Data Resources

The CDC’s Division of Heart Disease and Stroke Prevention has compiled a list of data and cartography resources helpful to public health professionals. This, along with much more information, can be found on the Chronic Disease GIS Exchange

https://www.cdc.gov/dhdsp/maps/gisx/resources/map-making-resources.html

Division for Heart Disease and Stroke Prevention

GIS Home
About the Site
Map Gallery
GIS Training
Tools for Creating Maps for Public Health
Explore GIS Resources

Map Making Resources

Cartography
- ArcGIS Mapping Center
  - "Ask a Cartographer" mapping solutions (ESRI)
- Color Brewer
  - Custom colorways including color-blind friendly, print friendly, quantitative, and qualitative color schemes.
- Coordinate Systems Overview
- Map Projection Overview
- GIS Resources Listed by State
- USGS Map Scale Tutorial (PDF, 177K)

GIS
- ArcGIS Resource Center
  - Communities, Help, Blogs, Forums, Videos (ESRI)
- BatchGeo
  - Free, online geocoding service
- GIS in Public Health and Planning
  - A compilation of GIS tutorials, data sources, and case studies
- National Cancer Institute
  - GIS data, tools, and research

Spatial Analysis
- Clearinghouse of Spatial Analysis Tools, Case Studies, and Other Resources
- Error, Accuracy, and Precision
  - An article detailing the differences between and importance of accuracy, error, and precision.
Geo-Spatial Data Resources

Geo-Spatial Data Resources are organized into four topic areas; Public Health Resources, GIS Data, Social Determinants of Health Resources, and Environmental Health Data Resources. Follow the links under your area of interest below to find publicly available datasets that are available for download and use in GIS.

- Public Health Resources
- GIS Data
- Social Determinants of Health Data Resources
- Environmental Health Data Resources

https://www.cdc.gov/dhdsp/maps/gisx/resources/geo-spatial-data.html
Dimming Basemaps

1. After you add your basemap, go to the ‘customize’tab and select ‘toolbars’.

2. Add the ‘Effects’toolbar.

3. Choose your basemap from the drop down menu, then use the dimming function icon to adjust the transparency of the basemap.
Instructions for Downloading Data from the CDC Heart Disease Interactive Atlas

Access the CDC Heart Disease Interactive Atlas online at: http://nccd.cdc.gov/DHDSPAtlas/

In the menu on the left, choose either “US Map – County Level” or “US Map” – State Level”

Select a variable of interest from the “Select data and filter options” menu on the left. In this example, we will choose Heart Disease Hospitalizations by clicking the plus next to Heart Disease and Stroke Data > All Heart Disease > Hospitalizations.
Click the word “Hospitalizations” to bring up a new filter menu at the bottom left of the screen. Use the down arrows on the right side of the labels to filter by race, gender, age, year, and choose whether the data is smoothed or unsmoothed. For more information on spatial smoothing, click the black ‘i’ button and navigate to the statistical methods section.

Click the green “Show Map” button to display the data on the map.
To look at a specific state, return to the “Select Map Area” menu. Select your state of interest from the drop down menu, then click the green “Show Map” button again.

To export the data, click on the “Report/Export” button (magnifying glass) in the toolbar at the top of the map.
Click the “Edit/Export>>” button to continue without making changes to the selected area.

Add additional data to your report by clicking through the additional data menu.
Click the export button and, when prompted, save the resulting file ‘report.csv’. After downloading the file, open it to check that the data was downloaded correctly.
Formatting Lines and Boundaries

1. Left click the line symbol in the table of contents.

2. In the symbol editor dialogue box click ‘edit symbol and choose your desired line symbol

3. Click ‘edit symbol. Here you can customize each layer of the symbol. In this example, the line symbol has 3 components that can be customized. By default, the symbol looks like this:

   We can change this by selecting the component to be customized and then selecting the ‘line properties’ tab.
4. Click the ‘properties’ button on the Line Properties tab. Here you can choose to add a symbol to your line if you wish. Choose a radio button next to one of the ‘Line Decorations’ then click the ‘properties’ tab. Here you can choose how many symbols you want to add to your line per segment. Click the ‘symbol’ tab in order to customize the symbol further.

In this example a trolley was chosen

And this was the end result
**Instructions for Downloading Data from the CDC Interactive Atlas of Heart Disease and Stroke**

Access the CDC Heart Disease Interactive Atlas online at: [http://nccd.cdc.gov/DHDSPAtlas/](http://nccd.cdc.gov/DHDSPAtlas/)

In the menu on the left, choose either “US Map County Level” or “US Map” – State Level.”

Select a variable of interest from the “Select Data and Filter Options” menu on the left. In this example, we will choose Heart Disease Hospitalizations by clicking the plus next to Heart Disease and Stroke Data > All Heart Disease > Hospitalizations.
Click the word “Hospitalizations” to bring up a new filter menu at the bottom left of the screen. Use the down arrows on the right side of the labels to filter by race, gender, age, year, and choose whether the data is smoothed or unsmoothed. For more information on spatial smoothing, click the black ‘i’ button and navigate to the statistical methods section.

Click the green “Show Map” button to display the data on the map.
To look at a specific state, return to the “Select Map Area” menu. Select your state of interest from the drop down menu, then click the green “Show Map” button again.

To export the data, click on the “Report/Export” button (magnifying glass) in the toolbar at the top of the map.
Click the “Edit/Export>>” button to continue without making changes to the selected area.

Add additional data to your report by clicking through the additional data menu.
Click the export button and, when prompted, save the resulting file ‘report.csv’. After downloading the file, open it to check that the data was downloaded correctly.
Data Resources

The CDC’s Division of Heart Disease and Stroke Prevention has compiled a list of data and cartography resources helpful to public health professionals. This, along with much more information, can be found on the Chronic Disease GIS Exchange

https://www.cdc.gov/dhdsp/maps/gisx/resources/map-making-resources.html
Geo-Spatial Data Resources

Geo-Spatial Data Resources are organized into four topic areas; Public Health Resources, GIS Data, Social Determinants of Health Resources, and Environmental Health Data Resources. Follow the links under your area of interest below to find publicly available datasets that are available for download and use in GIS.

- Public Health Resources
- GIS Data
- Social Determinants of Health Data Resources
- Environmental Health Data Resources

https://www.cdc.gov/dhdsp/maps/gisx/resources/geo-spatial-data.html
How to Add Halo’s to Map Labels

1. Open the layer properties dialogue box and activate the ‘labels’ tab.

2. Click the ‘symbols’ button, then click ‘edit symbol’.

3. Choose the tab ‘mask’

4. Choose the radio button next to ‘halo’ and reduce the size of the halo to about .5 or 1.

To change the color of the halo, click on the ‘symbol’ button and the symbol editor box will appear and here you can change the color of the halo.
Label Expressions

In the layer properties dialogue box choose the ‘labels’ tab, then choose the field you want your labels based on, then choose the ‘expression’ button.

The expression use in this example is in vbscript as follows:

```
[variable_1] + vbCrLf + "(" + [Variable 2] + ")"
```

Where:

- Vbnewline = value will be added on a new line in the label
- Variable 1 = the state abbreviation
- Variable 2 = number of cases in that state
**How to Get an RGB Value From a Screenshot**

Do you see a color online that you would like to use in a map you are creating and need to know the RGB values of that color? Follow these steps:

1. Click the ‘print screen’ button on your keyboard to take a snapshot of your screen. Paste the image into MS Paint.

2. Click on the color selector icon (the eyedropper), and then click on the color of interest to select it, then click on ‘edit color’.

3. The RGB values for that color will appear in a dialogue box.
Removing Service Layer Credits
(Basemap Metadata)

1. Go to the ‘Insert’ tab and choose ‘dynamic text’ and then choose ‘service layer credits’.
2. The service layer credits on the map will then become selected and you can grab them with your cursor and drag them off the map.