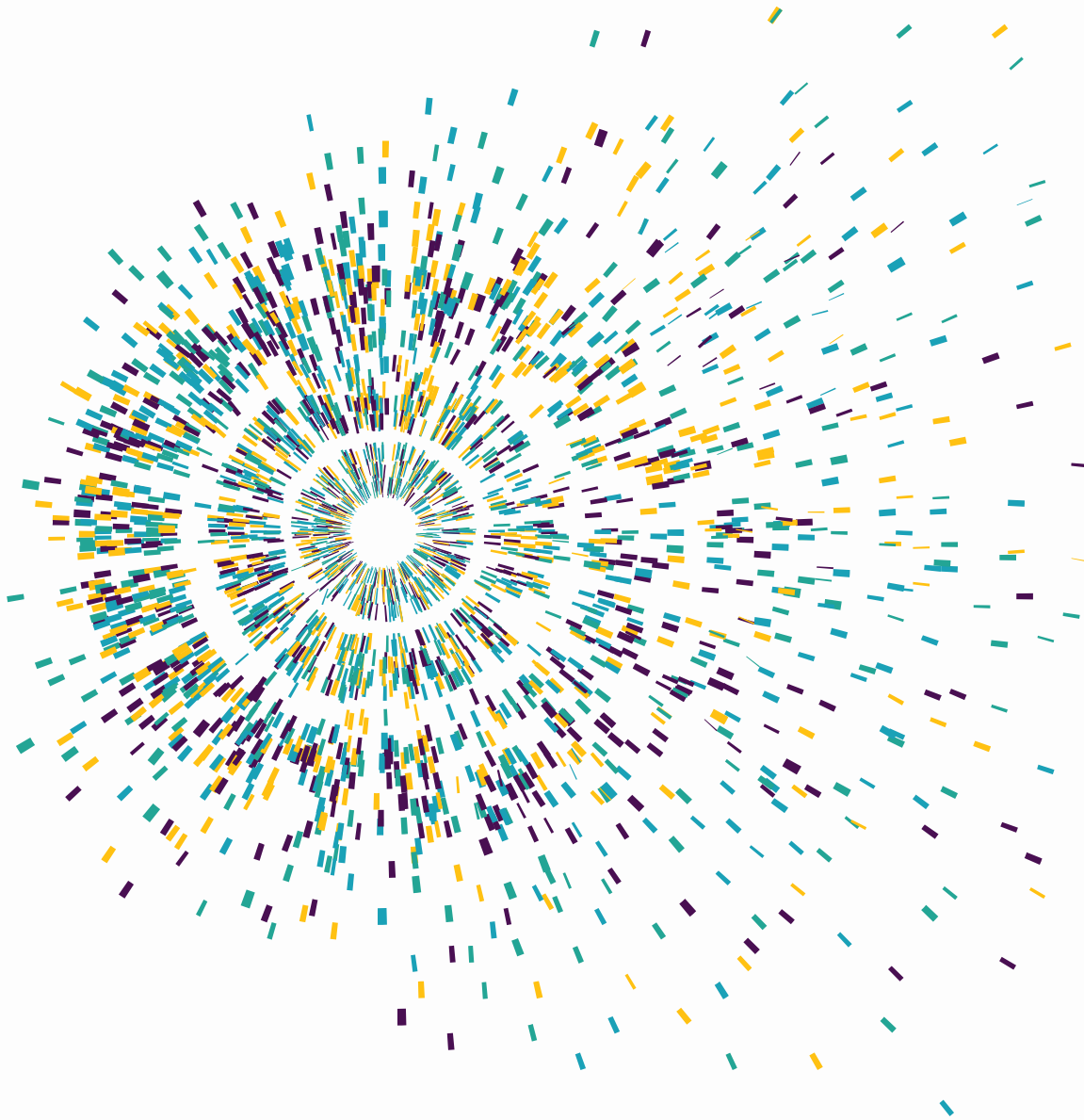


# Guidelines for the collection of data on geography



A tool to support data-informed decisions  
and improve service quality



Utah Department of  
**Health & Human Services**  
Health Equity

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**Note:** The [Standards for the collection of data on geography reference guide](#) provides a quick reference guide to the geography data collection standard.

# 1 | Purpose

The Utah Department of Health and Human Services (DHHS) vision is to ensure all Utahns have fair and equitable opportunities to live safe and healthy lives. DHHS will advocate for, support, and serve all individuals and communities in Utah. The goal of these data collection standards is to increase availability, quality, and comparability of demographic and social drivers of health (SDOH) data to identify and address health disparities, improve health outcomes, and advance health equity in Utah.

High-quality data on demographics and SDOH is crucial to address health disparities and advance health equity in Utah. The DHHS Office of Health Equity (OHE) developed standards for collecting demographics and SDOH to promote consistent and comparable data collection across the state of Utah. Uniform data collection improves quality, comparability, and effectiveness of health data to make data-informed decisions to improve health outcomes for all Utahns.

This guide is designed to help organizations in Utah collect meaningful and actionable data on geography in a standardized way. This aligns with national culturally and linguistically appropriate services (CLAS) standards that promote accurate and reliable demographic data collection.<sup>1</sup>

Standards outlined in Section 3 are intended for use as appropriate during demographic and SDOH data collection including, but not limited to, health surveys, healthcare and program registration, vital records, and health systems user feedback conducted by, sponsored by, or reportable to DHHS as specified by the Utah Health and Human Services Code (Title 26B of the Utah Code). Additional public health, healthcare, social services, and community-based organizations in Utah are encouraged to use these standards as appropriate to promote uniform and consistent geography data collection throughout the state.

**Note:** This document aligns with Utah Code 26B-7-114, Office of Health Equity duties.

# 2 | Background

## **Why is geography important to health?**

Where individuals and communities live greatly influences how well and how long they live. Disease patterns, built and natural environments, environmental exposures, access to healthcare services, social opportunities, and public resources and policies all vary by location.<sup>2, 3, 4, 5</sup> Geographies with opportunity and investment translate into populations with good health and well-being. This makes the places where people live, work, and grow one of the most significant components of overall health.

## **Why collect geography data?**

Geographic data is used to provide key contextual information about health outcomes and risk factors. By examining health outcomes and risk factors by specific geographic groupings, geographic health disparities can be identified and understood. Geographic information can also be applied in decision-making to guide public health interventions more effectively.

## **Utah Small Areas and the Health Improvement Index**

The Utah Small Areas are meaningful geographic groupings of neighboring ZIP codes in Utah. They are defined by criteria such as population size, political boundaries of cities and towns, and economic similarity.<sup>6</sup> They were developed by DHHS in collaboration with local health departments and are beneficial in conducting public health assessments and reporting data at the community level.<sup>6, 7</sup> Two pieces of information are necessary to determine a small area: ZIP code and county.<sup>6</sup>

Having information about Utah small areas enables the use of the Utah Health Improvement Index (HII), a health equity measure by geographic area. The HII is a composite index of nine indicators calculated from publicly-available data in the domains of income, education, employment, and housing. HII scores for small areas are ranked into quintiles and can be compared. Areas with greater socioeconomic disadvantage are ranked higher. The HII can help identify small areas in which poor health outcomes are considered to be closely linked to socioeconomic disadvantage and in need of prioritization for future investment.<sup>8</sup>

Use of the HII is recommended as a data-driven, practical way to inform efforts to reduce the burden of health disparities in specific geographic areas.<sup>8</sup> Collecting geographic data to determine the small area and HII is essential to efforts to understand and reduce health disparities in Utah.

## **What do we mean by demographic and SDOH data?**

Demographics refer to personal and social characteristics of a population. These characteristics may influence patterns of disease occurrence, risk factors, health outcomes, and health disparities in populations.

SDOH are the nonmedical factors that influence health. They are the conditions in which people are born, grow, live, work, and age and the wider set of forces and systems that shape the conditions of daily life.<sup>9, 10, 11</sup>

Demographics and SDOH, such as age, income, and education, can be more important than individual behaviors in affecting health outcomes and contribute to a wide range of health disparities.<sup>11</sup>

Some data can be understood as either demographics, or SDOH, or both. These two concepts can be regarded collectively in the context of gathering this information about populations in Utah to better understand and respond to health outcomes.

## **What are health disparities and health equity?**

Geography and health are fundamentally linked, but not everyone has equal access to geographies of opportunity.<sup>5</sup> Health disparities are a means to identify and measure differences in health that come with differences in demographics and SDOH.

### **What are health disparities?**

Health disparities are differences in health outcomes closely linked to economic, socio-cultural, environmental, and geographic disadvantage.<sup>12</sup>

### **What is health equity?**

Health equity is the principle underlying the commitment to reduce and, ultimately, eliminate health disparities by addressing its drivers. Pursuit of health equity means striving for the highest possible standard of health for all people with special attention to the needs of those communities at greatest risk for health disparities.<sup>12</sup>

# 3 | Standards for the collection of data on geography

## Geography data collection standard

The DHHS standard for data collection on geography—which typically means where someone lives—is presented in Figure 1.

**Figure 1: DHHS geography data collection standard\***

|                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>County</b><br/>In what county do you currently live?</p> <p><b>ZIP code</b><br/>What is the ZIP code where you currently live?</p> |
|------------------------------------------------------------------------------------------------------------------------------------------|

\*This question was adapted from the Behavioral Risk Factor Surveillance System (BRFSS).<sup>13</sup>

To collect this information, instructions ask a respondent “In what county do you currently live?” and “What is the ZIP code where you currently live?”<sup>13</sup> You may wish to give respondents a space to write in their responses, or you could provide a drop down menu. When a space is given for them to write in responses, it may be helpful to include examples of counties and ZIP codes in the instructions, such as “In what county do you currently live? (for example, Carbon County, Weber County, Salt Lake County, etc.)” and “What is the ZIP code where you currently live? (This is usually a five-digit number such as 84116.)”

## Data collection standards for additional details

### *Additional details for geography*

Additional questions besides county and ZIP code may be asked for greater detail on geography. If you have determined it necessary to collect more detailed geographic data for data collection purposes, you may want to ask for the full address, as outlined in Figure 2.

**Figure 2: Current address**

What is your current home address?

Address

Address line 2

City/town

State/region/province

ZIP/post code

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**Note:** Collecting information on where someone lives may be personally identifiable information (PII). PII is any data that can be used to identify, contact, or locate a specific person. Agencies and organizations must use the appropriate safeguards under applicable laws and regulations to protect and secure this information during data collection and storage.

# 4 | Data collection principles and considerations

These principles outline key concepts that enhance quality in data collection practices.

## **Use self-reporting**

Self-identification is the preferred way to collect information about an individual's demographics and SDOH, where respondents directly report their own experiences. Whenever possible, geography information should be collected through self-report.<sup>14</sup>

When self-reporting is not possible, demographic and SDOH data may be collected from a *knowledgeable proxy* as appropriate and in compliance with applicable policies, or by *record matching*, where existing records on an individual that contain their demographic information are used to supply the information.<sup>14</sup>

## **Limit data collection to minimum necessary**

All data collected should have a justified and clearly outlined purpose. Do everything possible to make sure the demographic and SDOH information collected is limited to the minimum or reasonable amount necessary to accomplish a specified purpose.<sup>15</sup>

## **Consider the sensitive nature of data**

When you collect demographic and SDOH information, make sure you consider the potentially sensitive nature of information collected. If you determine you need to collect potentially sensitive information to accomplish the specified purpose, make sure you do everything possible to avoid unintended consequences.

For some people, identifying an area or address of where someone lives can be sensitive personal information that carries risk or the fear of risk. Make sure you consider privacy and confidentiality when you collect geography information. Handle and store this information with proper safeguards to protect respondents' well-being.

## **Ensure data collection instruments are accessible**

Data collection instruments should be translated into the language(s) spoken by those who are reporting the information. For data collected in an interview format, accommodations should be made to provide interpretation for spoken or signed languages as applicable. Other accessible formats of data collection instruments may be necessary to ensure data quality.

## 5 | Data standard development process

The process of developing guidelines for data collection on geography involved the following steps:

- Conducted a literature review and determined the most relevant geography information to address health disparities in Utah is county and ZIP code, which identifies a Utah small area and its HII score
- Researched the best practices in format for collecting county, ZIP code, and address information in Utah
- Consulted with subject matter experts at DHHS who have experience in collection and analysis of geography data pertaining to Utah small areas
- Reviewed the key considerations and implications of collecting geography data in health and population-based surveys in Utah

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