Cardiovascular Health Community of Practice: How Philadelphia is Improving Its Community's Cardiovascular Health Through Policy Change

Department of Public Health

Introduction

The Philadelphia Department of Public Health serves the 1.58 million diverse residents of the city and works to make Philadelphia a healthy place to live, work, and play. Philadelphia is a city with both tremendous challenges and strengths. The poorest of the largest U.S. cities, it also has the highest rates of chronic conditions including obesity, diabetes, hypertension, and premature heart disease.[i] Yet in recent years, progressive policies including the Philadelphia Beverage Tax hold promise to improve health and reduce poverty by investing in programs that support early childhood education, community schools, and renovations to the city's parks, recreation centers, and libraries. The Division of Chronic Disease and Injury Prevention (Get Healthy Philly) works with partners across the city to create policy, systems, and environmental changes that promote health. Our work includes partnerships with local restaurant owners and bakeries to reduce the sodium in take-out food and hoagie rolls (that's sub rolls to non-Philadelphians), collaboration to start walking groups in parks around the city, implementation of policy approaches such as a density cap on tobacco permits and tobacco free zones around schools, and collaboration with local Federally Qualified Health Center and hospital practices to improve control of hypertension and cholesterol.

Challenge

Philadelphia has huge disparities in health and life expectancy between high income and low income neighborhoods and between racial and ethnic groups. Low income and minority city residents suffer from high rates of chronic diseases including heart disease, diabetes, and cancer. Among African Americans, as compared with Whites, premature cardiovascular mortality in the city is 56% higher,[ii] the prevalence of diabetes is 38% higher,[iii] and the death rate from cancer is 7% higher.[iv] Overall, African American men in Philadelphia have a life expectancy that is 3.9 years shorter than that of white city men; and African American women in the city have a life expectancy 2.7 years shorter than white women.[v] These diseases are mediated by behavioral risk factors such as unhealthy diets, lack of physical activity, and tobacco use. But those behavioral risk factors are not driven by differences in willpower

by neighborhood; they are the result of differences in environments that make it seem normal in some city neighborhoods to smoke, drink sugary drinks and eat fast food. While in other neighborhoods, city residents walk in leafy parks, eat fresh healthy food, and avoid all forms of tobacco. Figuring out how to change the context in which people make decisions about what they eat, how they move their bodies, and whether they smoke or not is the crux of our work. Our team was designed to work collaboratively across city departments and agencies, with community partners and with academic institutions and clinical partners to find and implement system solutions to these problems.

Solution

Get Healthy Philly (GHP) was created in 2010 as an initiative in the Health Commissioner's Office with the aim of taking a policy, systems, and environmental approach to preventing chronic conditions in Philadelphia. The initial approach included tobacco, nutrition, and physical activity. GHP partnered with other city departments, built a coalition of community and academic partners, and obtained federal grant funding to support its work. In 2015, the initiative became the Division of Chronic Disease Prevention, and in 2019 we expanded to become the Division of Chronic Disease and Injury Prevention, building a public health approach to gun violence prevention as a core part of our work. Policies passed and implemented through the division's work include tobacco-free inpatient behavioral health and inpatient drug and alcohol policies for all Philadelphia sites, a ban on smoking at outdoor bars, restaurants and cafes, the cigarette tax increase, a cap on tobacco retailer density and a ban on new tobacco permits within 500 feet of K-12 schools in the city, a sodium warning label requirement for chain restaurants, a Board of Health resolution on nutrition and screen time in early childcare settings, and support for the city's tax on sweetened drinks.

Results

The culture of tobacco use in Philadelphia has changed since 2010: tobacco free spaces are now the norm and include parks, recreation centers, most college and university campuses, public housing, and increasingly multiunit private housing. Tobacco products are more expensive and are sold at fewer places: since the passage of Philadelphia's tobacco retail regulations in 2016, the density of tobacco retail has decreased across the city, with larger decreases in the neighborhoods with the densest tobacco retail and marketing at baseline.[vi] Philadelphia's smoking rate has decreased from 27% in 2008 to 18% in 2018, representing a decrease of more than 100,000 smokers.[vii] The beverage tax has resulted in a 38% drop in purchases of sweetened drinks at chain stores and substantial decreases in adult and teen sugary drink consumption according to recent studies.[viii] Our partnership with Chinese takeout restaurants and Temple University resulted in a 30% drop in sodium in commonly served dishes that was maintained over 3 years.[ix] Our partnership with the Drexel Food lab on a lower sodium hoagie

roll and a lower sodium Philly pretzel has resulted in the replacement of 1.68 million rolls served in the Philadelphia schools with a roll containing 40% less sodium.[x] Additionally, we have partnered with 18 Philadelphia hospitals that have pledged to improve the nutrition of millions of meals served.

Lessons Learned

We have learned that voluntary pledges with a menu of options can help to build productive collaborations. Based on the success of the Good Food, Healthy Hospitals initiative, we worked with the Greater Philadelphia Business Coalition on Health to create a Healthy Employer Certification that now has its first platinum level awardee. We have also learned the importance of paying attention to implementation and understanding of the detailed work it requires to make a policy effective. Passing a policy is really just the first step. Without careful, patient work to figure out all of the details to make the policy work, it's simply a piece of paper. Our tobacco retail density work has required us to build a new database, create an online application process that includes a mapping function so that retailers applying for permits can tell if they are eligible, and to create systems for appeals and waiting lists. The work to create a lower sodium hoagie roll required us to think about the markets for the roll and then conduct taste tests and adjust the roll to meet the specifications of groups interested in a healthier product, but looking for a particular appearance or texture.

References

[i] Data available in the Philadelphia Community Health Explorer at https://healthexplorer.phila.gov/top-10-cities/. Sources: Behavioral Risk Factor Surveillance System Data as presented in the National Diabetes Surveillance System | 2013; Interactive Atlas of Heart Disease and Stroke, National Center for Health Statistics | 2011-2013; Behavioral Risk Factor Surveillance System (BRFSS) | 2011; Behavioral Risk Factor Surveillance System (BRFSS) | 2013, County level data is BRFSS as presented in the National Diabetes Surveillance System.

[ii] Vital Statistics Report, Philadelphia, 2014.

[iii] Philadelphia Health Management Corporation, Household Health Survey 2014-15

[iv] Vital Statistics Report, Philadelphia, 2014.

[v] Vitals Statistics Report, Philadelphia, 2015

[vi] Hannah G. Lawman, "The Pro-Equity Potential of Tobacco Retailer Licensing Regulations in Philadelphia", American Journal of Public Health 109, no. 3 (March 1, 2019): pp. 427-428.

[vii] Behavioral Risk Factor Surveillance System, 2011- 2018

[viii] Roberto CA et al, "Association of a Beverage Tax on Sugar-Sweetened and Artificially Sweetened Beverages With Changes in Beverage Prices and Sales at Chain Retailers in a Large Urban Setting," JAMA JAMA. 2019;321(18):1799-1810 and Philadelphia Department of Public Health Chart: Youth Consumption of Soda in Philadelphia, 2007-2017 https://www.phila.gov/media/20190227105051/chart-v4e1.pdf

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