Data Sources

Major Types of Data Sources

Primary Sources



- Same individual or team collects and analyzes data for a specific purpose of answering their research question

Secondary Sources



- Existing data collected for other purposes, you can use to answer your research questions

Example: The Iowa Tracking Portal contains data collected by IDPH for community needs

Example: We also use data from BRFSS, IYS, YRBSS, County Health Rankings

Iowa Public Health Tracking Portal

- Type of data: a variety of population-based and representative sample datasets
- Who: Iowa residents by county
- What: County environmental & health reports that summarize a set of measures for comparison across time and geography
- Strengths: environmental risk data, county information, include environmental health profile and health snapshots
- Limitations: limited indicators available
- Access: IPHTP

BRFSS

- Type of data: representative sample
- Who: randomly selected sample of adults aged 18+ (non-institutionalized), all 50 states, DC and US Territories, phone interviews
- What: chronic and communicable disease risk factor prevalence
- Strengths: behavioral health risk data, can compare state data with national, questions designed for program needs, states can add questions, some local area data available
- Limitations: excludes most institutionalized and those without phones, non-response, self-report
- Access: BRFSS

County Health Rankings

- Type of data: representative sample
- Who: US population by counties
- What: rankings for health outcomes and health factors among counties
- Strengths: county-level, detailed, county comparison tool, user-friendly (no ICD-10 codes)
- Limitations: the oldest data is from 2010, uses data from BRFSS so it could have the same limitations
- Access: County Health Rankings

YRBSS

- Type of data: representative sample
- Who: random sample of public middle and high school students every other year (random sample of classes within selected school districts)
- What: prevalence of health risk behaviors (eating habits, tobacco use, etc.)
- Strengths: multiple years for trend analysis
- Limitations: not all states participate (most states do high school survey, fewer states do middle school survey), response varies across schools
- Access: YRBSS

PLACES: Local Data for Better Health

- Type of data: Model-based population-level estimates
- Who: US population including all counties, places, census tracts, and Zip Code Tabulation Areas (ZCTAs)
- What: small area estimates on 27 chronic disease measures for all US counties, places, census tracts, and ZCTAs
- Strengths: valid small area estimates available in a uniform way at the local level regardless of size and urban-rural status
- **Limitations:** currently only 27 measures are available
- Access: PLACES

Data Profile: City Health Dashboard

- Type of data: Model-based population-level estimates
- Who: US population including over 750 cities with populations > 50,000
- What: small area estimates on 35+ health and "drivers of health" metrics
- Strengths: valid small area estimates available in a uniform way at the local level for cities (goes beyond the 500 cities project to now include small and midsize cities too);
- Limitations: currently only 35ish measures are available; does not provide data for rural geographies; limited ability to disaggregate data or look at data over time currently
- Access: City Health Dashboard

National Equity Atlas

- Type of data: population-based
- Who: US population
- What: racial equity data
- Strengths: contains data on demographic change, racial and economic inclusion, and the potential economic gains from racial equity for in the United States
- Limitations: self-reported data, underrepresentation of people of color due to census estimates, some false grouping based on ethnicity
- Access: The Atlas

American Community Survey

- Type of data: population-based
- Who: US population
- What: community-level social and economic data
- Strengths: continuous monthly collection of data, large annual sample of 3.5 million people, community-level estimates, data on demographics, social and economic factors and housing, strong response rate
- Limitations: self-reported data, historical data back to 2005, limited number of households (295,000) surveyed each month
- Access: <u>American Community Survey</u>

CDC Wonder

- Type of data: population-based
- Who: US population
- What: incidence and mortality data
- Strengths: detailed, high quality data over many years
- Limitations: you have to have a good bit of knowledge about ICD-10 codes and epi verbiage
- Access: <u>CDC WONDER</u>

Additional Resources related to Health Equity

- Applying social determinants of health indicator data for advancing health equity: A Guide for Local Health Department Epidemiologists and Public Health Professionals. (Bay Area Regional Health Initiative)
- Neighborhood Atlas (Area Deprivation Index (ADI) (University of Wisconsin School of Medicine and Public Health)
- CDC Social Vulnerability Index
- CDC Social Determinants of Health: Know What Affects Health (Contains data links as well as strategies/interventions links)

References

- U.S. Department of Health and Human Services. (n.d.). Common Data Types in Public Health Research. National Institutes of Health. https://www.nihlibrary.nih.gov/resources/subject-guides/health-data-resources/common-data-types-public-health-research.
- WHY DATA DISAGGREGATION IS KEY DURING A PANDEMIC? (n.d.). https://iris.paho.org/bitstream/handle/10665.2/52002/Data-Disaggregation-Factsheet-eng.pdf?sequence=8.
- ** Data Interpretation for Public Health Professionals. Northwest Center for Public Health Practice. (2019, October 22). https://www.nwcphp.org/training/data-interpretation-for-public-health-professionals.
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