The Power of Data for Healthy Communities

How can data illuminate health gaps and be a powerful tool for change?

Local health data are a powerful tool to help everyone in a community better understand the health of their neighborhoods—and provide a clear picture of the biggest health challenges and opportunities its residents experience. Local health data can serve as a rallying point and common platform to help residents, community leaders, policymakers, and advocates come together to set common goals for improvement and drive change.

By analyzing data, we can tell a story about a community. Too often, these analyses reveal that not everyone in a community has access to the same opportunities to be healthy. Local health data illuminate where there are gaps, where some people and places are cut off from opportunities to be healthy, and where we can all come together to take action.

The Robert Wood Johnson Foundation supports multiple efforts to provide community leaders and residents with local health data, as well as data about the drivers of health at the state, county, city and census tract levels. These data resources allow communities to uncover health challenges, better target resources, and measure progress toward assuring a fair and just opportunity for health.
Resources

500 Cities
https://www.cdc.gov/500cities/

500 Cities provides an easy-to-use picture of 27 measures of health including unhealthy behaviors such as smoking rates, health outcomes including coronary heart disease, and prevention practices including mammogram screenings, all at a level of detail not available before within the nation’s 500 largest cities. Interactive maps show where chronic conditions overlap by census tract.

How to use 500 Cities:
Health officials, local leaders, and advocates can use these data to identify health issues within a city, neighborhood, or even more localized tract. This helps them determine priorities and target health improvement efforts where the biggest gaps or inequities exist.

Child Opportunity Index
http://www.diversitydatakids.org

The Child Opportunity Index (COI) 2.0 quantifies, maps, and compares neighborhood opportunity for children across the United States. It is the first national measure of contemporary child opportunity available for all U.S. neighborhoods. COI ranks neighborhood opportunity along three domains that matter for children to develop and thrive: education, health and environment, social and economic opportunity. Child Opportunity Scores incorporate 29 indicators, range from very low to very high, and are broken down by race and ethnicity.

How to use the Child Opportunity Index:
Local service providers, community organizations, media, researchers, policymakers, planners and national equity-focused organizations use COI to increase awareness of equity and promote community discussions, target services and programs, better understand the connections between neighborhoods and health, and inform needs assessments, resource allocation, and policy development. The COI can be used on its own to understand and visualize the geography of opportunity, or it can be combined with data on demographics (e.g. location of children by race/ethnicity), resources (e.g. location of subsidized housing), or health outcomes (e.g. incidence of asthma), to investigate patterns and drivers of inequity.
City Health Dashboard
http://www.cityhealthdashboard.com/

Originally created as a one-stop online resource for 500 cities with populations of 66,000 or more, the City Health Dashboard expanded in 2020 to include over 250 new cities with populations of 50,000 to 66,000. The Dashboard provides data at the census tract level for select health and well-being measures, such as life expectancy and walkability. What sets it apart from other data resources is its additional focus on the many community-level factors that shape health, such as housing affordability, income inequality, children in poverty, and access to nutritious foods. The City Health Dashboard also allows users to see correlations between certain measures and to compare their cities with other peer cities.

How to use the City Health Dashboard:
City leaders, community organizations, advocates, and others can use the City Health Dashboard to pinpoint neighborhoods within their cities that are experiencing better or worse health outcomes—and to explore what is contributing to those differences. City Health Dashboard users are then encouraged to consider successful strategies from around the country to drive change. Dashboard users can also set realistic goals and benchmarks for their cities by comparing their cities to others that share similar characteristics. The Dashboard’s features, including its set of more than 35 key metrics, such as the uninsured rate and walkability, help city leaders place health at the center of decision-making.

County Health Rankings & Roadmaps
(Updated annually in March)
http://www.countyhealthrankings.org/

The County Health Rankings & Roadmaps are intended to support local communities in their journey to create health for all—measuring 35 factors that impact health, including high school graduation rates, obesity, housing, unemployment, access to healthy foods, children in poverty, and income inequality in nearly every county in America. The annual Rankings provide an easy-to-use snapshot that shows where we live influences how well and how long we live.

How to use the County Health Rankings & Roadmaps:
Leaders and advocates can use the Rankings to identify where their county is doing well and identify and prioritize their community’s health needs. The Take Action Center and What Works for Health resources can help users take action and develop solutions to improve health by offering tools, guidance, and a database of nearly 400 evidence-informed policies and programs.

The Health Opportunity and Equity (HOPE) Initiative
http://www.nationalcollaborative.org/our-programs/hope-initiative-project/

The HOPE Initiative’s measures offer a unique look into the effects of 28 indicators that influence health at the state and national level broken down by race, ethnicity, and socioeconomic status. HOPE’s measures provide a better understanding of what barriers stand in the way of equity and opportunity for specific groups and how states can tailor strategies for those most in need.

How to use HOPE’s Measures:
State leaders and advocates can use HOPE to ask, “What are other states doing right on creating equity and opportunity, how did they get there, and what might I do differently in my state?” These data show where babies are more likely to live past their first birthday, where residents can more easily access a doctor, where air quality is healthier, or where young children are more likely to enroll in pre-K.
National Equity Atlas
http://nationalequityatlas.org/

The National Equity Atlas was developed as a tool for the growing movement to create a more equitable, sustainable, and resilient economy. The Atlas contains data on demographic change, racial and economic inclusion, and the potential economic gains from racial equity for the largest 100 cities, largest 150 regions, all 50 states, and the United States as a whole. It includes historical data for multiple indicators as well as demographic projections through 2050. In addition to providing data, the Atlas shares policy solutions to improve upon the indicators and make progress toward equitable growth.

How to use the National Equity Atlas:
Community leaders and policymakers can use these data to track, measure, and make the case for inclusive growth in their communities. Users may explore the Atlas to assess how well diverse populations can participate in a community’s economic vitality, contribute to its readiness for the future, and connect to its assets and resources. Atlas data may also be used to catalyze conversations about why equity matters for the future of communities and to inform policies, plans, strategies, business models, and investments to advance equitable growth.

Opportunity Atlas
http://www.opportunityatlas.org/

The Opportunity Atlas traces the actual outcomes of 20 million Americans from childhood to their mid-30s to show how where you live impacts opportunities for upward social mobility. An interactive map provides detailed research on the roots of today’s affluence and poverty for every census tract in the U.S., allowing users to take a long-term and intergenerational view of how adult outcomes are shaped by income, community, family and race during childhood.

How to use the Opportunity Atlas:
Policy makers, practitioners, and the public can use the tool to look within their city to better understand where opportunity exists, what barriers stand in the way of economic mobility, and how each neighborhood shapes a child’s future economic and educational success.

United States Small-Area Life Expectancy Estimates Project (USALEEP)
https://rwjf.org/lifeexpectancy

USALEEP data—which measure life expectancy at birth for every census tract in the country—show that people living just a few miles apart may have vastly different chances of living a long life. This is the first public health outcome measure available nationwide at the census-tract level. On average, census tracts include 4,000 people who typically have similar characteristics such as social and economic status.

How to use USALEEP:
Life expectancy at birth estimates can help public health officials, local leaders, and community members to locate disparities in life expectancy at birth among population groups, start conversations about what is causing these disparities, and guide decisions on how to improve their community’s health.
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<td>500 Cities provides high-quality city and census tract level small area estimates (within the cities) for chronic disease risk factors, health outcomes, and clinical preventive service use.</td>
<td>The Child Opportunity Index 2.0 (COI 2.0) is a measure of neighborhood environment that incorporates 29 indicators of factors that influence healthy child development at the census tract level. Combined with information on where children of various racial/ethnic groups live, the COI 2.0 reveals profound inequities in exposure to higher-opportunity neighborhoods.</td>
<td>The City Health Dashboard data extend beyond the disease and prevention focus of 500 Cities to incorporate community-level context variables that equally shape health, including a city’s walkability and food environment, poverty and crime rates, air quality and housing affordability.</td>
<td>The County Health Rankings &amp; Roadmaps provide a snapshot of how health is influenced by where we live, learn, work, and play at county and (aggregated) state levels.</td>
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**Geographies**

- 497 of the largest cities in the U.S., plus the largest cities in VT, WV, and WY to represent all 50 states; data for 28,000 census tracts are also provided
- All census tracts, with reports available for 100 largest metropolitan areas in the U.S.
- 750+ cities across the U.S. with populations of 50,000 and above
- 3,142 counties (nearly all) in the U.S. and the District of Columbia (2020 release); Federal Information Processing Standard (FIPS) county codes are included for all entities

**Updated**

- Annually
- Regularly
- Annually
- Annually

**What’s Measured**

**Healthy Outcomes:** arthritis, current asthma, high blood pressure, cancer (except skin), high cholesterol, chronic kidney disease, COPD, coronary heart disease, diabetes, mental health, physical health, teeth loss, and stroke

**Unhealthy Behavior:** binge drinking, current smoking, lack of physical activity, obesity, and sleeping for less than 7 hours

**Prevention:** health insurance, annual checkups, dental visits, use of blood pressure medication, cholesterol screenings, mammography, pap screen test, colorectal cancer screening, and use of core preventative services for men and women

**Neighborhood opportunity:** Scores and categories (very low to very high) for each census tract relative to all tracts in its metro area. An overall index and three domain indices are available from the following indicators:

- **Education Domain:** early childhood education centers, high-quality early childhood education centers, and early childhood education enrollment, third grade math and reading proficiency, high school graduation rate, Advanced Placement (AP) course enrollment, college enrollment in nearby institutions, school poverty, teacher experience, adult educational attainment

- **Health and Environmental Domain:** access to healthy food, access to green space, walkability, housing vacancy rate, hazardous waste dump sites, industrial pollutants in air, water or soil, airborne microparticles, ozone concentration, extreme heat exposure, health insurance coverage

- **Social and Economic Domain:** employment rate, commute duration, poverty rate, public assistance rate, homeownership rate, high-skill employment, median household income, single-headed households

**Social and Economic Factors:** children in poverty*, high school graduation, excessive housing cost*, income inequality*, unemployment*, violent crime, third-grade reading proficiency, racial and ethnic diversity*, chronic school absenteeism, and neighborhood racial/ethnic segregation*

**Physical Environment:** lead risk due to housing age*, access to healthy foods*, walkability*, air pollution, and park access Health Behavior: adult smoking, teen births, binge drinking, physical inactivity, and opioid overdose deaths

**Health Outcomes:** poor physical health, low birthweight, adult obesity, poor mental health, premature mortality, breast cancer deaths, colorectal cancer deaths, diabetes, high blood pressure, and cardiovascular disease deaths, life expectancy*

**Clinical Care:** preventive services, dental care, prenatal care, primary care physicians, and uninsured*

*A limited set of metrics are available for cities with populations of 50,000 to 66,000. Starred metrics are generally available for all cities on the Dashboard.*
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<td>HOPE Initiative identify national and state progress toward achieving equity in health and the determinants of health by race, ethnicity, and socioeconomic status.</td>
<td>The National Equity Atlas was developed as a tool for the growing movement to create a more equitable, sustainable, and resilient economy. It is a comprehensive resource for data to track, measure, and make the case for inclusive growth in America’s cities, regions, states, and nationwide.</td>
<td>The Opportunity Atlas traces the actual outcomes of 20 million Americans from childhood to their mid-30s for every census tract in the U.S. Each estimate is specific to a selected group of children, born between 1978-1983, from each tract, defined by their race, gender, and parental income level.</td>
<td>USALEEP data measure life expectancy at birth for every census tract in the country—show that people living just a few miles apart may have vastly different chances of living a long life.</td>
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**Geographies**

- National, 50 states and the District of Columbia; local applications in three test communities
- 100 largest cities, the 150 largest metropolitan regions, all 50 states, and the United States; demographic projections are available for counties; several indicators can be mapped for census tracts
- All 70,000 census tracts in the U.S.
- Nearly all census tracts in the U.S.

**Updated**

- Annually
- Regularly
- Annually
- TBD

**What’s Measured**

**Health Outcomes**: adult health status, child health status, infant mortality, low birthweight, mental health status, and premature mortality

**Socioeconomic Factors**: connected youth, employment, household income, housing affordability, post-secondary education, and preschool enrollment

**Social Environment**: poverty concentration and crime rates

**Physical Environment**: air quality (particulate matter); food security, home ownership, liquor store density, housing quality

**Access to Health Care**: primary care physicians, psychiatrists, health insurance coverage, health care affordability, usual source of care, and colorectal cancer screening

**Demographics**: detailed race/ethnicity, people of color, race/ethnicity, population growth rates, contribution to growth: immigrants, contribution to growth: people of color, racial generation gap, diversity index, and median age

**Equity indicators are broken out into three categories:**

- **Economic vitality**: poverty, working poor, unemployment, wages; median, wages: $15/hr, income growth, job and wage growth, job and GDP growth, income inequality: Gini, income inequality: 95/20 ratio, and homeownership
- **Readiness**: school poverty, air pollution: exposure index, air pollution: unequal burden, educational levels and job requirements, disconnected youth, overweight and obese, asthma, and diabetes
- **Connectedness**: neighborhood poverty, housing burden, vehicle access, and commute time

**Economic benefits of equity indicators**: potential GDP and income gains from closing the racial income gap

**Outcomes**: incarceration, teen births, household and individual incomes for U.S. natives and for immigrants, employment, fraction in top 20% and 1% income categories, high school graduation, college graduation, hours worked per week, hourly wage, staying in same city as adults, fraction married, spouse’s income, and number of children


Life expectancy estimates are summary measures that are based on the number and age of death of the residents in each census tract during the years 2010-2015. These estimates are calculated by constructing a life table for each census tract. The life tables are computed using death certificate data collected by state vital statistics offices and population estimates from both the 2010 U.S. Census and the 2011-2015 American Community Survey.