



Working to make Philadelphians Healthier

Philadelphia Department of Public Health

June 13, 2018



Objectives

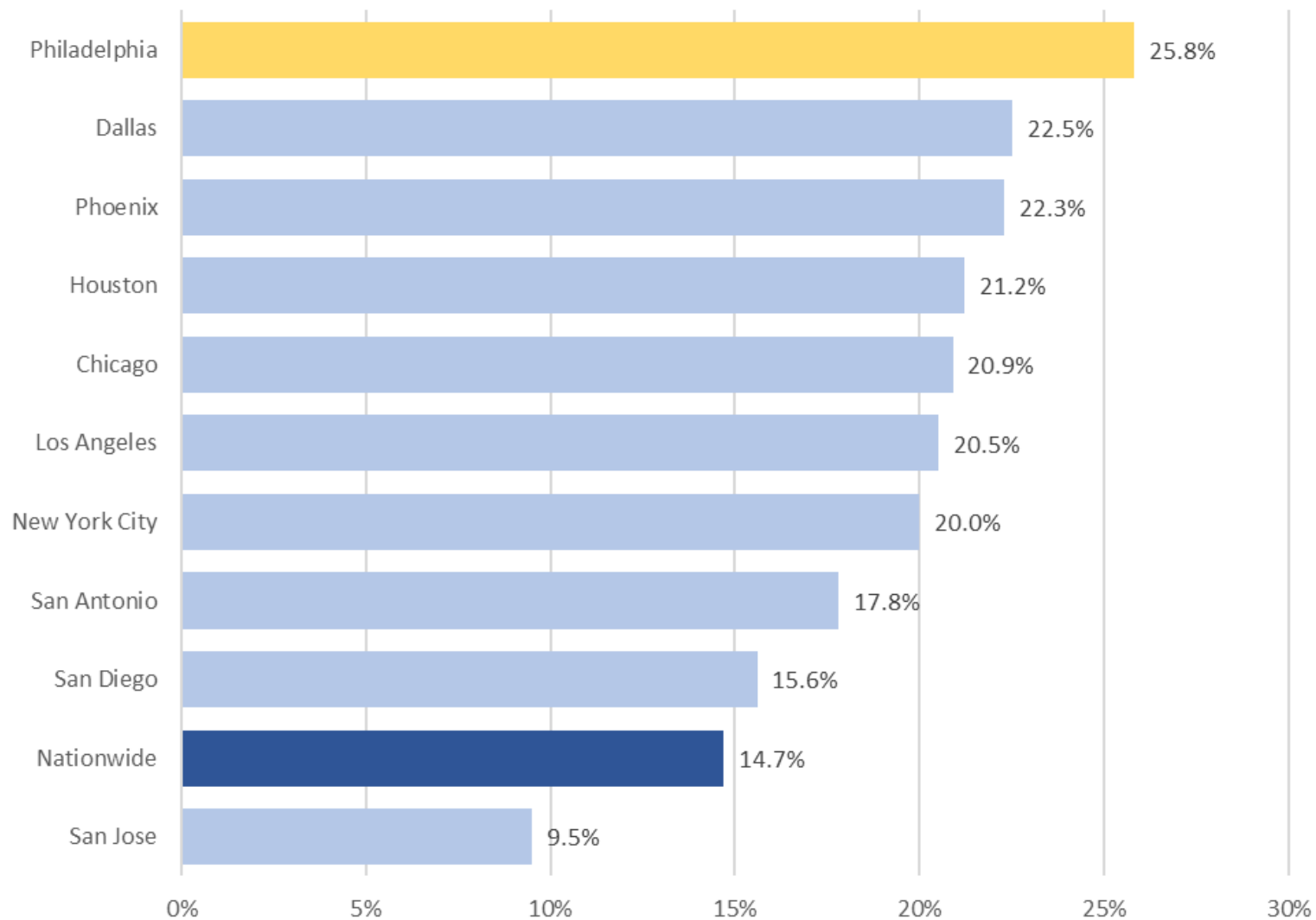
- Describe the structure and projected impact of Philadelphia's tax on sweetened drinks
- Discuss Philadelphia's new retail tobacco regulations and the background behind their implementation
- Explain the impact of flavored tobacco and its relationship to health disparities in Philadelphia

Where are we now?

Short Distances to Large Gaps in Health



People Living in Poverty, 2015 Nationwide and City Comparison



Source: US Census Bureau, American Community Survey, 1-year estimates, 2015

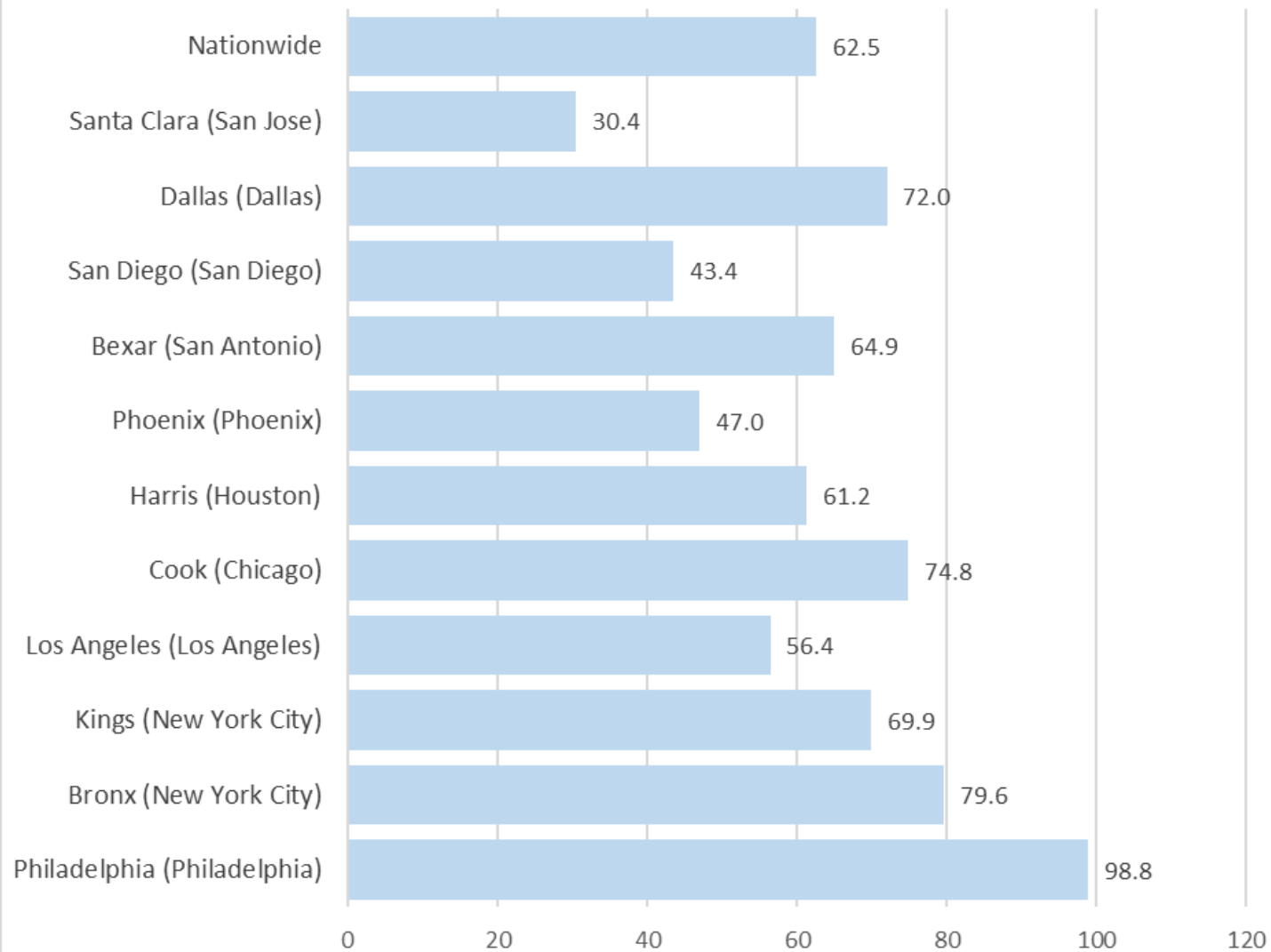
Indicator Definition:

Percentage of population, including all ages, living in a household with an income below 100% of the federal poverty level (FPL).

Notes:

In 2015, the FPL was equivalent to a yearly income of no more than \$11,770 for an individual, or \$24,250 for a family of 4.

Premature Cardiovascular Disease (CVD) Mortality Rate per 100,000 People, 2011-2013 Nationwide and County Comparison

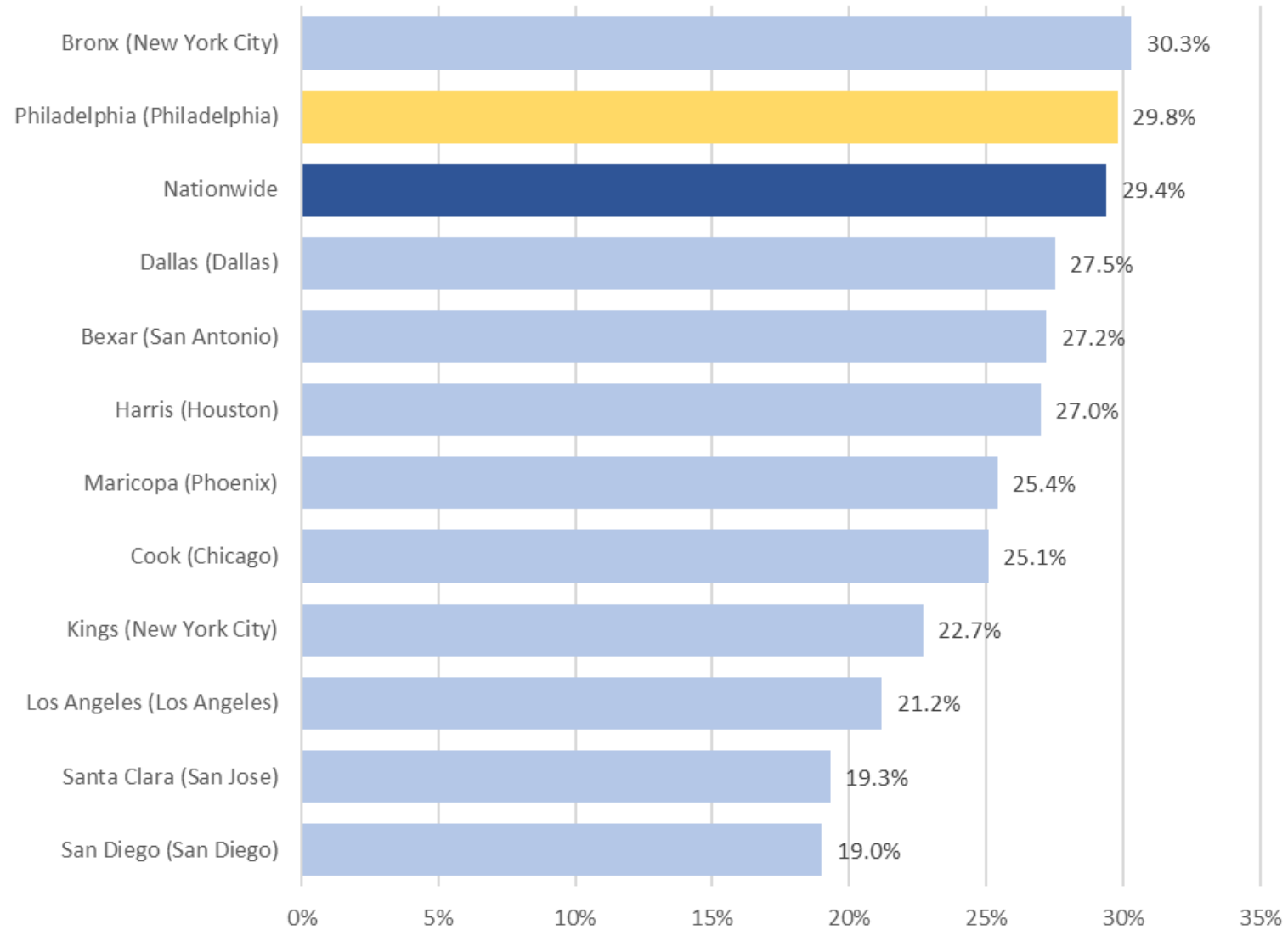


Indicator Definition:

Age-adjusted rate per 100,000 persons of CVD deaths (all heart disease) to persons under 75 years of age.

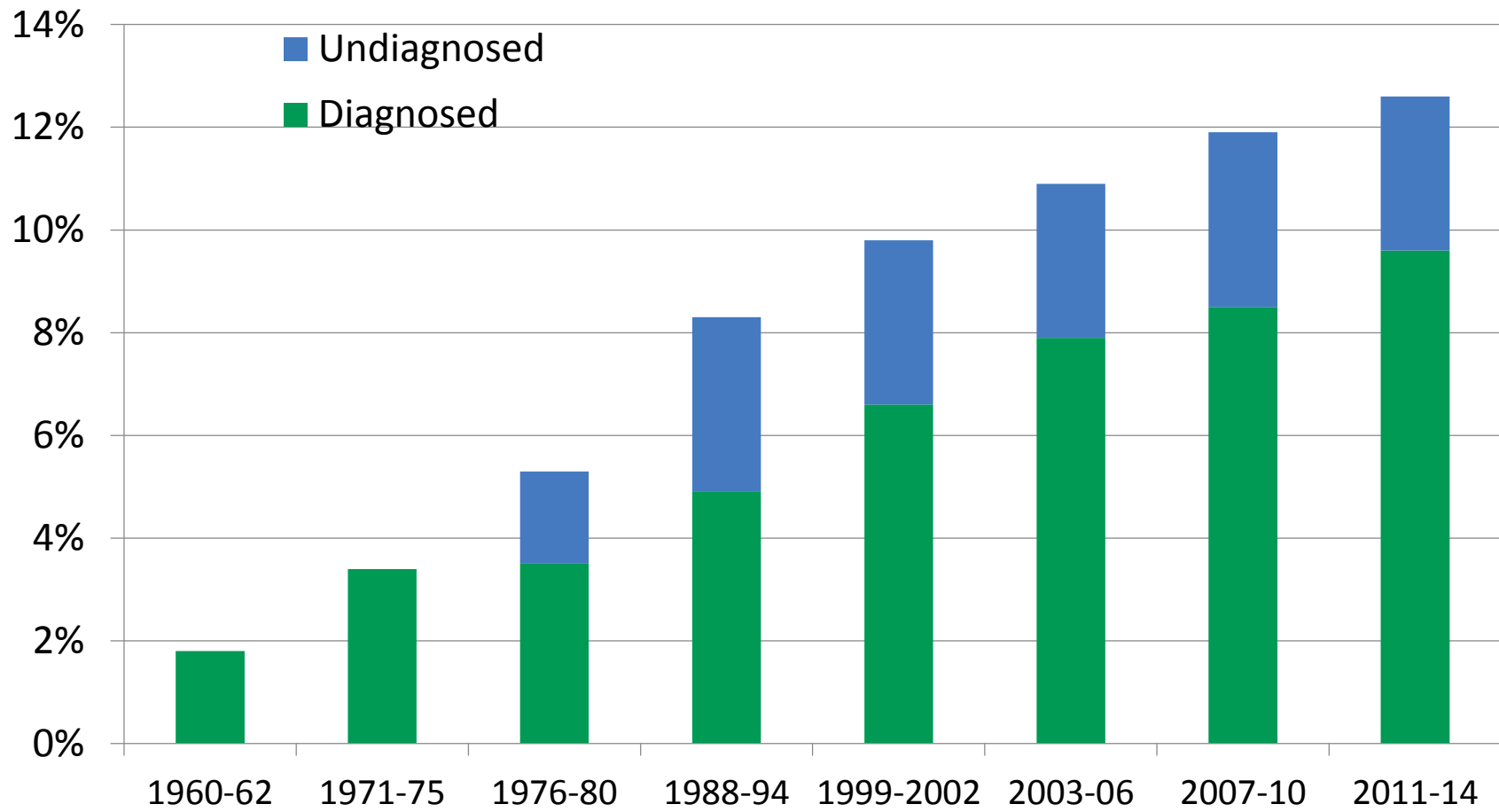
Source: Interactive Atlas of Heart Disease and Stroke, National Center for Health Statistics, 2011-2013

Adult Obesity Prevalence, 2013 Nationwide and County Comparison



Source: Behavioral Risk Factor Surveillance System Data as presented in the National Diabetes Surveillance System, 2013

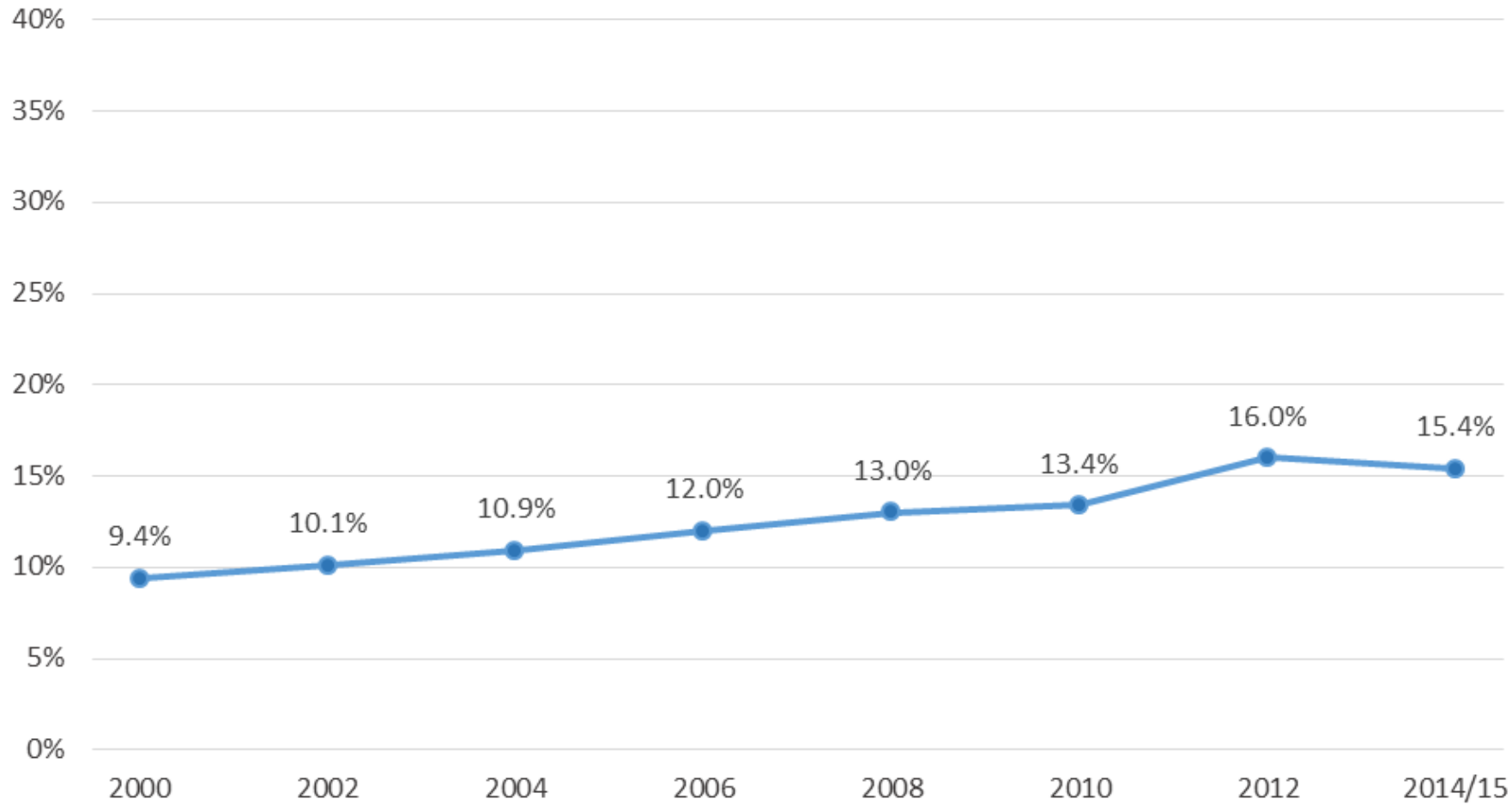
The National Epidemic of Diabetes



Data for adults 20+. Gregg EW et al. JAMA 2005;293:1868, Health United States, 2013 Table 46 and Health United States, 2015 Table 40



Adult Diabetes Prevalence



Source: Public Health Management Corporation (PHMC) Household Health Survey, 2000 - 2014/15

Diabetes

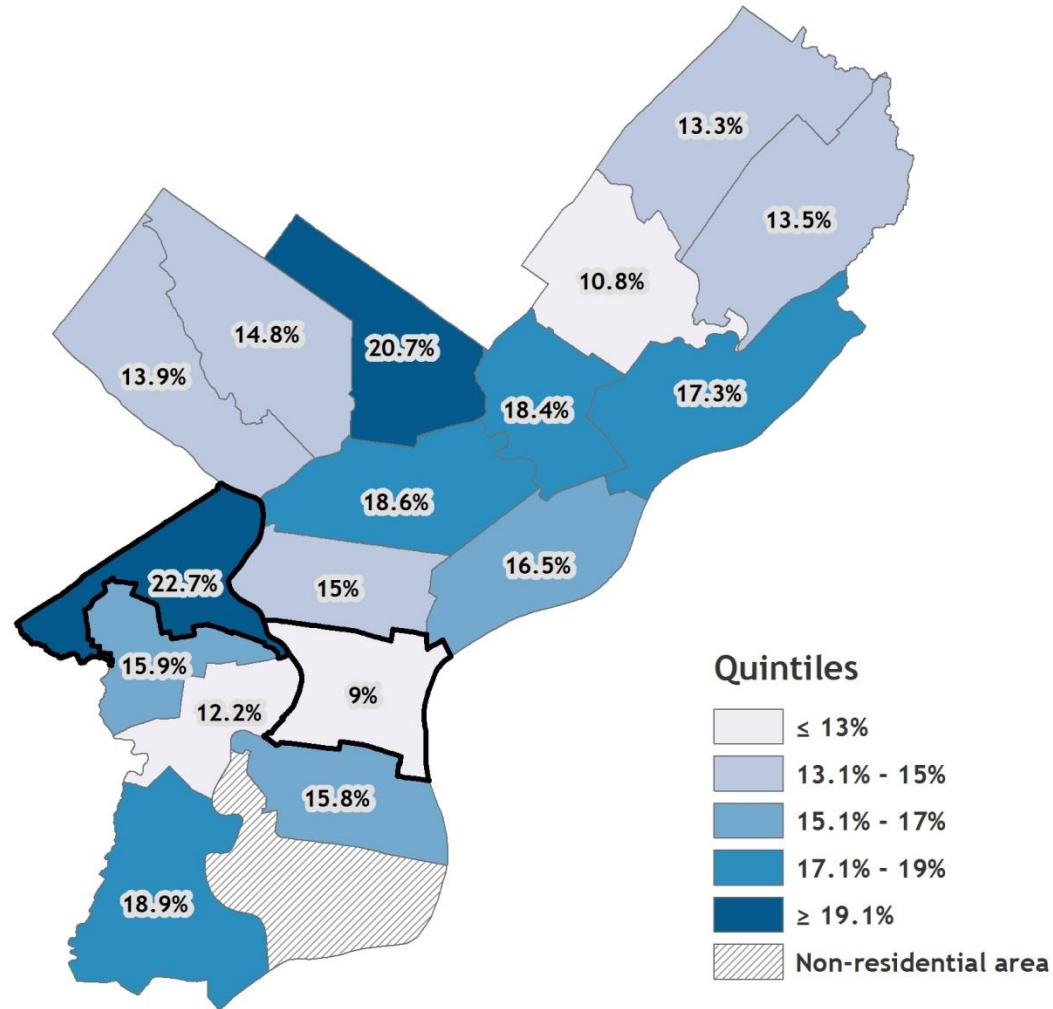
Indicator Definition:

Percentage of adults who have been told by a doctor or other health professional that they have or have had diabetes. Excludes respondents with a history of gestational diabetes only.

Refer to the [Data Sources](#) and [Data Definitions](#) sections for more detailed information about each.



Adult Diabetes Prevalence, 2012-2015



Source: Public Health Management Corporation (PHMC) Household Health Survey, 2012-2015

Indicator Definition:

Percentage of adults who have been told by a doctor or other health professional that they have or have had diabetes. Excludes respondents with a history of gestational diabetes only.

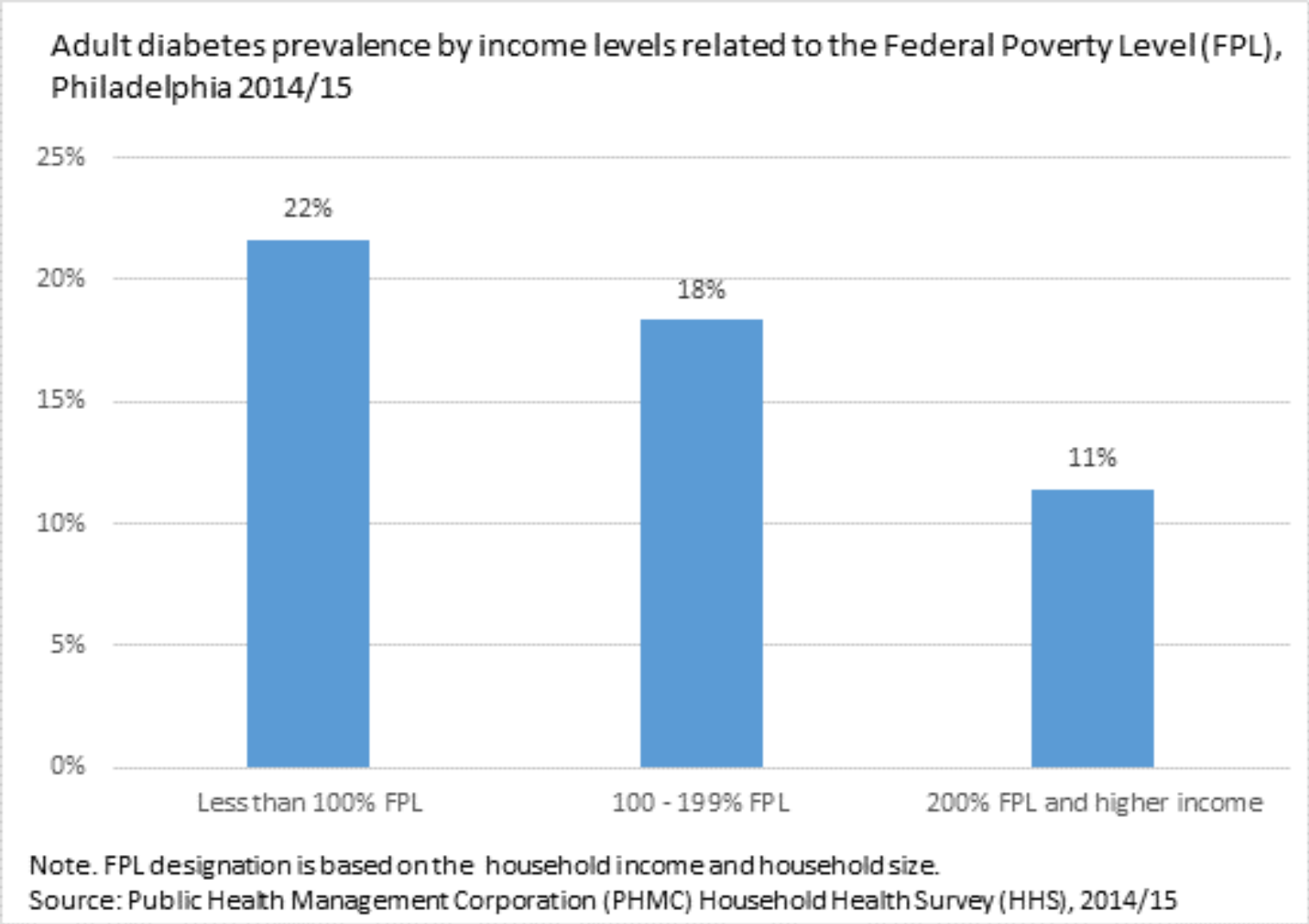
Notes:

Two years of Household Health Survey data (2012 and 2014/15) were combined to provide more reliable estimates by planning district, therefore these numbers are not directly comparable with previous estimates.

Planning districts with the best and poorest outcomes are outlined with a thick black border. For the citywide value, refer to the citywide over time graph.

Refer to the [Data Sources](#) and [Data Definitions](#) sections for more detailed information about each.

Diabetes is twice as common in poverty



Philadelphia's Beverage Tax

- 2016 beverage tax was passed based on Mayor Kenney's plan to use the revenue to benefit children and families
 - Funds 6500 high quality pre-K seats over 4 years
 - Long needed improvements to Philly under-funded parks, rec centers and libraries
 - Funds creation of 25 Community Schools over 4 years
- City Council opted to change the proposed 3 cent/ounce tax on sugary drinks to a 1.5 cent/ounce tax on all sweetened drinks (diet & regular)
 - Based on Council's concern that sugary drink tax would fall disproportionately on low-income city residents.

Exclusions

- Baby formula
- Medical foods
- Products that are 50% or more milk

Note that products without added sweetener are ***not*** taxed (100% juice, water, seltzer, etc.)

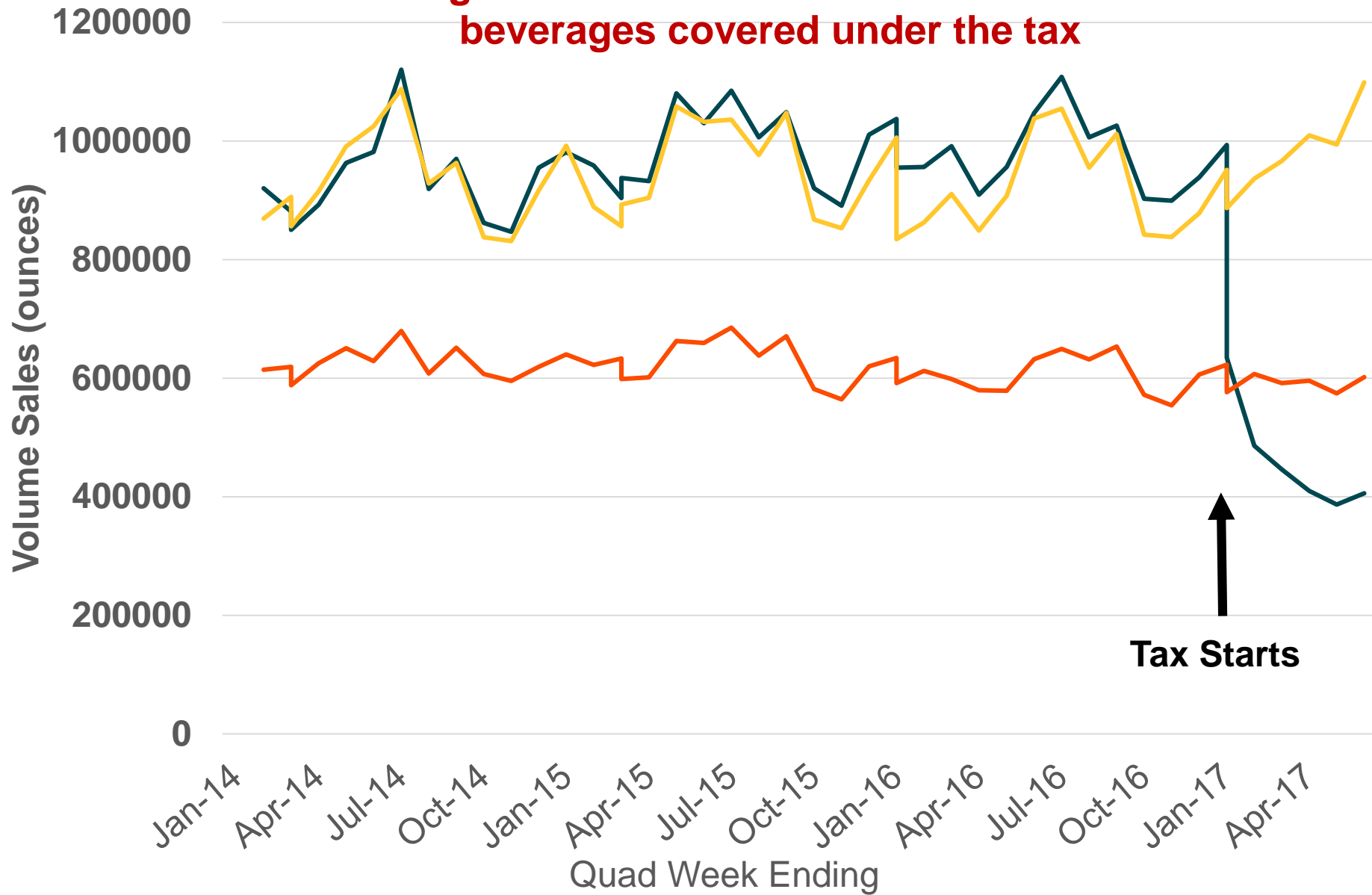
Projected impact

- Conservatively predicted a 27% drop in sweetened drink consumption due to the tax, with a gradual decrease after 1st year
- Harvard Choices Project estimated that Philadelphia's tax would prevent about 1,000 cases of diabetes annually
- The Choices Project also projected that low income Philadelphians would save money based on a greater decrease in SSB purchases among this group

Industry Claims vs. Data

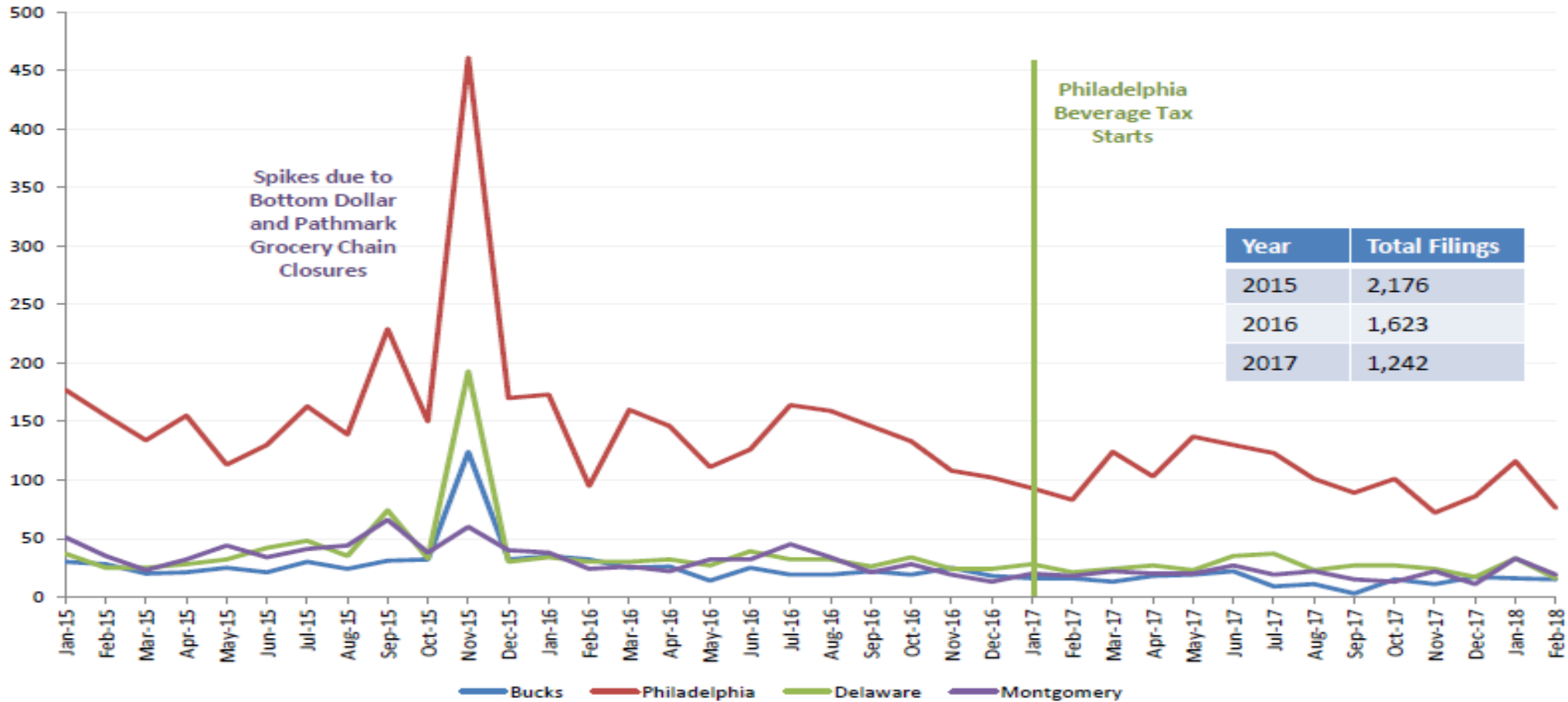
- Job losses
- People “fleeing the city” to buy their groceries
- Unemployment in beverage sector down slightly since tax implementation
- Wage tax from beverage sector up slightly
- Overall supermarket revenue appears stable despite very substantial drop in SSB sales

Change in volume sales in chain retailers for beverages covered under the tax



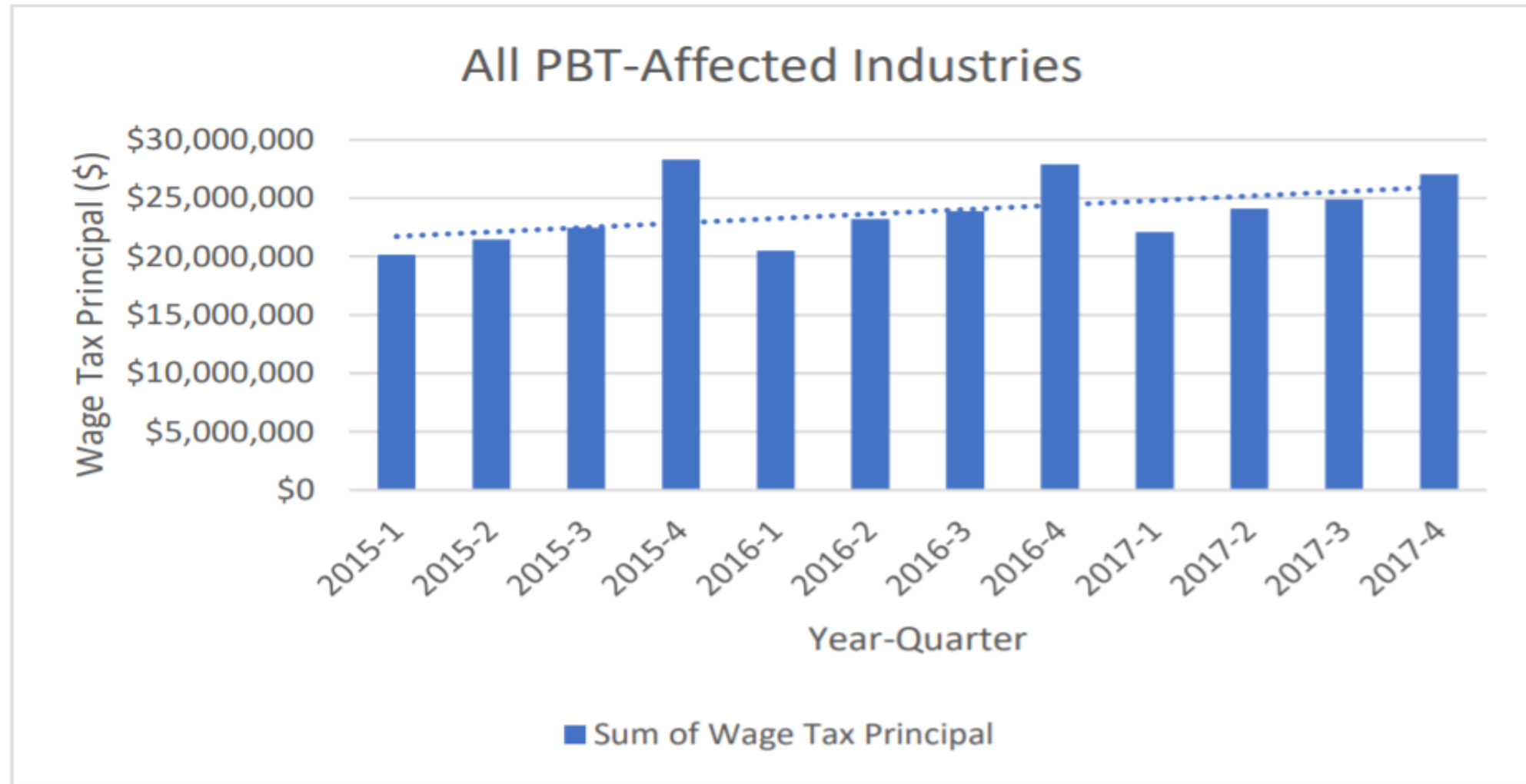
— Philadelphia — Baltimore — Counties

Figure 2. New Unemployment Claims Filings for Grocery Stores and Supermarkets in Philadelphia and surrounding counties (NAICS 44511), 2015-2018



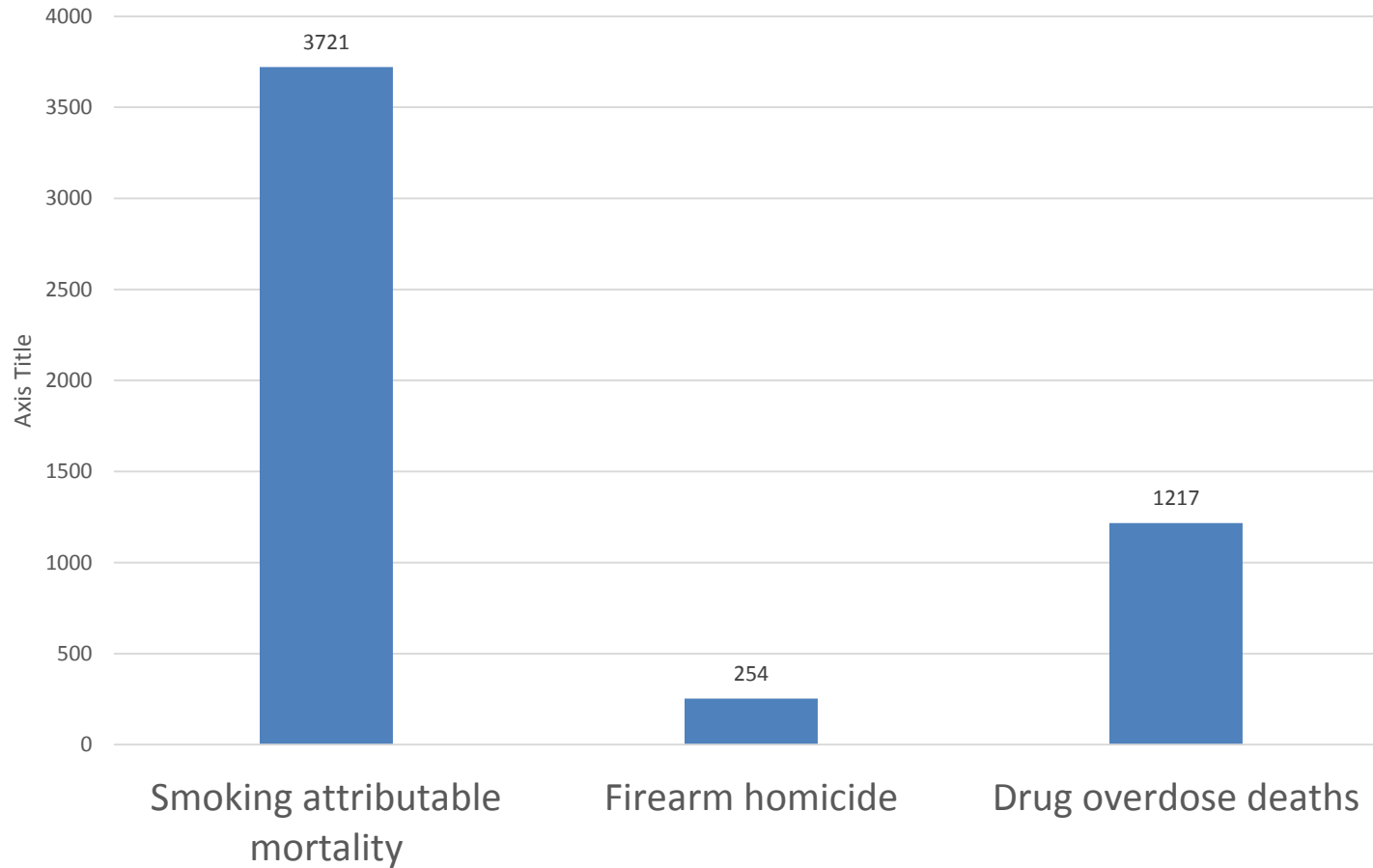
Note: Total new unemployment claims filings for grocery stores and supermarkets in Philadelphia dropped 23% the first year of the PBT.

Figure 3 – Quarterly Wage Tax Collections for All PBT-Affected Industries



Tobacco

Impact of tobacco use in Philadelphia



Smoking-attributable mortality calculated using SAMMEC methodology. Data source: Philadelphia Department of Public Health, Vital Statistics Report, 2014.

Firearm and Drug Overdose death data from the Philadelphia Medical Examiner's Office, 2017.



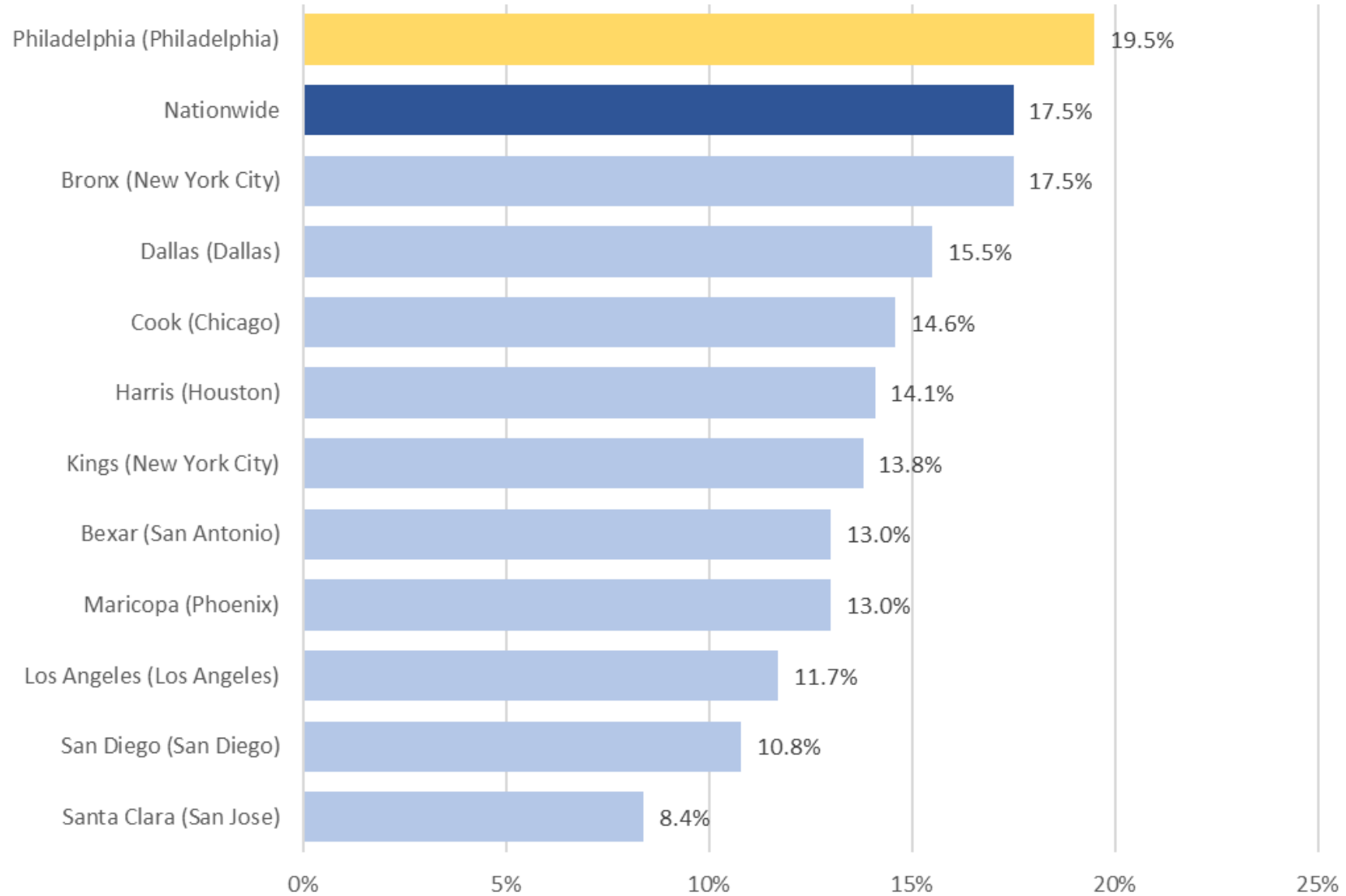
Lifetime cost of tobacco use

- **Cigarette smoking causes premature death:**
 - Life expectancy for smokers is at least 10 years shorter than for nonsmokers.
- **Economic costs over a lifetime: \$1.7 million**
 - Direct cost of cigarettes
 - Health care expenditures
 - Income losses: smokers earn 20% less than non-smokers, of which 8% is due to smoking, 12% to other factors
 - Financial opportunity costs - what if that money had been invested?
 - Loss of insurance discounts for non-smokers

https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/tobacco_related_mortality/
<https://wallethub.com/edu/the-financial-cost-of-smoking-by-state/9520/>

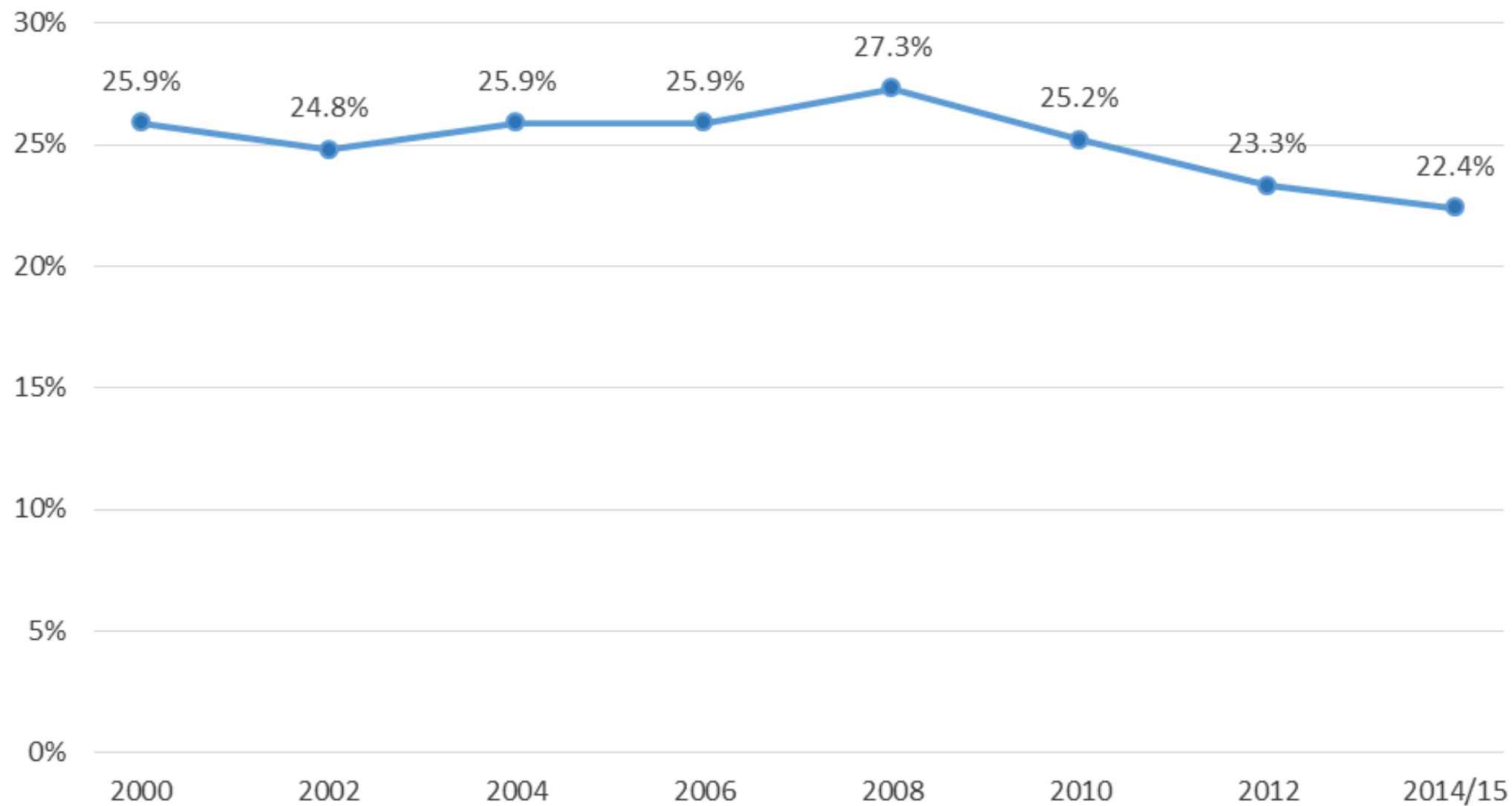


Adult Smoking Prevalence, 2015 Nationwide and County Comparison



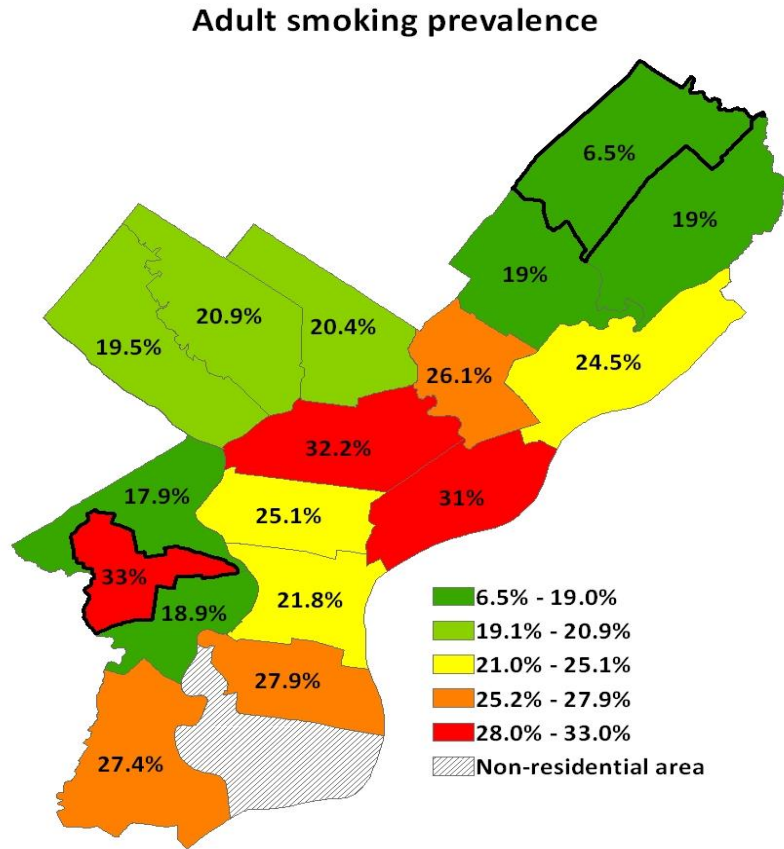
Source: Behavioral Risk Factor Surveillance System (BRFSS) as reported by the 2017 County Health Rankings & Roadmaps, 2015

Adult Smoking Prevalence

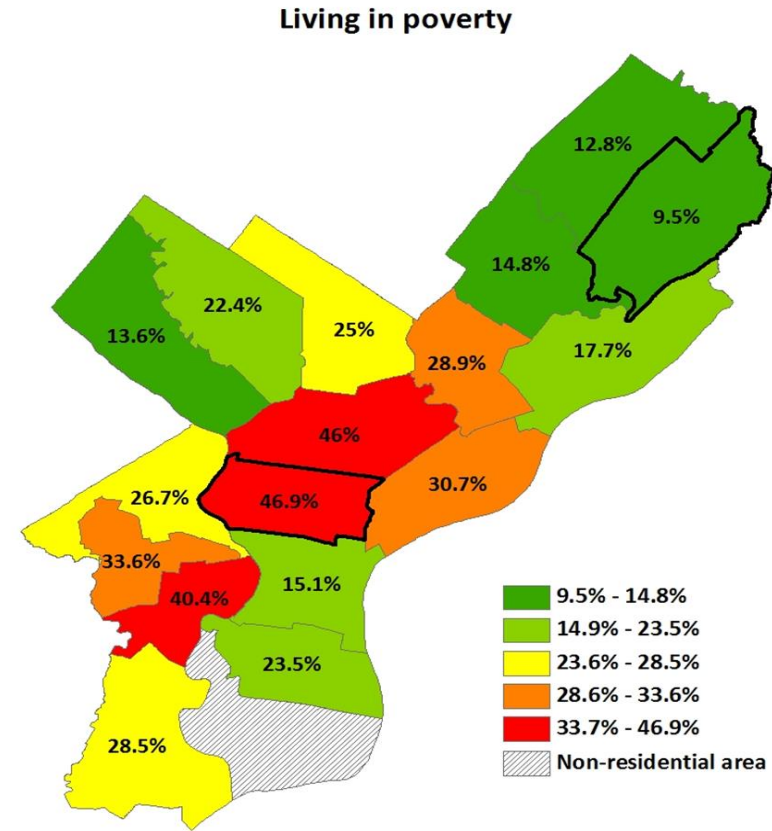


Source: Public Health Management Corporation (PHMC) Household Health Survey, 2000 - 2014/15

Smoking rates are highest in low-income areas



Source: Public Health Management Corporation (PHMC) Household Health Survey, 2012



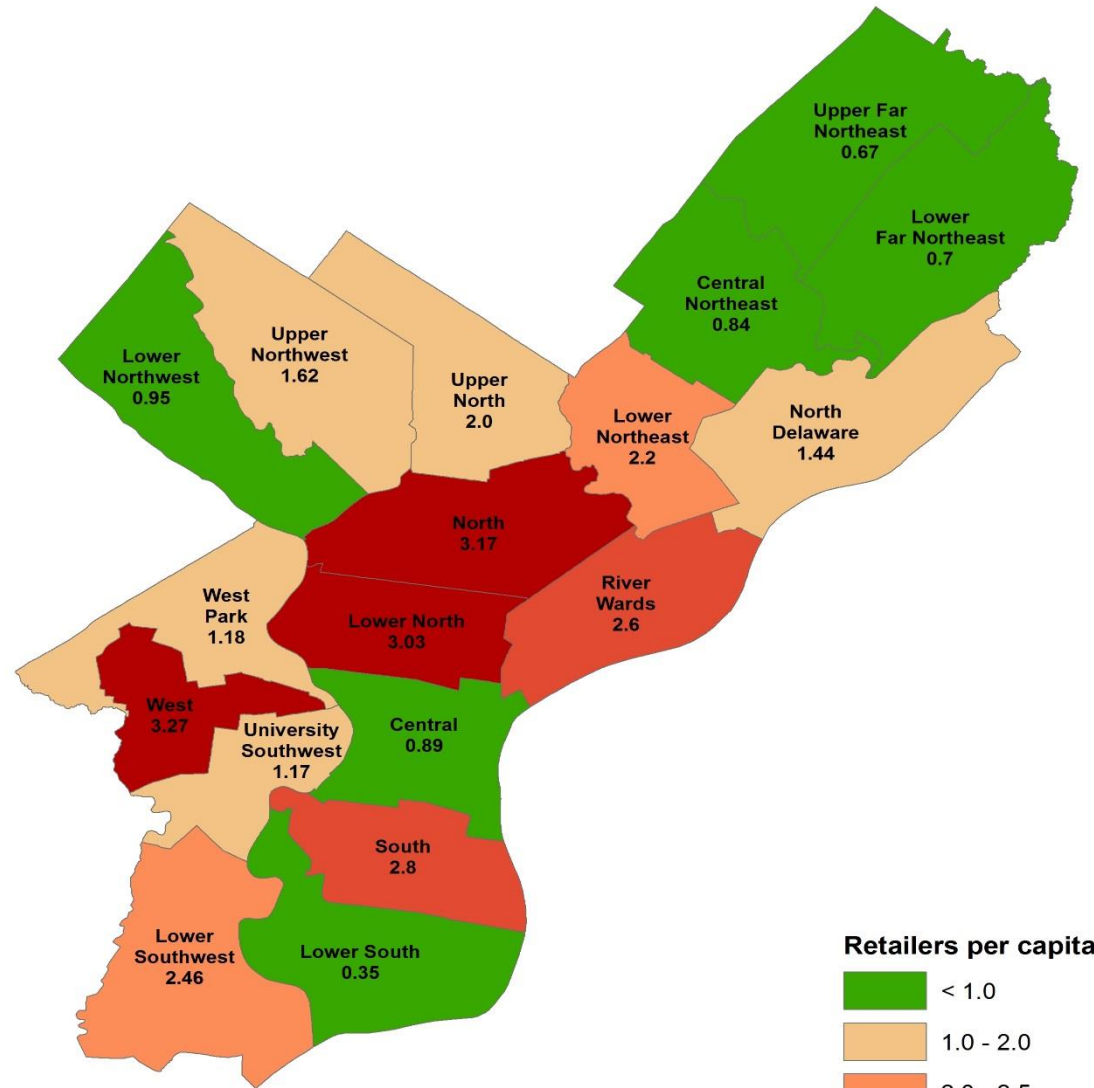
Source: American Community Survey, 2009-2013

Planning districts are depicted on a green-yellow-orange-red gradient, with green indicating better outcomes and red indicating poorer outcomes. The planning districts with the best and poorest outcomes are also highlighted with a thick black border.

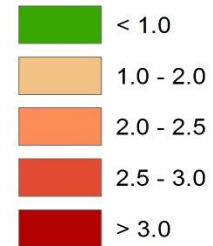
Philadelphia has twice as many retailers per capita as other big cities

	Population	Retailers	Retailers per 1000 residents
Philadelphia	1,560,297	3,455	2.21
Washington, DC	658,893	790	1.20
LA	3,928,864	4,500-5,000	1.15-1.27
NYC	8,491,079	9,800	1.15
San Francisco	852,469	897	1.05
Chicago	2,722,389	2,514	0.92

Tobacco Retailers Per 1,000 Daytime Population by Planning District



Retailers per capita



Created by Amory Hillengas at the PDPH on 6/21/17.
 Sources: Active tobacco establishments with a 2017 permit queried from the PTRD on 6/13/17,
 daytime population estimates calculated using the 2014 5-year ACS table B01003 and 2014 LEHD
 data via OnTheMap. Data were downloaded by tract and aggregated to Planning District.

Point-of-Sale Marketing

- In 2013, the tobacco industry spent 93% (\$8.3 billion) of its promotional dollars on point-of-sale advertising and promotions.¹
- This amounts to approximately \$1 million per hour
 - \$454.2 Million in Pennsylvania
 - \$55 million spent in Philadelphia
- \$35 spent per Philadelphia resident

1. Federal Trade Commission Cigarette Report for 2013 (March 2016)



Point-of-sale marketing works

- Prompts youth to start smoking
- Induces cravings and impulse purchases by smokers
- Makes quit attempts less successful



Example of a typical “power wall”

Tobacco Outlet and Smoking Cessation and Relapse

Anna Pulakka, PhD¹; Jaana I. Halonen, PhD²; Ichiro Kawachi, MD, PhD³; et al

> Author Affiliations

JAMA Intern Med. 2016;176(10):1512-1519. doi:10.1001/jamainternmed.2016.4535

Editorial
Comment

Related
Articles

Abstract

Importance Reduced availability of tobacco outlets is hypothesized to reduce smoking, but longitudinal evidence on this issue is scarce.

Objective To examine whether changes in distance from home to tobacco outlet are associated with changes in smoking behaviors.

Design, Setting, and Participants The data from 2 prospective cohort studies included geocoded residential addresses, addresses of tobacco outlets, and responses to smoking surveys in 2008 and 2012 (the Finnish Public Sector [FPS] study, n=53 755) or 2003 and 2012 (the Health and Social Support [HeSSup] study, n=11 924). All participants were smokers or ex-smokers at baseline. We used logistic regression in between-individual analyses and conditional logistic regression in case-crossover design analyses to examine change in walking distance from home to the nearest tobacco outlet as a predictor of quitting smoking in smokers and smoking relapse in ex-smokers. Study-specific estimates were pooled using fixed-effect meta-analysis.

Exposures Walking distance from home to the nearest tobacco outlet.

Main Outcomes and Measures Quitting smoking and smoking relapse as indicated by self-reported current and previous smoking at baseline and follow-up.

Results Overall, 20 729 men and women (age range 18-75 years) were recruited. Of the 6259 and 2090 baseline current smokers, 1744 (28%) and 818 (39%) quit, and of the 8959 and 3421 baseline ex-smokers, 617 (7%) and 205 (6%) relapsed in the FPS and HeSSup studies, respectively. Among the baseline smokers, a 500-m increase in distance from home to the nearest tobacco outlet was associated with a 16% increase in odds of quitting smoking in the between-individual analysis (pooled odds ratio, 1.16; 95% CI, 1.05-1.28) and 57% increase in within-individual analysis (pooled odds ratio, 1.57; 95% CI, 1.32-1.86), after adjusting for changes in self-reported marital and working status, substantial worsening of financial situation, illness in the family, and own health status. Increase in distance to the nearest tobacco outlet was not associated with smoking relapse among the ex-smokers.

Conclusions and Relevance These data suggest that increase in distance from home to the nearest tobacco outlet may increase quitting among smokers. No effect of change in distance on relapse in ex-smokers was observed.

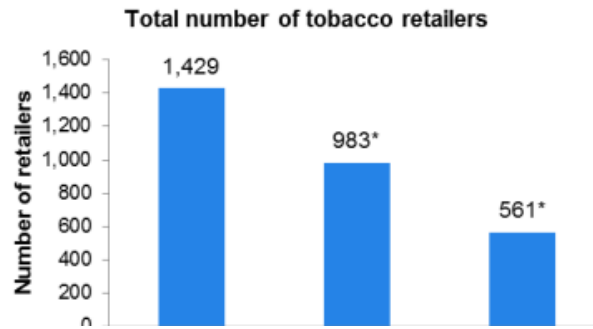
Among the baseline smokers, a 500-m increase in distance from home to the nearest tobacco outlet was associated with a 16% increase in odds of quitting smoking...



Tobacco Sales and Neighborhood Income In Philadelphia

- Smoking remains the leading underlying cause of death in Philadelphia, with more than 2,000 estimated attributable deaths.¹
- Neighborhoods with more retailers that sell tobacco (i.e., high tobacco retailer density) have higher smoking rates in adults² and youth.³ Teens in neighborhoods with more tobacco retailers are more likely to experiment with smoking.⁴
- In Pennsylvania, the tobacco industry spends \$454.2 million on advertising and marketing,⁽¹⁾ which is approximately \$35 per Pennsylvania resident.
- Point-of-sale tobacco marketing, to which youth are particularly susceptible,⁵ is widespread at retail stores in Philadelphia.⁶ Tobacco retailers near schools place more tobacco marketing materials near products for children, such as candy, than tobacco retailers in other locations.⁶
- Tobacco marketing also thwarts attempts by adults to quit smoking.⁵
- This issue of *CHART* summarizes data on tobacco retailers in Philadelphia's neighborhoods.

Low-Income Neighborhoods Have More Tobacco Retail Stores



- In Philadelphia in 2015, approximately 48% of tobacco retailers were located in low-income zip codes, 33% in mixed-income zip codes, and 19% in high-income zip codes.⁽²⁾

The Board of Health regulates tobacco retailers

Philadelphia Code § 9-631(2)(C)(.7) empowers Board of Health to impose any requirement on issuance & renewal of a tobacco retailer permit, as long as requirement is **“appropriate for the public health.”**

New Board of Health Regulation, 12/2016

1. Tobacco retailer density cap
2. School tobacco-free zones
3. Increase permit fee to fund program administration
4. Tobacco cease sales order and permit non-renewal for repeated youth sales violations

Public Process

- Held public hearing and solicited public comment
- Multiple changes made in draft regulation in response to suggestions and pushback from store owners
 - Exception allowing one time resale for stores with 75% of sales are tobacco to avoid loss of store value
 - Creation of a waiting list for stores in districts over the cap
 - Allow for permit application up to 24 months in advance of store opening

Projected Impact

- San Francisco Health Department
 - Decrease of 8% in tobacco retailers in first 10 months of implementation
- Other jurisdictions did not have data to report
- Based on San Francisco experience and high turnover of Philadelphia stores with tobacco permits, estimate that we will see at least as high an attrition rate as SF
- Higher permit fee will allow us to decrease youth tobacco sales rate through increased compliance checks and ability to stop sales by repeat youth sales violators

Evaluation

- Importance of evaluation high for innovative policies
- Funding for policy evaluation is scarce
- Designed “piggy-back” evaluation of tobacco retailer regulations on existing PBT evaluation:
 - Store scans of tobacco sold in 180 independently owned stores (corner stores, delis, etc) in Philadelphia (n=60), surrounding counties (n=60), and Baltimore City (n=60) at baseline, 6, 12, and 24-months
 - Over 3,000 customer intercepts (n=1,500 Philadelphia, n=1,500 Baltimore City) that record whether or not, what types, prices of tobacco, and attitudes towards tobacco being purchased at independent stores at baseline, 6-months, 12-months, and 24-months
 - Self-report online surveys of attitudes, unplanned tobacco purchases, quit attempts, and distance to purchase tobacco in 400 respondents in Philadelphia and Baltimore City at baseline, 12-months, and 24-months
 - Administrative data from the Philadelphia Tobacco Retailer Database records the number and locations of tobacco retailers in the city. Baltimore City is being used as a comparison city
- Foundation funder agreed to allow this add-on piece (first 2 strategies above), although not to fund it. Cost was very low (under \$15,000)

Bill 180522

- Introduced by Cm Squilla with 5 co-sponsors
- Would allow tobacco permit holders to transfer their permits to:
 - Subsequent retailers at same site
 - Any site within the city regardless of density or proximity to a school
- Held in committee after hearing June 6th at which many advocates spoke out against rolling back regulations
- Will likely be heard again in next few months

The influence of flavorings on tobacco use

- 90% of smokers start by age 18
- **Flavorings** increase the chance teens will start and continue smoking
- In 2014, 70% of teens who used tobacco reported using a **flavored** tobacco product

Huang L, Baker HM, et al. Impact of non-menthol flavours in tobacco products on perceptions and use among youth, young adults and adults: a systematic review. *Tob Control* 2016 0:1-11.

Flavored Tobacco Product Use Among Middle and High School Students — United States, 2014

MMWR October 2, 2015 / 64(38);1066-1070



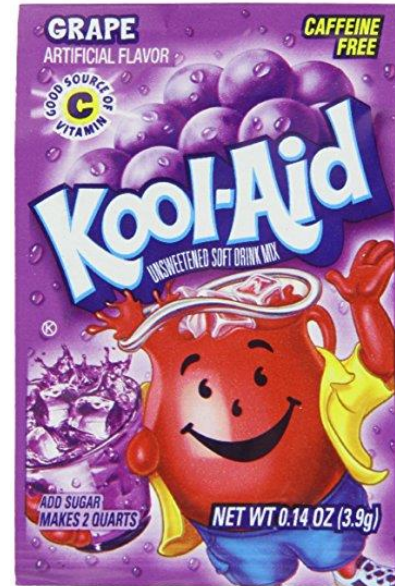
Fruit and Candy Flavored Tobacco Products



Cigarillo flavorings

Identical chemical flavoring used to flavor:

- Jolly ranchers
- Kool-aid
- Life savers
- Cigarillos



For about \$10, a teenager can buy:



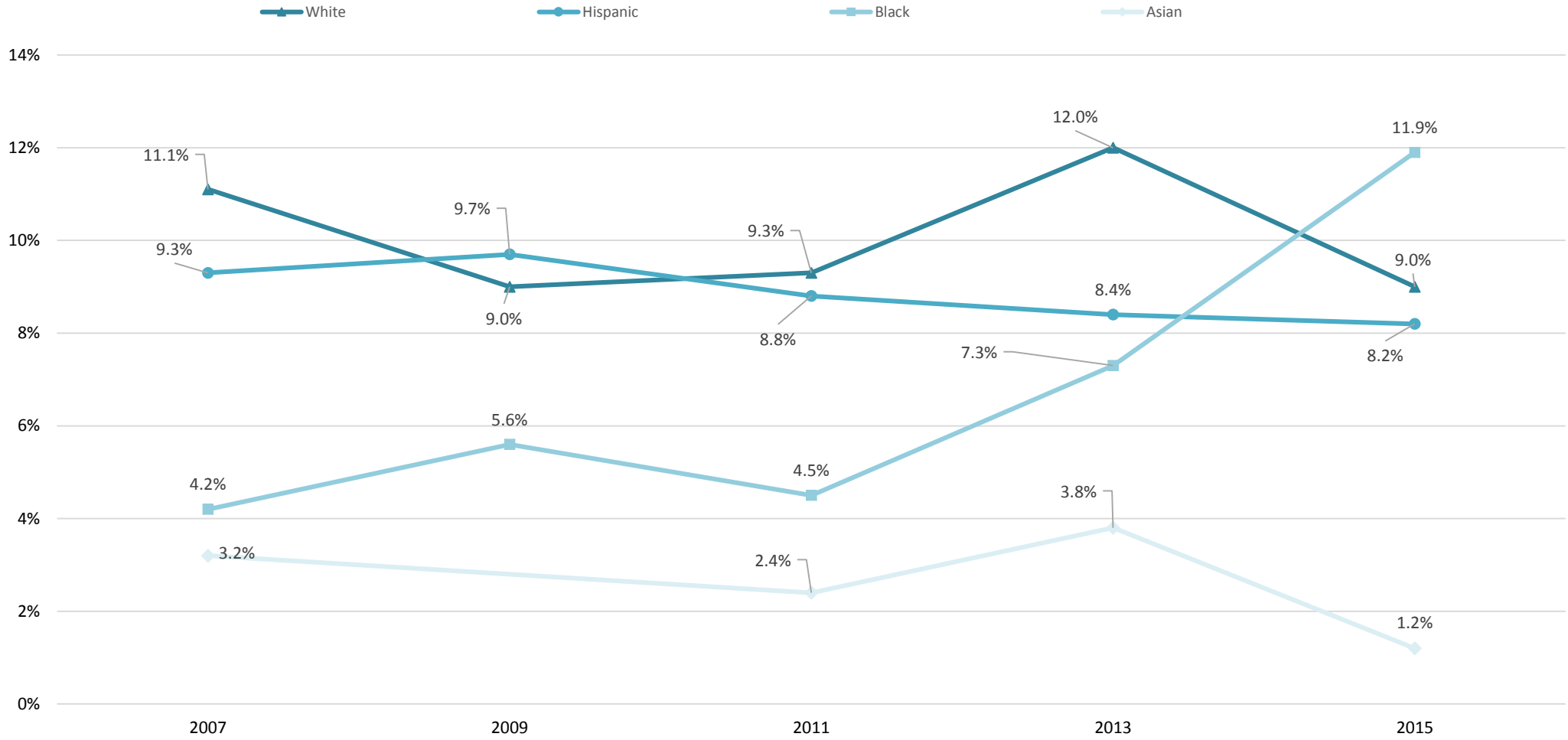
20 cigarettes = 20 gm tobacco



40 cigarillos=120 gm tobacco

Equivalent of 6 packs of cigarettes

Current Cigar Use By Race/Ethnicity Among Philadelphia Youth



Cigar use includes cigars, cigarillos, and little cigars. Data for Asians are missing for some years due to low sample size. Source: Youth Risk Behavior Survey (YRBS).

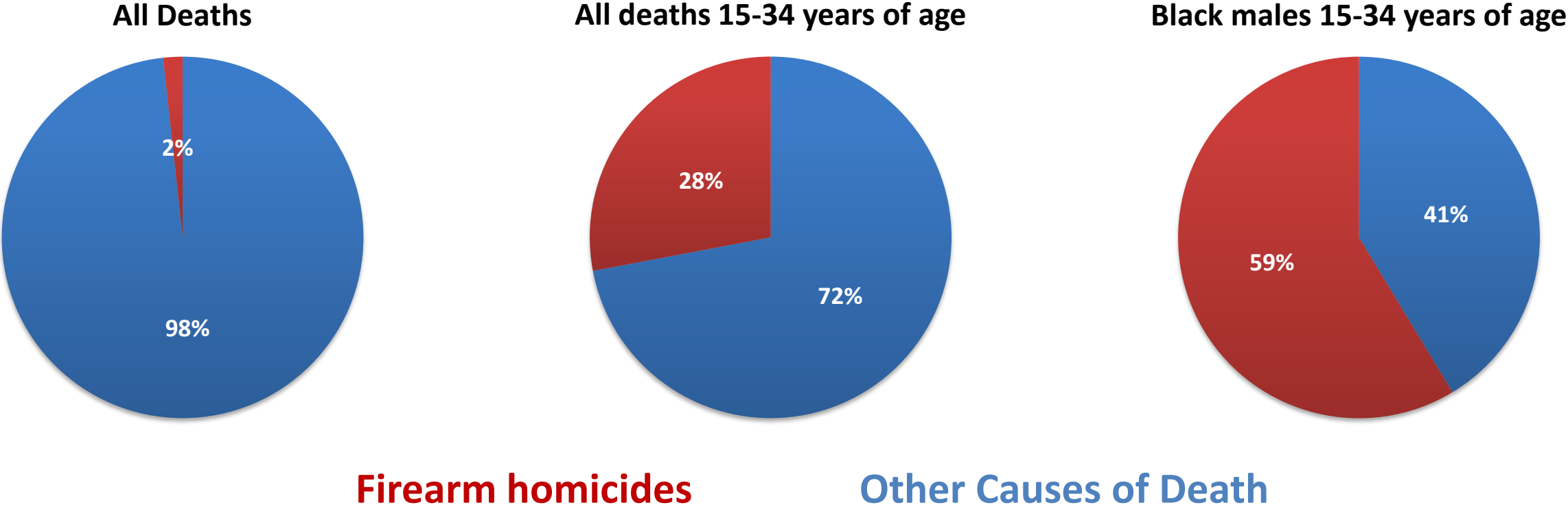
Ban on flavored cigars and cigarillos

- Introduced with 12 co-sponsors
- Passed out of committee June 5th
- Does not include hookah, chewing tobacco, or vape products
- Does not include menthol
- Will likely come up for a full Council vote in the fall

Developing Work

Firearm homicide is the leading cause of death for young non-Hispanic black men.

Percentage of deaths due to firearm homicide, Philadelphia, 2016



Source: 2016 Preliminary Vital Statistics , Philadelphia Department of Public Health

Homicide, firearms, and alcohol

- 82% of homicides in Philadelphia involve firearms
- Homicide is the leading cause of years of potential life lost for black men in Philadelphia
- 59% of deaths of black men age 15-34 are due to gun homicide
- Firearm homicides cluster in low income neighborhoods
- Both homicide and suicide are closely linked to alcohol use
- Off-premise outlets selling takeout alcohol were significantly associated with firearm assault
- Efforts to address gun homicide through commonsense measures that target guns and gun users have been pre-empted by the state.

Policies to prevent gun violence

- Conference June 21st at Jefferson: Code Red
- Will kick off formation of a Working Group of healthcare providers interested in policy solutions to gun violence



THANK YOU!



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