

COLLECTING & UTILIZING RELIABLE, LOCAL COMMUNITY- BASED HEALTH INFORMATION

An overview of the Community Health
Data Base
July 2016



**COMMUNITY
HEALTH
DATA BASE**
a PHMC resource

ABOUT PHMC

Public Health Management Corporation (PHMC) is a non-profit public health institute offering a diverse mix of programs and services. For more information:

www.phmc.org.

- Community Health Data Base
- Addictions Services
- Health Promotion, Injury Prevention
- Criminal Justice Treatment Initiatives
- Early Intervention Service for Infants and Toddlers
- HIV/AIDS Prevention
- Nurse Managed Care
- Services to Homeless
- Research and Evaluation

PHMC'S CENTER FOR DATA INNOVATION

- ◉ Large scale population surveys
- ◉ Training and technical assistance
- ◉ GIS mapping
- ◉ Community and population needs assessments
- ◉ Capacity building assessments
- ◉ Instrument and form development
- ◉ Proposal development and writing
- ◉ Database development
- ◉ Skills-based trainings
- ◉ Technical and policy reports

THE COMMUNITY HEALTH DATA BASE (CHDB)

- Network of health and human service organizations, government agencies, academic institutions, foundations among others across the Southeastern Pennsylvania region
- Provides **population-based data** to those interested in gaining a better understanding of communities they serve and how to best meet their needs

THE COMMUNITY HEALTH DATA BASE (CHDB)

- Collects **primary data** through our biennial Southeastern Pennsylvania Household Health Survey
 - CHDB's proprietary data set
- Provides **access to secondary data sets**, such as U.S. Census data and PA Vital Statistics
 - More on this later...

THE NEED FOR POPULATION HEALTH DATA

THE NEED FOR POPULATION HEALTH DATA

- Clinical data

- Provide a picture of those **receiving care**

- Program data

- Provide a picture of those attending sessions, **receiving services**

- Population data

- Provides a picture of the **entire population**, not just those receiving care or services
 - Nationally, statewide, and at the county and neighborhood level

THE NEED FOR POPULATION HEALTH DATA

- Geographic and demographic communities have **diverse needs**
- National, state, and county-level data are **insufficient to assess** and demonstrate local needs



FOR EXAMPLE...

- The percentage of **uninsured adults (18-64)** varies significantly by the nation, state, region, county and neighborhood:
- **21%** Nationwide (1)
 - **16%** in Pennsylvania (2)
 - **12%** in Southeastern Pennsylvania (3)
 - **19%** in Philadelphia County (3)
 - **30%** in Bridesburg/Kensington/Port Richmond (3)

**THE HOUSEHOLD HEALTH
SURVEY:
BACKGROUND AND METHODOLOGY**

HOUSEHOLD HEALTH SURVEY: BACKGROUND

- ◉ Survey began in 1983 (Philadelphia County)
- ◉ In 1991, expanded to include five-county Southeastern Pennsylvania region
- ◉ Since 1994, fielded **every other year**
- ◉ Currently completing the 2014/2015 Survey

HOUSEHOLD HEALTH SURVEY: METHODOLOGY

- Interviews conducted in **over 10,000 households**
 - Approximately 3,300 additional interviews about selected child conducted with child proxy
 - Total sample size: 13,300 adults and children
- Geographic region:
 - Bucks, Chester, Delaware, Montgomery and Philadelphia Counties



HOUSEHOLD HEALTH SURVEY: METHODOLOGY

- ◉ Interviews conducted by telephone using **random digit dial landline and cellphone technology**
- ◉ Oversample of persons 60+ and 75+ years of age
- ◉ Adult + child respondents selected using **last birthday method**
- ◉ Interviews conducted in English + Spanish; foreign-language proxy, if needed



CELL PHONE INTERVIEWS

- ◉ As we all know, there is a **dramatic rise in wireless-only households**
- ◉ CHDB first introduced a cell phone sampling frame in 2008
- ◉ **Cell phone interview expansion** in 2010 and 2012 (20% in 2014/2015)



Challenges of conducting cell phone interviews?

PUTTING THE DATA TO
USE:
FIRST STEPS

DEFINING YOUR COMMUNITY

- ◉ Neighborhoods
- ◉ Census tract clusters
- ◉ ZIP code clusters
- ◉ Planning Analysis Sections (PAS)
- ◉ Health districts
- ◉ Suburban townships
- ◉ County, region

Geographic

- ◉ Age/age group
- ◉ Gender
- ◉ Children
- ◉ Older adults
- ◉ Ethnic/racial groups
- ◉ Sexual identity
- ◉ Employment
- ◉ Education
- ◉ Religious affiliation
- ◉ Poverty (Federal Poverty Level)
- ◉ Among others...

Demographic



PUTTING THE DATA TO
USE:
TOPIC AREAS AND EXAMPLES

HEALTH AND WELL-BEING INDICATORS

Adults 18 years of age or older

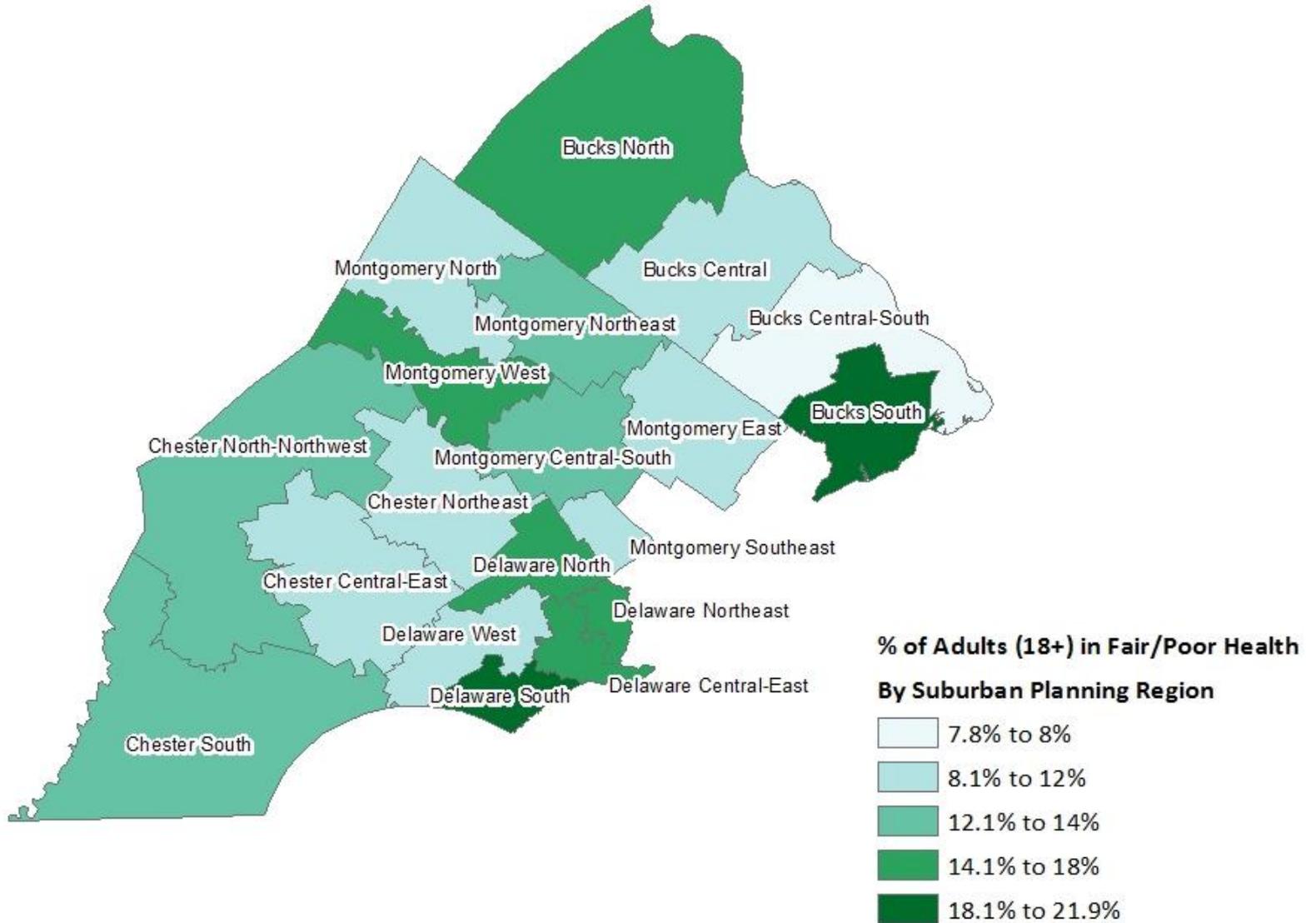


HEALTH STATUS

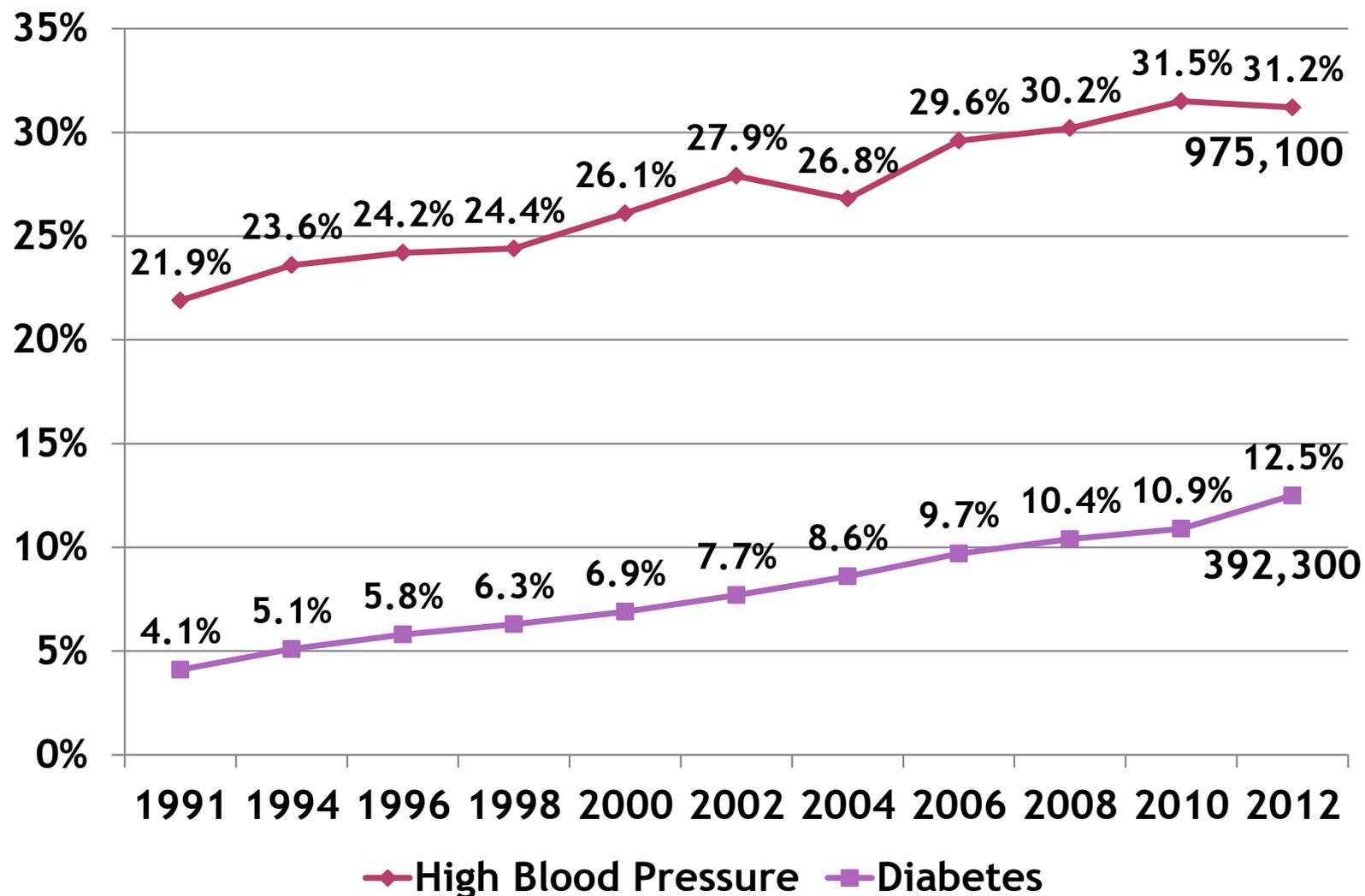
- Self-reported health status
- Disability status
- Chronic health conditions
 - Asthma
 - Cancer
 - Diabetes
 - High blood pressure
 - Chronic pain
- Obesity (BMI calculation)



Percentage of Adults (18+) in Fair/Poor Health by Suburban Planning Region, SEPA, 2012



CHRONIC HEALTH CONDITIONS AMONG ADULTS (18+), SEPA, 1991-2012



Source: PHMC's Community Health Data Base, 1991-2012 Southeastern Pennsylvania Household Health Surveys.

¹ NOTE: Beginning in the 2004 survey, the wording of the question about high blood pressure and diabetes was changed slightly. Respondents were asked if they EVER had high blood pressure or diabetes. In past survey years, respondents were asked if they currently have high blood pressure or diabetes.

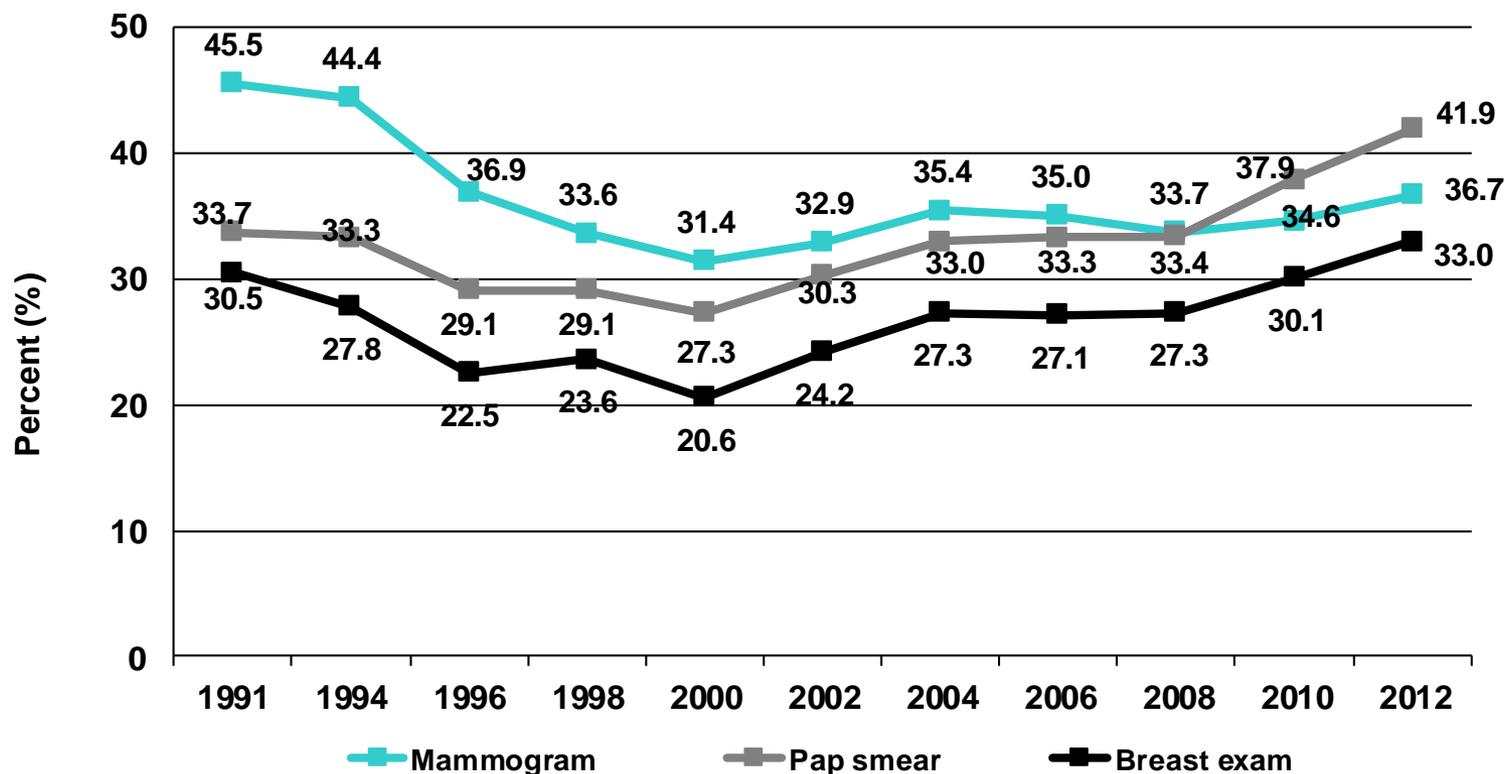
DISEASE PREVENTION & ACCESS TO CARE

Routine Screenings and Exams

- ⦿ Dental visit
- ⦿ Blood pressure reading
- ⦿ HIV testing
- ⦿ Colonoscopy (50+)
- ⦿ Pap smear (women 18+)
- ⦿ Clinical breast exam (women 18+)
- ⦿ Mammogram (women 40+)
- ⦿ Prostate exam (men 45+)



Women (18+) Who Did Not Receive Selected Cancer Screenings in the Past Year, Southeastern Pennsylvania, 1991-2012



Notes: ¹ Mammogram asked of female adult respondents 40 years of age and older.

² Pap smear and breast exam asked of female adult respondents 18 years of age and older.

Source: PHMC's Community Health Data Base, 1991-2012 Southeastern Pennsylvania Household Health Surveys

DISEASE PREVENTION & ACCESS TO CARE

Source and Utilization

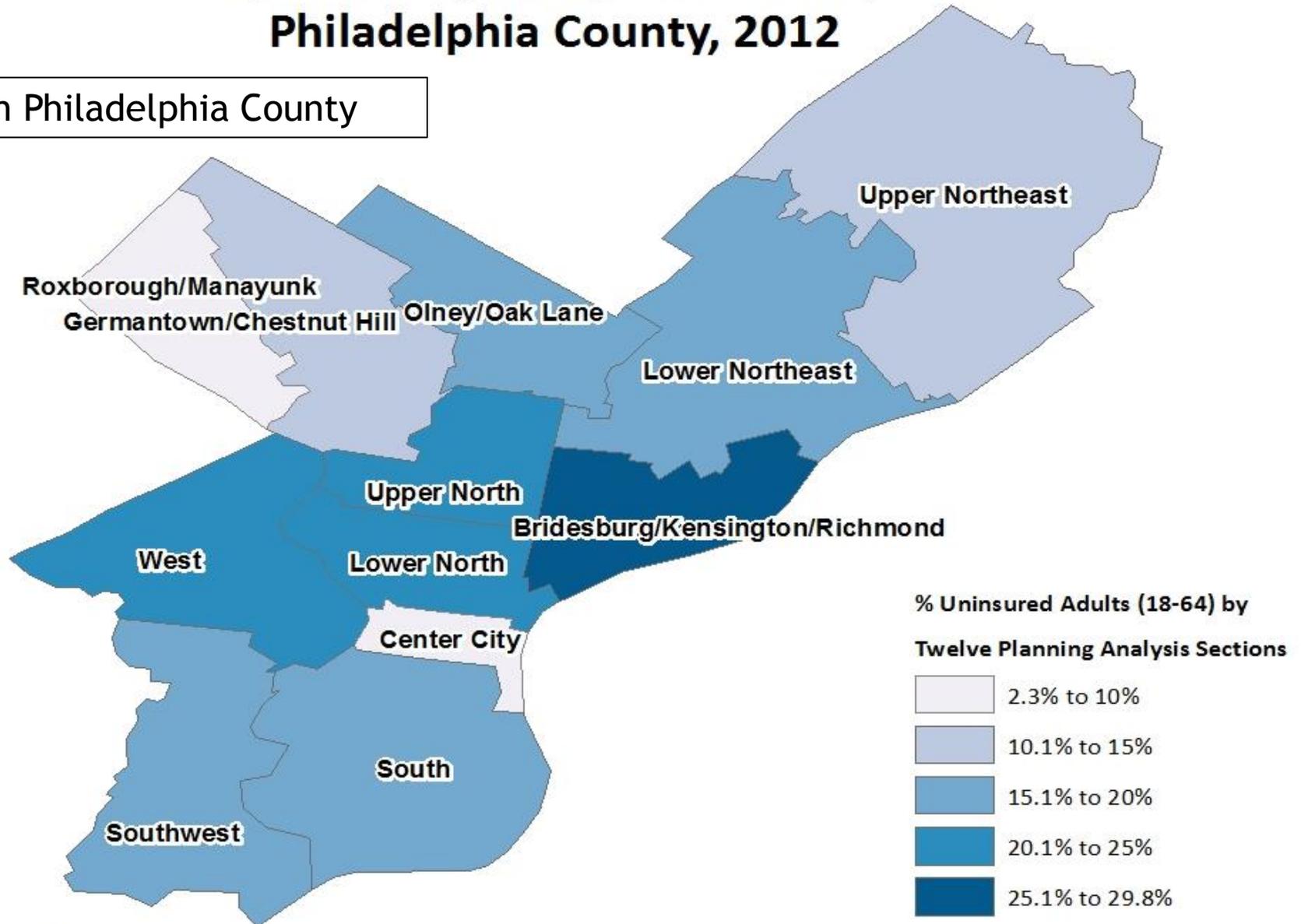
- ◉ Regular source of care
- ◉ Setting of care
- ◉ Number of medical visits in past year
- ◉ Use of retail clinics
- ◉ Hospital preference
- ◉ Barriers to care (transportation and language)
- ◉ Cost barriers to care

HEALTH INSURANCE

- Current source(s) of health coverage
- Among insured:
 - Name of insurer
 - Uninsured at any point in past year?
- Among uninsured:
 - Length of time without health insurance
 - Primary reason for lack of coverage
 - Visited ER due to lack of insurance
- Coverage for prescription drugs; dental care

Percentage of Uninsured Adults (18-64) by Planning Analysis Sections, Philadelphia County, 2012

18.5% in Philadelphia County

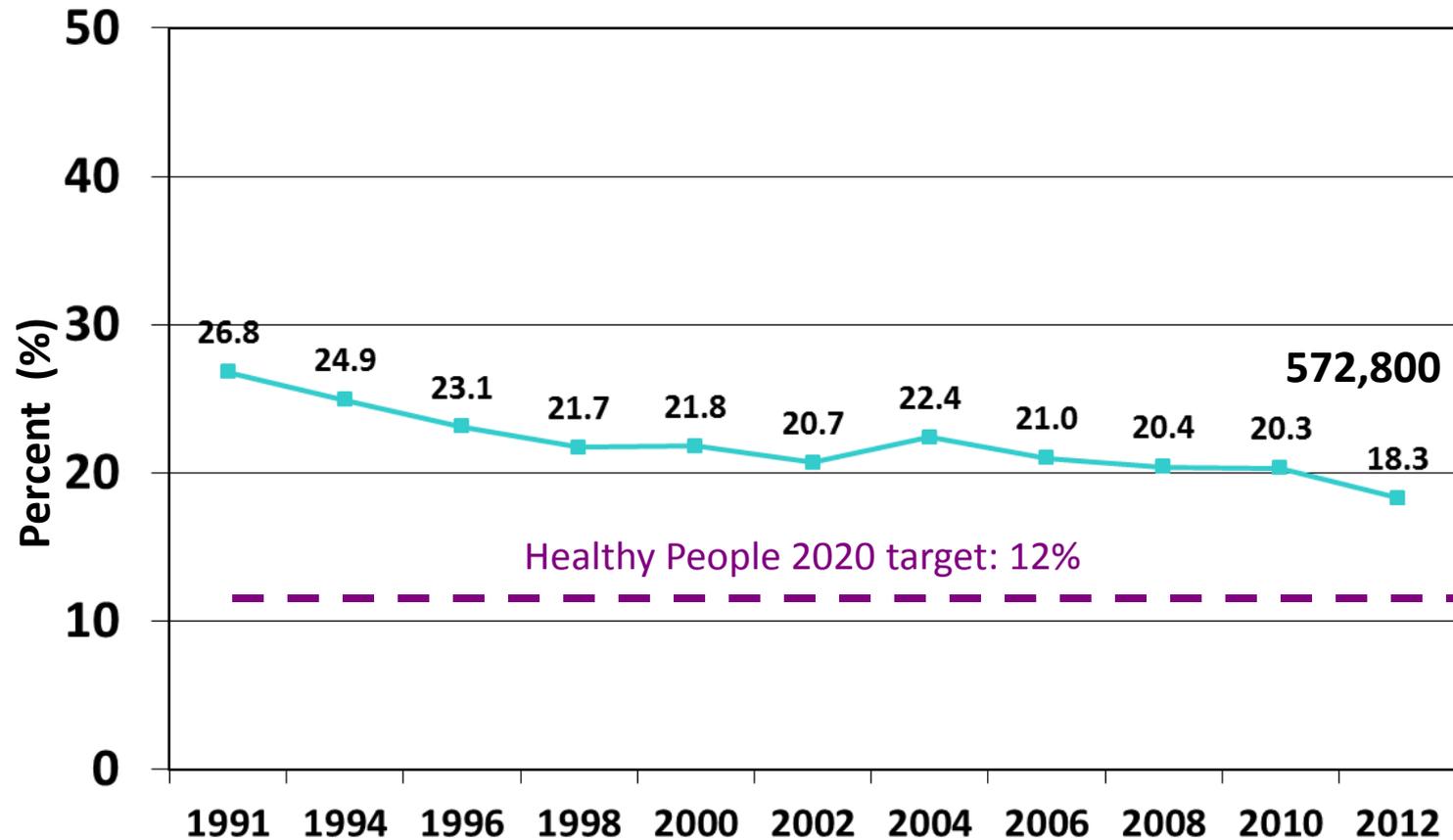


PERSONAL HEALTH BEHAVIORS

- ◉ Smoking status and frequency
- ◉ Smoking quit methods
- ◉ Exposure to SHS
- ◉ Use of OTP
- ◉ Problem gambling behavior
- ◉ Number of servings of fruits and vegetables
- ◉ Fast food consumption
- ◉ Exercise frequency
- ◉ Medication labeling
- ◉ Screen time (computer/TV)



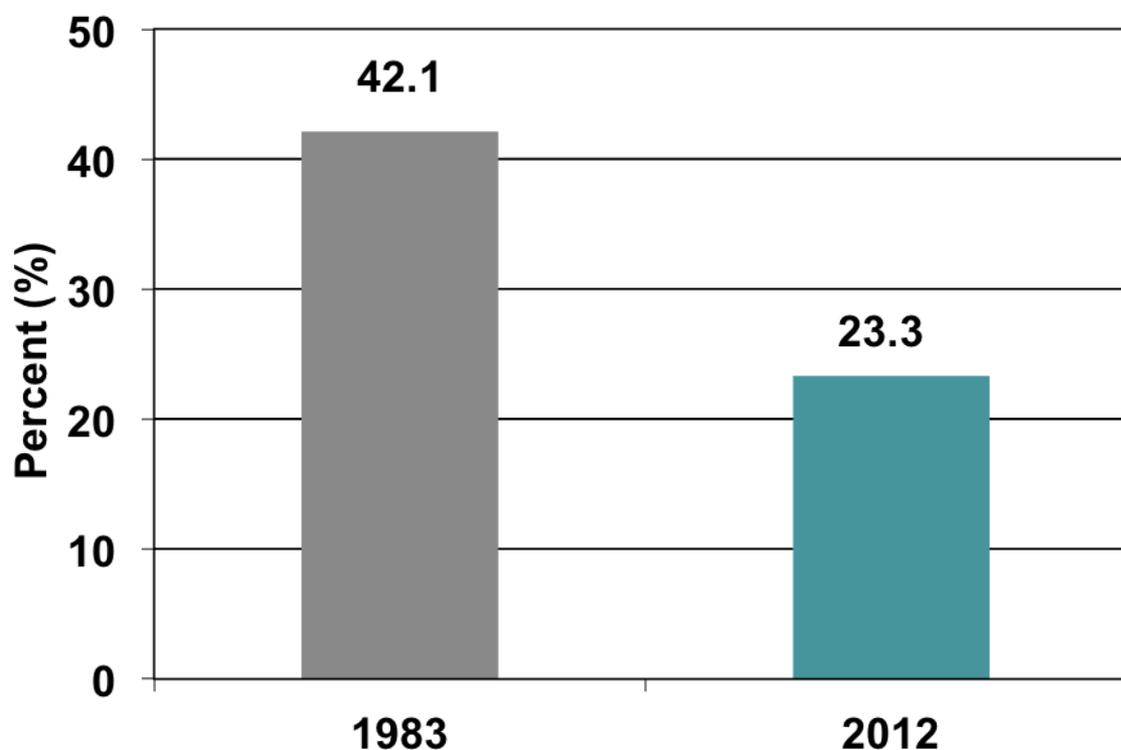
CIGARETTE SMOKING AMONG ADULTS (18+ YRS), SEPA, 1991-2012



Note: Beginning with the 2004 survey, the wording of the smoking question was changed slightly. Instead of asking respondents if they currently smoke, as was asked in previous survey years, respondents were asked if they smoke every day, some days or not at all.

Flashback! **Philadelphia** then & now...

Cigarette Smoking Among Philadelphia Adults (18+), 1983 and 2012



NOTE: Beginning with the 2004 survey, the wording of the smoking question was changed slightly. Instead of asking respondents if they currently smoke, as was asked in previous survey years, respondents were asked if they smoke every day, some days or not at all.

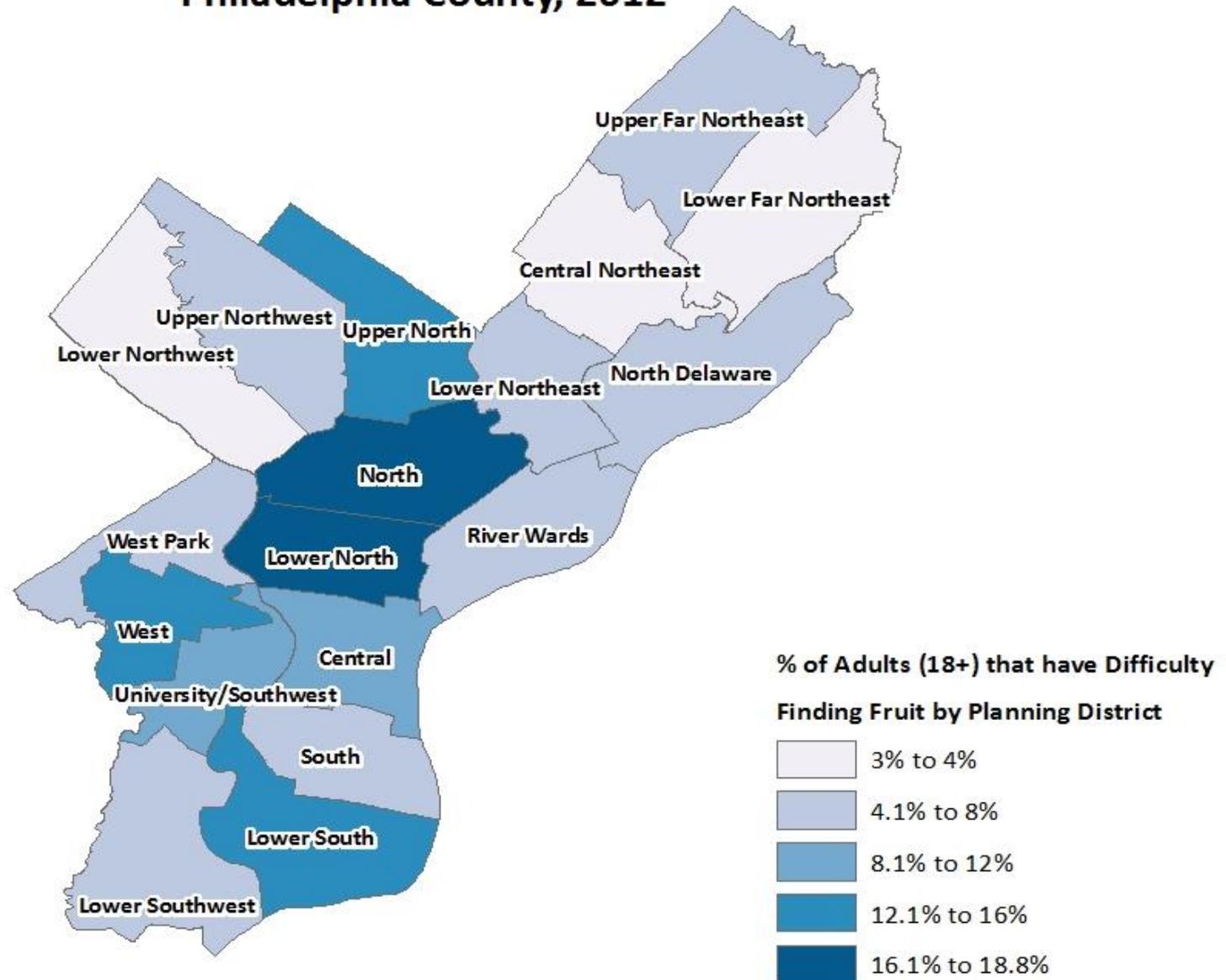
MENTAL & BEHAVIORAL HEALTH & ENVIRONMENT

- ◉ Diagnosed mental health condition and treatment
- ◉ Level of stress in past year
- ◉ Substance use
- ◉ In recovery from alcohol or drug addiction
- ◉ Friends/family in recovery
- ◉ Attitudes about recovery
- ◉ Safety
- ◉ Access to fresh produce
- ◉ Access to outdoor space
- ◉ Cut or skipped meal due to cost
- ◉ Use of neighborhood recreational facilities
- ◉ Housing costs
- ◉ Rent or own home

Mental & Behavioral Health

Food Access, Housing and Neighborhood

Percentage of Adults (18+) that have Difficulty Finding Fruits/Vegetables in their Neighborhood by Planning District, Philadelphia County, 2012



SOCIAL CAPITAL

- ◉ Involvement in local groups & organizations
- ◉ Neighbors have worked together
- ◉ Community improvement
- ◉ Sense of belonging to community
- ◉ Feelings of trust in community



Can where you live have an impact on your physical or mental health? For more than a decade, health researchers in the US^{4,5,6} and other countries^{2,3,4} have been examining the concept of social capital or the relationship between community connectedness and health outcomes. Over the years, health researchers have documented associations between low social capital and negative health outcomes such as self-reported fair or poor health^{3,4,6} and higher mortality rates.^{4,7}

Since 2002, PHMCo's Southeastern Pennsylvania (SEPA) Household Health Survey has included questions allowing us to look at social capital of the communities in which people live. Most recently, the 2010 SEPA Household Health Survey included five variables, based on questions successfully utilized in prior studies, measuring social capital: 1) number of groups the respondent currently participates in; 2) respondent's perception as to whether neighbors are willing to help each other; 3) respondent's perception as to whether neighbors ever worked together to improve their community; 4) respondent's feeling of belonging to the neighborhood; and 5) respondent's perception as to whether people in the neighborhood can be trusted.

A social capital index, with scores ranging from 1 to 10, was created by recoding these five variables so each item could have a maximum score of two. An individual with a combined index score of 1-4 was deemed as having "low" social capital, a score of 5-7 as "medium" social capital, and a score of 8-10 as "high" social capital.⁸

The purpose of this Brief is to increase the understanding of the relationship between social capital and demographic and socio-economic characteristics across communities as well as between social capital and health in the SEPA region. In particular, this Brief focuses on adults with low social capital,

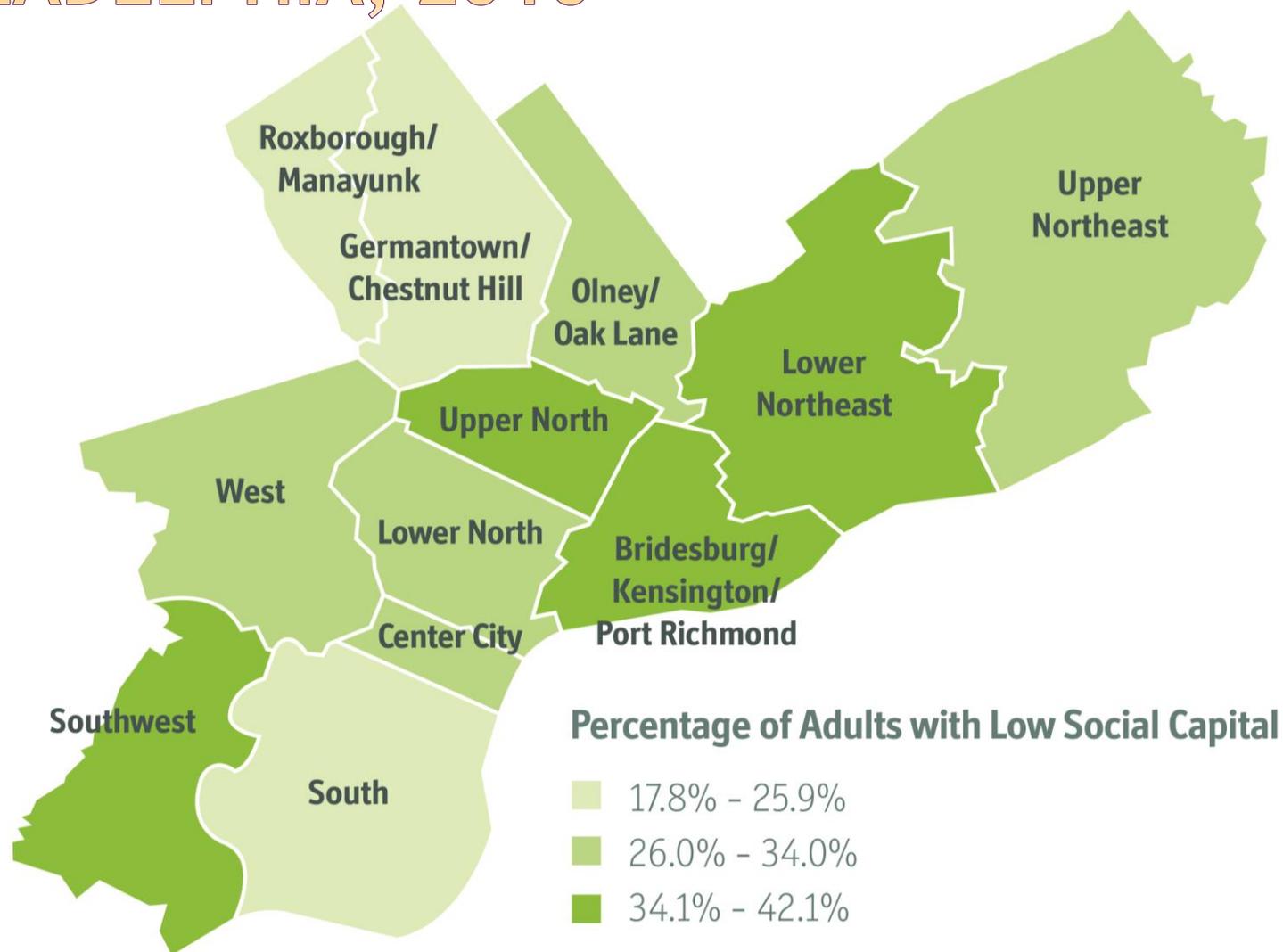
which, as noted, is strongly correlated with negative health outcomes and other health disparities.^{4,7} This Brief presents information from PHMCo's 2010 Household Health Survey on social capital among adults 18 years of age and older residing in the five-county SEPA region of Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties.

SOCIAL CAPITAL AND DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS

In Southeastern Pennsylvania (SEPA), one-quarter of adults (24.8%) have low social capital or do not feel connected to their neighbors and do not participate in community activities; this percentage represents approximately 632,000 adults in the region. Over one-half of SEPA adults (55.8% or approximately 1,425,000 adults) feel only somewhat connected to their neighbors and may or may not participate in community activities. Nearly one-fifth of adults in the region (19.4% or approximately 497,000 adults) have high social capital or feel very connected to their neighbors and support their community through various civic efforts (Figure 1). Data from the 2002 SEPA Household Health Survey show a similar pattern, where 26.2% of adults had low social capital, 54.1% had medium social capital, and 19.6% had high social capital.⁹

Levels of social capital in SEPA vary by demographic and socio-economic subgroups. Young adults are the most likely age group to have low social capital. Two in five young adults 18-29 years (40.5%) have low social capital, compared with adults 30-44 years (25.8%), adults 45-59 years (20.5%), and adults 60 years and older (18.8%) (Figure 2). We observed a similar pattern in 2002, where social capital increased with increasing age group.

ADULTS WITH LOW SOCIAL CAPITAL BY PLANNING ANALYSIS SECTION, PHILADELPHIA, 2010



OLDER ADULT SUPPLEMENT (60+)

- Housing repair needs
- Use of aids
- 10-item depression scale
- Use of formal in-home care (and payment)
- Falls within past year
- Instrumental Activities of Daily Living (IADL) limitations
 - i.e., using phone, shopping, meal prep, etc.
- Activities of Daily Living (ADL) limitations
 - i.e., bathing, grooming, eating, etc.
- Use of informal help with IADL & and ADL
- Other social supports & services



HEALTH & WELL-BEING INDICATORS FOR CHILDREN 0-17 YEARS OF AGE

- Health status
- Health conditions
- Health insurance
- Access to care
- Dental care (0-17 years)
- Physical activity (3-17 years)
- Nutrition (3-17 years)



WORKING WITH THE DATA FILES

HOUSEHOLD HEALTH SURVEY

DATA FILES: 2014/2015

1. Adult data file (18+ years) - HS15AR1
2. Child data file (0-17 years) - HS1560S1
3. Older adult data file (60+ years) - HS15CHD1
 - Includes data about all health and well-being indicators asked of adults as well as supplement questions asked only of older adults
4. Combination file (0+ years) - HS15COM1
 - Includes data about all health indicators asked of BOTH adults and children (general health status, asthma, insurance status, among others)

WEIGHTING THE DATA

- All Household Health Survey data files include weighting variables
 - Adjusts for sampling bias
 - Gives added weight to underrepresented population subgroups and reduce weight to overrepresented population subgroups
- How are data files weighted?
 - Data weighted by race, gender, income, age and household size
 - Four suburban counties each with one weighting area; Philadelphia County has three weighting areas

WEIGHTING THE DATA: PROJECTION WEIGHT

- Projection weight
 - Estimates population count
 - To be used when you want to estimate total number of people or households represented by survey data
- Adult file - ADPOPWT, HSEPOPWT
- 60+ file - ELDPOPWT
- Child file - CHPOPWT, HSEPOPWT
- Combination file - ARCPOPWT
 - To be applied when calculating projected number or % of total population (adults and children) in given area with particular characteristics

EXAMPLE: PROJECTION WEIGHT

- Data → Weight Cases → ADPOPWT

Q3a Ever had asthma?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	504830	16.1	16.1	16.1
	No	2623434	83.7	83.9	100.0
	Total	3128264	99.8	100.0	
Missing	System	5173	.2		
Total		3133436	100.0		

WEIGHTING THE DATA: BALANCING WEIGHT

- Balancing weight
 - Adjusts for sampling basis and retains sample size
 - Apply to test for statistical significance
- Adult file - ADBALWT, HSEBALWT
- 60+ file - ELDBALWT
- Child file - CHBALWT, HSEBALWT
- Combination file - ARCBALWT
 - To be applied when calculating number or % of total survey sample (adults and children) with particular characteristics

EXAMPLE: BALANCING WEIGHT

- Data → Weight Cases → ADBALWT

Q3a Ever had asthma?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1604	16.0	16.0	16.0
	No	8398	83.8	84.0	100.0
	Total	10002	99.8	100.0	
Missing	System	16	.2		
Total		10018	100.0		

ADDITIONAL DATA SETS

U.S. CENSUS & AMERICAN COMMUNITY SURVEY

- The CHDB provides selected data from the U.S. Census in useful aggregates and incorporates third-party data to provide interim projections
- 2010 Census counts and %, 2013 updates, 2018 projections
- Examples of data provided:
 - Population totals
 - Age, racial/ethnic, gender distributions
 - Household income and size
 - Educational status
 - Poverty status
 - Female-headed households

VITAL STATISTICS

- ◉ Data from the Commonwealth of PA, Dept. of Health, formatted to provide information on births and deaths
- ◉ Most recent data, provided in average annualized rates, are from 2011-2012
- ◉ Available at ZIP code and county level for all of SEPA and by Census Tract for Philadelphia County
- ◉ Birth outcomes: births to all women, births to adolescent women, infant mortality, prenatal care
- ◉ Mortality: all causes, heart disease, all cancer

DATA APPLICATIONS AND ACCESS

STRATEGIC LOCAL RESEARCH

Needs
assessments

Strategic growth
decisions,
facility planning

Disease
management
initiatives

Marketing and
outreach

Grant writing
and
development

Community
health
programming

Teaching and
academic
research

Advocacy and
public relations

HOW TO ACCESS DATA

- SPSS data files, as previously discussed, housed at the university
 - Look for corresponding documentation binder
- The CHDB website - www.CHDBdata.org
 - Online data analysis tools
 - Data findings articles
 - Reports
 - Presentations

THANK YOU!

Questions?