



UNDERSTANDING TRENDS OVER TIME

Interpreting Trend Graphs on the County Health Snapshots

Examining changes in Population Health and Well-being over time can provide an overall sense of community progress toward health. Trends in Community Conditions 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 Health Snapshot. 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 Annual Data Release includes data from over 30 different sources, each with unique methods for data collection and processing which impact the feasibility and reliability of comparisons over time. Our Health Snapshots provide trend graphs where possible and meaningful.

Trend data is currently available for 10 Select measures:

- Air Pollution: Particulate Matter
- Children in Poverty
- Dentists
- Flu Vaccinations
- Mammography Screening
- Premature Death
- Primary Care Physicians
- Preventable Hospital Stays
- Unemployment
- Uninsured

Trend data is currently available for five Additional measures:

- Alcohol-impaired Driving Deaths
- School Funding Adequacy
- Sexually Transmitted Infections
- Uninsured Adults
- Uninsured Children

Interpreting Trend Graphs

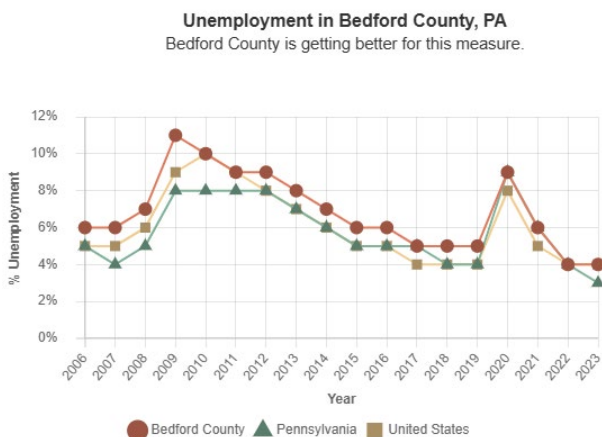
Trend graphs can be used to examine progress over time and can be found on the Health Snapshots. When you look at the trend graphs, ask yourself:

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?

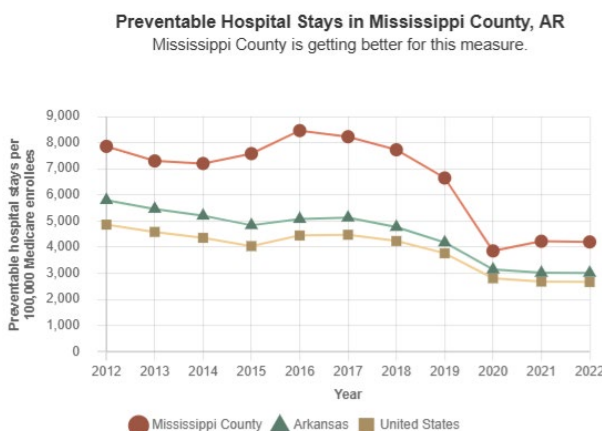
The example trend graphs (below) show different relationships among county, state, and national level data. We conduct linear regressions using all years of data shown in the graph to calculate whether a trend is decreasing, increasing, or stable.



Decreasing (improving) trend – similar to state and national trends

Interpretation: In Bedford County, PA, Unemployment decreased between the whole period of 2006 to 2023. There was a spike in Unemployment that occurred in 2009. Unemployment fell steadily after 2009 until 2020 when another larger spike occurred.

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 the Unemployment rate are due to larger state or national contexts, rather than to changes in unique local conditions.



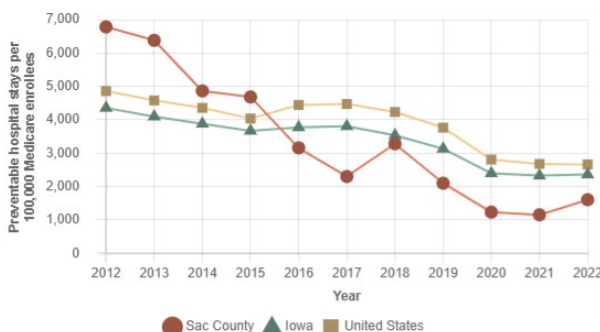
Decreasing (improving) trend – faster improvement than state and national trends

Interpretation: In Mississippi County, AR, Preventable Hospital Stays decreased significantly over the whole period of 2012 to 2022. The largest decrease happened between 2019 and 2020, and the trend has stabilized since.

Compare to the state and national trend: In 2016, the rate of Preventable Hospital Stays in Mississippi County was much higher than the state or the national rate. The county rate decreased more rapidly than the state and national trends and has become similar in the most recent years.



Preventable Hospital Stays in Sac County, IA
Sac County is getting better for this measure.

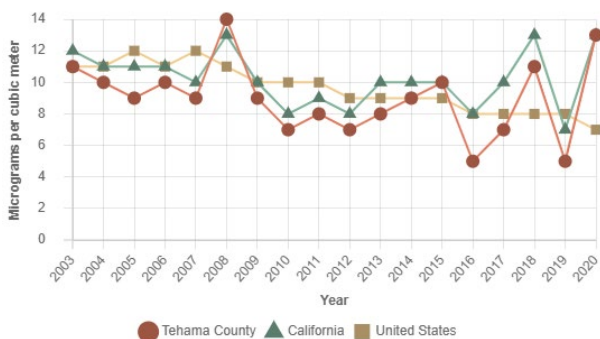


Decreasing (improving) trend – improving faster than state and national trends

Interpretation: In Sac County, IA, Preventable Hospital Stays show a decreasing trend over the time period from 2012 to 2022. The improvement appeared to happen most quickly between 2013 and 2017.

Compare to the state and national trend: Sac County is improving faster than the rest of Iowa and the U.S. This allows us to infer that changes in Preventable Hospital Stays may be due to some shift within Sac County itself - not due to larger state or national changes.

Air Pollution - Particulate Matter in Tehama County, CA
Average daily density of fine particulate matter
Tehama County is getting better for this measure.



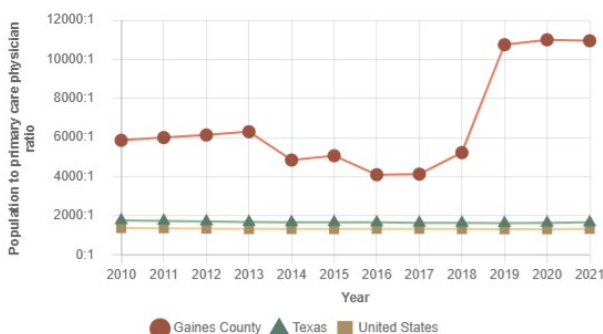
Decreasing (improving) trend (with lots of uncertainty) - not significantly different from state or national trend

Interpretation: In Tehama County, CA, Air Pollution showed a decreasing trend over the entire period between 2003 and 2020. The county experienced a large amount of variation in measured Air Pollution year-to-year during this period, which could be attributable to changes in data collection or other measurement methods. More than half of the population of Tehama lives in a rural area and this could mean that the county has fewer data collection locations for air pollution which may lead to larger variations in the data year to year due to sparse data.

Compare to the state and national trend: It is difficult to determine if Tehama County is doing better or worse than the state of California or the nation. We see spikes in Air Pollution in Tehama and in the state average in 2008 and 2018, these could be due to large scale events such as the Camp Wildfire in 2018.



Primary Care Physicians in Gaines County, TX
Gaines County is getting worse for this measure.

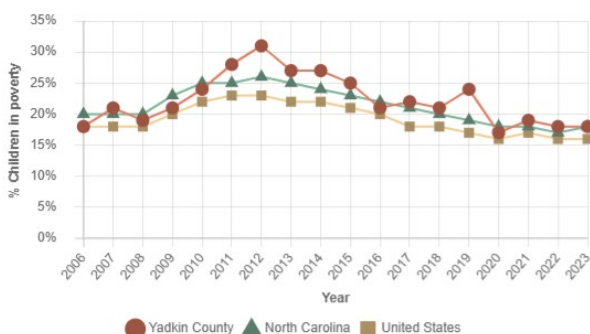


Increasing (worsening) trend – significantly different from state and national trends

Interpretation: In Gaines County, TX, the ratio of population to primary care providers increased significantly between 2017 and 2019. In 2019, the ratio appears to stop increasing and remain stable in the following years. The ratio appeared to have improved between 2013 and 2016.

Compare to the state and national trend: Gaines County is experiencing an increase in the ratio of population to primary care providers. This trend is significantly worse than state and national trends. In 2010, Gaines County had one of the worst ratios of population to primary care physicians in Texas, and the rate has gotten comparatively worse (moving further from the state and national trends in an increasing trend). The average ratio in Texas and in the U.S. has remained stable. This suggests that something in Gaines County is causing sustained worsening of the ratio of primary care physicians.

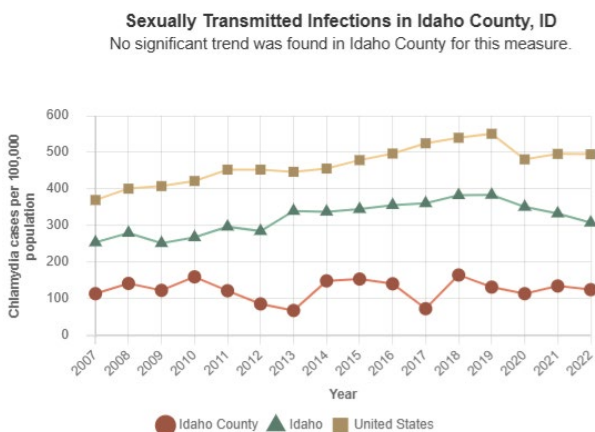
Children in Poverty in Yadkin County, NC
No significant trend was found in Yadkin County for this measure.



Stable trend – similar to state and national trends

Interpretation: In Yadkin County, NC, there was no significant change in Children in Poverty over the entire period between 2006 and 2023.

Compare to the state and national trend: For most years within this period, Yadkin County appears to be average among counties in the state and in the nation. In 2012 and 2019, Yadkin County experienced isolated spikes in Children in Poverty and these increases were not sustained over time.



Stable trend – significantly different from state and national trends

Interpretation: In Idaho County, ID, there was no significant change in Sexually Transmitted Infections from 2007 to 2022.

Compare to the state and national trend: The rate for the state of Idaho and for the U.S. also did not change significantly during this period. However, Idaho County started off, and remained, lower than the state and national rates. This graph shows a relatively stable trend in Sexually Transmitted Infections for Idaho County. Compared to state and national trends, the trend of Idaho County, ID, is significantly better.