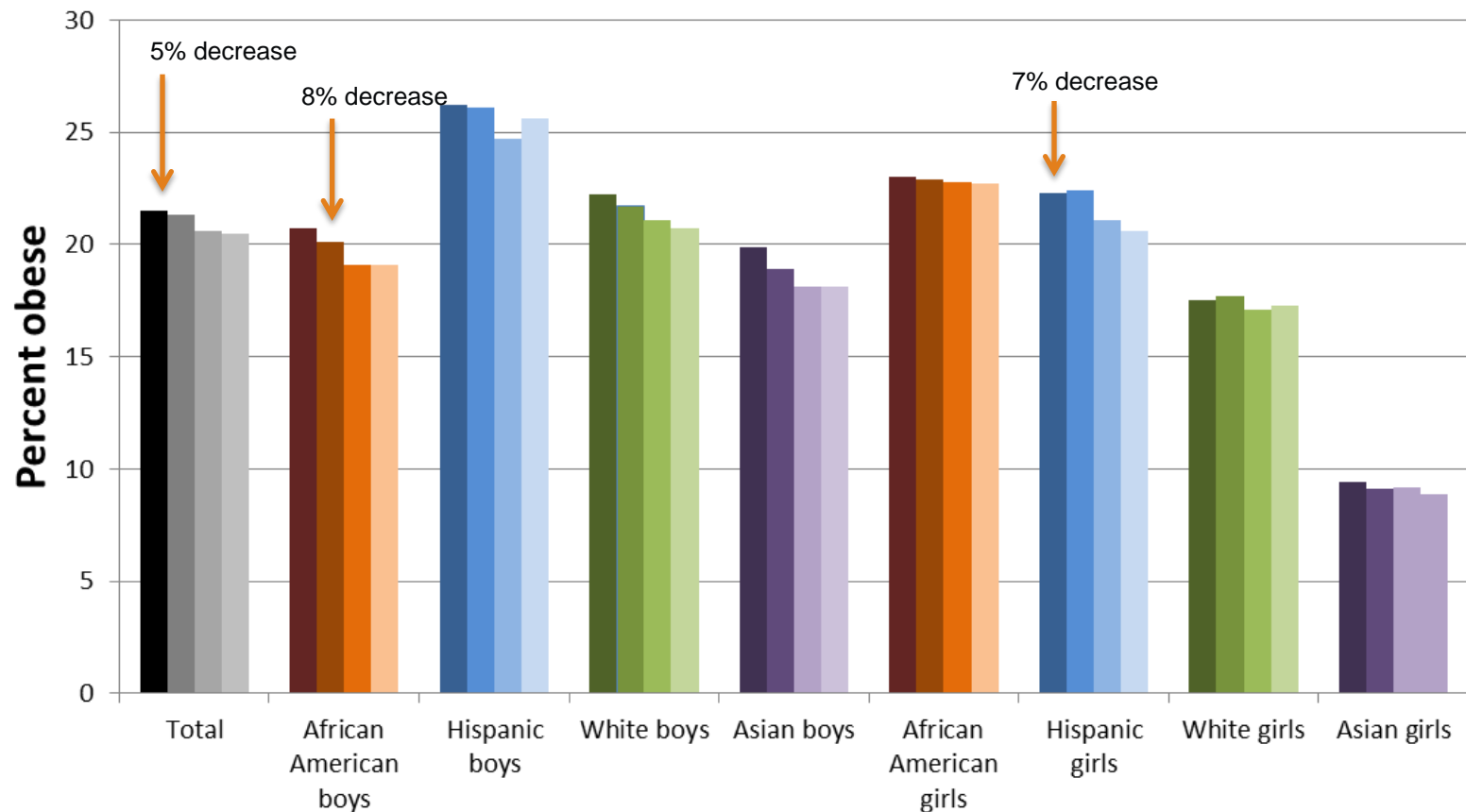


Progress: SSB consumption in Philadelphia



Progress: Child Obesity (2006-2010)

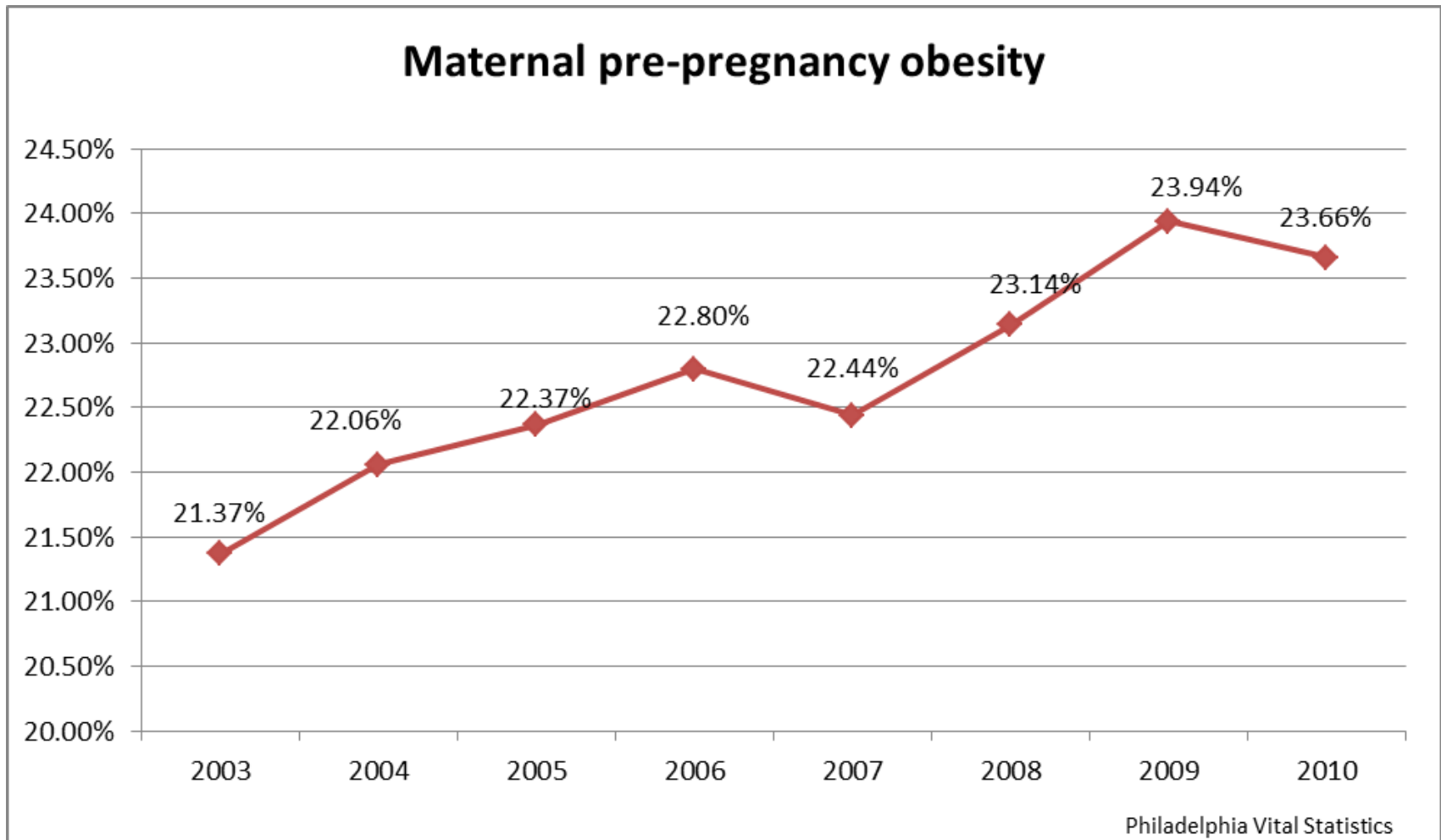
**Obesity among Philadelphia schoolchildren (5-18 years),
2006/07 - 2009/10**



Source: Robbins et al, Preventing Chronic Disease, 2012
Accompanying editorial from RWJF, "Philadelphia Freedom"



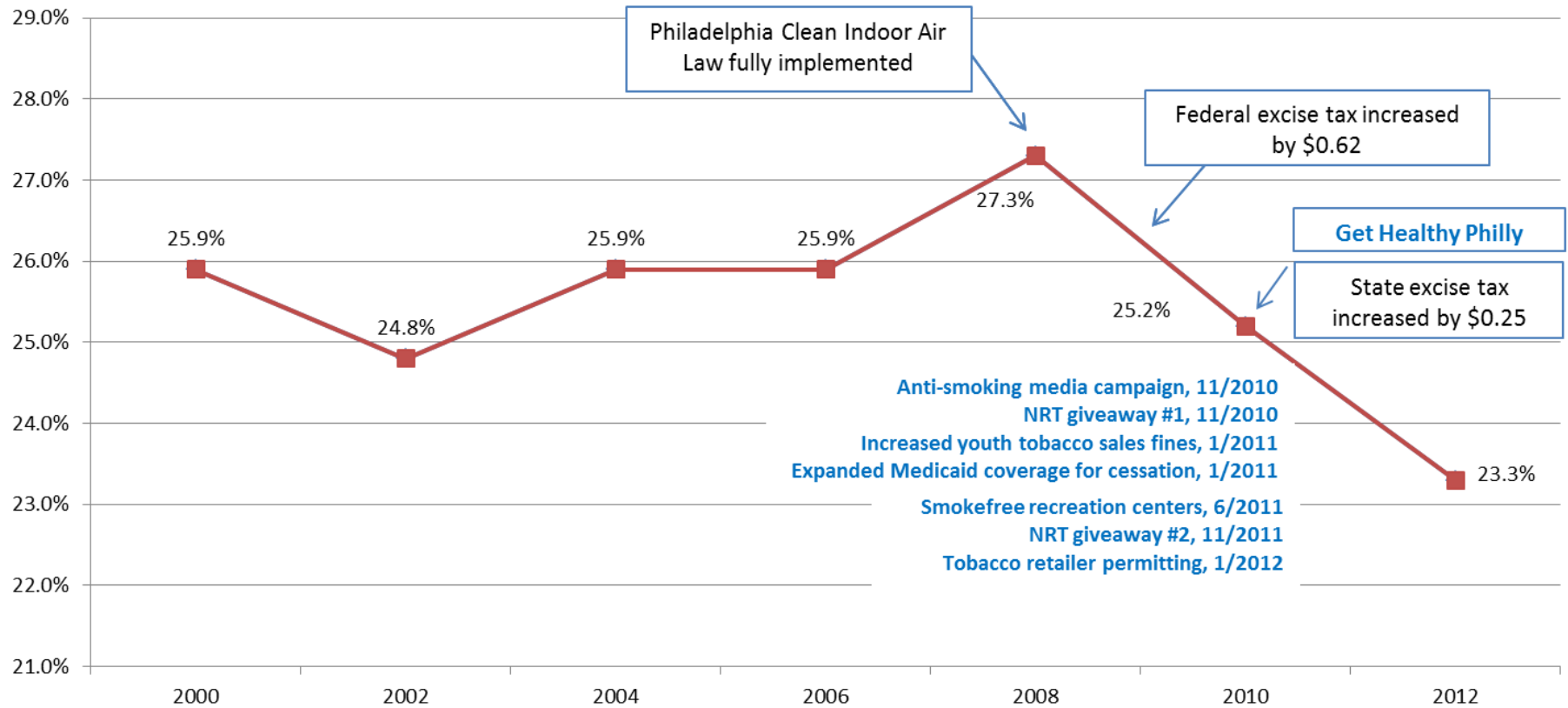
Progress: Maternal Obesity (2003-2010)



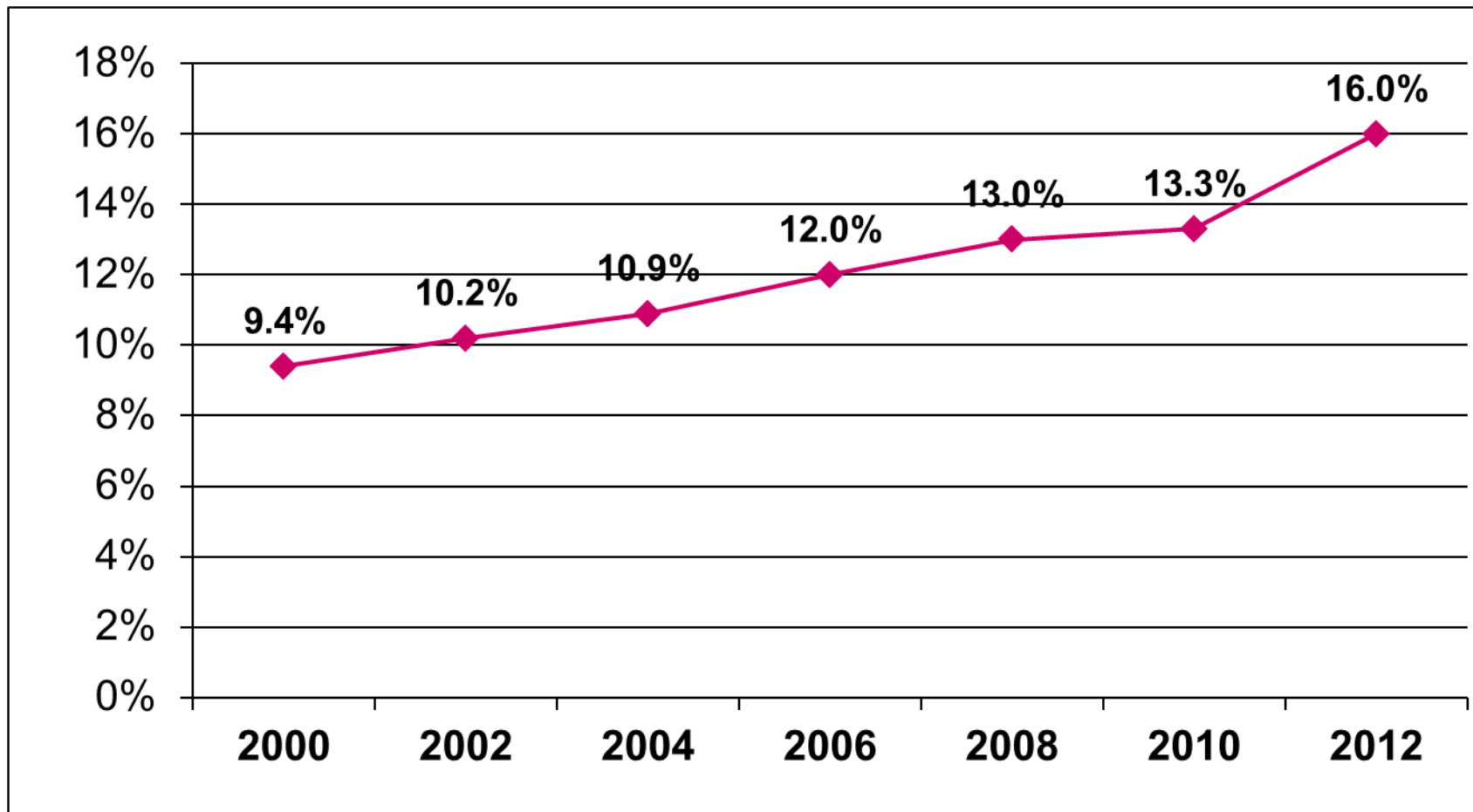
Progress: Adult Smoking



Adult smoking prevalence, Philadelphia



Growing Concerns: Diabetes

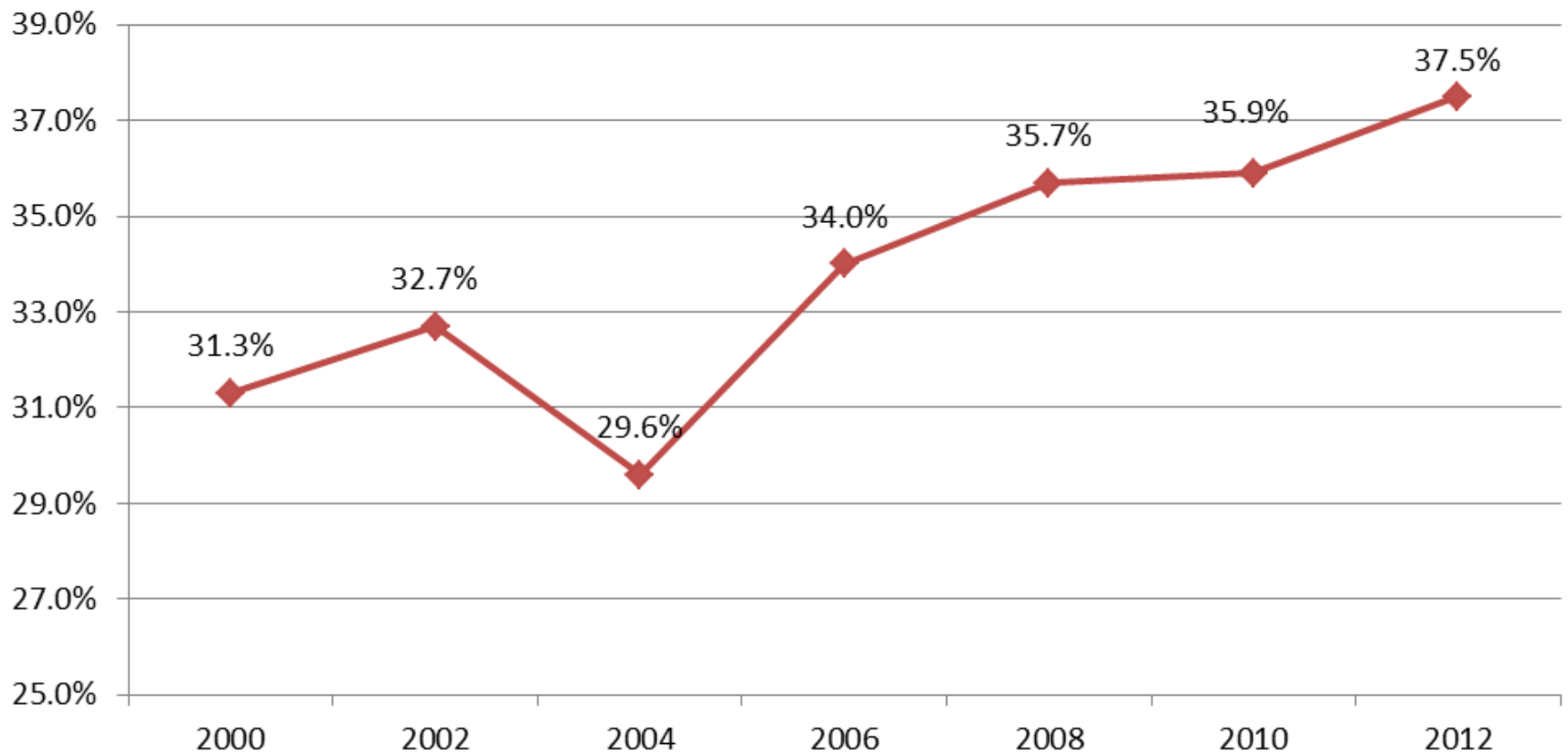


Source: PHMC Household Health Survey, 2000-2012



Growing Concerns: Hypertension

Adult hypertension, Philadelphia



PHMC Household Health Survey

Vignette: Retail Environment

Healthy Chinese Take-out Restaurant Initiative

Over 400 take-out Chinese restaurants in Philadelphia, primarily in African American and Hispanic neighborhoods

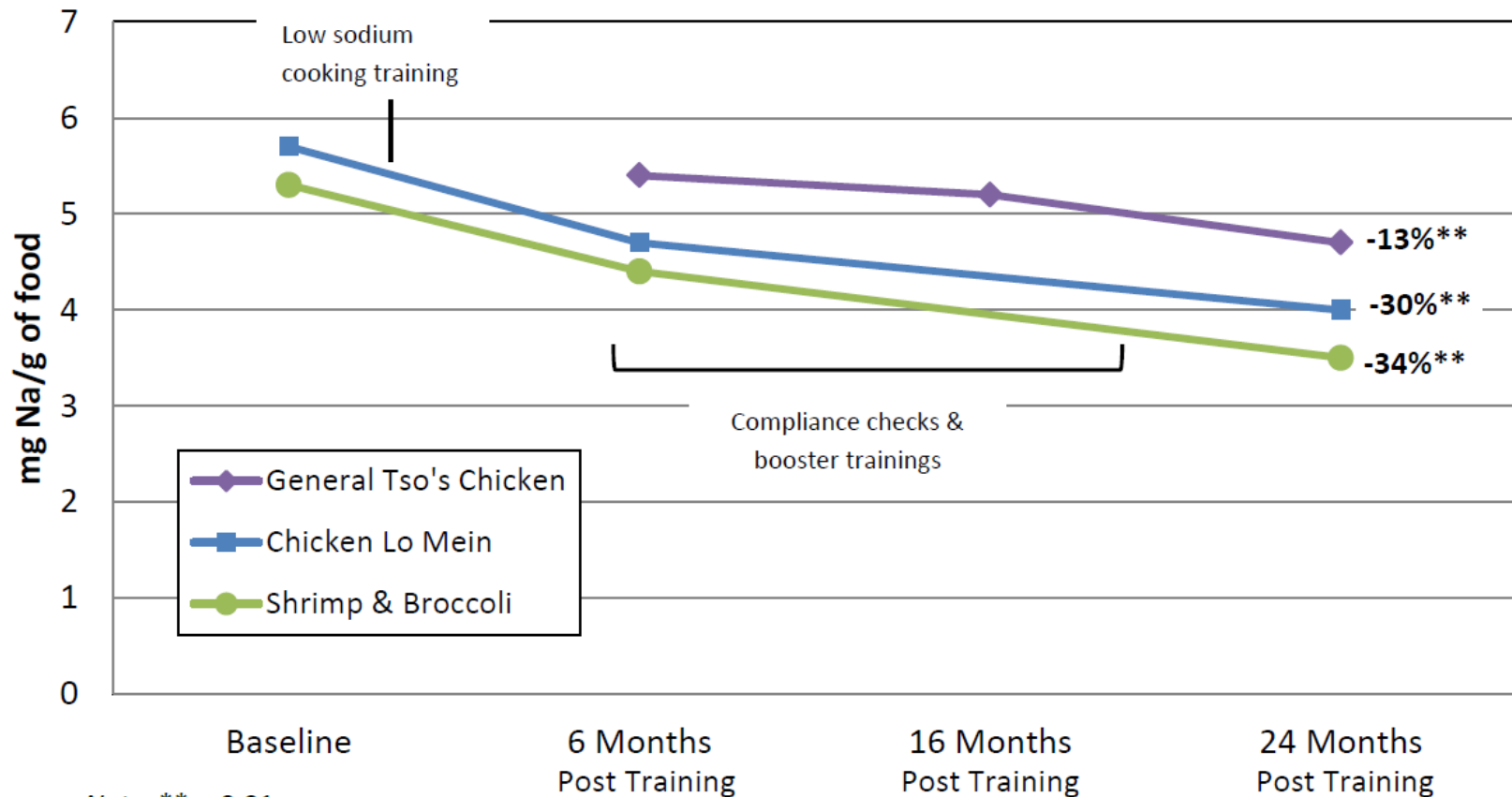
200+ have been trained in low-sodium cooking methods

- Temple University Center for Asian Health
- Asian Community Health Coalition
- Chinese Restaurant Association



Philadelphia Chinese Take-Out Initiative

Sodium Content of 3 Popular Chinese Take-Out Dishes

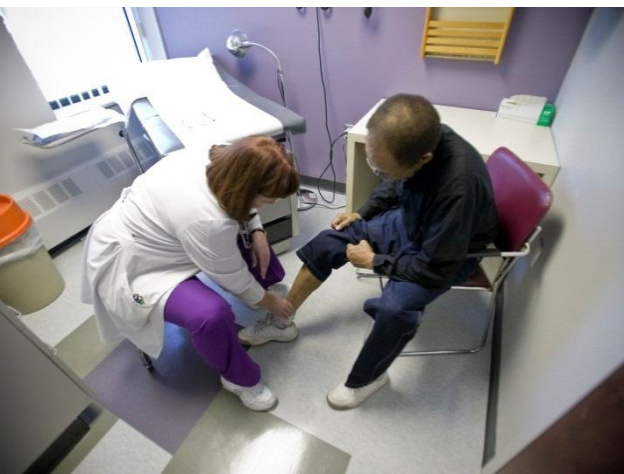


Note. **p<0.01.





We, as a nation, will strive together to create a culture of health enabling all in our diverse society to lead healthy lives, now and for generations to come.

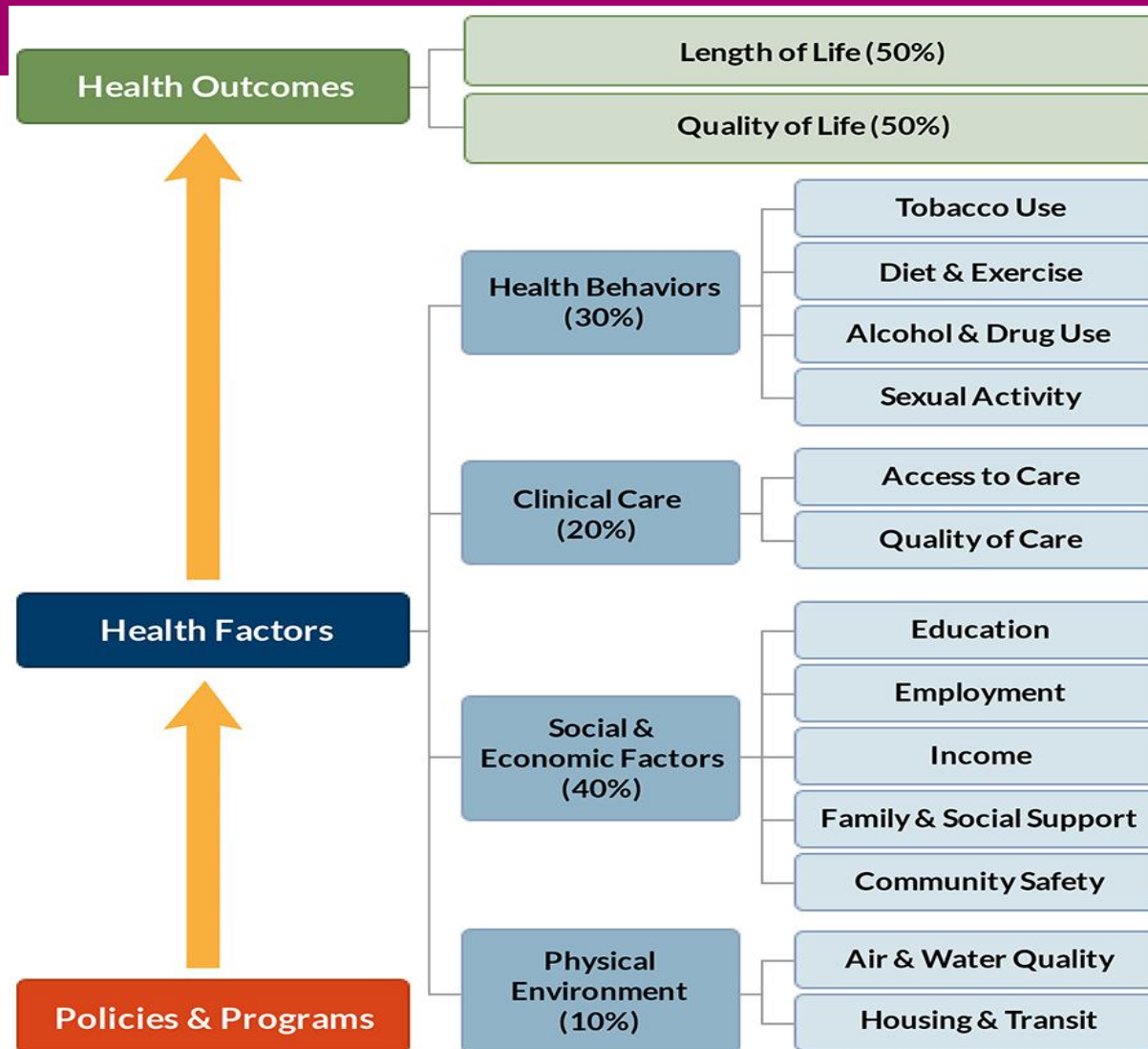


RWJF Commission to Build a Healthier America Recommendations

- 1** Make investing in America's youngest children a high priority.
- 2** Fundamentally change how we revitalize neighborhoods, fully integrating health into community development.
- 3** Broaden the mindset, mission, and incentives for health professionals and health care institutions from treating illness to helping people lead healthy lives.



Action Framework for Addressing Health



County Health Rankings model © 2014 UWPHI



See countyhealthrankings.org

