County Health Rankings
Mobilizing Action Toward Community Health

County Health Rankings: Frequently Asked Questions (FAQs)

Please note: For up-to-date FAQs, please visit www.countyhealthrankings.org.

GENERAL

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22. Were the *County Health Rankings* affected by lack of data? Not all counties have estimates from the CDC's Behavioral Risk Factor Surveillance System (BRFSS), or they have unstable and unreliable estimates due to small numbers.

METRICS

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25. Did the measure for motor vehicle deaths include or exclude off-road deaths, such as ATVs, farm vehicles, etc.? Did it include pedestrians killed or just occupants of the vehicles?
26. Were any of the indicators age-adjusted?
27. Healthy People 2010 age adjusts all of their objectives that are derived from BRFSS. Wouldn't it make sense for the *Rankings* to do so as well?
28. The definition of binge drinking in BRFSS changed in 2006. Is it appropriate to combine data from 2002–08 since it contains data collected using different definitions?

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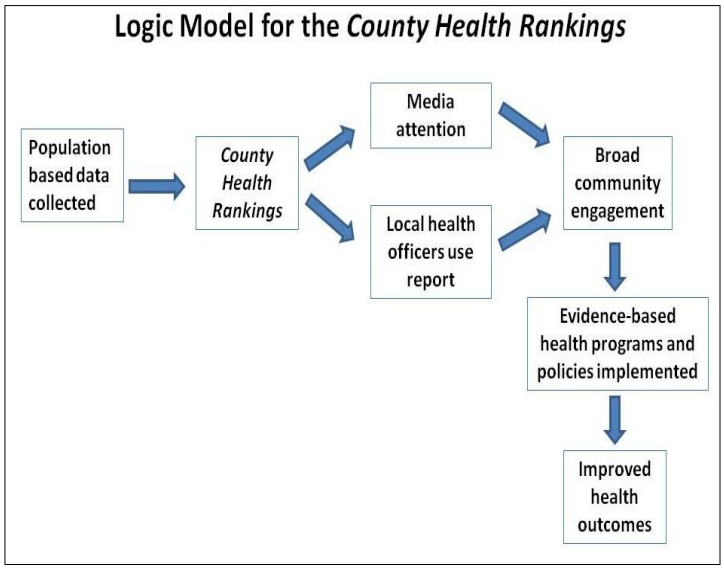
GENERAL

1. **Why rank counties' health?**

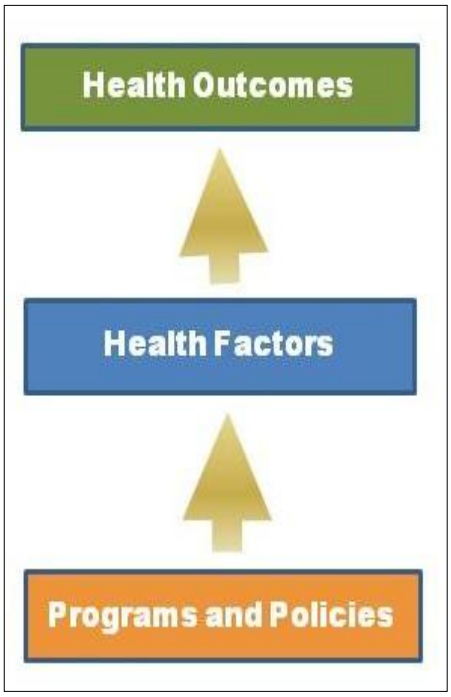


To serve as a call to action for communities to

- Understand the health problems in their community.
- Get more people involved in improving the health of communities.
- Recognize that factors outside medical care influence health.

Ranking the health of counties using not only traditional health outcomes, but also a broad range of health determinants, can mobilize action by governmental public health and many other sectors that can influence and are affected by health.

2. **Is there a model underlying the *County Health Rankings*?**



The *County Health Rankings* are based upon the model of population health improvement in which health outcomes are the result of a set of health factors (see diagram). These determining factors and their outcomes are also affected by policies or programs in the community. Once communities understand their current health outcomes and the factors likely to impact their future health, they can improve health by adopting effective programs and policies that address these key determining factors.

3. **How did you rank counties' health?**

We ranked counties' health on two sets of measures:

- Health outcomes (length and quality of life)
- Health factors (health behaviors, access to and quality of clinical care, social and economic factors, and the physical environment).
- More details are provided in the Ranking Methods section of www.countyhealthrankings.org.

4. **Do some states already rank the health of their counties?**

Yes, building on the work of America's Health Rankings™, the University of Wisconsin Population Health Institute has been ranking the health of Wisconsin counties for the past six years:

- Wisconsin County Health Rankings

Other states have developed their own rankings:

- Tennessee*
- Kansas*
- Kentucky
- New Mexico*

*Based on the Wisconsin model.

5. **Our state already publishes county-level indicators—what is the value-added of the *County Health Rankings*?**

The *County Health Rankings* are designed as a call to action. The use of ranks can often serve as a more effective tool for drawing attention to community health issues than lengthy listings of indicators. We encourage any community that has not already done so to use the *Rankings* as a stimulus to engage community members in a more detailed community health assessment, using whatever additional data sources they have available.

6. **Where did the data for the *Rankings* come from?**

The *Rankings* were largely created from nationally available data. Our partners at the CDC and the National Center for Health Statistics have provided data that is readily available at little or no cost. Some of the health care data were provided by Dartmouth at a very reasonable cost. The grant from the Robert Wood Johnson Foundation provides funding for data acquisition, analysis and preparation at no cost to states or communities. (See Question 14 for more information.)

7. **Will we be able to compare our counties across the nation as well as within our state?**

The purpose of the *County Health Rankings* is to compare counties within states. We discourage comparisons between states for several reasons:

- The *County Health Rankings* is not intended to be a national report that identifies and focuses only on the 10 or 15 least healthy counties in the nation. The *Rankings* provide a tool for each state to identify counties where health disparities exist. The report focuses on state-specific county rankings and does not provide any county rankings across state boundaries.

- Some of the measures that we used are state specific and make comparisons across state boundaries difficult.

- There are existing resources that can be used to compare counties across the nation. One is the Community Health Status Indicator (CHSI) Database which is made available by the Human Resource Services Administration (HRSA). The CHSI database is periodically updated and provides a valuable resource for counties that are interested in comparing themselves to peer counties with similar demographics.

8. **Did you rank states as well as counties within states?**

No, but we have tried to align our measures as closely as possible with the group behind America's Health Rankings™, who rank the health of states.

METHODS

9. **There is a major city in our state. Was this city included in the *County Health Rankings*?**

The *County Health Rankings* was based on counties and county equivalents. Any entity that has its own Federal Information Processing Standard (FIPS) county code was included in the *Rankings*. The FIPS county code is a five-digit code where the first two digits represent the state and the remaining three digits designate county or county equivalents.
Certain major cities, such as Baltimore and St. Louis, are considered county equivalents and have their own FIPS county code, whereas other cities, such as Milwaukee, do not.

10. **The availability and quality of information for the factors examined by the *Rankings* varies across states. How did the *County Health Rankings* address this?**

The *County Health Rankings* are presented ***by state*** with no comparisons across states.

11. **Our state department of health provides county-level data for many more indicators than were included in the *County Health Rankings.* Why are composite scores and rankings helpful?**

The *County Health Rankings* use composite scores and rankings as a means to *draw attention* to 1) the fact that health varies by place; 2) the multiple factors that contribute to healthy communities; 3) the understanding that health is everybody's business—and not just that of the state or local health department. Communities wishing to dig deeper and understand what can be done within their community are encouraged to use additional more detailed data sources available within a state to conduct an indicator-specific analysis. The *Rankings* can be used as a pointer to suggest areas where more in-depth analysis might be helpful.

12. **How were weights assigned across and within the four health factors in the *County Health Rankings*?**

There is no "correct" weighting formula, but we have conducted literature reviews and analysis, and had discussions with experts to determine an appropriate allocation of weights. As a result of this work, we assigned a weight of 30 percent to health behaviors, 20 percent to clinical care, 40 percent to social and economic factors, and 10 percent to the physical environment. Within each of these factors, we assigned weights to the focus areas and individual measures based on a combination of available information on the contribution of that focus area and on the reliability of specific measures.

13. **How should/can state departments of health respond to counties that question the *County Health Rankings* because they believe the *Rankings* do not accurately reflect their county?**

We suggest that state departments use the release of the *County Health Rankings* as an opportunity to encourage communities to conduct more in-depth community health assessment using whatever additional more detailed county-level data are available within the state. Communities should consider the *County Health Rankings* as a snapshot of health, not a high-resolution photograph. If and when questions are raised by results in the *County Health Rankings*, the objective is to generate discussion about how healthy a county is and what can be done to improve its health, rather than focusing on whether or not its ranking is "correct."

14. **What methodologies were used to collect the data?**

Most of the data we used are public data. Vital statistics data, rates of sexually transmitted diseases and data from the Behavioral Risk Factor Surveillance System (BRFSS) survey were calculated by staff at the Centers for Disease Control and Prevention. The same is true for our health care quality measures, which were calculated for us by the authors of the Dartmouth Atlas of Healthcare, using Medicare claims data. Another key data source, primarily for social and economic variables, is Census 2000 and the American Community Survey 2005–07. We downloaded these data sets and, where needed, calculated the estimates ourselves. Similarly, we downloaded publicly available data on violent crime, education, and some built environment measures, and calculated point estimates.

15. **Was each measure assigned the same weight? By weighting measures differently, one can get very different rankings.**

Each measure was weighted differently based its contribution to health and on its reliability. See Question 12 for information on how the overall weights were derived.

We reported the rank of each county for health outcomes and for health factors. Within health outcomes we reported rankings for mortality and morbidity. We also reported rankings for the four health factors: health behaviors, clinical care, social and economic factors, and the physical environment. The report also includes specific data for each measure within health outcomes and health factors.

16. **How did you address statistical uncertainty, such as sampling error for survey estimates, within the *Rankings*?**

Within each of our county snapshots, we provide a 95 percent confidence interval or margin of error for the data that comprises our measures. We also provide more detailed information that allows communities to see all counties' data for each particular measure.

Although county rates for any specific measure may not be statistically different from one another, when combined in a model with all the other measures, those various measures can be combined to produce an overall score. The overall score was used to calculate the *Rankings*.

17. **How reliable are the data associated with the *County Health Rankings*?**

Reliability depends on the specific measures. We provide background on the data in our documentation. Mortality data, for example, are extremely reliable. Deaths are reported 100 percent of the time, and so the death rates are based on a "census" (i.e., all deaths that occurred rather than a sample of deaths), and are thus extremely reliable. Other measures, for example those on air quality and water quality, might be based on sampling methods and may require in-depth analysis to understand the quality of the measure. Survey data are very useful but certainly have some well-known limitations. For example, they are based on availability of land-line telephones and it is assumed that people respond and answer truthfully. However, when all of the measures are combined, we are confident that they provide a solid picture of overall health in a community. The University of Wisconsin researchers found this to be the case in their experience with the *Wisconsin County Health Rankings*. The counties with the lowest rankings for overall health are counties that have had challenges for decades with respect to employment, income and education. These counties have also had high rates of unhealthy behaviors and health care systems that are not in great shape. Overall, the summary message of overall health in a community comes through despite some of the data limitations.

18. **Were individual measures ranked across counties or against a standard?**

We did not compare against a standard. Individual measures for a county were compared to the average for the state. For each measure, we looked at the variation of a measure for the state within the state. We looked at its variance and used a statistical tool called the standard error and a z-score, to give a sense of how far from the average each county was in regard to its own values. We then summed up all the z-scores (with different weights for different measures) for all the measures in the model, which allowed us to combine, for example, smoking rates with violent crime with motor vehicle crashes and education rates, etc.

19. **How did you calculate *Rankings* for counties that had measures with rates that were not statistically distinguishable (i.e., not statistically significantly different) from one another?**

The major goal of the *Rankings* is to raise awareness about the many factors that influence health and that health varies from place to place. We encourage communities to focus on the strengths and challenges within their own community and use the *Rankings* as a call to action. The *Rankings* are based on summary measures, using z-scores (not ranks) to standardize each individual measure to the same scale. We do not suggest that the *Rankings* themselves

represent statistically significant differences from county to county. To de-emphasize the differences between individual county ranks, we provide quartile maps for the summary *Rankings* measures and specific indicators for each state. These maps can be used to draw attention to areas of a state with better or worse health, rather than specific discussions of small differences in rank. For those users who wish drill down within the *Rankings* and determine whether a county's performance on a specific measure is significantly different from that or another county or the state's mean, we provide error margins (or confidence intervals) for most of the individual measures.

20. **What process was used to choose the measures that defined the constructs in the *Rankings*?**

The process for choosing measures was guided by:

- Review of the literature around the impact of various factors on health outcomes.
- Ability for the item being measured to be modified through community action.
- Review of America's Health Rankings™ methodology and indicators.
- Availability and reliability of measures at the county-level throughout the nation.
- Analysis and feedback by a panel of technical experts.

21. **For data that were aggregated over several years, was recent data weighted more, or were the values for each year averaged equally?**

Each year's data were weighted equally.

22. **Were the *County Health Rankings* affected by lack of data? Not all counties have estimates from the CDC's Behavioral Risk Factor Surveillance System (BRFSS), or they have unstable and unreliable estimates due to small numbers.**

Indeed, some counties in the nation are too small to have reliable measurements for health outcome measures. Those counties were not ranked. For the health factor measures, one strategy we used to overcome small sample sizes from data sources, such as the BRFSS, was to combine multiple years of data. This means that although the *Rankings* are useful for differentiating between places that are and are not healthy, they are not a good tool for setting objectives and tracking progress from year to year.

METRICS

23. **There is a measure for low birth weight but not a measure for prenatal care. Timely and appropriate prenatal care can prevent or reduce low birth weight, birth defects, and complications of birth. Why was it not included?**

Timely and appropriate prenatal care is important. However, since states are at different stages of implementation with revisions to birth certificates, we were advised not use a measure of prenatal care in this first release of the *County Health Rankings*.

24. **Why are there no measures to assess smoking, diet, exercise and alcohol use among teens?**

We agree that including measures for both teens and adults would be helpful. Unfortunately, county-level data on teen activities were not available in enough states for us to incorporate these measures this year.

25. **Did the measure for motor vehicle deaths include or exclude off-road deaths, such as ATVs, farm vehicles, etc.? Did it include pedestrians killed or just occupants of the vehicles?**

Complete documentation for each of the measures is provided in each state's report. Motor vehicle deaths includes traffic and non-traffic accidents involving motorcycles and three-wheel motor vehicles; cars; vans; trucks; buses; street cars; ATVs; industrial, agricultural and construction vehicles; and bikes and pedestrians when colliding with any of the vehicles mentioned.

26. **Were any of the measures age-adjusted?**

Yes, the following outcome measures were age-adjusted: premature death (years of potential life lost), self-reported health, physically unhealthy days and mentally unhealthy days.

27. **Healthy People 2010 age adjusts all of their objectives that are derived from BRFSS. Wouldn't it make sense for the *Rankings* to do so as well?**

We agree that age adjusting strengthens the comparability of indicators from community to community. However, we face the issue of small sample sizes and the limited feasibility of being able to accurately calculate age-adjusted rates throughout the nation. Therefore, we focused on adjusting those measures related to health outcomes (mortality and morbidity) where the link between age and outcome affects comparisons the most.

28. **The definition of binge drinking in BRFSS changed in 2006. Is it appropriate to combine data from 2002–08 since it contains data collected using different definitions?**

Ideally, we would like to have a uniform definition across the entire time period for the binge drinking measure. The fact that prior to 2006, binge drinking was universally defined as five drinks on an occasion and in 2006, the measure was differentiated by gender (four drinks for women and five drinks for men) is documented in our technical notes. Furthermore, users of the specific data should be aware that when binge drinking rates for 2006 and later are higher, this may, at least in part, be due to the lower threshold for women. However, given the small sample sizes for many counties, we would have had insufficient BRFSS data for binge drinking rates if we only used the most recent three years (after the change in definition). Since alcohol use is an important factor of health, we decided to include the binge drinking measure despite the change in definition. Because the change was applied across all counties, we believe it is still appropriate to use the measure as part of our ranking algorithm.