

CDC's Division of Population Health - Responding to the Need for Sub-State Level Data

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National Committee on Vital and Health Statistics

Population Health Subcommittee Workshop

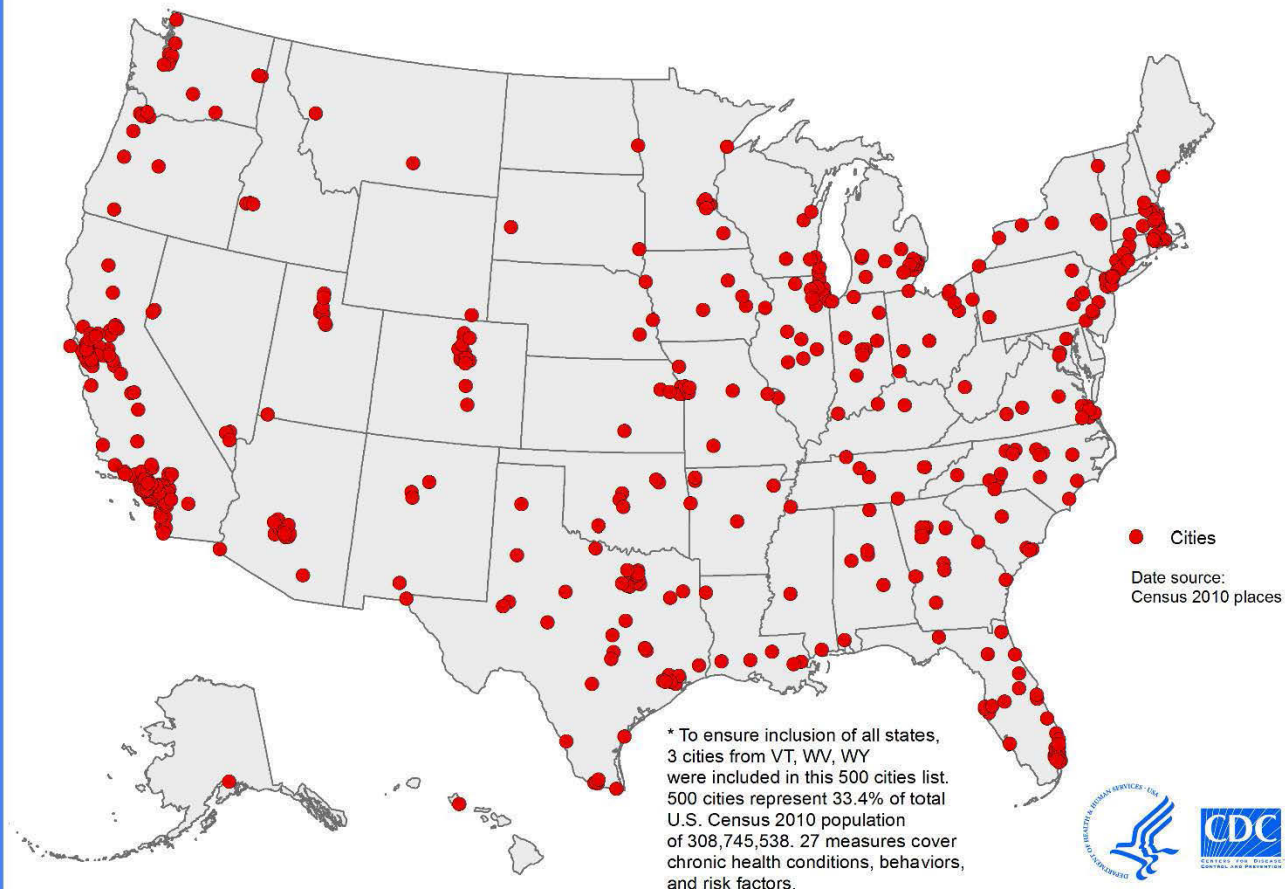
Using Sub-county Data to Promote Multi-sector Approaches for
Community Health and Well-being: Identifying Gaps and
Opportunities

September 27, 2016

500 Cities Local Data for Better Health

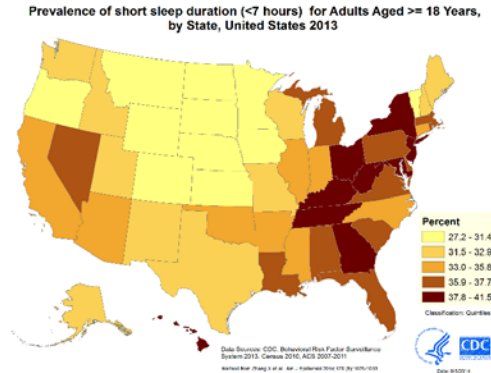
- ❑ **Robert Wood Johnson Foundation and CDC Foundation in partnership with CDC**
- ❑ **Project launched in October 2015**
- ❑ **First-of-its kind data analysis for the 500 largest American cities, and the census tracts within these cities, to estimate and report data for a select number of chronic disease measures, using data from the Behavioral Risk Factor Surveillance System**
- ❑ **Data estimates will be made available through:**
 - **CDC Chronic Data Portal (Socrata Open Data) – December 2016**
 - **Interactive website that will allow users to view, explore and download city and tract-level data – scheduled to launch in summer of 2017**

Largest 500 US Cities*, by 2010 Population

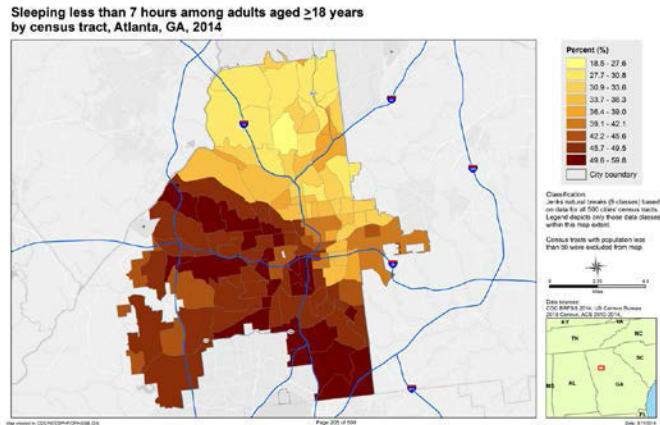


Our Vision

To go from this:



To also have this:



27 Chronic Disease Measures

- Unhealthy behaviors
- Health outcomes
- Prevention

Unhealthy Behavior Measures

- Binge drinking among adults aged ≥ 18 years
- Current smoking among adults aged ≥ 18 years
- No leisure-time physical activity among adults aged ≥ 18 years
- Obesity among adults aged ≥ 18 years
- Sleeping less than 7 hours among adults aged ≥ 18 years

Health Outcome Measures

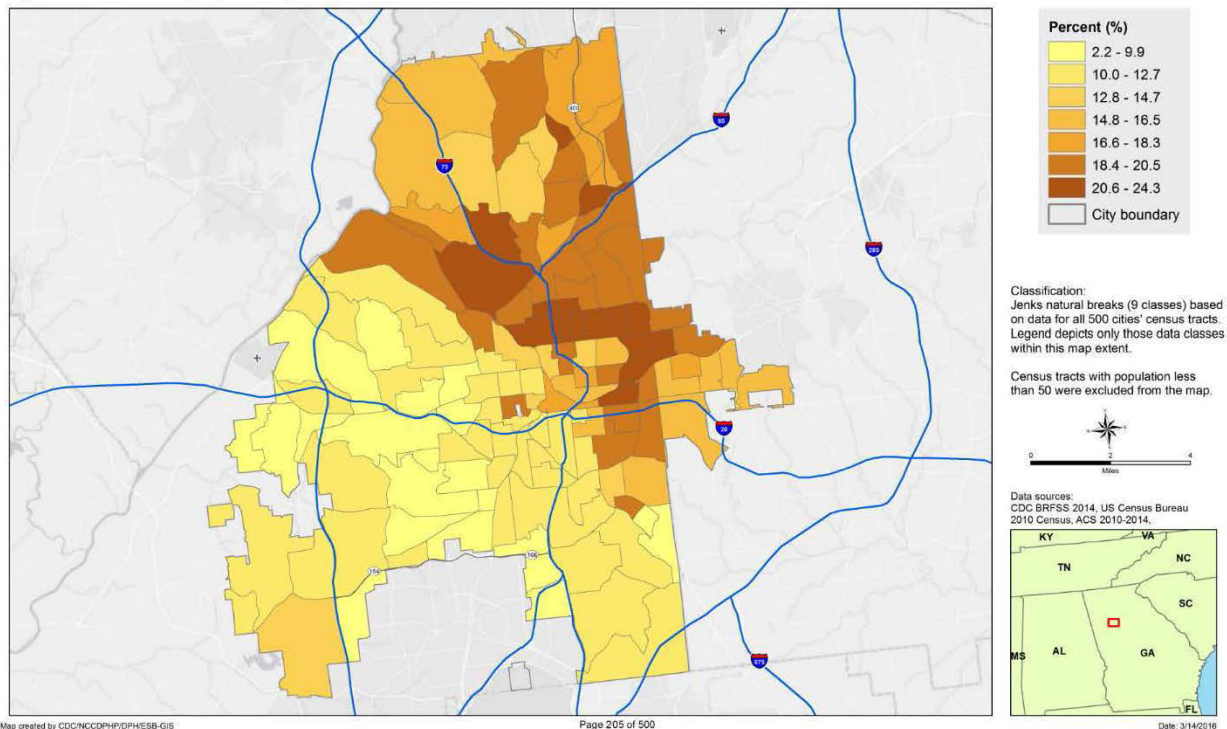
- Arthritis among adults aged ≥ 18 years
- Current asthma among adults aged ≥ 18 years
- High blood pressure among adults aged ≥ 18 years
- Cancer (excluding skin cancer) among adults aged ≥ 18 years
- High cholesterol among adults aged ≥ 18 years who have been screened in the past 5 years
- Chronic kidney disease among adults aged ≥ 18 years
- Chronic obstructive pulmonary disease among adults aged ≥ 18 years
- Coronary heart disease among adults aged ≥ 18 years
- Diagnosed diabetes among adults aged ≥ 18 years
- Mental health not good for ≥ 14 days among adults aged ≥ 18 years
- Physical health not good for ≥ 14 days among adults aged ≥ 18 years
- All teeth lost among adults aged ≥ 65 years
- Stroke among adults aged ≥ 18 years

Prevention Measures

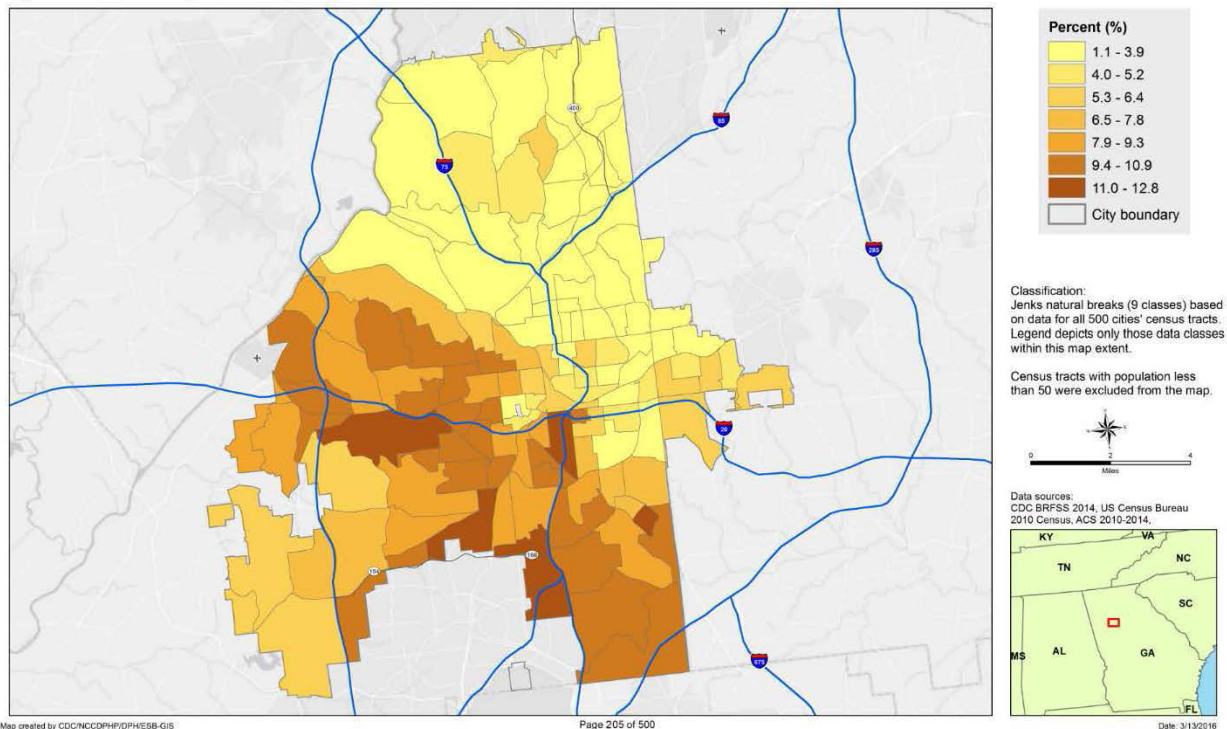
- Current lack of health insurance among adults aged 18–64 years
- Visits to doctor for routine checkup within the past year among adults aged ≥ 18 years
- Visits to dentist or dental clinic among adults aged ≥ 18 years
- Taking medicine for high blood pressure control among adults aged ≥ 18 years with high blood pressure
- Cholesterol screening among adults aged ≥ 18 years
- Mammography use among women aged 50–74 years
- Papanicolaou smear use among adult women aged 21–65 years
- Fecal occult blood test, sigmoidoscopy, or colonoscopy among adults aged 50–75 years
- Older adults aged ≥ 65 years who are up to date on a core set of clinical preventive services
 - Men: Flu shot past year, PPV shot ever, Colorectal cancer screening
 - Women: Same as above, and Mammogram past 2 years

Examples of 500 Cities Maps

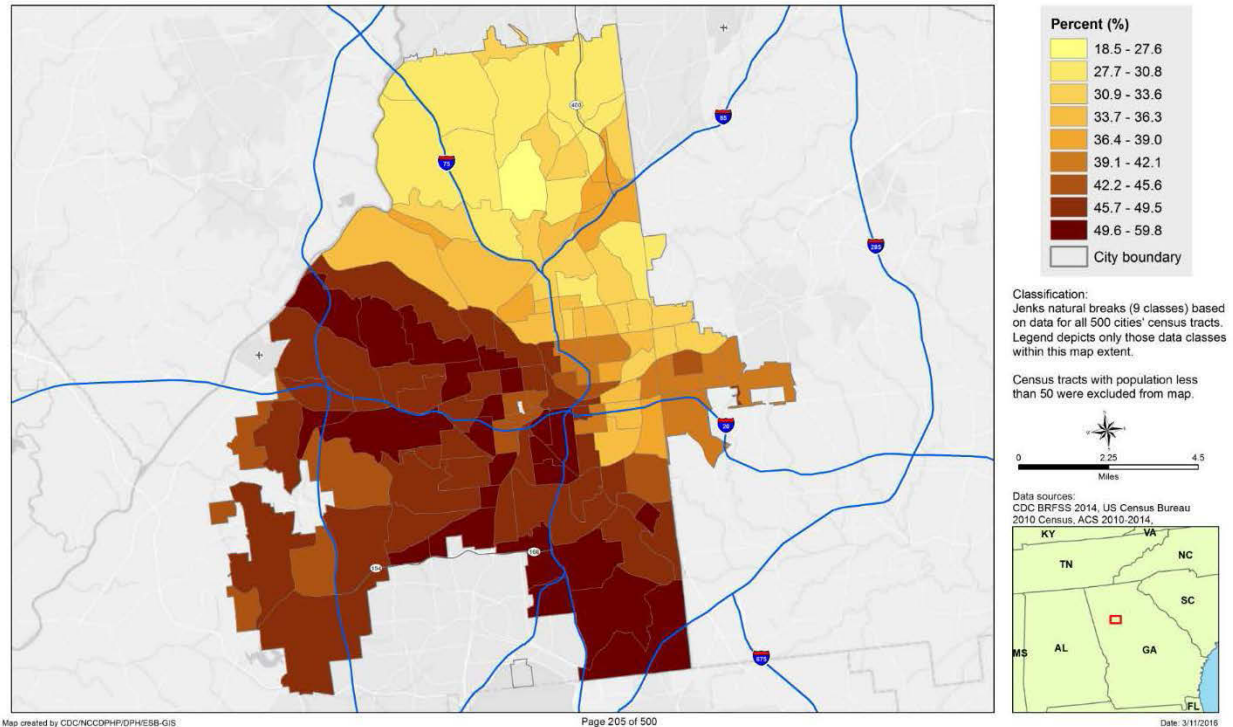
Binge drinking prevalence among adults aged ≥ 18 years by census tract, Atlanta, GA, 2014



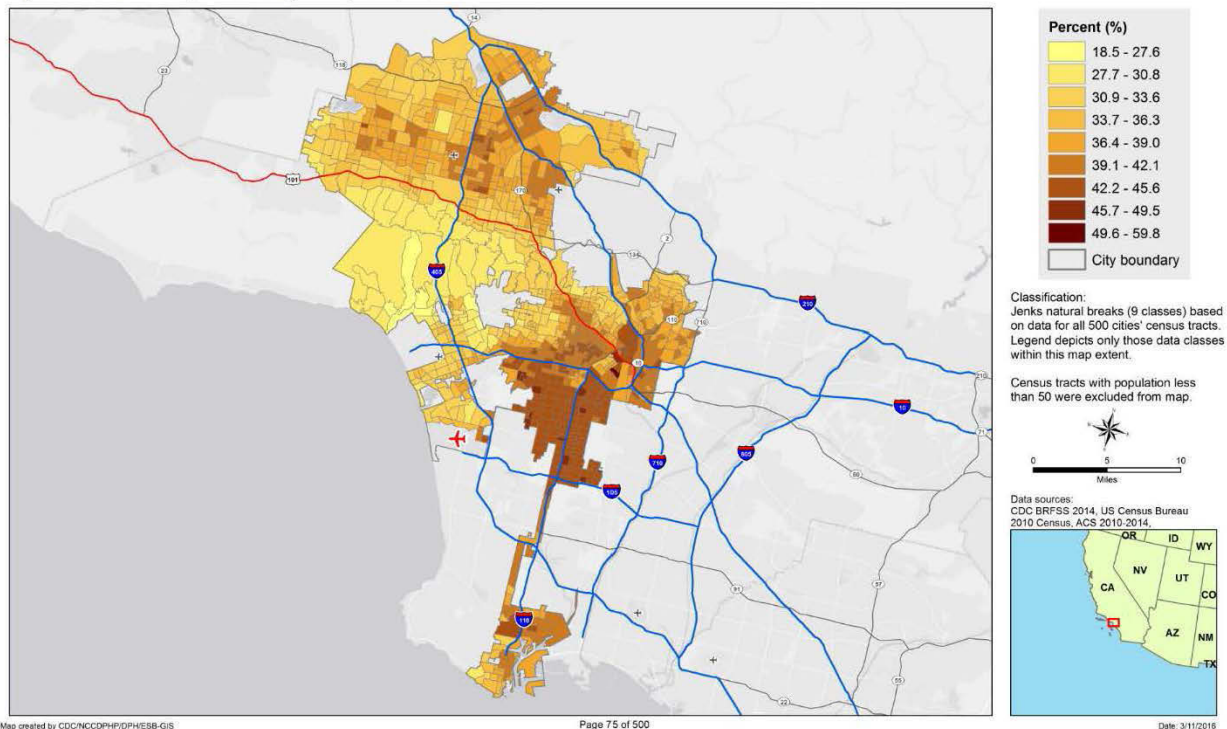
Chronic obstructive pulmonary disease among adults aged ≥ 18 years by census tract, Atlanta, GA, 2014



Sleeping less than 7 hours among adults aged ≥ 18 years by census tract, Atlanta, GA, 2014



Sleeping less than 7 hours among adults aged ≥ 18 years by census tract, Los Angeles, CA, 2014



For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



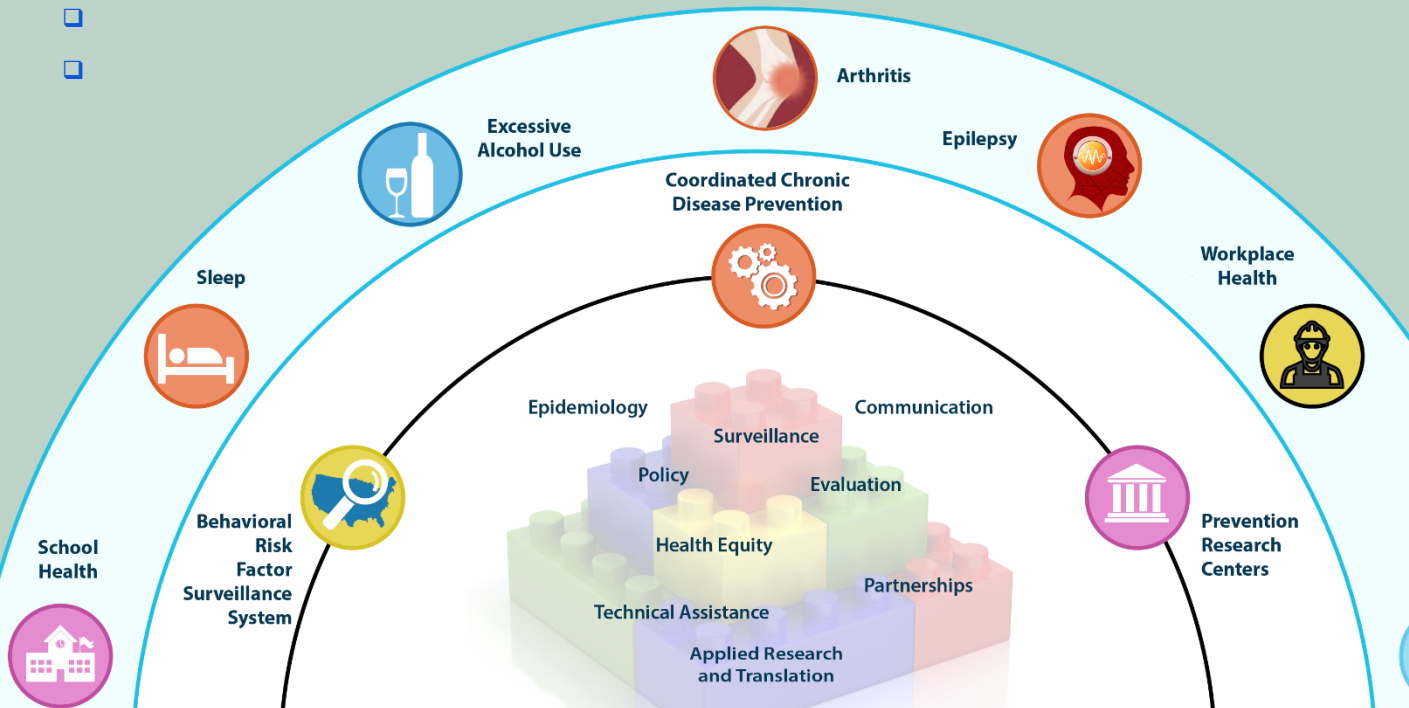
SAEMRP Project History (2)

- ❑ SIMS Initiative (2013): chronic conditions by county for funded states
- ❑ CDC DPH (2013): COPD by census tracts
- ❑ CDC Div. of Physical Activity and Obesity (2014): obesity by county for FOA eligibility determination
- ❑ RWJF and CDCF (2015-present): 500 Cities Project
- ❑ CDC Div. of Cancer Prev. and Control (2015): smoking status by county
- ❑ CDC Div. of Cancer Prev. and Control (2016): colorectal cancer screening by county
- ❑ CDC Div. of Oral Health (2016): dental caries by county
- ❑ County Health Rankings & Roadmaps (2016): chronic conditions by county

The Division of Population Health



Enhancing Population Health Across the Lifespan



BRFSS Metropolitan and Micropolitan Statistical Area and County Data

- ❑ **The Selected Metropolitan/Micropolitan Area Risk Trends of BRFSS (SMART BRFSS) uses BRFSS data to provide prevalence rates for selected conditions and behaviors for cities and their surrounding counties.**
- ❑ **Starting in 2016, BRFSS will provide prevalence estimates for all counties in the U.S. through new statistical small area estimation methods.**

History of Small Area Estimation Method (SAE): Multilevel Regression and Post-Stratification (MRP) Projects (1)

- ❑ HHS OASH (July 2009): chronic conditions by US Congressional Districts
- ❑ UT Houston (2010): HPV vaccination in TX counties
- ❑ Trust for Public Land (2010): Childhood obesity by block groups
- ❑ CDC CPPW (2010): obesity and smoking by county
- ❑ CDC CTG (2011/2012): COPD by census tracts
- ❑ MA Dept of PH (2011): asthma by county
- ❑ CDC Div. of Oral Health (2012-15): periodontitis by census tracts



The 500 Cities Project: Local data for better health

Number of Cities

500

Proportion of
Total US Population
Accounted for per
the 2010 Census

33.4%

Number of Measures

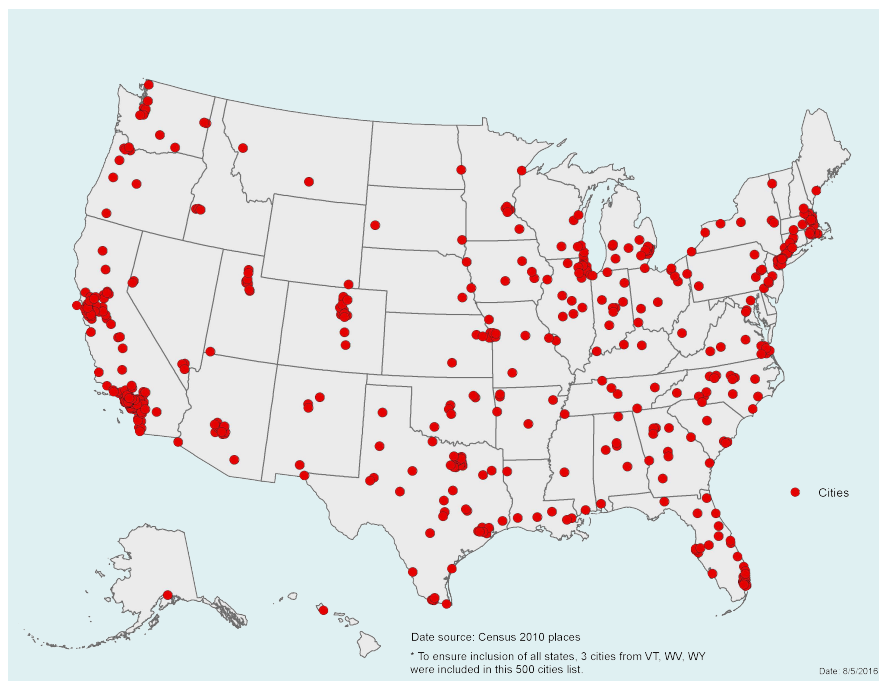
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How does the 500 Cities Project fill a current need?

Effective planning for improving the health of residents within the nation's largest cities requires high quality, small-area data for the current health status and behavioral risk factors that influence health. While limited data are available at the county and metropolitan levels, no data have been made available on a large scale for cities and for small areas within cities.

What is the purpose of this project?

This project will identify, analyze, and report city and census tract-level data, obtained using small area estimation methods, for a select number of chronic disease measures for the 500 largest American cities. Measures include unhealthy behaviors (e.g., current smoking), health outcomes (e.g., coronary heart disease, diabetes, etc.), and prevention (e.g., health insurance coverage, cholesterol screening, etc.). The data will be available through a public, interactive "500 Cities" website that will allow users to view, explore, and download city- and tract-level data.



What is the unique value of this project?

- ▶ Reflects innovations in generating valid small-area estimates for population health.
- ▶ Measures will complement existing sets of surveillance indicators that report state, metropolitan area, and county- level data.
- ▶ Releases data for cities, many of which cover multiple counties or don't follow county boundaries, and for census tracts for the first time.
- ▶ Enables retrieval, visualization, and exploration of a uniformly-defined selected city and tract-level data for the largest 500 US cities for conditions, behaviors, and risk factors that have a substantial impact on population health.

When will the 500 Cities Project be available for use?

In December of 2016 the data will be published online through the CDC Chronic Data Portal. The Project's dedicated, interactive website for city- and tract-level data will launch by May of 2017.

How will the data advance health?

High-quality, small-area epidemiologic data are necessary to improve population health. These data can be used both by individual cities and groups of cities collectively to:

- ▶ Inform the development and implementation of effective and targeted prevention activities;
- ▶ Identify emerging health problems;
- ▶ Establish and monitor key health objectives; and
- ▶ Evaluate policies and programs that impact health.