

# Module 2

# Introduction



# DAP TOOLKIT MODULE II: NAVIGATING THE THE HEALTH ATLAS

---

Cook County Department of Public Health & University of Illinois - Chicago School of Public Health

---

Data Ambassador Program (DAP)

---

**Module 2:** Navigating the Health Atlas

---

## Module 2 Contents:

Module 2: Cook County Health Atlas Introduction

Module 2.1: Search & Explore Health Indicators

Module 2.2: Visualize Indicators

Module 2.3: Download Data

## Module 2 Learning Objectives:

1. Describe the purpose and contents of the Cook County Health Atlas
2. Utilize the health atlas functionality and search tools to explore the health indicators
3. Create and interpret custom maps and tables
4. Evaluate the strengths, limitations, and applications of the Cook County Health Atlas

## Setting the Stage

After learning about the intersection of health equity and population health data, you are now ready to apply the health equity framework to your respective roles and responsibilities at your organization. Remember that population health data is utilized to support your grant proposal and advocacy efforts to address a difference and/or differences amongst your target populations and racial/ethnic groups. This module will teach you how to navigate the health atlas, familiarize yourself with various indicators, and create data visualizations (charts, maps, line graphs) while also interpreting data that you're interested in.

## Health Atlas Categories:

### HEALTH OUTCOMES

Consequences, complications and other outcomes that result from disease (e.g., injury, hospitalization, death).

### HEALTH BEHAVIORS

Individual activities that influence health (e.g., alcohol, drug and tobacco use; diet, physical activity, sleep).

### HEALTH CARE

Systems and services for administering care (e.g., health screenings; primary, prenatal and dental care; clinics, hospitals, FQHCs).



### DEMOGRAPHICS

Population characteristics including community size, composition and structure (e.g., population, age, gender, race/ethnicity, migration).

### SOCIOECONOMIC

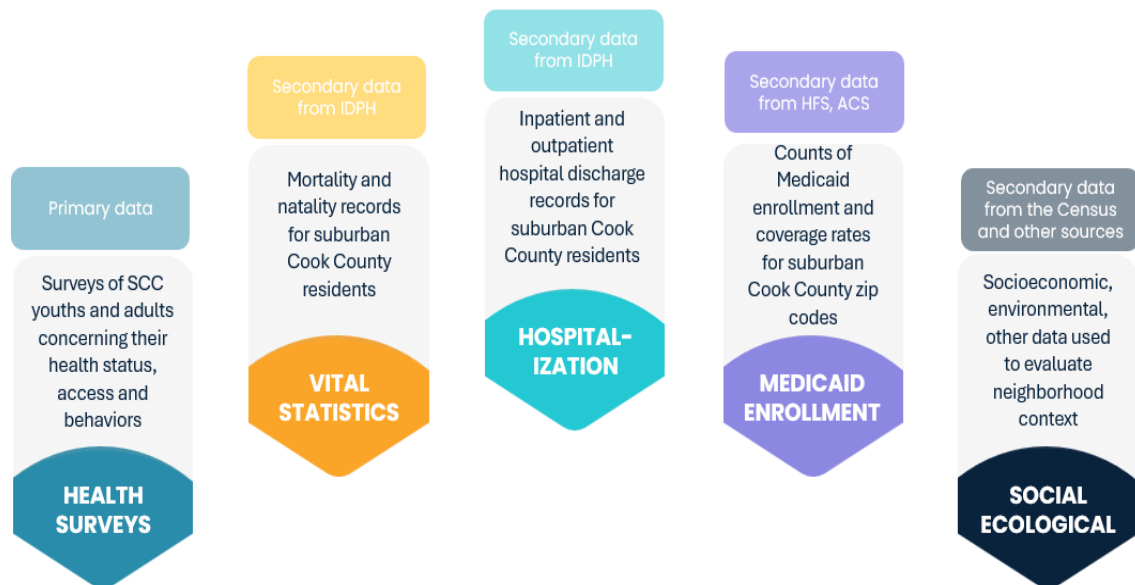
Social and economic factors that can affect health (e.g., income, employment, education, segregation).

### PHYSICAL ENVIRONMENT

Characteristics of the places where individuals live, learn, work, and play (e.g., housing, air quality, water quality and transportation)

The Cook County Health Atlas is a database that has 300+ indicators that are categorized into six categories (**Health Outcomes, Health Behaviors, Healthcare, Demographics, Socioeconomic, and Physical Environment**). As you navigate the Health Atlas, please be aware of where health indicators are held.

# Sources of Data on Cook County Health Atlas



The Cook County Health Atlas compiles various data sources to identify, monitor, and track disease trends and improve communities residing in suburban Cook County. Therefore, these various data sources assist us with:

- **Health Surveys** - Cook County Department of Public Health (CCDPH) administers both Youth-Risk Behavioral Survey (YRBS) to measure the health and behaviors of high school students and the suburban Cook County Health Survey (SCCHS) to measure the health of adults.
- **Vital Statistics** - CCDPH receives birth and death records from our state agency (Illinois Department of Public Health) to identify maternal and chronic disease health in suburban Cook County. This data also allows for mapping health outcomes at the municipality and zip code level. (You will learn about mapping health outcomes in the next module)
- **Hospital Discharge** - CCDPH also receives hospital records from IDPH to assess healthcare utilization resources while also gauging the

morbidity and injury outcomes among residents in suburban Cook County

- **American Community Survey, Centers for Disease Control, and other secondary data sources** - CCDPH gathers supplemental data sources from other national health agencies such as the CDC and U.S. Census Bureau to assist with surveillance and capturing the social determinants of health

As a Cook County Health Atlas user, you may see the following labels for indicators: "indicator name" (CCHS), "indicator name" (PLACES), and "indicator name" (YRBS). It's important to know what each of these abbreviations mean.

- **PLACES** - PLACES data is sourced from the Centers for Disease Control (CDC), and the national agency using estimates from the national Behavioral Risk Factor Surveillance Survey (BRFSS), U.S. Census decennial population counts and annual county population estimates, and the American Community Survey 5-year Estimates.

If you would like to learn more, please proceed to the following link

<https://www.cdc.gov/places/about/index.html>

- **Suburban Cook County Health Survey (CCHS)** - Suburban Cook County Health Survey data is sourced from CCDPH, and the health department collects information that helps identify health concerns for our residents. This survey helps the agency identify health disparities as it relates to health outcomes and health behavior data among our adult population.

If you would like to learn more, see the following link

<https://cookcountypublichealth.org/health-survey/>

- **Youth-Risk Behavioral Survey (YRBS)** - Youth Risk Behavioral Survey data is sourced from CCDPH, and the health department administers this survey and collects information on youth-related health outcomes and behaviors among high school students in 9th to 12th grades.

If you would like to learn more, see the following link

<https://cookcountypublichealth.org/epidemiology-data-reports/yrbs-youth-risk-behavioral-survey/>

## References

Centers for Disease Control (CDC). PLACES: Local Data for Better Health  
<https://www.cdc.gov/places/about/index.html>

Cook County Department of Public Health (CCDPH) Suburban Cook  
County Health Survey Summary  
<https://cookcountypublichealth.org/health-survey/>

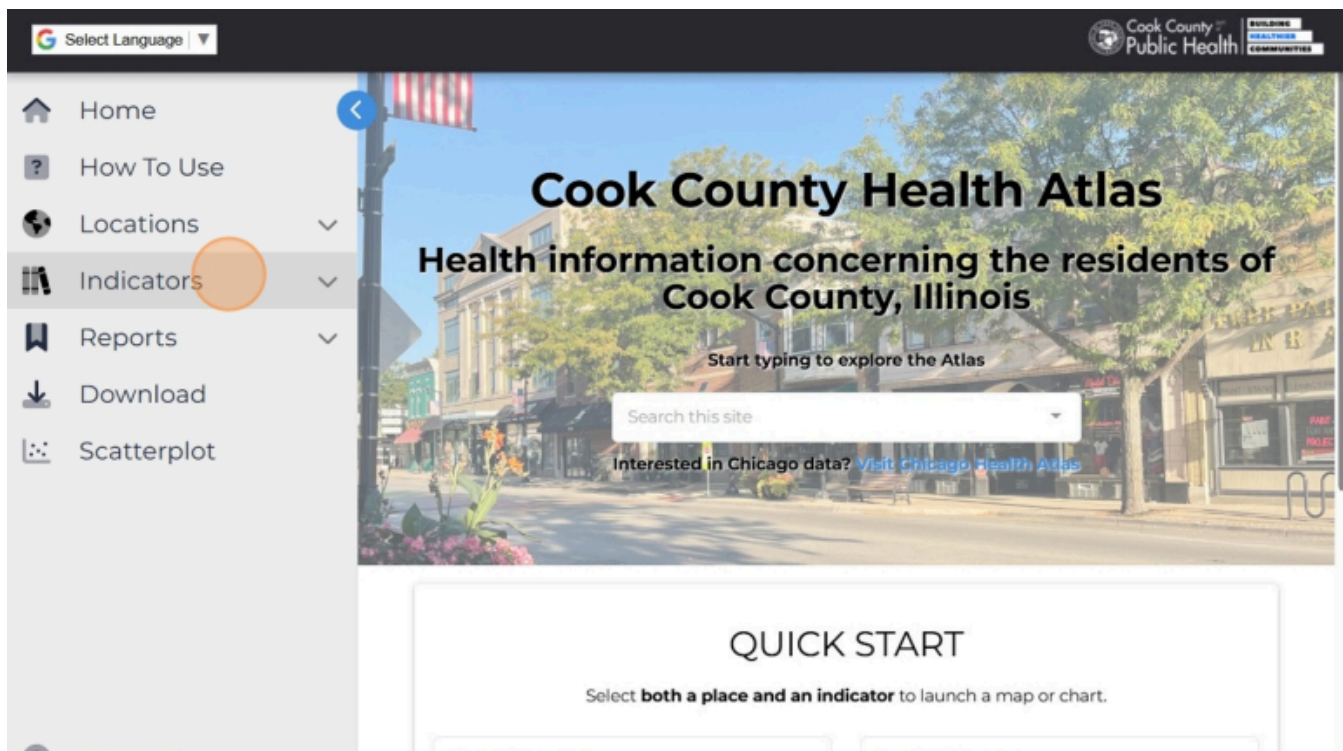
Cook County Department of Public Health (CCDPH) Youth-Risk Behavior  
Survey (YRBS)  
<https://cookcountypublichealth.org/epidemiology-data-reports/yrbs-youth-risk-behavioral-survey/>

# 2.1 Search & Explore

# Search and Explore

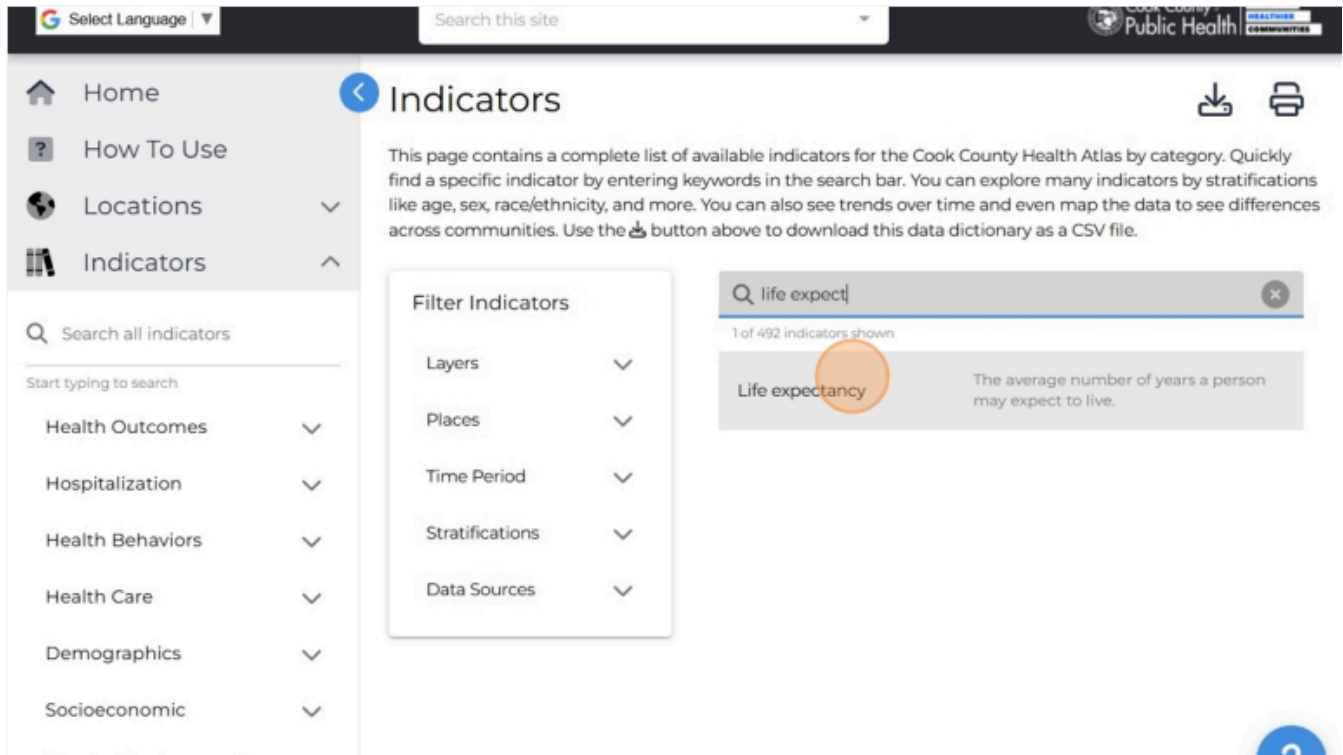
Now, let's begin with how to search and explore various atlas indicators.

**Step 1:** Click the “Indicators” option of the left navigation panel to open the indicators page




**Step 2:** Type “life expectancy” into the search bar on the indicators page The atlas actively filters indicators based on what is typed in the search bar.

**Step 3:** Click the indicator name from the list of filtered indicators to the display the indicator’s description, data units, time periods, and the stratification for which the indicator data are available



**Step 4:** Click “More Information” to view the indicator’s public health importance and related technical documentation

**Indicators**

This page contains a complete list of available indicators for the Cook County Health Atlas by category. Quickly find a specific indicator by entering keywords in the search bar. You can explore many indicators by stratifications like age, sex, race/ethnicity, and more. You can also see trends over time and even map the data to see differences across communities. Use the  button above to download this data dictionary as a CSV file.

**Filter Indicators**



- Layers ▼
- Places ▼
- Time Period ▼
- Stratifications ▼
- Data Sources ▼

Q life expect ✕

1 of 492 indicators shown

**Life expectancy**

Description	The average number of years a person may expect to live.
Units	Years
Time Periods	2010 - 2022
Stratifications	Race and ethnicity and Sex
Layers	All layers
Dataset	Illinois Department of Public Health (IDPH) Vital Records

[VISUALIZE THIS INDICATOR](#)
 MORE INFORMATION


**Life expectancy** ✕

View data about Life expectancy

Years  
The average number of years a person may expect to live.

See where data is available ▼

**Data Source and Technical Documentation** ▲

**Technical Notes about this topic:**

The number of years a person born in a particular year could expect to live if death rates remained the same as they are in that particular year. Abridged life tables were calculated for 2010-2022.

Single year life expectancy estimates were calculated using interpolated 2010 & 2020 decennial census population estimates. Where age-specific death counts equaled zero, "0.5" was substituted to allow for stable calculations. Life expectancy was calculated using the Chiang Methodology using age-specific death rates for ages 0-1, 1-4, 5-9 and in subsequent 5-year age groups to age 90, with an open-ended interval beginning at age 90.

Differences of less than one year should be considered equal unless there is additional evidence for a difference, such as a trend.

# 2.2 Visualize Indicators

# Visualize Indicators

Next, let's see how to create visualizations in various formats such as tables, charts, and maps

**Step 1:** With the life expectancy indicator visible in the indicator search panel, click the "Visualize This Indicator" link to display the default life expectancy by race and ethnicity chart for the latest data year.

The screenshot shows a web application interface with a sidebar on the left containing navigation options: Home, How To Use, Locations, Indicators, Reports, Download, Scatterplot, Help & Tools, and Powered by Metopio. A 'Filter Indicators' panel is open, showing dropdown menus for Layers, Places, Time Period, Stratifications, and Data Sources. The main content area displays a list of indicators. The 'Life expectancy' indicator is selected, and its details are shown: Description (The average number of years a person may expect to live.), Units (Years), Time Periods (2010 - 2022), Stratifications (Race and ethnicity and Sex), Layers (All layers), and Dataset (Illinois Department of Public Health (IDPH) Vital Records). A blue button labeled 'VISUALIZE THIS INDICATOR' is highlighted with an orange circle, and a 'MORE INFORMATION' link is also visible. Other indicators like 'Lifetime inhalation cancer risk' and 'Chronic liver disease and cirrhosis mortality rate' are also visible in the list.

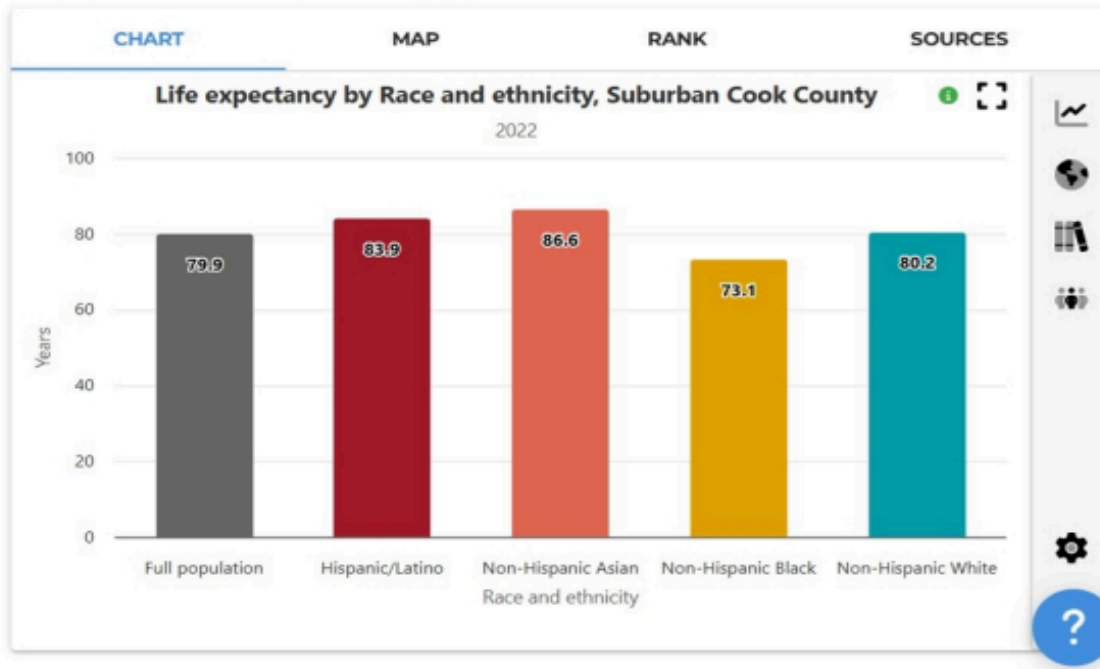
**Step 2:** In the "Charts" tab, click the "Line Chart" option to view life expectancy by race and ethnicity group over time, between 2010 and 2022

# Life expectancy

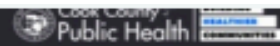


Years

The average number of years a person may expect to live.



Search this site



# Life expectancy



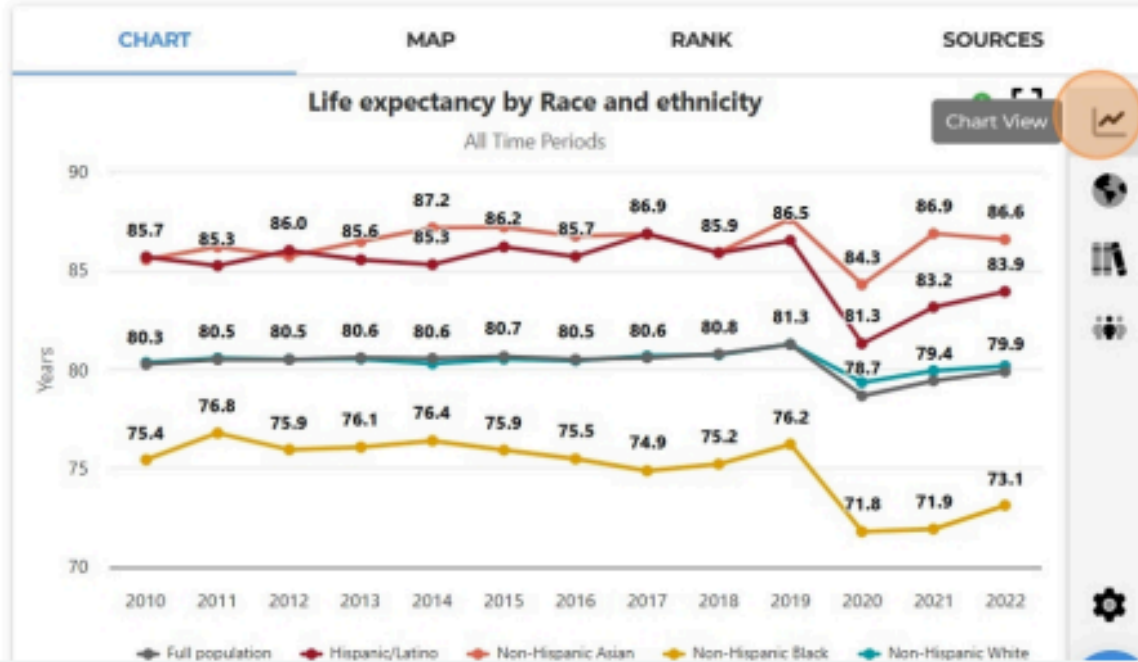
Years

The average number of years a person may expect to live.

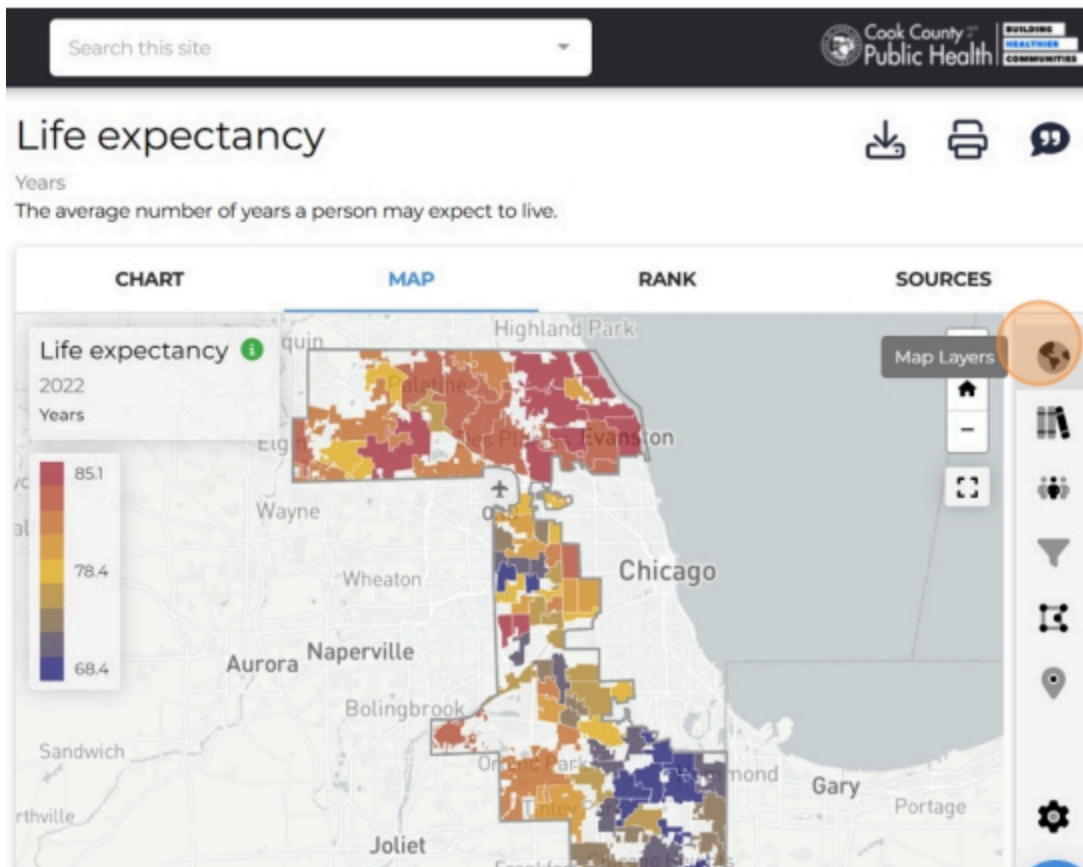


# Life expectancy

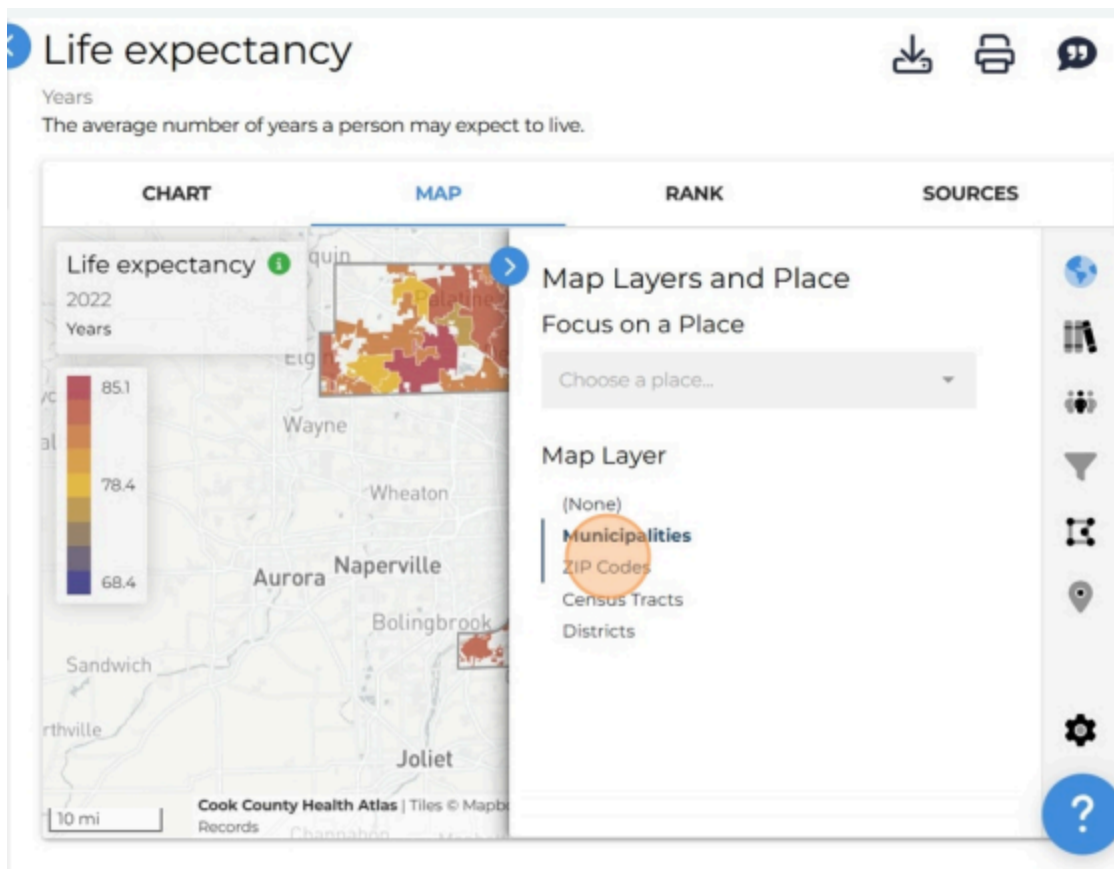
Years  
The average number of years a person may expect to live.



**Step 3:** Click the “Map” tab to view the default life expectancy map by municipality



**Step 4:** With the “Map” tab open, click the “Zip Codes” option under “Map Layer” to view life expectancy estimates by zip code



**Try it on your own:** Use the search and visualization tools to explore one or more health indicators listed below

- Poverty Rate
- Suicide mortality rate
- Alcohol-related hospitalization rate
- Traumatic brain injury-related hospitalization rate

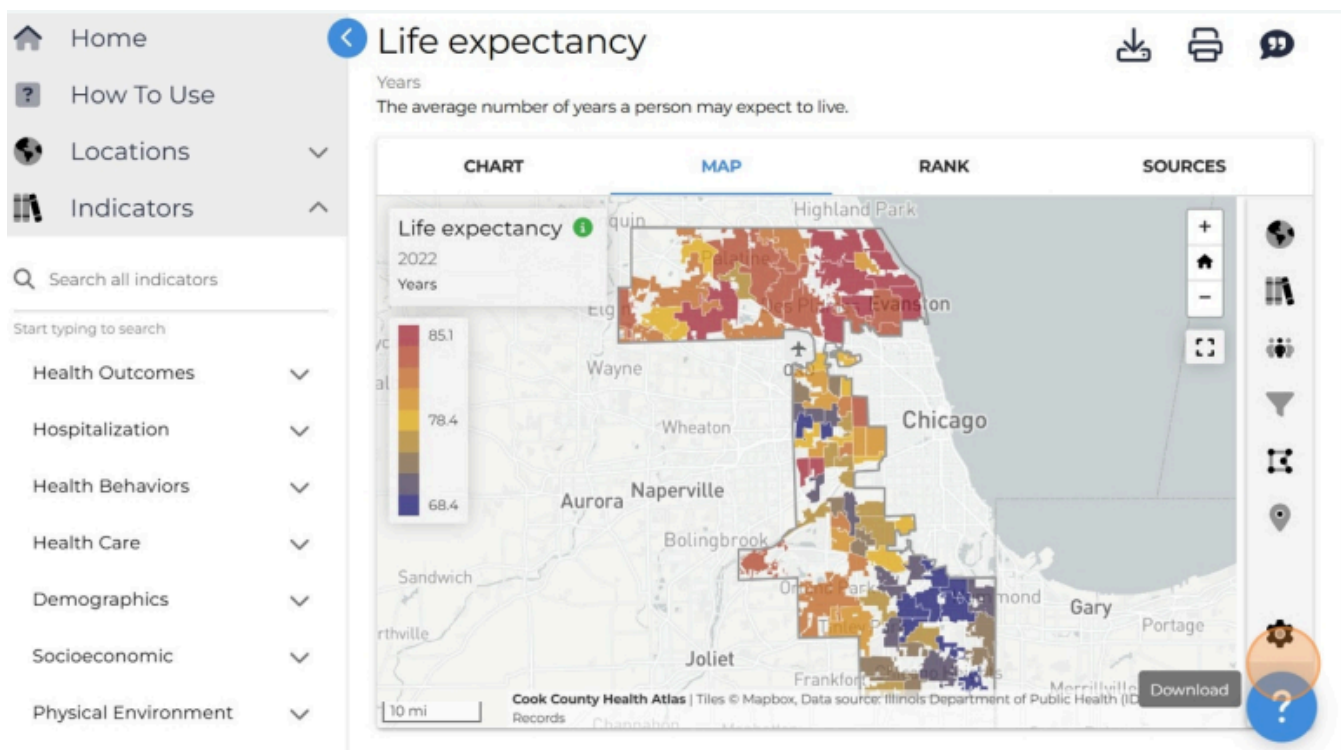
# 2.3 Download Data

# Download Data and Images:

Now that you've created your visualizations, you also have the ability to save your visualization for health education materials, presentations, programming planning, and other initiatives.

**Step 1:** With the the “life expectancy” indicator by zip code map visible,

click the download icon  in the bottom right of the screen



**Step 2:** Under “Download this map”, select one of the options and click the “Download” button to save the information locally on your computer

Home

How To Use

Locations

Indicators

Search all indicators

Start typing to search

- Health Outcomes
- Hospitalization
- Health Behaviors
- Health Care
- Demographics
- Socioeconomic
- Physical Environment

## Life expectancy

Years  
The average number of years a person may expect to live.

CHART | MAP | RANK | SOURCES

Life expectancy 2022  
Years

85.1  
78.4  
68.4

Download this map

- Image file
- Excel file with the data
- Word document

**DOWNLOAD**

Image Options

Use the **Image Editor** to change the way your image looks.

Image Editor

**Step 3:** Click the “Download” link in the left navigation tab to view the atlas’ “Download Data” web page

Select Language

Search this site

Cook County Public Health

Home

How To Use

Locations

Indicators

Reports

**Download**

Scatterplot

Help & Tools

## Download Data

Use this page to download data for any available places. Some indicators may not have data at all geographic layers. See technical notes of indicators for information on how they were produced.

1 Locations | 2 Indicators | 3 Download Options | 4 Review

Select a layer

Layer: Municipalities

Optional filters

Filter to municipalities in...

Downloading data for all municipalities available.

By default, the download will include all municipalities available. You may filter the results by selecting any number of locations (including municipalities themselves). Your download will include all municipalities that overlap with any of these locations.

**CONTINUE**

**Step 4:** Continue through the download data process by selecting your desired: (1) location (e.g., municipalities); (2) indicators; and (3) download option. Lastly, review and download the data.

The screenshot displays the 'Download Data' interface. On the left is a sidebar with navigation options: Home, How To Use, Locations, Indicators, Reports, Download, Scatterplot, Help & Tools, and Powered by Metopio. The main content area is titled 'Download Data' and includes a progress bar with four steps: 1. Locations (active), 2. Indicators, 3. Download Options, and 4. Review. Below the progress bar, there is a 'Select a layer' section with a dropdown menu currently set to 'Municipalities'. To the right is an 'Optional filters' section with a dropdown menu 'Filter to municipalities in...' and a checked checkbox for 'Downloading data for all municipalities available.' Below this checkbox is explanatory text: 'By default, the download will include all municipalities available. You may filter the results by selecting any number of locations (including municipalities themselves). Your download will include all municipalities that overlap with any of these locations.' A blue 'CONTINUE' button is located at the bottom right of the main content area, and a blue circular help icon with a question mark is positioned at the bottom right corner of the interface.

# Module 2 - Pre/Post Questions

## **Module 2 Pre/Post Assessment Questions**

This pre- and post- assessment will gauge the knowledge and skills discussed in this module. Feel free to distribute this assessment among DAP participants as you progress through the modules.

### **Pre-Assessment**

- 1) On a scale from **1 (Poor) to 5 (Excellent)**, how would you rate your understanding of the importance of population health?
- 2) On a scale from **1 (Poor) to 5 (Excellent)**, how would you rate your understanding of health equity at your organization (in general)?
- 3) On a scale from **1 (Poor) to 5 (Excellent)**, how would you rate your understanding of how to use the Cook County Health Atlas to understand health conditions in your community?
- 4) On a scale from **1 (Strongly Disagree) to 5 (Strongly Agree)**, I feel confident in communicating the social factors that influence health outcomes.

### **Post-Assessment**

- 1) After the session, on a scale from **1 (Poor) to 5 (Excellent)**, how would you rate your understanding of the importance of population health?
- 2) After the session, on a scale from **1 (Poor) to 5 (Excellent)**, how would you rate your understanding of health equity at your organization (in general)?
- 3) After the session, on a scale from **1 (Poor) to 5 (Excellent)**, how would you rate your understanding of how to use the Cook County Health Atlas to understand health conditions in your community?

4) After the session, on a scale from **1 (Strongly Disagree)** to **5 (Strongly Agree)**, I feel confident in communicating the social factors that influence health outcomes.

# Important information

# Resources

Name	Type	Notes
File	Textbook	<ul style="list-style-type: none"><li>Add page numbers and key chapters</li></ul>
File	Video	<ul style="list-style-type: none"><li>Add timestamps to focus on key sections</li></ul>
File	Article	<ul style="list-style-type: none"><li>Highlight key sections</li></ul>
Link	Website	<ul style="list-style-type: none"><li>Bookmark key pages</li></ul>

# Key terms and concepts

Term	Definition	Notes
Word	Describe in 1-2 sentences	<ul style="list-style-type: none"><li>Add visuals, charts, supporting ideas, or relevant resources such as external links</li></ul>
Name	Describe in 1-2 sentences	<ul style="list-style-type: none"><li>The content should support your understanding of the term</li></ul>
Concept	Describe in 1-2 sentences	<ul style="list-style-type: none"><li>Memory devices or visual aids can help with recall</li></ul>

# Questions and discussion

Question	Notes
Add question	<ul style="list-style-type: none"><li>• Add answers or important ideas from class discussion</li></ul>
Add question	<ul style="list-style-type: none"><li>• Be concise and clear</li></ul>

# Homework

# Homework

Task	Status	Due	Notes
Task 1	Submitted ▾	📅 Date	<ul style="list-style-type: none"><li>Note relevant details like formatting requirements</li></ul>
Task 2	In progress ▾	📅 Date	<ul style="list-style-type: none"><li>Break down bigger projects into smaller tasks</li></ul>
Task 3	Not started ▾	📅 Date	<ul style="list-style-type: none"><li>Reach out to your instructor if you're stuck or need an extension</li></ul>