County Health Rankings & Roadmaps

Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

2016 Lancaster County Health Rankings
Summary Report

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Prepared by: Jessica L. Klinkner, MPH CHES
Health Promotion Specialist
Community Health and Wellness

The Robert Wood Johnson Foundation and University of Wisconsin Population Health Institute have released the *County Health Rankings* annually since 2010.   The report ranks almost all of the counties in the nation, based on method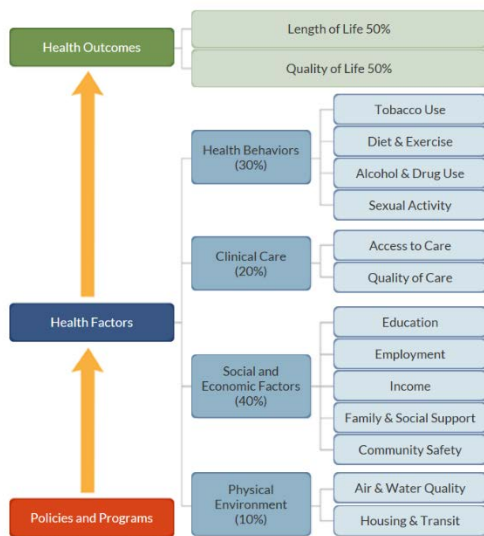ology that has been used to rank all Wisconsin counties since 2003. The *Rankings* are compiled using county-level measures from a variety of national and state data sources that are weighted for statistical comparison. The *County Health Rankings* provide a snapshot of a community's health and a starting point for investigating and discussing ways to improve health.

Figure 1: University of Wisconsin Population Health Institute. County Health Rankings & Roadmaps 2016. www.countyhealthrankings.org.

Each year, health measures are selected that affect the **Health Outcomes** (representing the current health of our community) and **Health Factors** (representing the factors that influence the health of our community). **Attachment A** details Lancaster County's 2016 ranking for Health Outcomes and Health Factors, including ranks for five subcategories as illustrated in **Figure 1**.

The health measures are re-evaluated annually for inclusion in the *Rankings* process, with measure and data source selection based on the following criteria:
- Reflect important aspects of population health that can be improved
- Valid, reliable, recognized and used by others
- Available at the county level
- Available for free or low cost
- As up-to-date as possible

For ease of direct comparison, detailed historical *Rankings* for Lancaster County are included in **Attachment B**. It is important to note that addition of new measures and removal of measures used in prior years make direct comparison of annual category rankings difficult. In 2016, no new indicators were introduced, however *Drinking Water Violations* was amended to report if a violation exists in the County, rather than "the annual average percentage of the population served by community water systems who receive drinking water that does not meet all applicable health-based drinking water standards". Additionally, a significant change in methodology for the CDC Behavioral Risk Factor Surveillance System (BRFSS) is reflected in this year's *Rankings*. The BRFSS informs the following *Rankings* measures: Health Outcomes (Fair or Poor Health, Mentally Unhealthy Days, and Physically Unhealthy Days) and Health Factors (Adult Smoking and Excessive Drinking) measures. Due to this change, single-year modeling was used to develop county-level estimates. According to the *Rankings*, "These findings come with certain caveats because the statistical power of our tests is substantially decreased without access to the underlying raw data, and the trends may be overestimated due to smoothing undertaken in the modelling process." Other indicators impacted by the change in BRFSS methodology include Adult Obesity and Physical Inactivity, which are estimated by using multi-year modeling. For this reason, the

values listed for each of these indicators in the *Rankings* vary slightly, but not significantly, from those included in the 2016 Lancaster County Community Health Needs Assessment (CHNA). The 2016 CHNA includes raw, 3-year BRFSS data specific to Lancaster County, a method cited by the *Rankings* team as an "alternative option for examining trends" that eliminates the loss of statistical power caused by modeling.

Attachment C illustrates the categorical rankings of the 8 Pennsylvania Counties that ranked above Lancaster County for comparison.

Indicator Highlights (details in **Attachment A**)

Overall, Lancaster County performed well, ranking 9th out of 67 counties (**Health Outcomes (9)** and **Health Factors (9)**), but there is still room for improvement. Indicators marked with an asterisk (*) improved significantly from the value reported in 2015. In 2016, Lancaster County scored **better** than Pennsylvania in the following categories (with statistical significance):

- Premature Death
- Low Birth Weight
- Adult Smoking
- Food Environment Index
- Sexually Transmitted Infections*
- Teen Birth Rate
- Preventable Hospital Stays (Medicare)*
- Diabetic Monitoring
- High School Graduation*

- Unemployment*
- Children in Poverty
- Children in Single-Parent Households
- Income inequality
- Social Associations*
- Violent Crime Rate
- Injury Deaths
- Long Commute—Driving Alone
- Air Pollution—Particulate Matter Days

Additional categories where Lancaster County scored **better** than Pennsylvania (not included in overall ranking):

- Premature age-adjusted mortality
- HIV prevalence
- Food Insecurity
- Drug overdose deaths
- Drug overdose deaths—modeled
- Insufficient sleep
- Health care costs

- Median household income
- Children eligible for free lunch
- Residential segregation—black/white
- Residential segregation—non-white/white
- Homicides

Areas where Lancaster County scored **worse** than Pennsylvania include (with statistical significance):

- Access to Exercise Opportunities
- Uninsured Rate
- Primary Care Physicians (Patient to PCP ratio)
- Dentists (Patient to Dentist ratio)*

- Mental Health Providers (Patient to Provider ratio)*
- Some College
- Driving Alone to Work

Additional categories where Lancaster County scored **worse** than Pennsylvania (not included in overall ranking):

- Limited access to healthy foods
- Uninsured children
- Other primary care providers (Patient to Other PCP ratio)

Rankings: Areas of Strength and Areas to Explore

The *Rankings* team highlight Health Factor indicators that offer the greatest potential opportunity for improvement as well as already existing assets in our community that can benefit from continued growth. They identified measures where there are meaningful differences between Lancaster County's values and either the Pennsylvania average, the national benchmark, or the state average in the best state, taking into account the relative influence that each indicator has on health outcomes.

Identified Areas of Strength:

- Physical inactivity
- Primary Care Physicians (Patient to PCP ratio)
- Preventable Hospital Stays (Medicare)
- Diabetic Monitoring
- Mammography screening (Medicare)
- High School Graduation
- Unemployment
- Children in poverty
- Income inequality
- Children in Single-Parent Households
- Injury Deaths

Identified Areas to Explore:

- Adult Smoking (since 2013)
- Adult Obesity (since 2012)
- Uninsured (since 2014)
- Some College (since in 2015)

Conclusion

The identification of these factors to explore reinforces LG Health/Penn Medicine's existing and ongoing commitment to improve access to care and increase the number of County residents that are tobacco free and at a healthy weight. Additionally, the *Rankings* snapshot as a whole provide important data that raise awareness about the impact of social/economic factors and the physical environment to our health.

An important statement from the County Health Rankings about use of data to measure progress: *Ranks are great for garnering attention, simplifying a lot of complex data, and making comparisons between one community and another at a point in time—but they shouldn't be used alone to measure a single community's progress. Rather, look at them as one tool among many. Because ranks are relative, they aren't as helpful in isolation -- your county's rank depends not only on what is happening in your county,*

but also on what happens in all the other counties in your state. In fact, if every county in a state improved its health equally, their ranks would all stay the same. So look for ranks to inform your progress measurement, not drive it.

The *Rankings* provide comparative data to Pennsylvania and counties nationwide that performed in the 90th percentile, which aid in identification of targeted objectives for community health improvement. This data supplements and supports the findings of the 2016 Lancaster County Health Needs Assessment and will be accounted for in the development of the 2018-2018 LG Health/Penn Medicine Community Health Improvement Plan.

Questions: Please contact Jessica Klinkner, Health Promotion Specialist, at 717-544-3867 or jklinkner2@lghealth.org.

Attachment A: 2016 Lancaster County Health Ranking Results

Measures	2016	PA	Explanation
Health Outcomes	**9**		**Rank out of 67: Represents Current Health of County**
Mortality Rank (50%)	**7**		**Rank out of 67**
Premature death	5,700	6,900	Years of potential life lost before age 75 per 100,000 pop.
Morbidity Rank (50%)	**12**		**Rank out of 67**
Poor or fair health*	15%	15%	Percentage of adults with poor or fair health (age-adjusted)
Poor physical health days*	3.5	3.6	Average number of physically unhealthy days within 30 days (age-adjusted)
Poor mental health days*	3.7	3.9	Average number of mentally unhealthy days reported in past 30 days (age-adjusted)
Low birth weight	7%	8%	Percent of live births with weight <2500 grams
Health Factors Rank	**9**		**Rank out of 67: What Influences the Health of the County**
Health Behaviors Rank (30%)	**6**		**Rank out of 67**
Adult smoking*	17%	19%	Percent of Adults that Smoke
Adult obesity	29%	29%	Percent of Adults that report a BMI ≥ 30
Food environment index	8.1	7.7	Index of factors that contribute to a healthy food environment including access to healthy foods and food insecurity
Physical inactivity	21%	24%	Percent of adults that report no leisure time physical activity
Access to exercise opportunities	75%	85%	Percent of the population with adequate access to locations for physical activity
Excessive drinking*	17%	18%	Percent of Adults that report heavy or binge drinking
Alcohol-impaired driving deaths	35%	33%	Percentage of motor vehicle crash deaths with alcohol involvement
Sexually transmitted infections	192.9	407.8	Chlamydia rate per 100,000 pop.
Teen birth rate	25	27	Per 1,000 females age 15-19
Clinical Care Rank (20%)	**15**		**Rank out of 67**
Uninsured	14%	12%	Percent of population < age 65 without health insurance
Primary care physicians	1,340:1	1,220:1	Ratio of population to primary care physicians
Dentists	1,950:1	1,550:1	Ratio of population to dentists
Mental Health provider	870:1	580:1	Ratio of population to mental health providers
Preventable hospital stays	42	57	Rate per 1,000 Medicare enrollees
Diabetic screening	91%	86%	Percent of Medicare enrollees with diabetes that receive HbA1c screening
Mammography screening	67%	64%	Percent of female Medicare enrollees that receive mammography screening
Social & Economic Factors Rank (40%)	**7**		**Rank out of 67**
High school graduation	90%	86%	Percent of 9th grade cohort that graduates in 4 years
Some college	53%	62%	Percent of adults age 25-44 with some post-secondary education
Unemployment	4.6%	5.8%	Percent of population age 16+ unemployed
Children in poverty	15%	19%	Percent of children < age 18 in poverty
Income inequality	3.9	4.8	Ratio of household income at the 80th percentile level with that at the 20th percentile
Children in single-parent households	23%	33%	Percent of children that live in a single parent household
Social associations	14.2	12.3	Number of membership associations per 10,000 population
Violent crime rate	177	357	Rate per 100,000 pop.
Injury deaths	56	67	Injury mortality per 100,000 pop.
Physical Environment Rank (10%)	**26**		**Rank out of 67**
Drinking water violations*	Yes	---	Users should note that this measure has been changed. Now measures whether county residents may have been exposed to water exceeding a violation limit (i.e. Yes or No)
Severe housing problems	15%	15%	Percent of the population living with severe housing problems (overcrowded, expensive, incomplete plumbing facilities, or have incomplete kitchen facilities)
Driving alone to work	79%	77%	Percent of the working population who commute to work alone
Long commute -driving alone	27%	35%	Percent of the work force driving alone who spend more than 30 minutes commuting to work
Air pollution-particulate matter days	12.4	12.9	Average daily measure of fine particulate matter in micrograms per cubic meter (PM2.5)

Indicates a change in methodology. Data should not be compared to prior years.

Measures	'10	'11	'12	'13	'14	'15	'16
Health Outcomes Rank (50%)	**8**	**7**	**9**	**8**	**9**	**8**	**9**
Mortality Rank (50%)	**15**	**12**	**11**	**11**	**11**	**8**	**7**
Premature death	6,360	6,234	6,198	5,871	5,871	5,700	5,700
Morbidity Rank (50%)	**4**	**7**	**6**	**6**	**10**	**9**	**12**
Poor or fair health*	11%	11%	11%	11%	11%	11%	15%
Poor physical health days*	2.9	2.8	2.8	2.7	2.9	2.9	3.5
Poor mental health days*	3.3	3.4	3.5	3.2	3.2	3.2	3.7
Low birth weight	6.2%	6.4%	6.5%	6.8%	6.8%	6.8%	7%
Health Factors Rank (50%)	**9**	**9**	**9**	**9**	**8**	**9**	**9**
Health Behaviors Rank (30%)	**13**	**12**	**7**	**8**	**8**	**9**	**6**
Adult smoking*	20%	19%	16%	16%	16%	16%	17%
Adult obesity	27%	29%	30%	30%	28%	29%	29%
Food environment index					8.4	8.1	8.1
Physical inactivity			22%	22%	23%	21%	21%
Access to exercise opportunities					69%	75%	75%
Excessive drinking*	15%	15%	14%	14%	15%	15%	17%
Alcohol-impaired driving deaths					34%	35%	35%
Sexually transmitted infections	289	231	218	253	228	224	192.9**
Teen birth rate	31	30	30	28	27	26	25
Clinical Care Rank (20%)	**4**	**8**	**19**	**21**	**22**	**17**	**15**
Uninsured	14%	14%	14%	14%	14%	15%	14%
Primary care physicians*	114	1362:1	1362:1	1,384:1	1,326:1	1,341:1	1,340:1
Dentists				2,262:1	2,079:1	2,029:1	1,950:1**
Mental Health provider*					1,379:1	934:1	870:1**
Preventable hospital stays (Medicare)	54	52	53	48	50	46	42**
Diabetic screening (Medicare)	87%	87%	87%	88%	87%	90%	91%
Mammography screening (Medicare)		69%	68%	68%	66%	67.5%	67%
Social & Economic Factors Rank (40%)	**8**	**10**	**9**	**10**	**9**	**8**	**7**
High school graduation*	82%	84%	85%	88%	88%	89%	90%**
Some college	23%	49%	50%	51%	52%	52.9%	53%
Unemployment	4%	7.2%	7.5%	6.8%	6.6%	6.1%	4.6%**
Children in poverty	13%	13%	16%	16%	17%	15%	15%
Income Inequality						3.9	3.9
Children in single-parent households	7%	21%	22%	22%	22%	22%	23%
Social Associations						13.9	14.2**
Violent crime rate	189	196	186	180	176	177	177
Injury deaths					52	54	56
Physical Environment Rank (10%)	**53**	**56**	**64**	**33**	**26**	**22**	**26**
Drinking water violations*					8%	4%	Yes
Severe housing problems					14%	15%	15%
Driving alone to work					79%	79%	79%
Long commute -driving alone					26%	26%	27%
Air pollution-particulate matter days	13	10	10	N/A	12.4	12.4	12.4

*Definition of measure changed or change in methodology between 2010 and 2016, as noted by |. Data should not be compared to prior years. ** Indicates a statistically significant improvement from 2015*

Attachment C: Categorical rankings of the 8 Pennsylvania Counties that ranked above Lancaster County

County	Health Outcomes Ranking		
	Overall Rank	Length of Life	Quality of Life
Chester	1	3	1
Union	2	1	5
Montgomery	3	4	2
Centre	4	2	9
Cumberland	5	5	3
Bucks	6	9	4
Butler	7	13	6
Adams	8	6	16
Lancaster	9	7	12

County	Health Factors Ranking				
	Overall Rank	Health Behaviors	Clinical Care	Social & Economic Factors	Physical Environment
Montgomery	1	2	1	1	22
Chester	2	1	4	3	36
Bucks	3	3	6	5	25
Cumberland	4	4	5	4	29
Centre	5	7	7	2	39
Montour	6	14	2	10	4
Union	7	16	3	8	6
Butler	8	9	10	6	65
Lancaster	9	6	15	7	26

Key:

Rank higher than Lancaster County
Rank lower than Lancaster County