

UNDERSTANDING TRENDS OVER TIME

Interpreting County Health Rankings Trend Graphs

Examining changes in Health Outcomes over time can provide an overall understanding of a community's progress toward health improvement. Trends in Health Factors can inform specific health programs and may reflect the impact of local efforts.

For each measure with trend data available, a detailed trend graph can be viewed by clicking on the graph icons in the county or state snapshot. We conduct linear regressions using all years of data shown in the graph to calculate whether there is a decreasing, increasing or stable trend. Each graph icon is color-coded to communicate the direction of the trend:



The county value is trending worse for this measure



The county value shows no significant trend



The county value is trending better for this measure



Additional information is needed to interpret the trend for this measure



Trend graph available, no interpretation calculated

The County Health Rankings data come from nearly 30 different sources, each with unique methods for data collection and processing which impact the feasibility and reliability of comparisons over time. County Health Rankings produces trend graphs where possible and meaningful.

Trend data is currently available for 12 ranked measures:

- Premature Death
- Alcohol-Impaired Driving Deaths
- Sexually Transmitted Infections
- Uninsured
- Primary Care Physicians
- Dentists
- Preventable Hospital Stays
- Mammography Screening
- Flu Vaccinations
- Unemployment
- Children in Poverty
- Air Pollution - Particulate Matter

Trend data is currently available for 3 unranked measures:

- Uninsured Adults
- Uninsured Children
- School Funding Adequacy

Interpreting Trend Graphs

Trend graphs can be used to examine progress over time for select measures and can be found on each county and state snapshot.

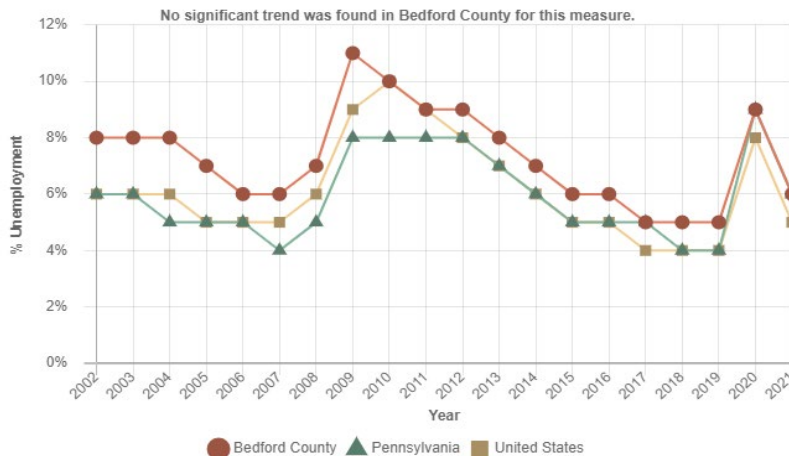
When you look at the trend graphs, ask yourself:

1. Is the county value increasing, decreasing or staying the same over time?
2. Is the county trend better, worse or similar to the state trend?
3. Is the county trend better, worse or similar to the national trend?
4. What worldwide, national or local events occurred during this time period that may have impacted the measure?

In many cases, it may be helpful to consider state and national trends. An individual county's trend may be fairly stable but the nation or state may have increasing or decreasing trends. This could cause the county's value to comparatively improve or worsen not because of a change in the county's value, but a change in the state or national values. The trend graph interpretation will indicate "please note state and national trends" in these situations.

The example trend graphs (below) show different relationships among county, state, and national level data.

Unemployment in Bedford County, PA
County, state and national trends



No clear trend – similar to state and national trends

Interpretation: In Bedford County, PA, there was no clear trend in Unemployment over the whole period of 2002 to 2021. There was a spike in Unemployment that began in 2008, and another spike in 2020. However, Unemployment fell steadily between 2009 and 2020. The 2020 spike appears isolated and was likely a result of the COVID-19 pandemic.

Compare to the state and national trend:

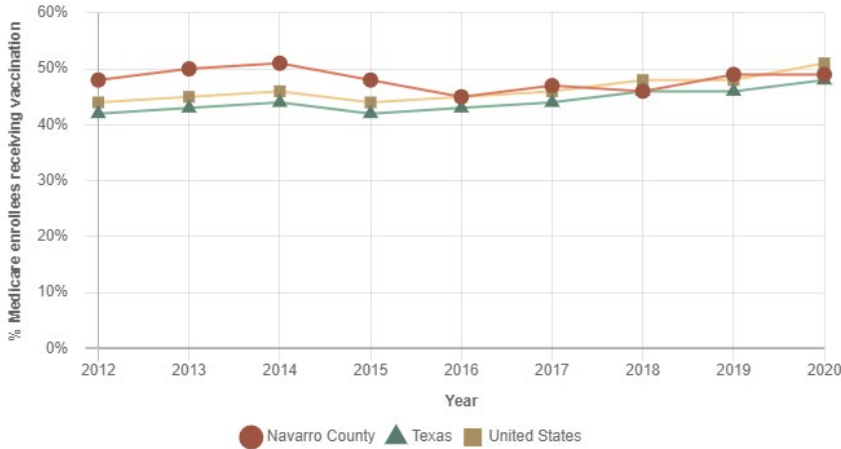
The changes in Bedford County's trend line are similar to the changes in the state and national trend lines. This allows us to infer that changes in Unemployment are due to larger state or national changes, rather than to changes in unique local conditions.

County Health Rankings & Roadmaps

Building a Culture of Health, County by County

Flu Vaccinations in Navarro County, TX County, state and national trends

Although no significant trend was found in Navarro County for this measure, please note state and national trends.



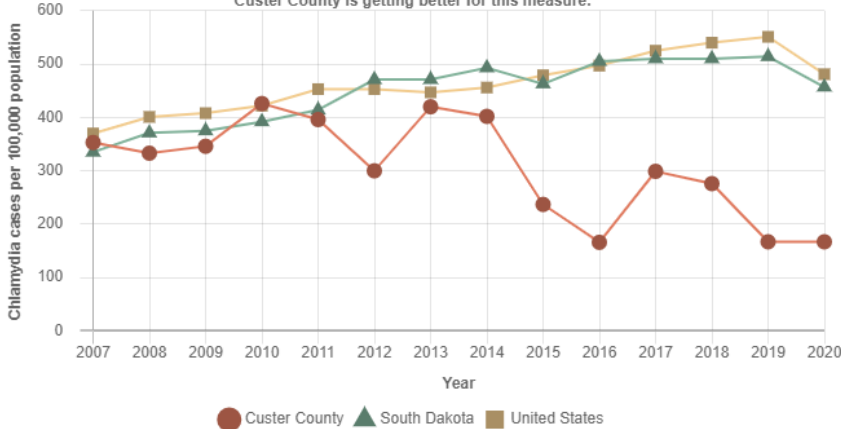
Stable trend – similar to state and national trends

Interpretation: In Navarro County, TX, there was no significant change in Flu Vaccinations from 2012 to 2020.

Compare to the state and national trend: Navarro County is not higher or lower than Texas. Navarro County appears to be average, and not changing. However, due to increases in state and national values, the county’s relative ranking may have worsened over time even though the county’s number of flu vaccinations has remained stable.

Sexually Transmitted Infections in Custer County, SD County, state and national trends

Custer County is getting better for this measure.



Improving (decreasing) trend – improving faster than state and national trends

Interpretation: In Custer County, SD, Sexually Transmitted Infections decreased between 2013 and 2020. The improvement appeared to accelerate most between 2014 and 2016, and generally continues despite a small increase in 2017 followed by a stabilization.

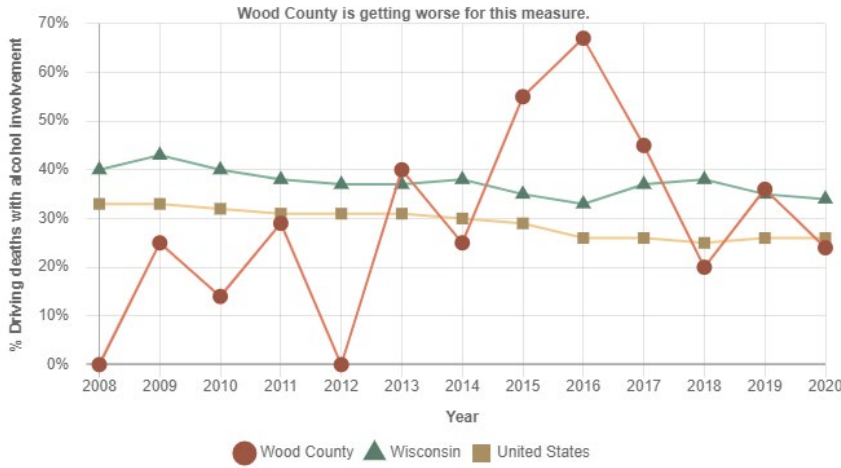
Compare to the state and national trend: Custer County is improving at a faster rate than the rest of South Dakota. In Custer County, the rate of sexually transmitted infections is lower than the rest of South Dakota and the U.S.

Notes:
Sexually transmitted infections should only be compared across states with caution.

County Health Rankings & Roadmaps

Building a Culture of Health, County by County

**Alcohol-Impaired Driving Deaths in Wood County, WI
County, state and national trends**



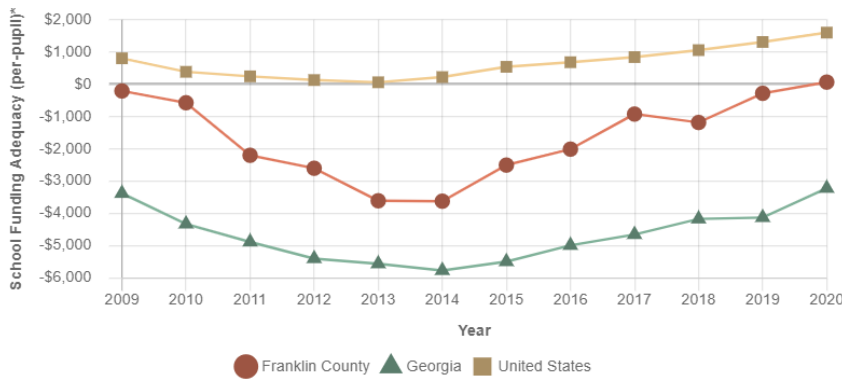
Notes:
This trend graph uses single-year estimates.

Worsening (increasing) trend (with lots of uncertainty)

Interpretation: In Wood County, WI, Alcohol-Impaired Driving Deaths increased over the period between 2008 and 2020. The county experienced a large amount of variation in Alcohol-Impaired Driving Deaths year-to-year during this period, most likely due to this being a smaller county with a smaller number of total deaths.

Compare to the state and national trend: It is difficult to determine if Wood County is doing worse than the state of Wisconsin or the nation. Wood County is small and has smaller numbers of deaths. As a result, smaller changes in the number of alcohol-impaired driving deaths can cause big changes in the percentage. This causes uncertainty in the percentage from year to year.

**School Funding Adequacy in Franklin County, GA
County, state and national trends**



Notes:
*School Funding Adequacy is the actual per-pupil spending compared with an estimated amount that would need to be spent to achieve U.S. average test scores in each school district. The county value is the cross-district average of the spending surplus or deficit.

County values are below an established goal

Interpretation: School Funding Adequacy is the average difference in dollars between actual spending per pupil and the estimated dollars needed to achieve U.S. average test scores in each district. In Franklin County, GA, School Funding has remained below the estimated need from 2009 through 2019, with the largest per-pupil funding deficit during this period experienced in 2014. Franklin County achieved Adequate School Funding in 2020.

Compare to the state and national trend: Between 2009 and 2020, Franklin County experienced a smaller per-pupil deficit in School Funding Adequacy as compared to the rest of Georgia. During this period, the average county in the U.S. did not experience a school funding deficit.

County Health Rankings & Roadmaps

Building a Culture of Health, County by County

Trends in Sexually Transmitted Infections in selected places



Trend graph available – no interpretation calculated

Interpretation: In some cases, a trend graph may be available but the relationship between the trend lines is not calculated. You will see this on state snapshots and when using the Compare Counties tool where the trend graphs are dynamically created based on user selections.

Notes:
Sexually transmitted infections should only be compared across states with caution.