COUNTY HEALTH RANKINGS & ROADMAPS

Relational Datasets – v6 (June 2025)

This document describes the relational datasets created during the County Health Rankings & Roadmaps Annual Release calculation process.

Changes that are new to 2025 are highlighted in yellow.

**File Organization**

The relational datasets are organized into two groups within the **relational\_data** folder:

1. **General Information Files (root of relational\_data)**
   * These CSVs contain general information, text fields, definitions, and metadata (e.g., *t\_category*, *t\_factor*, *t\_focus\_area*, *t\_measure*, etc.).
   * They do not contain county- or state-specific ranking results.
   * These files are not year-specific but may contain a year field as part of their structure for reference.
2. **Data Files (year-specific subfolders inside relational\_data)**
   * These CSVs contain the actual ranking results and measure values for counties and states.
   * Each dataset is split by year, and the resulting CSVs are saved in subfolders named by year (e.g., relational\_data/2024/t\_measure\_data\_2024.csv).
   * This organization ensures that data files are grouped by the year they represent, while general information files remain accessible in a single location.

# Field Types

The following field types are included in the County Health Rankings & Roadmaps datasets. If more detail is needed to fully define a field, it will be included under the “Additional Information” column of the table descriptions.

## Integer

Whole number, usually used for unique ids or numeric codes

## Double

Decimal number, usually used for dollar amounts or calculations

## Timestamp

Date and/or time

## Text

Text fields must be defined with a specified length, the length is given in parentheses

## Numeric Code

Integer field used to store a single radio or drop-down option.

## Plain Text

Open text field that does not allow any formatting, but may include HTML character codes, such as &quot;

## Rich Text

Open text field that is formatted as HTML; allowed tags are p, em, strong, ul, ol, li, a[href|target|title], br, sup, sub, h3, img[src|style]

# Numeric Codes

|  |  |
| --- | --- |
| Code Type | Code Meaning |
| Area to Highlight | 0=No;  1=Area of Strength;  2=Area to Explore |
| Correction | 0=none; 1=incorrect value used in rankings; 2=corrected value (post rankings) |
| Format Type | 0=rate;  1=percentage;  2=dollars;  3=ratio;  4=code (NCHS 2014);  5=code (Yes/No);  6=code (NCHS 2016);  7=code (EZACO);  8=cap at 100;  9=cap below 1 |
| Health Group Comparison | 1=County is faring better than the average county…;  2=County is faring slightly better than the average county…;  3=County is faring about the same as the average county…;  4=County is faring slightly worse than the average county…;  5=County if faring worse than the average county… |
| Measure Direction | 1=negative;  -1=positive;  0=neutral |
| Measure Type | 0=ranked;  1=state specific;  2=contextual;  3=demographic |
| Reliability | 0=reliable;  1=unreliable; 2=missing;  3=suspect;  4=unreliable but treat as reliable in certain situations |
| Symbol Location | 0=column header; 1=row identifier |
| Trend Graph | 0=No trend graph available;  1=Trend graph available, but insufficient data to determine improvement;  2=Trend graph available, negative change;  3=Trend graph available, no change;  4=Trend graph available, positive change;  5=Trend graph available, no interpretation calculated |
| View | 0=county snapshot/additional measures tables; 1=measure detail table;  2=inter-state comparison table |
| Yes/No | 0=No;  1=Yes;  2=Don’t Know |
| Yes/No/NA | 0=No;  1=Yes;  2=N/A |

# CHR&R Relational Analytic Datasets

The following datasets are compiled from both the calculation process and the Administrative Website.

## Hierarchy Information

Hierarchy information is maintained locally via the Administrative Website.

### t\_category

This dataset stores general information about categories (ex. “Health Outcomes,” “Health Factors”).

**Primary Key: year, category\_id**

|  |  |  |
| --- | --- | --- |
| Field Name | Field Type | Additional Information |
| year | Integer |  |
| category\_id | Integer |  |
| category\_name | Plain Text (100) |  |
| category\_parent | Integer | No actual parent, only here so same logic can be applied to all hierarchy levels; Artificial value of 1 |
| category\_index | Integer | Within parent |
| last\_updated | Timestamp |  |

### t\_factor

This dataset stores general information about factors (ex. “Length of Life,” “Health Behaviors”).

**Primary Key: year, factor\_id**

|  |  |  |
| --- | --- | --- |
| Field Name | Field Type | Additional Information |
| year | Integer |  |
| factor\_id | Integer |  |
| factor\_name | Plain Text (100) |  |
| factor\_parent | Integer | Category Id |
| factor\_index | Integer | Within parent |
| last\_updated | Timestamp |  |

### t\_focus\_area

This dataset stores general information about focus areas (ex. “Tobacco Use,” “Community Safety”).

**Primary Key: year, focus\_area\_id**

|  |  |  |
| --- | --- | --- |
| Field Name | Field Type | Additional Information |
| year | Integer |  |
| focus\_area\_id | Integer |  |
| focus\_area\_name | Plain Text (100) |  |
| focus\_area\_parent | Integer | Factor Id |
| focus\_area\_index | Integer | Within parent |
| focus\_area\_numerator | Integer | Within category (Health Outcomes/Health Factors) |
| focus\_area\_denominator | Integer | Within category (Health Outcomes/Health Factors) |
| last\_updated | Timestamp |  |

### t\_measure

This dataset stores general information about measures.

**Primary Key: year, measure\_id**

|  |  |  |
| --- | --- | --- |
| Field Name | Field Type | Additional Information |
| year | Integer |  |
| measure\_id | Integer |  |
| measure\_name | Plain Text (100) |  |
| measure\_parent | Integer | Focus Area Id |
| measure\_index | Integer | Within parent |
| description | Plain Text (1000) |  |
| direction | Numeric Code | Measure Direction code |
| format\_type | Numeric Code | Format Type code |
| display\_precision | Integer |  |
| measure\_type | Numeric Code | Measure Type code |
| weight\_numerator | Integer | Within category (Health Outcomes/Health Factors) |
| weight\_denominator | Integer | Within category (Health Outcomes/Health Factors) |
| compare\_states | Numeric Code | Yes/No code |
| last\_updated | Timestamp |  |

## Rankings Calculations

*Rankings* calculations are generated in SAS.

### t\_benchmark

This dataset stores information about the benchmark for each measure. In 2010, this was a state specific target value. Since 2011, it has been a national benchmark***. 2010 data is no longer included in the CHR&R app and the 2010 national benchmarks have not been verified.***

**Primary Key: year, measure\_id, correction**

|  |  |  |
| --- | --- | --- |
| Field Name | Field Type | Additional Information |
| year | Integer |  |
| measure\_id | Integer |  |
| correction | Numeric Code | Correction code |
| benchmark | Double |  |
| source | Plain Text (1000) | 10th/90th percentile |
| last\_updated | Timestamp |  |

### t\_category\_data

This dataset stores the category level rankings data.

**Primary Key: year, category\_id, state\_fips, county\_fips**

|  |  |  |
| --- | --- | --- |
| Field Name | Field Type | Additional Information |
| year | Integer |  |
| category\_id | Integer |  |
| state\_fips | Plain Text (2) |  |
| county\_fips | Plain Text (3) |  |
| z\_score | Double |  |
| rank | Integer | 999=unranked |
| quartile | Integer | 999=unranked |
| health\_group | Integer |  |
| state\_comparison | Numeric Code | Health Group Comparison code  Indicates whether the county’s health group is better, the same, or worse than the state’s health group |
| us\_comparison | Numeric Code | Health Group Comparison code  Indicates whether the county’s health group is better, the same, or worse than the nation’ health group (z-score of 0) |
| last\_updated | Timestamp |  |

### t\_factor\_data

This dataset stores the factor level rankings data.

**Primary Key: year, factor\_id, state\_fips, county\_fips**

|  |  |  |
| --- | --- | --- |
| Field Name | Field Type | Additional Information |
| year | Integer |  |
| factor\_id | Integer |  |
| state\_fips | Plain Text (2) |  |
| county\_fips | Plain Text (3) |  |
| z\_score | Double |  |
| rank | Integer | 999=unranked |
| quartile | Integer | 999=unranked |
| last\_updated | Timestamp |  |

### t\_focus\_area\_data

This dataset stores the focus area level rankings data.

**Primary Key: year, focus\_area\_id, state\_fips, county\_fips**

|  |  |  |
| --- | --- | --- |
| Field Name | Field Type | Additional Information |
| year | Integer |  |
| focus\_area\_id | Integer |  |
| state\_fips | Plain Text (2) |  |
| county\_fips | Plain Text (3) |  |
| z\_score | Double |  |
| rank | Integer | 999=unranked |
| quartile | Integer | 999=unranked |
| last\_updated | Timestamp |  |

### t\_map\_legend

This dataset stores information about the colored ranges on maps. Generally, these are quartiles, but a fifth range is included for Rhode Island, since it only has 5 counties.

**Primary Key: year, state\_fips**

|  |  |  |
| --- | --- | --- |
| Field Name | Field Type | Additional Information |
| year | Integer |  |
| state\_fips | Plain Text (2) |  |
| total\_counties | Integer |  |
| ranked\_counties | Integer |  |
| range\_1\_min | Integer |  |
| range\_1\_max | Integer |  |
| range\_2\_min | Integer |  |
| range\_2\_max | Integer |  |
| range\_3\_min | Integer |  |
| range\_3\_max | Integer |  |
| range\_4\_min | Integer |  |
| range\_4\_max | Integer |  |
| range\_5\_min | Integer |  |
| range\_5\_max | Integer |  |
| not\_ranked\_min | Integer | 999=unranked |
| not\_ranked\_max | Integer | 999=unranked |
| last\_updated | Timestamp |  |

### t\_measure\_data

This dataset stores the county measure level rankings data. In 2024, race data was moved to its own dataset. ***If data was corrected post-Rankings, there will be 2 records (one with the data used in the Rankings and one with the corrected data). For measures that are displayed as ratios, the raw\_value field stores the value as a rate and the other\_data\_1 field stores the value as a ratio (positive number if :1 and negative number if :0).***

**Primary Key: year, measure\_id, correction, state\_fips, county\_fips**

|  |  |  |
| --- | --- | --- |
| Field Name | Field Type | Additional Information |
| year | Integer |  |
| measure\_id | Integer |  |
| state\_fips | Plain Text (2) |  |
| county\_fips | Plain Text (3) |  |
| correction | Numeric Code | Correction code Indicates whether the data was used in the calculations or corrected post-Rankings |
| raw\_value | Double |  |
| ci\_low | Double |  |
| ci\_high | Double |  |
| numerator | Double |  |
| denominator | Double |  |
| other\_data\_1 | Double | Generic field for holding other information (such as Deaths for YPLL, or Ratio for PCP) |
| other\_data\_1\_ci\_low | Double |  |
| other\_data\_1\_ci\_high | Double |  |
| other\_data\_1\_flag | Numeric Code | Reliability code |
| other\_data\_2 | Double | Generic field for holding other information (such as Deaths for YPLL, or Ratio for PCP) |
| other\_data\_2\_ci\_low | Double |  |
| other\_data\_2\_ci\_high | Double |  |
| other\_data\_2\_flag | Numeric Code | Reliability code |
| other\_data\_3 | Double | Generic field for holding other information (such as Deaths for YPLL, or Ratio for PCP) |
| other\_data\_3\_ci\_low | Double |  |
| other\_data\_3\_ci\_high | Double |  |
| other\_data\_3\_flag | Numeric Code | Reliability code |
| other\_data\_4 | Double | Generic field for holding other information (such as Deaths for YPLL, or Ratio for PCP) |
| other\_data\_4\_ci\_low | Double |  |
| other\_data\_4\_ci\_high | Double |  |
| other\_data\_4\_flag | Numeric Code | Reliability code |
| reliability | Numeric Code | Reliability code Used during the data compilation process to determine whether the raw\_value is considered rank\_ready |
| rank\_ready | Numeric Code | Yes/No code  Value can be used in calculations, assuming the county is ranked |
| display | Numeric Code | Yes/No code  Value can be displayed on the website and in result files (measure detail table, snapshot, Excel data files) |
| county\_ranked | Numeric Code | Yes/No code |
| rank\_value | Double | The value actually used when doing the calculations. |
| z\_score | Double | The unadjusted z-score used for rankings/health groups; starting in 2024 this is national-based, prior to 2024 it is state-based |
| z\_score\_rank | Double | Z-score used for rankings/health groups after adjustments: measure direction, truncation for small counties, missing set to 0 (state/national average); starting in 2025 missing values are set to the average county z-score for the state |
| z\_score\_state | Double | Starting in 2024, the z-score used for health groups is national-based, but we still have some need to also calculate a state-based z-score; this is the unadjusted z-score. |
| z\_score\_state\_rank | Double | Starting in 2024, the z-score used for health groups is national-based, but we still have some need to also calculate a state-based z-score; this is the z-score after adjustments: measure direction, truncation for small counties, missing set to 0 (state average); starting in 2025 missing values are set to the average county z-score for the state |
| map\_group | Integer |  |
| area\_to\_highlight | Numeric Code | Area to Highlight code |
| trend\_graph | Numeric Code | Trend Graph code |
| last\_updated | Timestamp |  |

### t\_race\_data

This dataset stores the measure level race disaggregation data. It includes national, state and county records. ***If data was corrected post-Rankings, there will be 2 records (one with the data used in the Rankings and one with the corrected data).***

**Primary Key: year, measure\_id, correction, state\_fips, county\_fips**

|  |  |  |
| --- | --- | --- |
| Field Name | Field Type | Additional Information |
| Year | Integer |  |
| measure\_id | Integer |  |
| state\_fips | Plain Text (2) |  |
| county\_fips | Plain Text (3) |  |
| correction | Numeric Code | Correction code Indicates whether the data was used in the calculations or corrected post-Rankings |
| race\_aian | Double | Value for American Indians/Alaska Natives |
| race\_aian\_ci\_low | Double |  |
| race\_aian\_ci\_high | Double |  |
| race\_aian\_flag | Numeric Code | Reliability code |
| race\_asian | Double | Value for Asians/Pacific Islanders |
| race\_asian\_ci\_low | Double |  |
| race\_asian\_ci\_high | Double |  |
| race\_asian\_flag | Numeric Code | Reliability code |
| race\_black | Double | Value for Blacks |
| race\_black\_ci\_low | Double |  |
| race\_black\_ci\_high | Double |  |
| race\_black\_flag | Numeric Code | Reliability code |
| race\_hispanic | Double | Value for Hispanics |
| race\_hispanic\_ci\_low | Double |  |
| race\_hispanic\_ci\_high | Double |  |
| race\_hispanic\_flag | Numeric Code | Reliability code |
| race\_nhopi | Double | Value for Native Hawaiian or Pacific Islander |
| race\_ nhopi \_ci\_low | Double |  |
| race\_ nhopi \_ci\_high | Double |  |
| race\_ nhopi \_flag | Numeric Code | Reliability code |
| race\_tom | Double | Value for Two or More Races |
| race\_tom\_ci\_low | Double |  |
| race\_tom\_ci\_high | Double |  |
| race\_tom\_flag | Numeric Code | Reliability code |
| race\_white | Double | Value for Whites |
| race\_white\_ci\_low | Double |  |
| race\_white\_ci\_high | Double |  |
| race\_white\_flag | Numeric Code | Reliability code |
| last\_updated | Timestamp |  |

### t\_state\_data

This dataset stores the state measure level rankings data. In 2024, race data was moved to its own dataset. ***If data was corrected post-Rankings, there will be 2 records (one with the data used in the Rankings and one with the corrected data). For measures that are displayed as ratios, the raw\_value field stores the value as a rate and the other\_data\_1 field stores the value as a ratio (positive number if :1 and negative number if :0).***

**Primary Key: year, measure\_id, correction, state\_fips**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Field Name | Field Type | | Additional Information | |
| year | Integer | |  | |
| measure\_id | Integer | |  | |
| state\_fips | Plain Text (2) | |  | |
| county\_fips | Plain Text (3) | |  | |
| correction | Numeric Code | | Correction code Indicates whether the data was used in the calculations or corrected post-Rankings | |
| raw\_value | Double | |  | |
| ci\_low | Double | |  | |
| ci\_high | Double | |  | |
| numerator | Double | |  | |
| denominator | Double | |  | |
| other\_data\_1 | Double | | Generic field for holding other information (such as Deaths for YPLL, or Ratio for PCP) | |
| other\_data\_1\_ci\_low | Double | |  | |
| other\_data\_1\_ci\_high | Double | |  | |
| other\_data\_1\_flag | Numeric Code | | Reliability code | |
| other\_data\_2 | Double | | Generic field for holding other information (such as Deaths for YPLL, or Ratio for PCP) | |
| other\_data\_2\_ci\_low | Double | |  | |
| other\_data\_2\_ci\_high | Double | |  | |
| other\_data\_2\_flag | Numeric Code | | Reliability code | |
| other\_data\_3 | Double | | Generic field for holding other information (such as Deaths for YPLL, or Ratio for PCP) | |
| other\_data\_3\_ci\_low | | Double | |  |
| other\_data\_3\_ci\_high | | Double | |  |
| other\_data\_3\_flag | | Numeric Code | | Reliability code |
| other\_data\_4 | | Double | | Generic field for holding other information (such as Deaths for YPLL, or Ratio for PCP) |
| other\_data\_4\_ci\_low | | Double | |  |
| other\_data\_4\_ci\_high | | Double | |  |
| other\_data\_4\_flag | | Numeric Code | | Reliability code |
| reliability | Numeric Code | | Reliability code | |
| rank\_ready | Numeric Code | | Yes/No code  Value can be used in calculations, assuming the county is ranked | |
| display | Numeric Code | | Yes/No code  Value can be displayed on the website and in result files (measure detail table, snapshot, Excel data files) | |
| show\_details | Numeric Code | | Yes/No code  Link to the measure detail page from the snapshot | |
| state\_min | Double | |  | |
| state\_max | Double | |  | |
| trend\_graph | Numeric Code | | Trend Graph code | |
| last\_updated | Timestamp | |  | |