North Central Washington Epi Consortium Community Health Indicator Construction: Data Download and Cleaning Methods Document

# CDC PLACES

**Description of data source**: CDC PLACES is a collaboration between CDC, the Robert Wood Johnson Foundation, and the CDC Foundation. It is an expansion of the [500 Cities Project](https://www.cdc.gov/places/about/500-cities-2016-2019/index.html), which was the original CDC initiative collecting the same health variables but for the 500 largest cities in the US (ended in 2019). PLACES reports county, place, census tract, and ZCTA data and uses small area estimation methods to obtain measures for the entirety of the US. [More information on this data source can be found here](https://www.cdc.gov/places/about/index.html). The main data source for the majority of health variables of interest in CDC PLACES come from the [Behavioral Risk Factor Surveillance System (BRFSS)](https://www.cdc.gov/brfss/index.html).

The indicator from this data source is…

1. **Stroke among adults aged ≥18 years**
   * **This indicator falls under the CDC PLACES umbrella of “Health Outcomes.” The variable is defined as the *age-adjusted prevalence of stroke* in the county, or the age-adjusted lifetime self-reported prevalence of stroke in the county, for a given year.**
   * **More information can be found** [**at this site**](https://www.cdc.gov/places/measure-definitions/health-outcomes/index.html#stroke)

As of end of 2023, only county-level estimates are available for this stroke prevalence indicator, i.e., state-level estimates of stroke prevalence will not be included on dashboards as they are not made available by this data source.

**Where to access data**: To access this data, visit this site: <https://www.cdc.gov/places/index.html>

**How often data are updated**: These data are updated yearly.

**Referencing data**:

* PLACES. Centers for Disease Control and Prevention. Accessed [**DATE DATA ACCESSED**]. <https://www.cdc.gov/places>

**Levels of data availability for download**:

* Stroke: has ONLY county level data available. Chelan and Douglas are separated out. There is *no regional OR state level data readily downloadable* for stroke prevalence.

**Demographics availability**:There does not appear to be demographic specific information available.

**Instructions for downloading, storing, and cleaning data**:

## Stroke

* County-level estimates (no state-level available in CDC PLACES)
  + **Download Data**
    1. Go to <https://www.cdc.gov/places/index.html> and click on “Data Portal”
    2. In the bar above the header that says “ Welcome to the 500 Cities & PLACES Data Portal”, search for the following: “PLACES: Local Data for Better Health, County Data”. Many results will come up, but we want the following datasets:
       - PLACES: Local Data for Better Health, County Data **YEAR** release
    3. Click on the dataset you are interested in downloading
    4. **A screenshot of a computer

       Description automatically generated**In the top right corner, click “Export” and download as a “CSV”
       - CDC PLACES does not have a user interface that allows users to download subsets of data, meaning you’ll have to download the entire dataset for the United States, and then we will restrict the data we use in the data cleaning process (described below)
  + **Store Data**
    1. The file will download with the name “PLACES\_\_Local\_Data\_for\_Better\_Health\_\_County\_Data\_**YEAR**\_release\_**DATE OF DOWNLOAD**” regardless of the year. Rename in the following format for consistency:
       - DataSource\_Indicator\_Level\_Years
       - Example: PLACES\_Stroke\_Counties\_2023
  + **Clean Data**
    1. Data cleaning process will be done in R

# Washington State Immunization Information System (WA IIS)

**Description of data source**: The Washington State Immunization Information System (WA IIS) is a web-based, lifetime registry that keeps track of immunization records for people of all ages in our state. The vast majority of data in the WA IIS is entered electronically through EHRs. More information on the WA IIS can be found [here](https://doh.wa.gov/public-health-healthcare-providers/healthcare-professions-and-facilities/data-exchange/immunization-information-system).

The two indicators from this data source are…

1. **Infant Vaccination** 
   * **More information on the Infant Vaccination indicator, which falls under the umbrella of “Immunization Data” can be found** [**here**](https://doh.wa.gov/data-and-statistical-reports/washington-tracking-network-wtn/immunization-data)
2. **Kindergarten Vaccination** 
   * **More information on the Kindergarten Vaccination indicator, which falls under the umbrella of “School Immunization Data” can be found** [**here**](https://doh.wa.gov/data-and-statistical-reports/washington-tracking-network-wtn/school-immunization)

**Where to access data**:

* For Infant Vaccination data, go here:   
  <https://doh.wa.gov/data-statistical-reports/washington-tracking-network-wtn/immunization-data/county-hedis-measures-dashboard>
* For Kindergarten Vaccination, go here: <https://doh.wa.gov/data-and-statistical-reports/washington-tracking-network-wtn/school-immunization/dashboard>

**How often data are updated**: These data are updated yearly.

**Referencing data**: There does not appear to be an official way they suggest you reference the data on the website. Please use the following:

Infant Vaccination:

* Washington State Department of Health (WADOH). Washington Tracking Network (WTN). Immunization Data, County HEDIS Measures Dashboard. Web. Accessed: ***INSERT DATE DATA WAS ACCESSED***. <https://doh.wa.gov/data-statistical-reports/washington-tracking-network-wtn/immunization-data/county-hedis-measures-dashboard>

Kindergarten Vaccination:

* Washington State Department of Health (WADOH). Washington Tracking Network (WTN). Immunization Data, School Immunization Data Dashboard. Web. Accessed: ***INSERT DATE DATA WAS ACCESSED***. <https://doh.wa.gov/data-and-statistical-reports/washington-tracking-network-wtn/school-immunization/dashboard>

**Levels of data availability for download**:

* Infant Vaccination: has state and county level available. Chelan and Douglas are separated out. There is *no regional data readily downloadable* for infant vaccination.
* Kindergarten Vaccination: has state and county level available. Chelan and Douglas are separated out. There is *no regional data readily downloadable* for kindergarten vaccination.

**Demographics availability**:There does not appear to be demographic specific information available.

**Instructions for downloading, storing, and cleaning data**:

## Infant Vaccination

* County and State level estimates (one data download for both)
  + **Download Data**
    1. Go to <https://doh.wa.gov/data-statistical-reports/washington-tracking-network-wtn/immunization-data/county-hedis-measures-dashboard> and select the Data Table Download tab from the ribbon
    2. From the Data Year drop down, select the *year* of data you’re interested in
       - Even if you are looking to download multiple years of data, download one year at a time for ease of data cleaning
    3. From the Vaccine Series options, select “HEDIS Combo 10”
    4. For Vaccine Component, make sure “HEDIS Combo 10” is selected
    5. For Sex, make sure “All” is selected
    6. For Geography, de-select “All”, and then select all of the following:
       - Chelan, Douglas, Grant, Kittitas, Okanogan, and Statewide
       - A close-up of a computer screen

         Description automatically generatedOnce you do this, you should see 6 rows of data in total
    7. At the bottom of the screen, click on the download symbol that looks like this 🡪
    8. Select “Crosstab”, and then under Select Format click the “Excel” option
       - We normally use CSV file format, but for this specific indicator, we have found that the CSV file format was downloading with some issues
    9. Repeat this process for all of the years of data you need
  + **Store Data**
    1. The file will download with the general name “HEDIS Export Worksheet” regardless of the year. Rename in the following format:
       - DataSource\_Indicator\_Level\_Years
       - Example: WAIIS\_InfantVax\_All\_2018
  + **Clean Data** 
    1. Data cleaning process will be done in R

## Kindergarten Vaccination

* County level estimates
  + **Download data** 
    1. Go to <https://doh.wa.gov/data-and-statistical-reports/washington-tracking-network-wtn/school-immunization/dashboard> and select the County Data Download tab from the ribbon
    2. For School Year, select the years you are interested in
       - Even if you are looking to download multiple years of data, download one year at a time for ease of data cleaning
    3. For Disease, select “Overall”
    4. For Grade, select “Kindergarten”
    5. Select **Chelan, Douglas, Grant, Kittitas, and Okanogan counties**. You can select all at once by holding down ‘Ctrl’ as you select the counties
    6. A screenshot of a data

       Description automatically generatedHover over one of the counties you selected and click “Keep Only”. This will restrict the data that are shown to our 5 counties of interest
    7. At the bottom of the screen, click on the download symbol
    8. Select “Crosstab”, and then under Select Format click the “Excel” option
       - We normally use CSV file format, but for this specific indicator, we have found that the CSV file format was downloading with some issues
    9. Repeat this process for all of the years of data you need
  + **Store Data** 
    1. The file will download with the general name “County Data Download” regardless of the year. Rename in the following format:
       - DataSource\_Indicator\_Level\_Years
       - Example: WAIIS\_KindergartenVax\_County\_2016\_2017
  + **Clean Data**
    1. Data cleaning process will be done in R
* State level estimates
  + **Download Data**
    1. Go to <https://doh.wa.gov/data-and-statistical-reports/washington-tracking-network-wtn/school-immunization/dashboard> and select the Yearly Trends tab from the ribbon
    2. In the drop-down menu under Grade, select “Kindergarten”
       - We are interested in the “Kindergarten Immunization Status by School Year” figure. There are a few ways to pull data from this dashboard, but the way described here allows for the easiest formatting for data visualization
    3. Select the year of data for “Immunization Status: Complete” you are interested in. At the time of writing these instructions, that was the darkest blue line in the “Kindergarten Immunization Status by School Year” figure. Once selected, you should see your dot outlined in black
       - Even if you are looking to download multiple years of data, download one year at a time for ease of data cleaning
    4. A screenshot of a computer

       Description automatically generatedHover over one of the dots, and select the “View Data…” tab (highlighted with red box below)

* + 1. This will open up a new window. Click “Download” in the top right corner, which will download a CSV file
    2. Repeat this process for all of the years of data you need
  + **Store Data** 
    1. The file will download with the general name “Yearly Complete\_data”. Rename in the following format:
       - DataSource\_Indicator\_Level\_Years
       - Example: WAIIS\_KindergartenVax\_State\_2019\_2020
  + **Clean Data** 
    1. Data cleaning process will be done in R