

COVID-19 & Obesity Trends for Florence County

Florence County Health Department | 2021 Report

Introduction

Obesity is an increasingly common, accepted, serious, and costly disease (CDC, 2021). In addition, globally the COVID-19 pandemic has put additional stressors on individuals that increase factors that put people living with obesity at greater risk for disease and chronic conditions related to obesity (Finer & Bruun, 2020). Wisconsin and Florence County both show trends of increasing obesity in recent years. Unfortunately, recent data shows the obesity rate for Florence County is 35% and 32% for the state of Wisconsin (County Health Rankings, 2021). Nationally, more than one-third of the adult population are obese according to the Center for Disease Control and Prevention for Health Statistics (2021). Research shows that the burden of disease related to obesity related conditions (e.g. heart disease, stroke, type 2 diabetes, and certain types of cancer) are the leading cause of premature and preventable death (CDC, 2021). The economic costs of obesity can also be evaluated on three levels: individual, workplace, and government.

Individual opportunities may be limited because obese individuals are typically from certain groups (e.g. non-Hispanic Black; Hispanic, non-Hispanic White, and non-Hispanic Asian adults) more than others and of a lower to mid-level socioeconomic status than others (CDC, 2021). At the workplace level, obesity can hinder employment opportunities through missed work due to obesity-related diseases; low productivity resulting from physical and/or mental health conditions common among obese individuals; disability due to obesity-related diseases; and higher insurance premiums (Hammond & Levine, 2010). Finally, according to the World Obesity Federation (2021) the rate of COVID-19 related complications, hospitalizations, and/or death had a higher prevalence than those who were not obese or extremely overweight.

The Centers for Disease Control and Prevention (CDC) has suggested that obesity could be caused by genetic factors, environmental factors and some diseases or drugs (CDC, 2021). Of the environmental factors, quantity and the quality of the food consumed as well as physical activity are the major factors for controlling obesity. Finally, those individuals that experience health disparities are more likely to experience obesity than those that do not have barriers to access to health care, healthy food, a livable income, adequate housing, and opportunities for exercise.

According to the CDC's *Guide to Community Preventive Services*, evidence-based strategies to increase physical activity levels include: community-wide campaigns; individual behavioral change; social support in community settings; the creation or enhancement of access to places for physical activity; and point-of-decision prompts.

After review of available data and supporting research, FCHD staff, in collaboration with partners, completed a tree diagram to identify potential corrective actions for the upward trend of obesity within Florence County. Florence County staff used upstream thinking to determine preventative programming (see chart page 4). Five programs identified were Community Walking Paths, Strong Bodies, Yoga—with or without a chair, updating of local school outdoor tennis and basketball courts, and Walk with Ease. Each of these programs address specific populations found in Florence County. The corrective actions will require annual evaluation and monitoring over a 5-year period to ascertain the impact of these programs.

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References:

Centers for Disease and Prevention (2021). *Overweight & obesity. Data and statistics*. Retrieved from <https://www.cdc.gov/obesity/data/index.html>

County Health Rankings & Roadmaps (2021). Retrieved from <http://www.countyhealthrankings.org/>

Hammond, R.A. & Levine, R. (2010). The economic impact of obesity in the United States. *Diabetes Metabolic Syndrome and Obesity: Targets and Therapy* 3, 285-295. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3047996/>

World Health Federation. (2020). Covid-19 and obesity. *Clinical Obesity*, 10:e12365. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7267455/pdf/COB-10-na.pdf>

Analysis

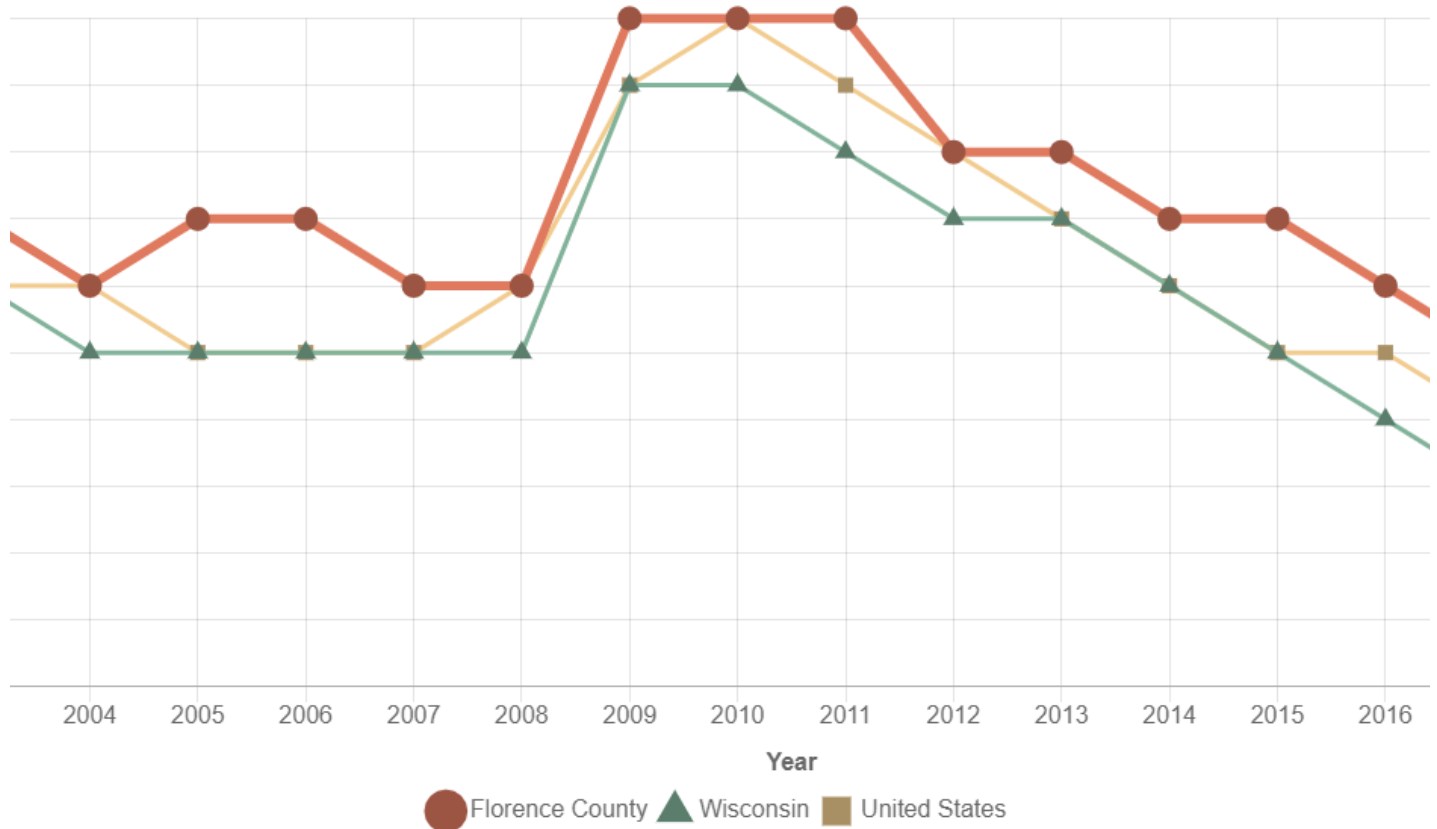
The chart below, which utilizes descriptive analysis, indicates that Florence County is consistent with both the State and National trends in unemployment rates, resulting in an increasing number of residents with income at or below poverty level. Studies show a strong association between obesity and low socio-economic status (Newton, Braithwaite, & Akinyemiju 2017). Poverty has been linked to the consumption of low-quality food in part because nutritious foods can be significantly more expensive than calorie-dense, less nutritious foods, leading to obesity (Newton, Braithwaite, & Akinyemiju 2017). Factors found to be closely related to obesity are unemployment, the receipt of food stamps, and income at/or below poverty level (Newton, Braithwaite, & Akinyemiju 2017).

Reference:

Newton, S., Braithwaite, D. & Akinyemiju, T.F. (2017). Socio-economic status over the life course and obesity: Systematic review and meta-analysis. *Systematic review and meta-analysis. PLoS One* 12(5): e0177151. Retrieved from . <https://doi.org/10.1371/journal.pone.0177151>

Unemployment in Florence County, WI County, State and National Trends

No significant trend was found in Florence County for this measure.



Source: County Health Rankings 2021. *It is noted that annual data may have limited interpretative value due to the small numbers.

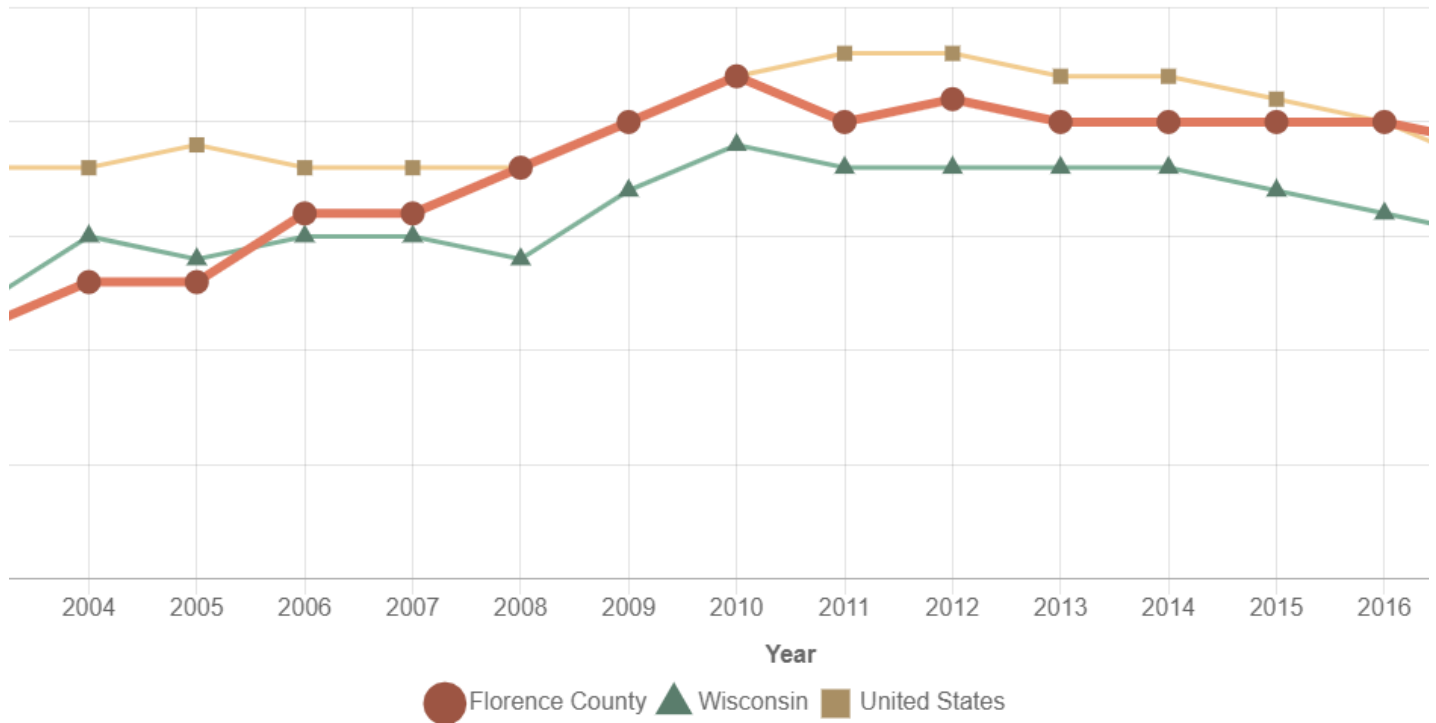
Conclusions

The chart below indicates that childhood poverty rates have steadily increased across counties, states, as well as nationwide over the last several years. Even though Florence County is currently below the nationwide trend, it is still higher than the state trend. The increasing trend among youth in poverty is important because obesity is a major risk factor associated with high poverty levels - among adults and children alike. Obesity is related to a variety of serious health conditions such as diabetes, high blood pressure, heart disease, stroke, and certain cancers (www.ncsl.org). These health conditions, along with other childhood obesity health expenses exceed \$14 billion dollars annually (www.ncsl.org). Access to good nutrition and regular physical activity can decrease the negative impact that poverty and its' associated obesity has on the youth of Florence County. Further assessment and analysis is needed to determine corrective actions.

Reference: National Conference of State Legislatures. (2014). *Childhood Overweight and Obesity Trends*. Retrieved from www.ncsl.org/research/health/childhood-obesity-trends-states-rates.aspx

Children in poverty in Florence County, WI County, State and National Trends

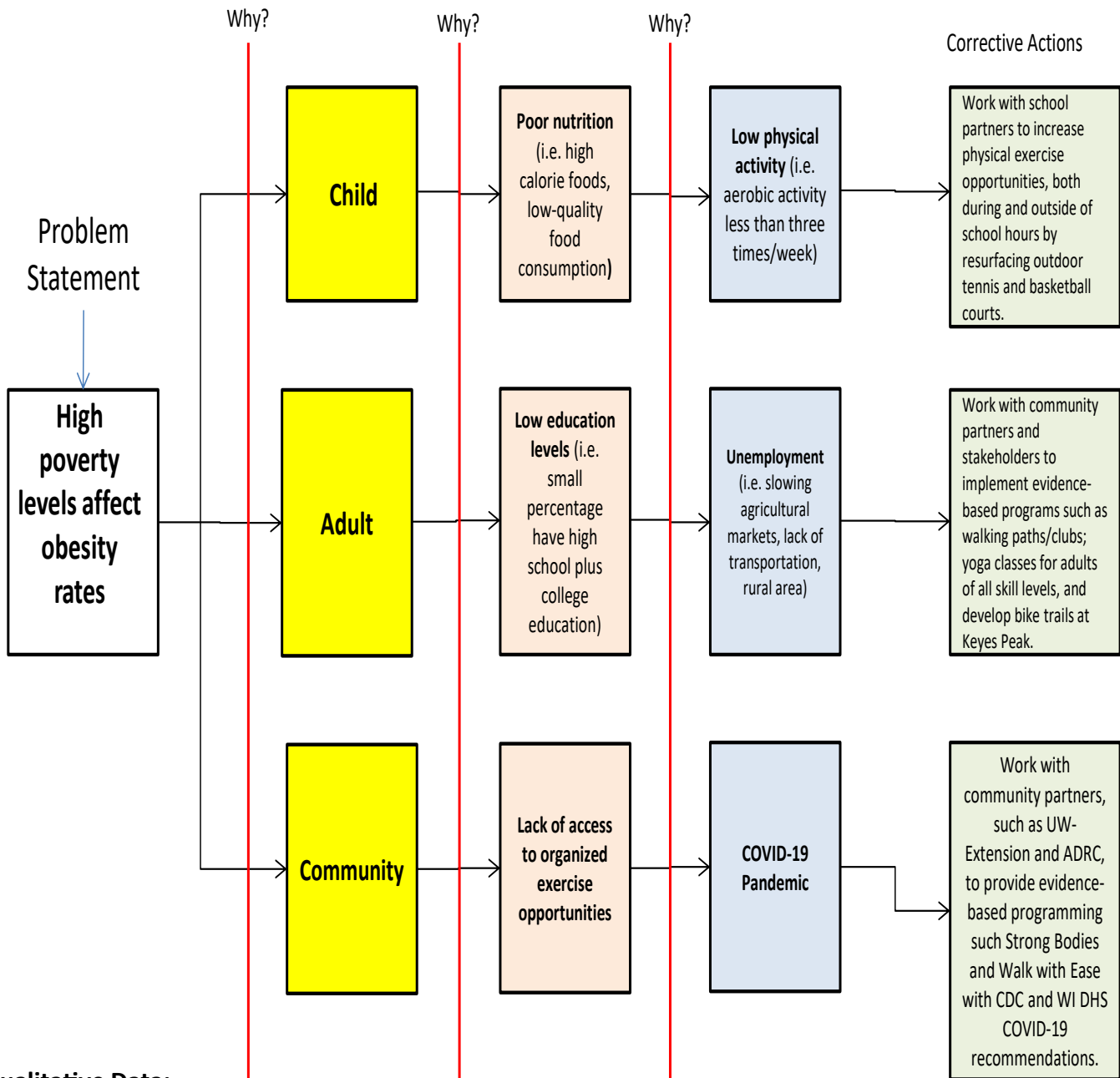
The long term trend in Florence County is getting worse for this measure. However, in recent years the trend has improved.



is based on the Current Population Survey; beginning in 2005, it was based on the

Source: County Health Rankings 2021. *It is noted that annual data may have limited interpretative value due to the small numbers.

Florence County Health Department Tree Diagram Updated July 2021



Qualitative Data:

- School administration and staff were positive and supportive of the outdoor tennis/basketball court being refurbished for increased use.
- Per UW Extension for Florence County, Strong Bodies participants appreciated and enjoyed the modified Strong Bodies class that was offered virtually.
- For those yoga participants that had access to the internet, they were able to continue classes with local yoga instructor through the Zoom platform until classes could be held back in person.

Reference: County Health Rankings & Roadmaps. (2021). *What works for health*. Retrieved from <https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health>