

County Health Rankings & Roadmaps

Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

COUNTY HEALTH RANKINGS AIR QUALITY MEASURES

Amanda Jovaag & Marjory Givens

countyhealthrankings.org



University of Wisconsin
Population Health Institute
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Support
provided by



Robert Wood Johnson
Foundation

OUTLINE

- ▶ What are the County Health Rankings & Roadmaps?
- ▶ Why do we include a measure of air quality?
- ▶ What measures have we used?
- ▶ What would be an ideal air quality measure (or set of air quality measures) for our purposes?

County Health Rankings & Roadmaps

Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

County Health Rankings & Roadmaps is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.

countyhealthrankings.org

WHY WE DO WHAT WE DO

Improve Health Outcomes

WHY WE DO WHAT WE DO

Increase Health Equity

COUNTY HEALTH RANKINGS AND ROADMAPS

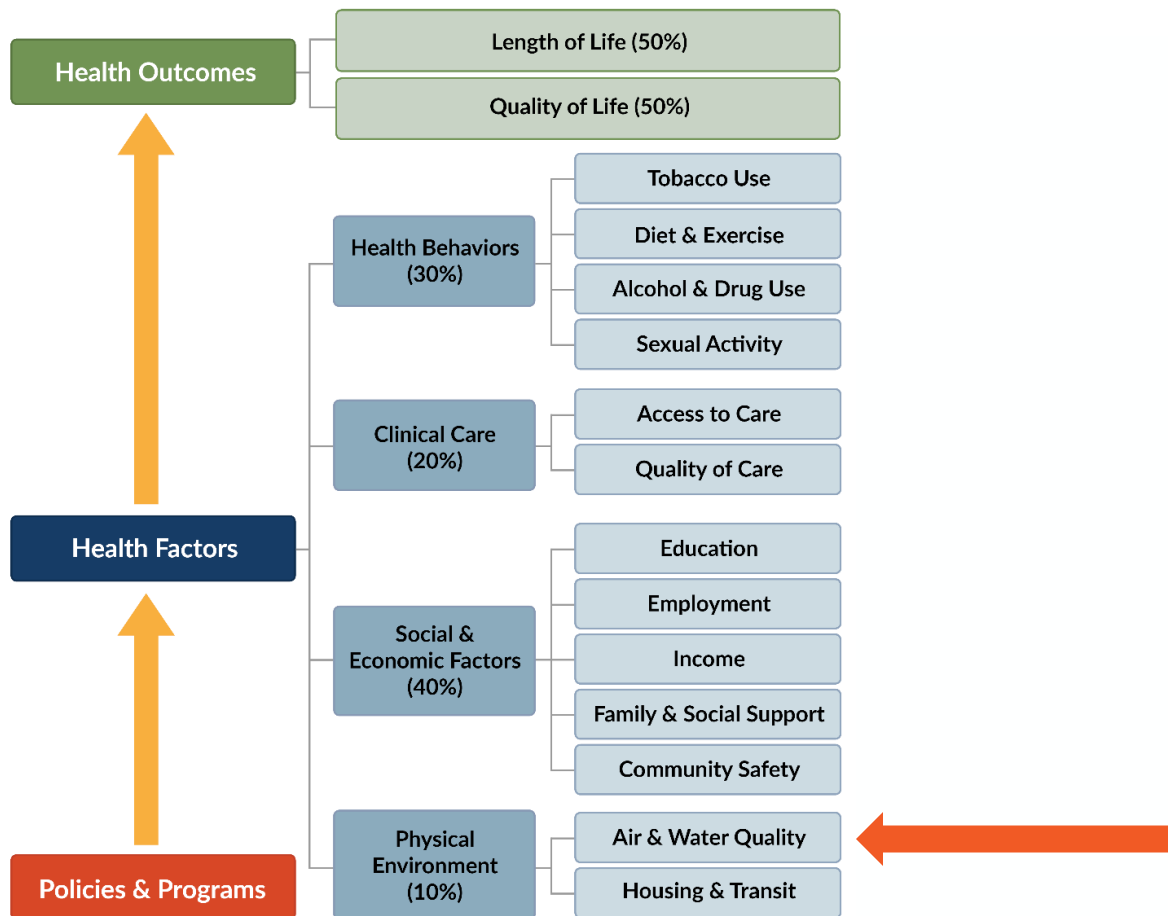
DATA

EVIDENCE

GUIDANCE

STORIES

WHY DO WE MEASURE AIR QUALITY IN COMMUNITIES?



WHAT MEASURES OF AIR QUALITY HAVE WE USED?

▶ Measures

- Days above regulatory standard for ozone and PM₂₅
- Average density of PM₂₅

▶ Sources

- Environmental Public Health Tracking
- CDC WONDER

WHAT QUALITIES WOULD AN IDEAL MEASURE HAVE?

- ▶ <http://www.countyhealthrankings.org/criteria-selecting-or-revising-measures>
- ▶ The measure reflects important aspects of population health that can be improved (modifiable factors)\
- ▶ The measure and its association to health can be effectively communicated to the media, communities, and other key audiences
- ▶ With the mindset that fewer measures are better than more, any new measure must bring added value without diluting the model
- ▶ Measures for health outcomes will generally not be changed to ensure consistency, but measures for factors can be expanded, pared, or revised.
- ▶ New measures must fall within one of the factor areas in the model.
- ▶ The measure speaks to a current or emerging health issue that CHR&R could/should engage in and has the potential to make CHR&R more relevant to a strategic new set of partners
- ▶ The metric is a more precise measure of the intended construct and/or refines the construct dimensions based on improved understanding of its relation to health (e.g., CHR measures community safety with injury deaths because a more proximal measure is unavailable)
- ▶ The measure keeps CHR&R aligned with other metric initiatives (e.g., America's Health Rankings)
- ▶ The measure will advance efforts to address health equity

WHAT QUALITIES WOULD AN IDEAL MEASURE HAVE?

- ▶ The measure and its association to health are scientifically supported in the literature and/or by analysis of CHR data
- ▶ The measure draws from data that are available at the county level
- ▶ The measure draws from data sources that are valid, reliable, recognized and used by others
- ▶ The measure has been tested and used by others in the field
- ▶ The measure draws from data available for nearly all counties nationwide and puts the interests of counties and states ahead of national coverage (i.e. – the ideal is not to have missing data clustered within a particular state)
- ▶ Data to populate the measure have a short time lag (recently available within the past 3-5 years)
- ▶ Data to populate the measure will be collected regularly (ideally annually but at least every 3-5 years) and made public by the data stewards
- ▶ Data to populate the measure are available for free or at low cost
- ▶ The measure can be ranked (e.g., it has ordinal value)
- ▶ The measure can be broken down by geographic or population subgroups

WHAT QUALITIES WOULD AN IDEAL MEASURE HAVE?

- ▶ Strong links to population health
- ▶ Modifiable
- ▶ Small number of measures
- ▶ Agreed upon and validated by numerous sources
- ▶ Available for all states
- ▶ Data available annually
- ▶ Minimal modeling or smoothing used
- ▶ Estimates can be created for smaller geographic areas