## Social Determinants of Health (SDOH) and PLACES Data

Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Understanding data on social determinants of health that can enhance or hinder health, such as income, educational level, employment, language and literacy skills, and access to health care, safe housing, nutritious foods, and physical activity opportunities, can help focus efforts to improve people's health on a local level.

Combining data related to SDOH measures with community-level chronic disease measures from PLACES can broaden the usefulness of each of these types of data in understanding community health. When examined together, users can identify which health and SDOH issues overlap in a community and use this information when planning public health promotion, prevention, treatment, and management strategies. For example, identifying communities with high rates of chronic disease along with high social vulnerability can highlight geographic areas especially in need of strategies tailored for the conditions residents may be experiencing. Also, combining these data can inform planning activities for partners across sectors like education, transportation, and housing who have the shared goal to improve the conditions in people's environments and their health.

PLACES data are provided at the county-, place-, census tract-, or ZIP Code Tabulation Area (ZCTA)-level. The list below provides information and links to SDOH data with measures available at one or more of these geographic levels. This is not meant to be an exhaustive list but is provided as a resource for data users who are interested in jointly examining these measures. Like the PLACES website, the links below provide datasets in a variety of formats and most provide interactive visualization tools. Options for jointly examining PLACES and SDOH data range from opening both datasets or maps and looking at them side by side, to overlaying the datasets using GIS software, to downloading each dataset and merging them for more indepth analysis. PLACES datasets can be downloaded from the PLACES data portal (help section link).

## **Examples of Datasets Containing SDOH Measures:**

- American Community Survey (ACS)
  - Geographic level of data: state, county, place, census tract, ZCTA
  - Publisher: U.S. Census Bureau
  - ACS data profiles include the most frequently requested demographic (DP05), social (DP02), economic (DP03), and housing data (DP04).
- Area Health Resources Files (AHRF)
  - Geographic level of data: county
  - Publisher: Health Resources & Services Administration (HRSA)

 The AHRF data files include data on health care professions, health facilities, population characteristics, economics, health professions training, hospital use, hospital expenditures, and environment.

## Atlas of Rural and Small-Town America

- Geographic level of data: county
- Publisher: U.S. Department of Agriculture (USDA), Economic Research Service (ERS)
- The Atlas of Rural and Small-Town America provides statistics by broad categories of socioeconomic factors: people, jobs, county classification, income, and veterans.
- Community Resilience Estimates
  - Geographic level of data: state, county, census tract
  - **Publisher:** U.S. Census Bureau
  - Community resilience is the capacity of individuals and households to absorb, endure, and recover from the health, social, and economic impacts of a disaster such as a hurricane or pandemic. Estimates at the tract and county level are calculated by modeling individual and household characteristics, including poverty, crowding, and unemployment, from the 2019 ACS.
- Crime Data Explorer (CDE)
  - Geographic level of data: state, county, city
  - Publisher: U.S. Federal Bureau of Investigation (FBI)
  - The CDE provides data on violent and property crime incidents.
- Environmental Dataset Gateway (EDG)
  - Geographic level of data: county, census tract, census block group
  - **Publisher:** U.S. Environmental Protection Agency (EPA)
  - The EDG provides access to EPA's Open Data resources, including datasets related to air, water, temperature, precipitation, flood, and environmental justice.
- Environmental Justice Index (EJI)
  - Geographic level of data: census tract
  - Publisher: CDC/ATSDR
  - The EJI uses data from the U.S. Census Bureau, the U.S. Environmental Protection Agency, the
    U.S. Mine Safety and Health Administration, and the U.S. Centers for Disease Control and
    Prevention to rank the cumulative impacts of environmental injustice on health for every census
    tract. The EJI ranks each tract on 36 environmental, social, and health factors and groups them
    into three overarching modules and ten different domains.
- Fatality Analysis Reporting System (FARS)
  - Geographic level of data: state, county, point
  - Publisher: U.S. Department of Transportation (DOT), National Highway Traffic Safety Administration (NHTSA)
  - FARS is a nationwide census providing data regarding motor vehicle traffic crashes with fatal injuries.
- Food Environment Atlas
  - o Geographic level of data: state, county
  - Publisher: U.S. Department of Agriculture (USDA), Economic Research Service (ERS)

- The Atlas provides estimates on three broad categories of food environment factors: food choices (e.g., access and proximity to a grocery store; number of food stores and restaurants), health and well-being (e.g., food insecurity), and community characteristics (e.g., demographic composition; recreation and fitness centers).
- Local Area Transportation Characteristics for Households (LATCH)
  - Geographic level of data: census tract
  - **Publisher:** U.S. Department of Transportation (DOT)
  - LATCH data provides average weekday household person-miles traveled, person trips, vehicle-miles traveled and vehicle trips at census tract level.
- Local Area Unemployment Statistics (LAUS)
  - Geographic level of data: state, county, metro area
  - o Publisher: U.S. Bureau of Labor Statistics (BLS)
  - The LAUS portal provides data on unemployment rates by month and 12-month net changes.
- Location Affordability Index (LAI)
  - Geographic level of data: census tract
  - Publisher: U.S. Department of Housing and Urban Development (HUD)
  - The LAI provides estimates of household housing and transportation costs at the neighborhood-level along with constituent data on the built environment and demographic characteristics.
- National Environmental Public Health Tracking Network
  - Geographic level of data: county, census tract
  - Publisher: CDC, National Center for Environmental Health (NCEH)
  - The Tracking Network is a system of integrated health, exposure, and hazard information and data from a variety of national, state, and city sources.
- Social Determinants of Health Database
  - Geographic level of data: county, census tract, ZCTA
  - Publisher: Agency for Healthcare Research and Quality (AHRQ)
  - The beta data files include data that correspond to five key SDOH domains: social context (e.g., age, race/ethnicity, veteran status), economic context (e.g., income, unemployment rate), education, physical infrastructure (e.g., housing, crime, transportation), and health care context (e.g., health insurance).
- Social Vulnerability Index (SVI)
  - o Geographic level of data: county, census tract
  - Publisher: CDC/ATSDR
  - The CDC/ATSDR SVI includes 15 U.S. census variables, including poverty, lack of vehicle access, and crowded housing, that are grouped into four related themes, including socioeconomic status; household composition and disability; minority status and language; and housing type and transportation. Each county and census tract receives a separate ranking for each of the 15 variables, the four themes, as well as an overall SVI ranking.

Learn more about what NCCDPHP is doing to address the SDOH at: Social Determinants of Health | CDC. Learn more about CDC resources for SDOH data, research, tools for action, programs, and policy at: CDC Social Determinants of Health: Know What Affects Health.