2020 Community Health Assessment

Community Health Status Assessment

Black Hawk County, Iowa

Black Hawk County Public Health

May 2020

Contents

Community Health Status Assessment

MAPP (Mobilizing for Action through Planning and Partnerships) is a community-wide strategic planning process for improving public health, as well as an action oriented process to help communities prioritize public health issues, identify resources for addressing them, and taking action. MAPP provides a framework, guidance, structure, and best practices for developing healthy communities. Black Hawk County Health Department, in collaboration with community stakeholders, is using the MAPP process to develop a community health assessment and community health improvement plan. This process was initiated in March of 2019 when representatives from the National Association of County & City Health Officials (NACCHO) led community stakeholders through a training and visioning process for Black Hawk County (BHC). The community health assessment is comprised of four assessments to understand the health issues and needs of the community.

The Community Health Status Assessment (CHSA) collects quantitative information on health status, quality of life, and risk factors. It is the only assessment of the 4 MAPP assessments that is purely quantitative. The health indicators listed in this CHSA will help decide the priorities for the Community Health Assessment (CHA) and the Community Health Improvement Plan (CHIP). The CHSA was created in order to answer two questions:

1. "How healthy are Black Hawk County residents?"
2. "What does the health status of Black Hawk County look like?"

Method

The data presented in this report was gathered from multiple sources. Some data in this report was obtained through a Data Sharing Agreement with the Iowa Department of Public Health (IDPH). This includes births, mortalities, Behavioral Risk Factor Surveillance System (BRFSS), and inpatient/outpatient primary diagnoses. Publically available data sources were used, including the U.S. Census Bureau, IDPH tracking portal, Iowa Secretary of State, County Health Rankings, Iowa Youth Survey, CDC Wonder, Iowa Department of Education, Iowa Department of Transportation, Iowa State University, and the CDC 500 Cities Project.

Demographic trend comparisons used local, state, and federal data to compare different health indicators. The goal was to demonstrate how Black Hawk County compared to the rest of Iowa and the United States. County level data is available in table format to show trends in Black Hawk County over time. While some indicators have state and local level data, this section is focused on the local level. The main objective for this section is to show how the local level is progressing or regressing in various health outcomes through the years.

Population Change of Black Hawk County
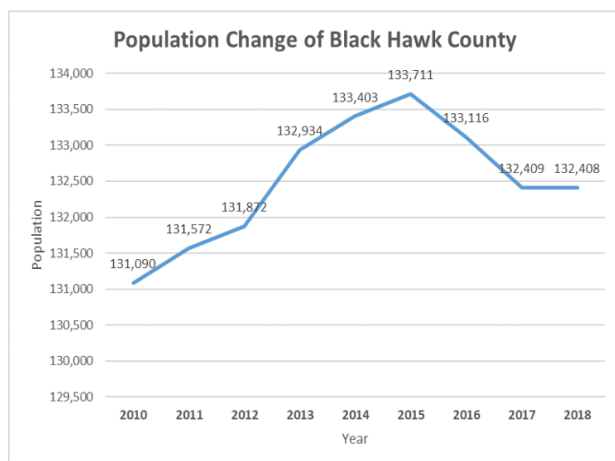
Population growth is starting to decline

Mortality trends of motor vehicle and all transportation deaths are much lower than Iowa average

Figure 4. Chlamydia — Rates of Reported Cases by County, United States, 2018
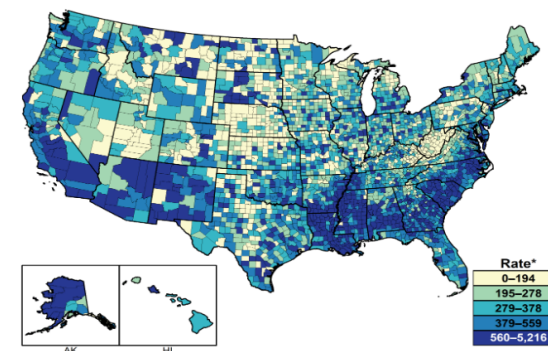
* Per 100,000.
NOTE: See section A1.5 in the Appendix for more information on county-level rates.

Black Hawk County placed in the worst category for STD rates in the United States

Population below federal poverty level is higher than the Iowa average and United States average.

Cases of child abuse/neglect higher in Black Hawk County than in Iowa
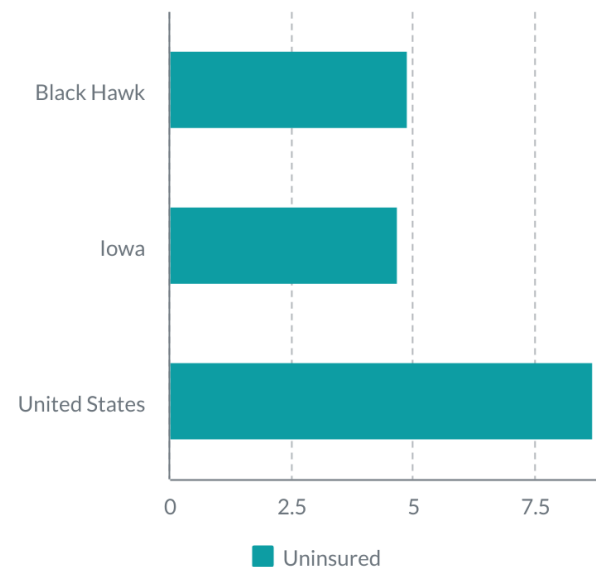
Uninsured population in Iowa is one of the lowest in the country.

3
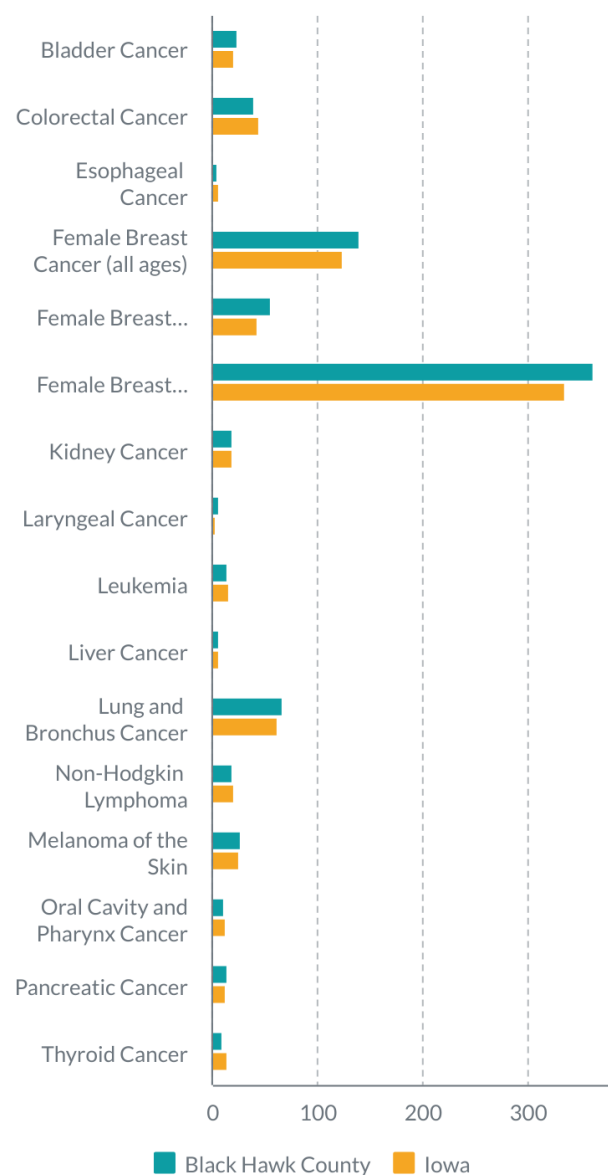
Cancer rates for breast cancer are relatively high compared to the rest of the United States.
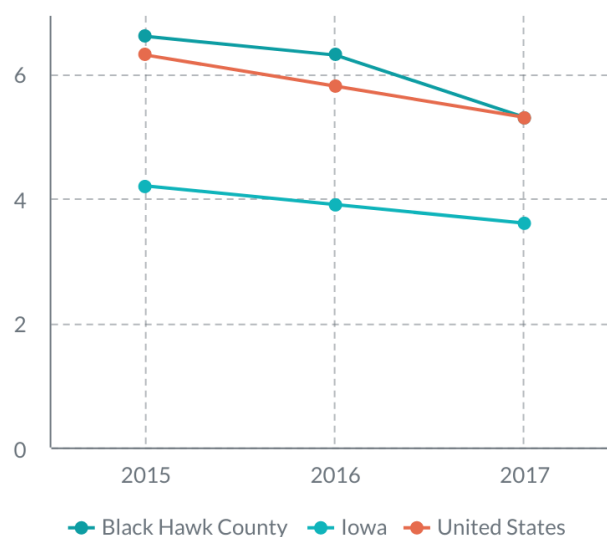
Unemployment rate for Black Hawk County is much higher than the rest of Iowa
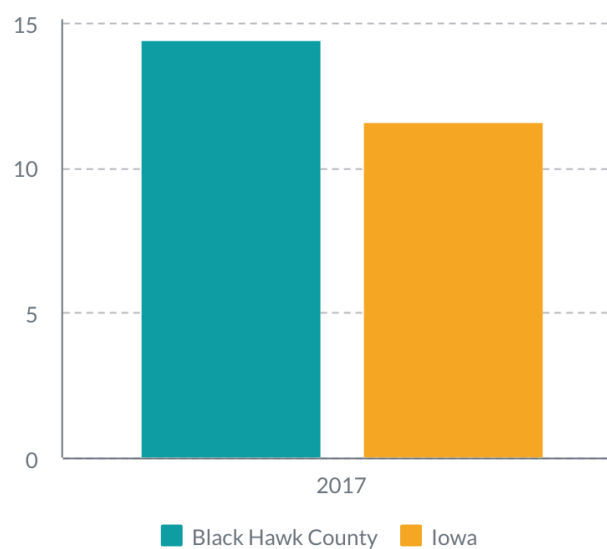
Proportion of population receiving Food Assistance is higher in Black Hawk County than in Iowa
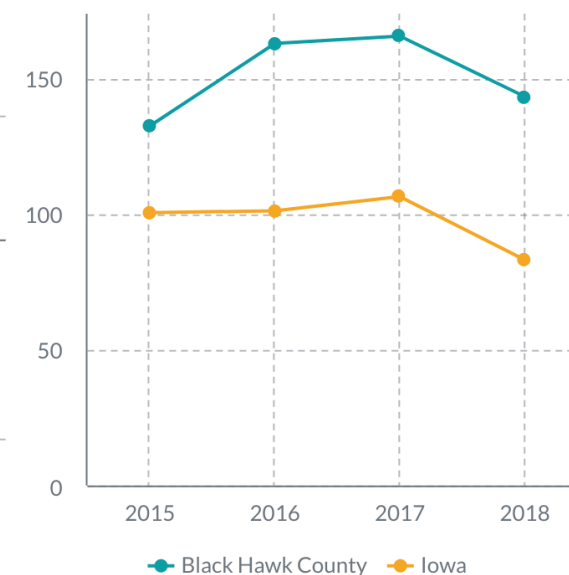
Asthma hospitlaization rates much higher in Black Hawk County than the rest of Iowa for children under age 5 years.

County Health Rankings & Roadmaps

The *County Health Rankings & Roadmaps* program is a partnership between the Robert Wood Johnson Foundation, a non-profit philanthropy that focuses its efforts on pressing health issues, and the University of Wisconsin Population Health Institute. The *County Health Rankings* project uses nationwide, statewide, and local data to create a ranking list that compares health outcomes between populations. The health outcomes analyzed include length of life, quality of life, health behaviors, clinical care, social and economic factors, and physical environment.

The annual health ranking snapshot of Black Hawk County is beneficial to health professionals and is used to compare our county to other counties in Iowa. With this information we can better understand the health needs of Black Hawk County and plan interventions to promote a healthier community. Data displayed in the *County Health Rankings* were released for 2019, which includes date ranges from 2010 to 2018. The table below displays Black Hawk County's health outcome, Iowa's average health outcome, Black Hawk County's ranking (out of 99 counties, with 1 being the best and 99 the worst), year range the data was obtained, and a description of the health outcome.

Black Hawk County's overall rank is 61st of 99 counties. This is worse than the previous year's ranking of 58th of 99 counties. The health outcomes that are worse in 2019 than in 2018 are length of life and quality of life. All other health outcomes (health behaviors 72nd, clinical care 18th, social and economic factors 89th, and physical environment 72nd) are ranked better in 2019 than in 2018.

County Demographics	2019 County Health Ranking, Iowa: Black Hawk County = 61				
	Black Hawk	Iowa	County Ranking	Year of Data	Description
Health Outcomes	**	**	61		
Length of Life	**	**	64		
Premature death	6,800	6,200		2015-2017	Years of potential life lost before age 75 per 100,000 population (age-adjusted)
Quality of Life	**	**	58		
Poor or fair health	12%	13%		2016	Percentage of adults reporting fair or poor health (age-adjusted)
Poor physical health days	2.8	2.9		2016	Average number of physically unhealthy days reported in past 30 days (age-adjusted)
Poor mental health days	3.2	3.3		2016	Average number of mentally unhealthy days reported in past 30 days (age-adjusted)
Low birthweight	7%	7%		2011-2017	Percentage of live births with low birthweight (< 2,500 grams)
Additional Health Outcomes (not included in overall ranking)					
Life expectancy	79	79.5		2015-2017	Average number of years a person can expect to live
Premature age-adjusted mortality	340	320		2015-2017	Number of deaths among residents under age 75 per 100,000 population (age-adjusted)
Child mortality	60	50		2014-2017	Number of deaths among children under age 18 per 100,000 population
Infant mortality	6	5		2011-2017	Number of all infant deaths (within 1 year), per 1,000 live births
Frequent physical distress	9%	9%		2016	Percentage of adults reporting 14 or more days of poor physical health per month
Frequent mental distress	10%	10%		2016	Percentage of adults reporting 14 or more days of poor mental health per month
Diabetes prevalence	11%	10%		2015	Percentage of adults aged 20 and above with diagnosed diabetes

	Black Hawk	Iowa	County Ranking	Year of Data	Description
HIV prevalence	91	94		2015	Number of people aged 13 years and older living with a diagnosis of human immunodeficiency virus (HIV) infection per 100,000 population
Health Factors	**	**	75		
Health Behaviors	**	**	72		
Adult smoking	15%	17%		2016	Percentage of adults who are current smokers
Adult obesity	31%	32%		2015	Percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m2
Food environment index	7.2	8.2		2015-2016	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)
Physical inactivity	22%	23%		2015	Percentage of adults age 20 and over reporting no leisure-time physical activity
Access to exercise opportunities	83%	83%		2010, 2018	Percentage of population with adequate access to locations for physical activity
Excessive drinking	22%	22%		2016	Percentage of adults reporting binge or heavy drinking
Alcohol-impaired driving deaths	13%	28%		2013-2017	Percentage of driving deaths with alcohol involvement
Sexually transmitted infections	717.8	415.6		2016	Number of newly diagnosed chlamydia cases per 100,000 population
Teen births	18	20		2011-2017	Number of births per 1,000 female population ages 15-19
Additional Health Behaviors (not included in overall ranking)					
Food insecurity	14%	12%		2016	Percentage of population who lack adequate access to food
Limited access to healthy foods	11%	6%		2015	Percentage of population who are low-income and do not live close to a grocery store
Drug overdose deaths	9	10		2015-2017	Number of drug poisoning deaths per 100,000 population
Motor vehicle crash deaths	8	11		2011-2017	Number of motor vehicle crash deaths per 100,000 population
Insufficient sleep	27%	28%		2016	Percentage of adults who report fewer than 7 hours of sleep on average

	Black Hawk	Iowa	County Ranking	Year of Data	Description
Clinical Care	**	**	18		
Uninsured	5%	5%		2016	Percentage of population under age 65 without health insurance
Primary care physicians	1,070:1	1,390:1		2016	Ratio of population to primary care physicians
Dentists	1,380:1	1,520:1		2017	Ratio of population to dentists
Mental health providers	660:1	700:1		2018	Ratio of population to mental health providers
Preventable hospital stays	3,456	3,776		2016	Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees
Mammography screening	52%	49%		2016	Percentage of female Medicare enrollees ages 65-74 that received an annual mammography screening
Flu vaccinations	56%	51%		2016	Percentage of fee-for-service (FFS) Medicare enrollees that had an annual flu vaccination
Additional Clinical Care (not included in overall ranking)					
Uninsured adults	6%	6%		2016	Percentage of adults under age 65 without health insurance
Uninsured children	3%	3%		2016	Percentage of children under age 19 without health insurance
Other primary care providers	834:1	1,085:1		2018	Ratio of population to primary care providers other than physicians
Social & Economic Factors	**	**	89		
High school graduation	89%	91%		2016-2017	Percentage of ninth-grade cohort that graduates in four years
Some college	69%	70%		2013-2017	Percentage of adults ages 25-44 with some post-secondary education
Unemployment	3.8%	3.1%		2017	Percentage of population ages 16 and older unemployed but seeking work
Children in poverty	17%	13%		2017	Percentage of people under age 18 in poverty
Income inequality	4.4	4.3		2013-2017	Ratio of household income at the 80th percentile to income at the 20th percentile

	Black Hawk	Iowa	County Ranking	Year of Data	Description
Children in single-parent households	32%	29%		2013-2017	Percentage of children that live in a household headed by single parent
Social associations	12.6	15.1		2016	Number of membership associations per 10,000 population
Violent crime	511	282		2014, 2016	Number of reported violent crime offenses per 100,000 population
Injury deaths	60	67		2013-2017	Number of deaths due to injury per 100,000 population
Additional Social & Economic Factors (not included in overall ranking)					
Disconnected youth	5%	5%		2013-2017	Percentage of teens and young adults ages 16-19 who are neither working nor in school
Median household income	$50,400	$58,700		2017	The income where half of households in a county earn more and half of households earn less
Children eligible for free or reduced price lunch	50%	41%		2016-2017	Percentage of children enrolled in public schools that are eligible for free or reduced price lunch
Residential segregation - Black/White	60	63		2013-2017	Index of dissimilarity where higher values indicate greater residential segregation between black and white county residents
Residential segregation - non-white/white	50	47		2013-2017	Index of dissimilarity where higher values indicate greater residential segregation between non-white and white county residents
Homicides	4	2		2011-2017	Number of deaths due to homicide per 100,000 population
Firearm fatalities	8	9		2013-2017	Number of deaths due to firearms per 100,000 population
Physical Environment	**	**	**72**		
Air pollution - particulate matter	9.4	9		2014	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)

	Black Hawk	Iowa	County Ranking	Year of Data	Description
Severe housing problems	15%	12%		2011-2015	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities
Driving alone to work	82%	81%		2013-2017	Percentage of the workforce that drives alone to work
Long commute - driving alone	8%	20%		2013-2017	Among workers who commute in their car alone, the percentage that commute more than 30 minutes
Additional Physical Environment (not included in overall ranking)					
Homeownership	66%	71%		2013-2017	Percentage of occupied housing units that are owned
Severe housing cost burden	13%	10%		2013-2017	Percentage of households that spend 50% or more of their household income on housing
Table Color Code: **Green** indicates that Black Hawk County has a better health outcome (>1%) than the state of Iowa average. **Yellow** indicates that Black Hawk County has a similar (within 1%) health outcome as the state of Iowa average. **Red** indicates that Black Hawk County has a worse (>1%) health outcome than the state of Iowa average.					
Source: County Health Rankings & Roadmaps program. A collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. https://www.countyhealthrankings.org/					

Green total: **17**

Yellow total: **22**

Red total: **20**

Demographics

Population Trends

BHC, Iowa was founded in 1843 with a total land area of 573 square miles. It is the fourth-most populated county in the state of Iowa. As of the 2010 census, the population in BHC is 131,090, and a 2018 population estimate of 132,408. The population estimates through 2018 depict a fluctuation, but the population is increasing. BHC's population growth rate has varied over the years, but has an average growth rate of 0.14%. This is smaller than the Iowa average growth rate of 0.44%.

Figure 2 compares the change in population of BHC to the State of Iowa. BHC's racial distribution shows that, in general, the population is becoming more diverse. White non-Hispanic or Latino percentages are decreasing, while all other racial and ethnic groups are increasing.

Recent census estimates show that the age distribution is slowly changing. There has been a decrease in the younger population, while the older population is increasing. BHC has a much higher population of individuals age 20 to 24 than the state and federal average, which may be due to student attendance to local universities. In the past, BHC had a much lower proportion of individuals age 35 to 54 compared to the state and federal average, however, the proportion in this age group has been increasing from 2015 to 2018. The gender distribution in BHC is almost 50% male and 50% female.
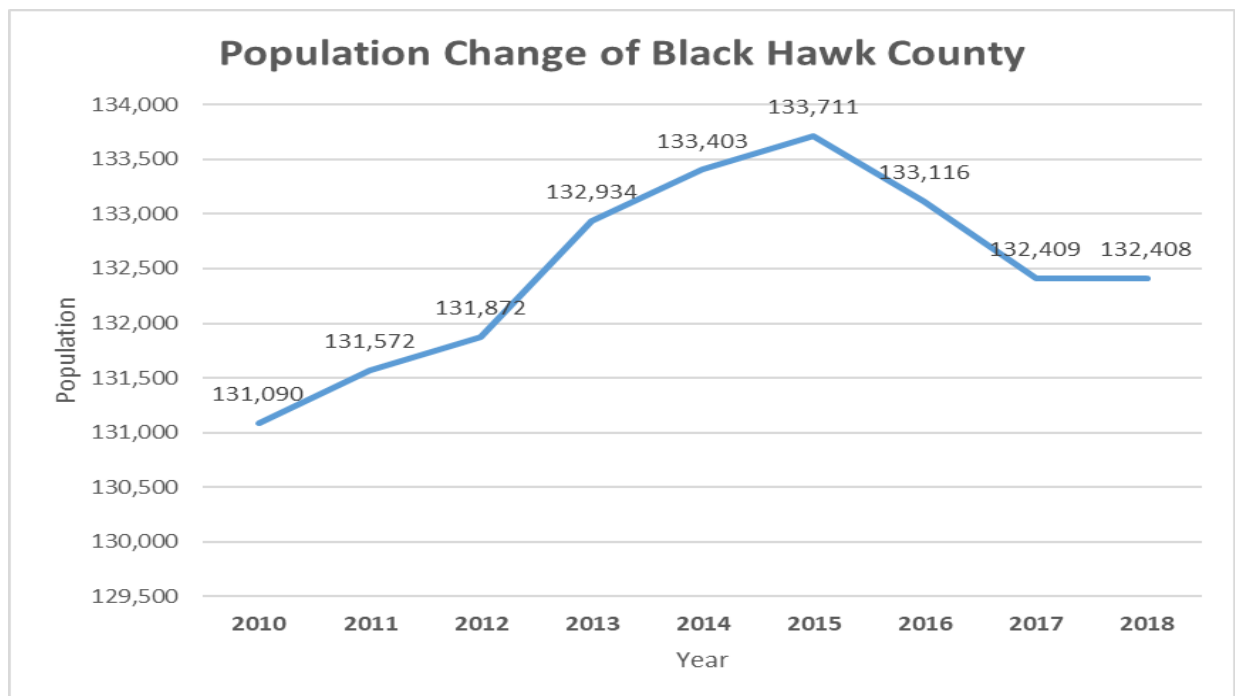
Figure 1. Population estimates from 2010 census.[1]

Population Change by Race and Ethnicity, 2010 to 2018

	White non-Hispanic or Latino	Black or African American non-Hispanic or Latino	American Indian and Alaska Native non-Hispanic or Latino	Asian non-Hispanic or Latino	Native Hawaiian and Other Pacific Islander non-Hispanic or Latino	Two or More Races non-Hispanic or Latino	Hispanic or Latino
2010	84.0%	8.8%	0.2%	1.3%	0.1%	1.9%	3.7%
2018	80.8%	9.5%	0.2%	2.4%	0.4%	2.3%	4.5%

Figure 2. Population change for Black Hawk County by race and ethnicity.[1]

Age Distributions for Black Hawk County: 2015 and 2018 Comparison

	Under 5	5 to 14	15 to 19	20 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	75+
2015	6.40%	11.90%	7.00%	12.00%	13.20%	10.90%	11.10%	12.50%	8.20%	6.90%
2018	6.30%	12.00%	6.80%	11.30%	13.10%	11.40%	10.40%	12.20%	9.30%	7.10%

Age Groups
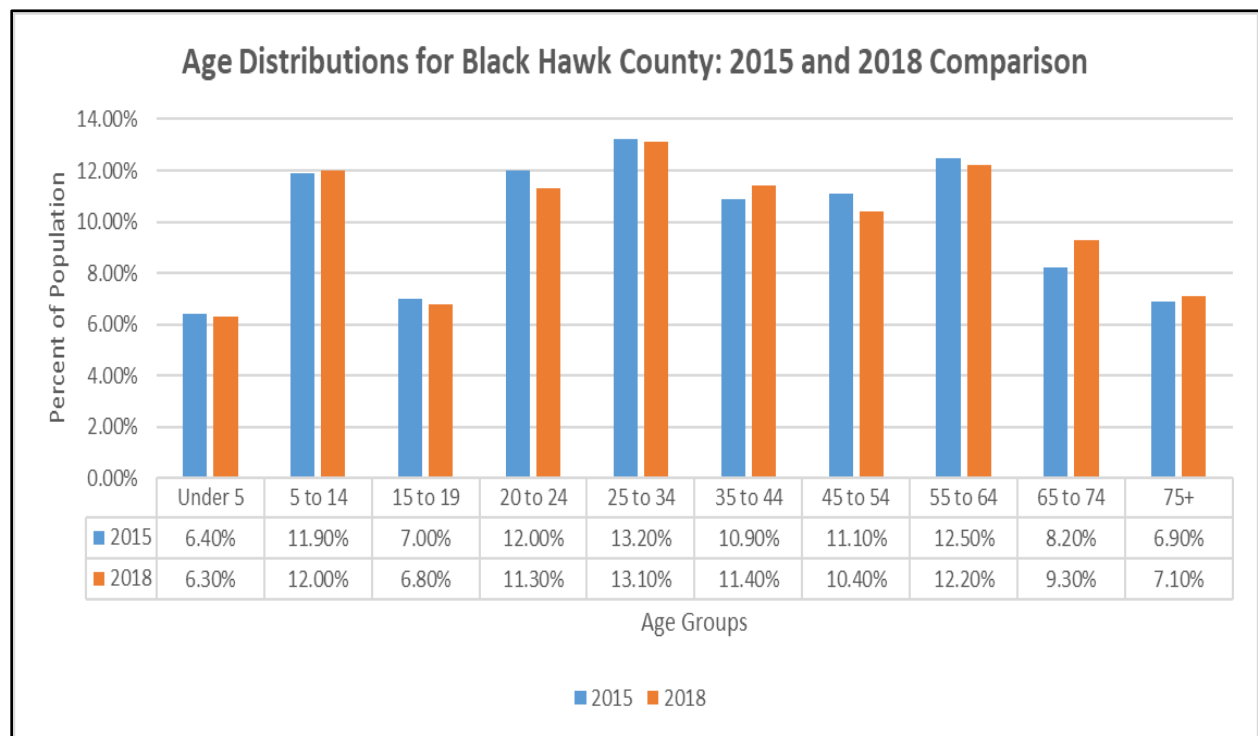
Figure 3. Comparison of age categories in Black Hawk County for years 2015 and 2018.[1]

Population by Age Categories 2018

Age Categories	Under 5	5 to 14	15 to 19	20 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	75+
Black Hawk County	6.3%	12.0%	6.8%	11.3%	13.1%	11.4%	10.4%	12.2%	9.3%	7.1%
Iowa	6.3%	13.0%	6.8%	7.2%	12.6%	12.0%	11.8%	13.2%	9.5%	7.6%
United States	6.1%	12.6%	6.4%	6.7%	14.0%	12.6%	12.7%	12.9%	9.3%	6.7%
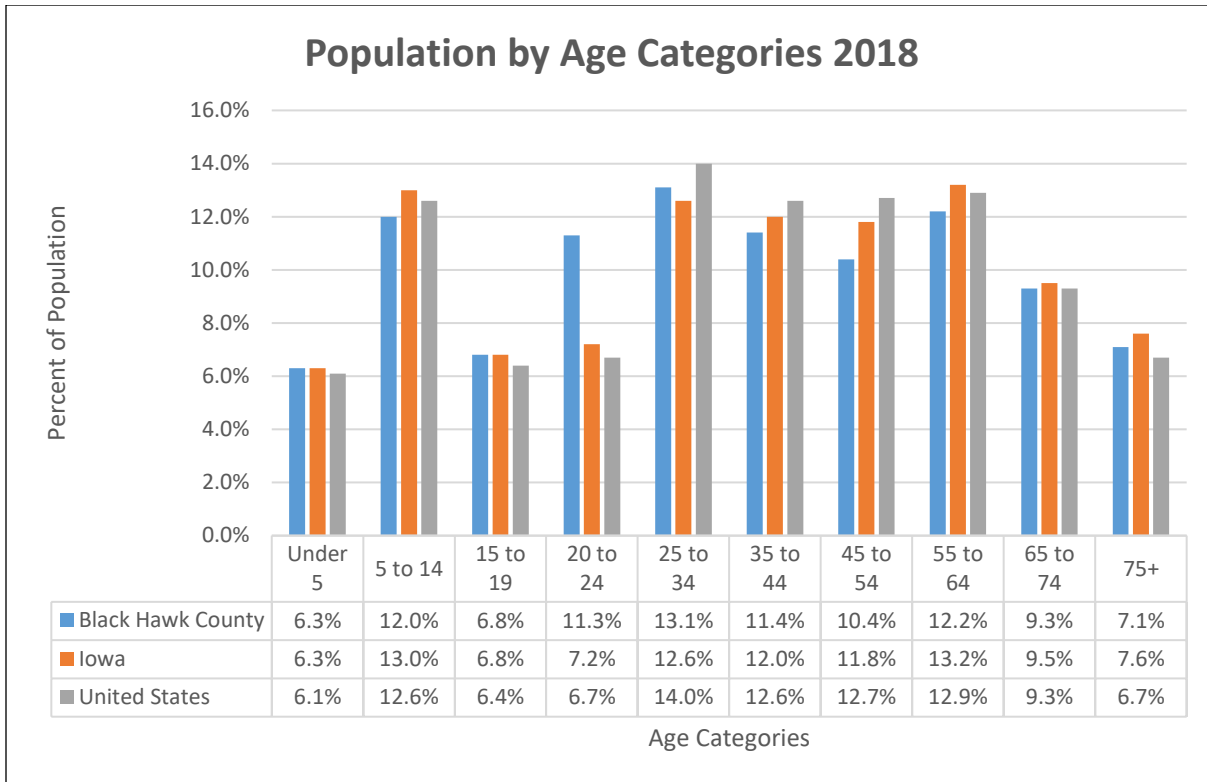
Figure 4. Comparison of age categories by local, state and federal level for 2018.[1]

Immigrant Distribution

According to the American Immigration Council, nearly 5% of Iowa's population was born in another country and over 4% of residents are native-born Americans who have at least one immigrant parent in 2017.[15] The top countries of origin for immigrants were Mexico (29.3%), China (7.7%), India (7.1%), Vietnam (4.5%), and Bosnia and Herzegovina (3.3%). In BHC, 5% of the population is foreign born. This includes Europe (34.3%), Asia (29.6%), Africa (10.8%), and the Americas (23.5%).

From 2010 to 2014 26% of the immigrant population (1.3% of Iowa population) were undocumented immigrants. As of 2015, 37.4% of the immigrants in Iowa were naturalized. The total immigrant-led households in Iowa paid $348.9 million in state and local taxes in 2014. It was estimated that undocumented immigrants paid $36.7 million in state and local taxes in 2014.

Socioeconomic Status

Economic Trends

The Median Household Income (MHI) for BHC is only 88.3% of the Iowa average, and 86.2% of the United States average (BHC = $50,916, Iowa = $58,570, US = $60,336). The MHI has increased at the local, state, and federal level over the years, even after adjusting for inflation. BHC has more households that make $0 to $49,999 than state or federal averages. In 2017, the federal poverty level was $12,060 for a household with 1 individual, $12,240 for 2 people, and $20,420 for a household of 3. This puts the MHI groups of $0 – $24,000 at risk of falling below the federal poverty level. Census data suggests that BHC has an increasing population that falls below the poverty level, and has a higher percentage below the federal poverty level than the state and federal averages.

Unemployment rates across the United States have been decreasing since 2010, and have dropped to less than 5% by the end of 2018. Although this drop has also occurred in BHC, we are still much higher than the state average. In 2017, the Iowa average for unemployment rate was only 67.9% of BHC's (BHC = 5.3%, Iowa = 3.6%). BHC's unemployment rate and housing tenure is similar to the United States average, so the difference between Iowa and BHC could be due to other geographic and demographic factors. One explanation is the large cities within BHC and local universities in Cedar Falls and Waterloo. However, according to the U.S. Department of Agriculture, rural unemployment rates are higher than urban[2]. A comparison between other Iowa counties and BHC is a potential health indicator to look at in future assessments.

Median Household Income

	2015	2016	2017
Black Hawk County	$48,369	$50,348	$50,916
Iowa	$54,736	$56,247	$58,570
United States	$55,775	$57,617	$60,336
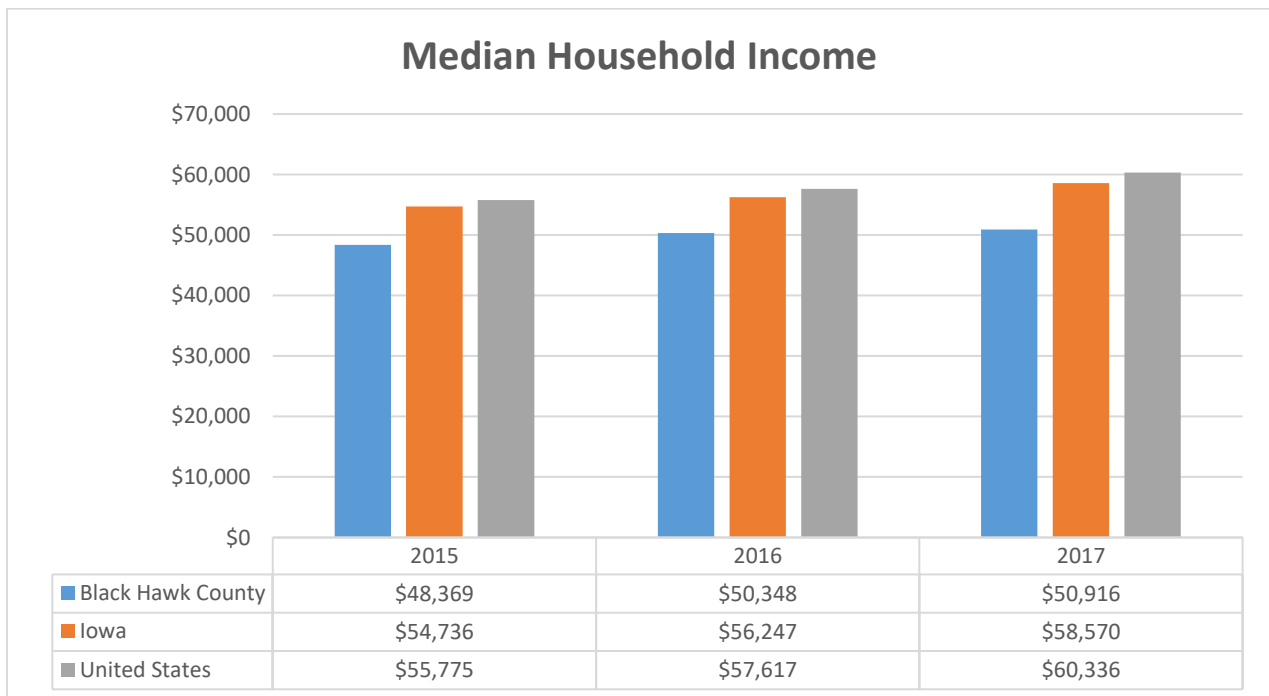
Figure 5. Median Household Income comparison between local, state, and federal averages.[1]

Median Household Income Range 2017

Figure showing proportions of population by median household income range for United States, Iowa, and Black Hawk County.

Income Range	United States	Iowa	Black Hawk County
Household income $150,000 +			
Household income $100,000 to $149,000			
Household income $75,000 to $99,999			
Household income $50,000 to $74,999			
Household income $25,000 to $49,999			
Household income $10,000 to $24,999			
Household income less than $10,000			

Legend: ■ United States ■ Iowa ■ Black Hawk County

Figure 6. Proportions of population broken down by Median Household Income range for 2017.[1]

Population Below Povertly Level in Last 12 Months 2017

2015: Black Hawk County 13.70%, Iowa 12.20%, United States 14.70%
2016: Black Hawk County 17.10%, Iowa 11.80%, United States 14.00%
2017: Black Hawk County 15.90%, Iowa 10.70%, United States 13.40%

Legend: ■ Black Hawk County ■ Iowa ■ United States
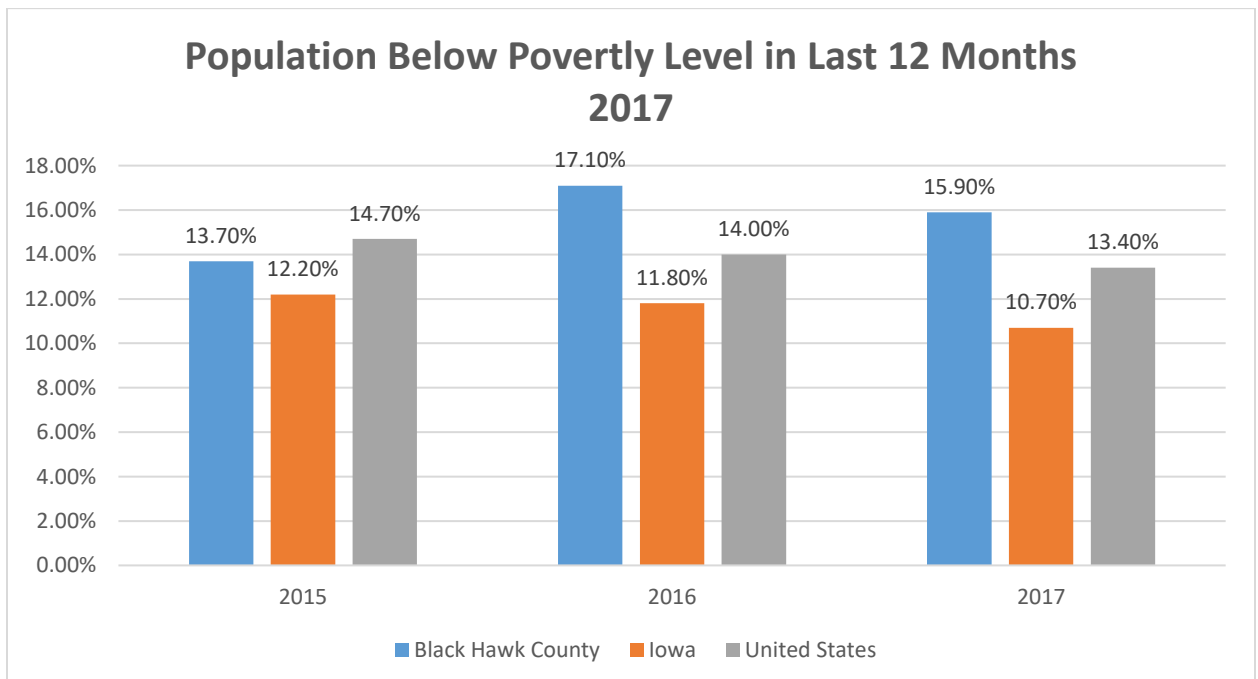
Figure 7. Population with income below the federal poverty level within the last 12 months in 2017.[1]

Population Below Povery in Last 12 Months by Race and Ethnicity 2017

Race	United States	Iowa	Black Hawk County
Two or more races	16.70%	24.30%	25.60%
Black	23.00%	32.30%	27.50%
White	11.10%	9.30%	14.90%
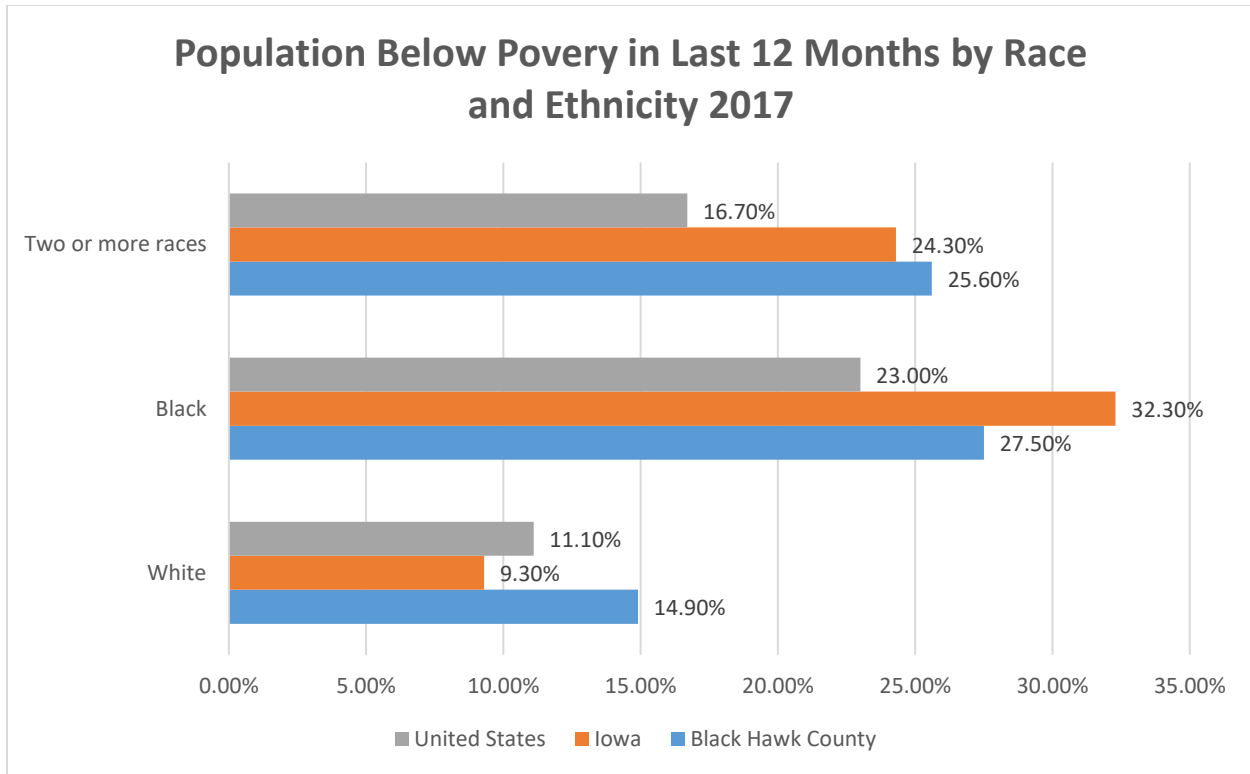
Figure 8. Population with income below the federal poverty level within the last 12 months broken down by race. Races and ethnicities not displayed (Asian, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Two or more races, and Hispanic or Latino) are due to data suppression.[1]

Percentage of Families and People Whose Income in the Past 12 Months is Below Poverty Level 2017			
	Black Hawk County	**Iowa**	**United States**
All Families	9.8%	6.7%	9.5%
Families (with children under 18 years)	16.4%	10.9%	15.0%
Married Couple (with children under 18 years)	6.5%	4.2%	6.6%
Single Female (with children under 18 years)	39.5%	31.7%	35.7%

Table 1. Proportion of families that had income within the last 12 months below the federal poverty level in 2017. Families with children under 18 were chosen to show differences between overall families and those with children.[1]

Figure 9. United States unemployment rate from 2010 to 2019.[3]

Unemployment Rate

	2015	2016	2017
Black Hawk County	6.60%	6.30%	5.30%
Iowa	4.20%	3.90%	3.60%
United States	6.30%	5.80%	5.30%
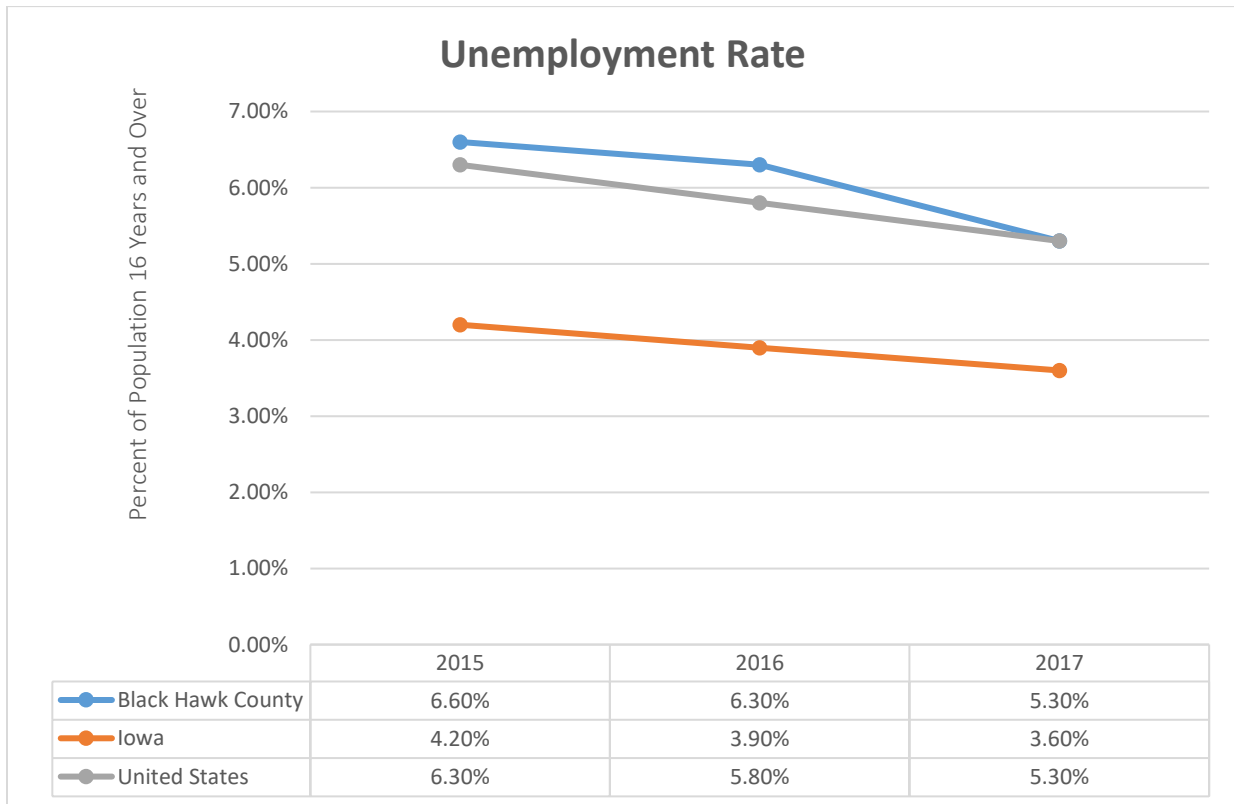
Figure 10. Trends of population proportions above age 16 years that were unemployed within the year.[1]

Housing Tenure 2017

	Rented	Owned
Black Hawk County	35.50%	64.50%
Iowa	28.40%	71.60%
United States	36.10%	63.90%

Black Hawk County   *Iowa*   *United States*
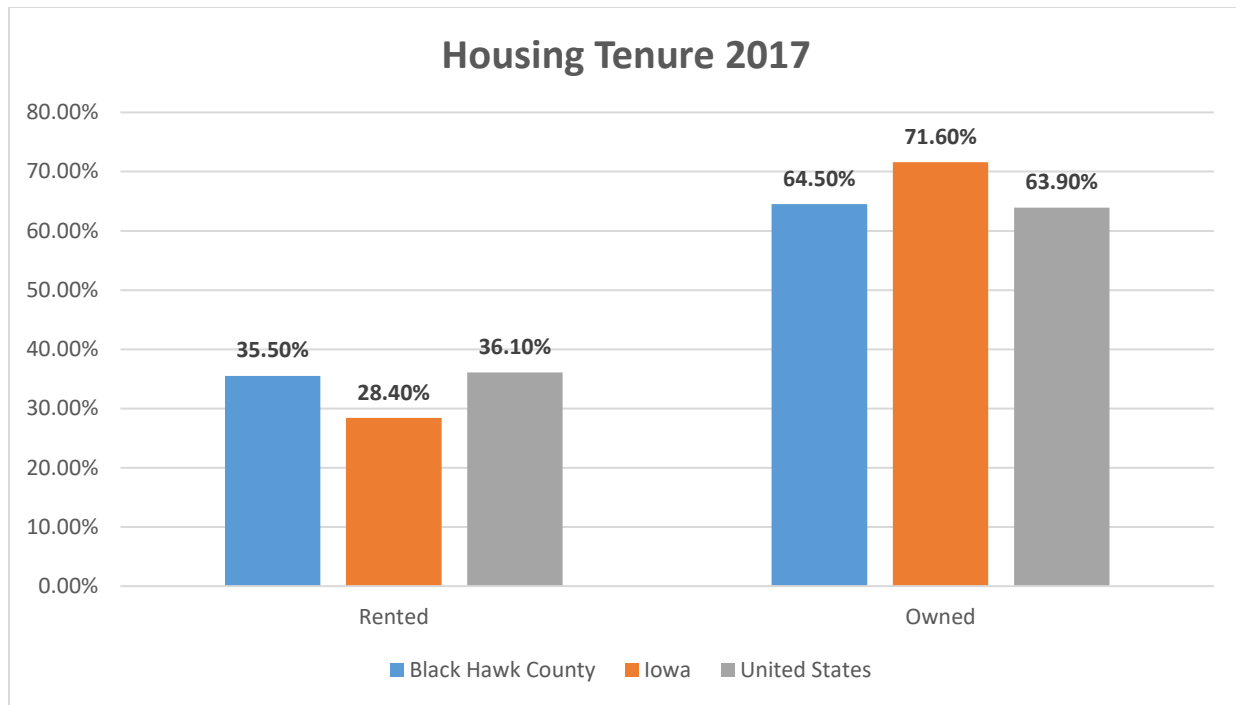
Figure 11. Comparison of population proportions at the local, state, and federal levels in 2017. Owned properties include homes with and without a mortgage.[1]

Health Insurance Trends

Lack of health coverage has been a growing problem in the United States. It affects a person's medical decisions, and has been associated with overall health.[4] In 2010, the date that the Affordable Care Act came into effect, there were 46.5 million uninsured Americans under age 65.[4] This number dropped to about 27 million by 2016.[4] Recent trends show that the uninsured population is no longer decreasing. From 2016 to 2018 there has been an increase in the uninsured by 1.2 million.[4] Data collected on the uninsured population showed that barriers to obtaining health care coverage affect some population groups more than others. The majority of individuals without insurance are low-income adults and people of color, and most claim they are unable to afford the insurance rates.[4]

The average percentage of uninsured Iowans was only 54% of the United States average (Iowa = 4.7%, US = 8.7%). In 2018, Iowa was one of 9 States (10 states including Washington D.C.) that had less than 7% uninsured Americans below 65 years of age.[5] BHC has a slightly higher percentage of uninsured compared to the Iowa average, but is still much lower than the United States average. In Iowa, Black or African American populations have a higher percentage of uninsured compared to the White or Caucasian population.

Uninsured Status 2017

Percent Uninsured Under Age 65

Black Hawk	4.90%
Iowa	4.70%
United States	8.70%
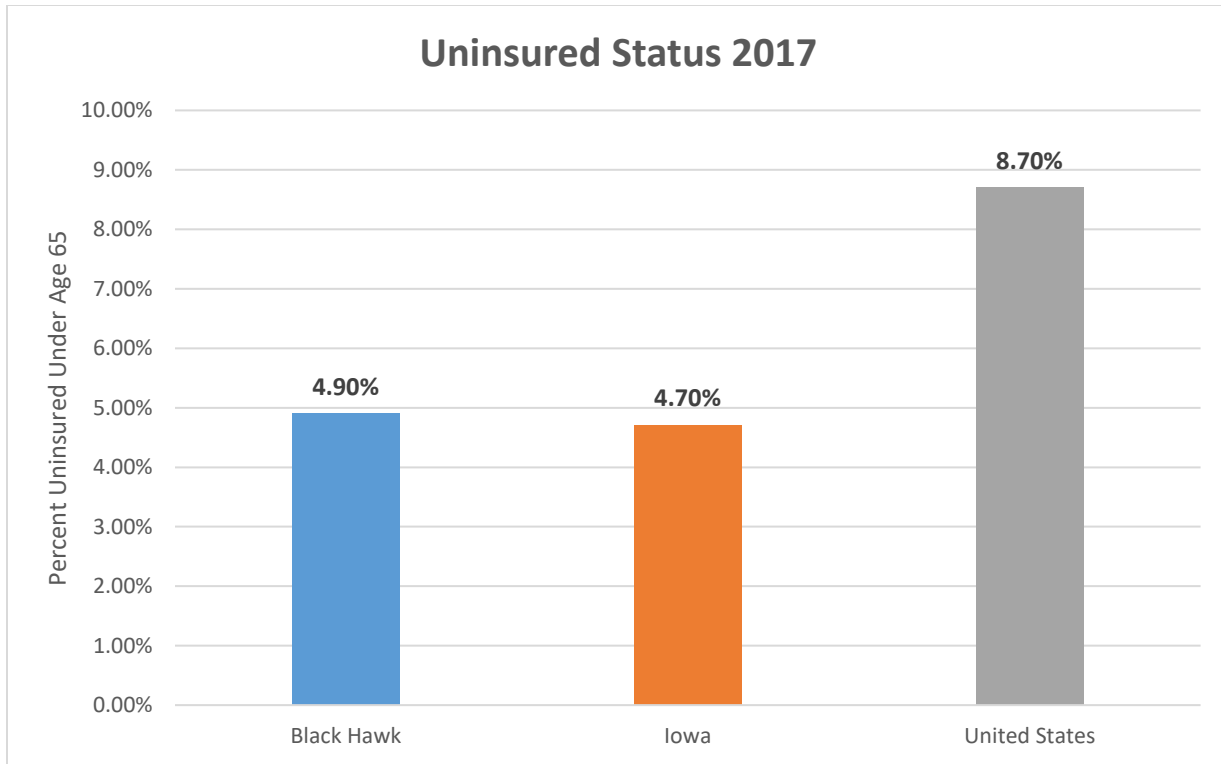
Figure 12. Proportion of population below age 65 that did not have insurance coverage within the last year in 2017.[1]

Insurance Status by Race 2017

Percent Uninsured Under Age 65

White:
- Black Hawk County: 4.50%
- Iowa: 4.20%
- United States: 7.80%

Black or African American:
- Black Hawk County: 8.00%
- Iowa: 7.20%
- United States: 10%

Legend: Black Hawk County, Iowa, United States
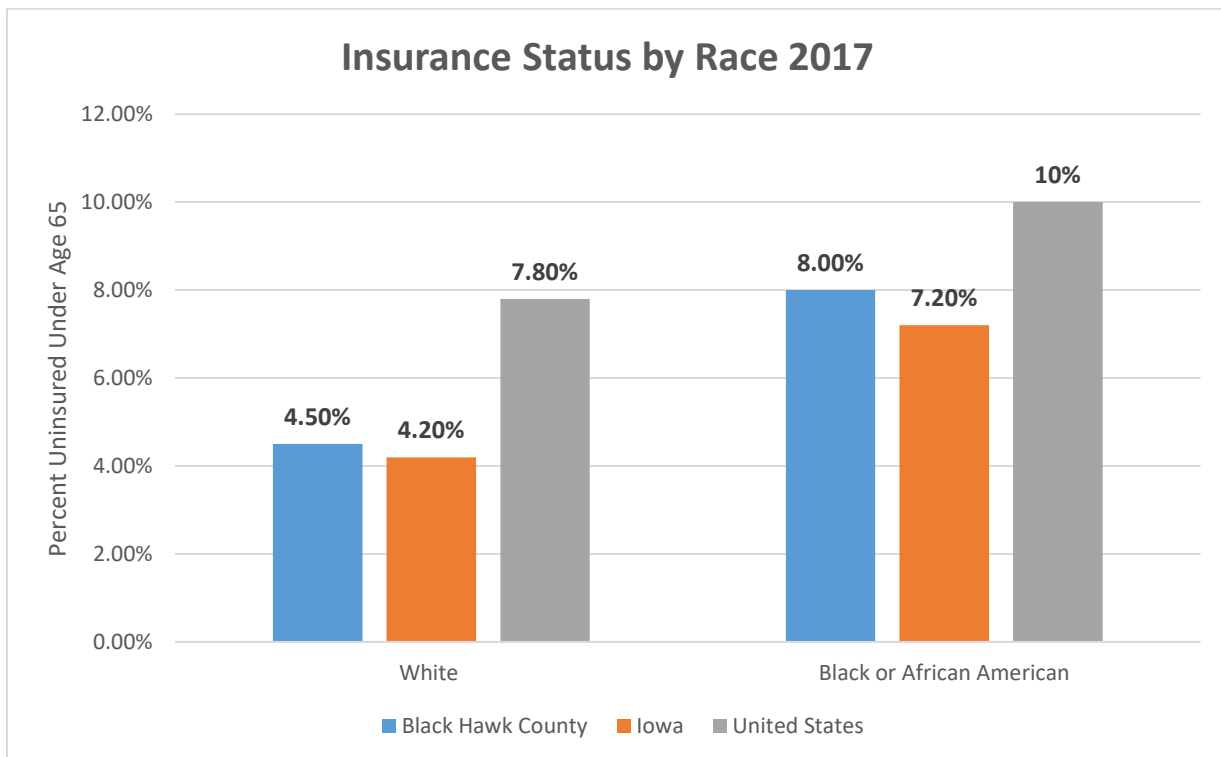
Figure 13. Proportion of population below age 65 broken down by race that did not have insurance coverage within the last year in 2017.[1]
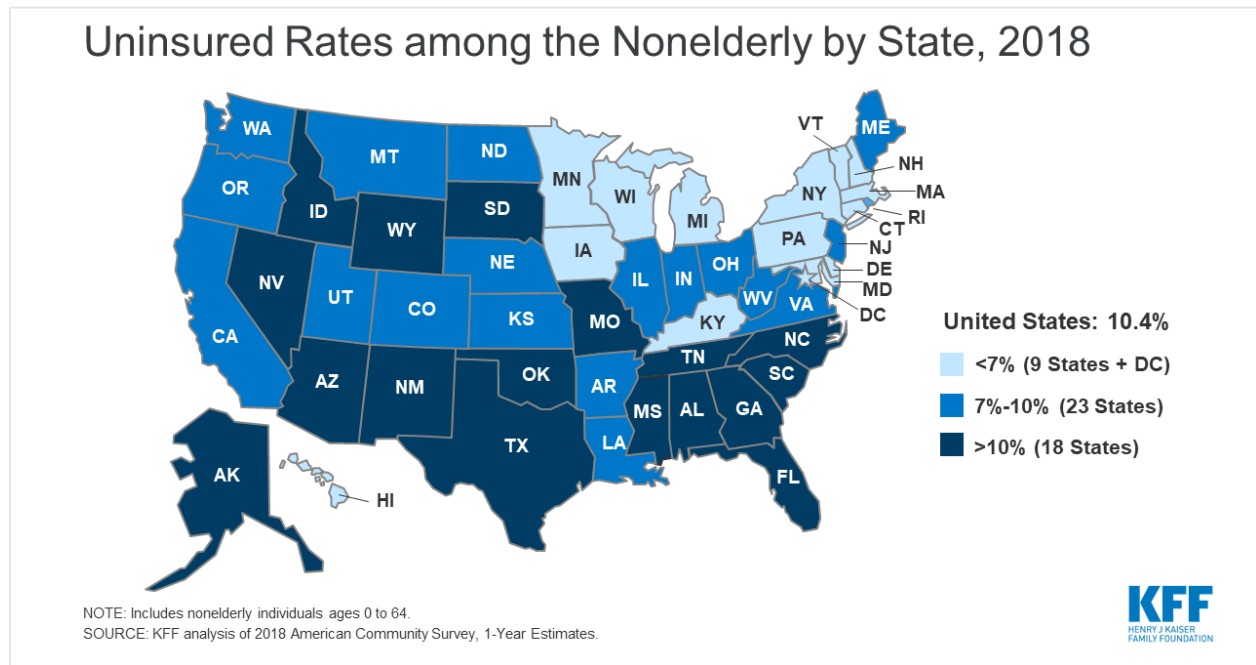
Figure 14. Map of population proportions below age 65 that did not have insurance coverage within the last year in 2018.[5]

Education Trends

Educational attainment has been associated with unemployment rate, income, and at some level health.[6, 7] *Figure 20* depicts the association of education to economic factors. Although the correlation is not completely understood between education and health outcomes, studies have shown that increasing education also increases health.[7]

State and local populations have a higher percentage of individuals with some college (no degree) or an Associate's degree. The federal average that attained Bachelor's degrees or post undergraduate is larger than local levels. One explanation could be that the large proportion of university students fall within the "some college (no degree)" and "Associate's degree", but have not attained a Bachelor's degree. BHC has a higher percentage of individuals age 25 and older that have not attained a High School diploma. The association between education and health can be further looked at within BHC in future assessments.

The graduation rates of BHC public schools are similar to each other with an average graduation rate of 92.3% in 2018. The Waterloo school district graduation rates are about 10% lower than the other school districts (Waterloo = 84.2%, Union = 90.4%, Hudson = 97.7%, Dunkerton = 92.3%, and Cedar Falls = 96.8% in 2018). This rate has been increasing in recent years from 80% to 84%. The 4 year trend shows

Cedar Falls, Hudson, and Waterloo school districts have increasing high school graduation rates, while Union and Dunkerton school districts have decreasing high school graduation rates.

Educational Attainment 2017
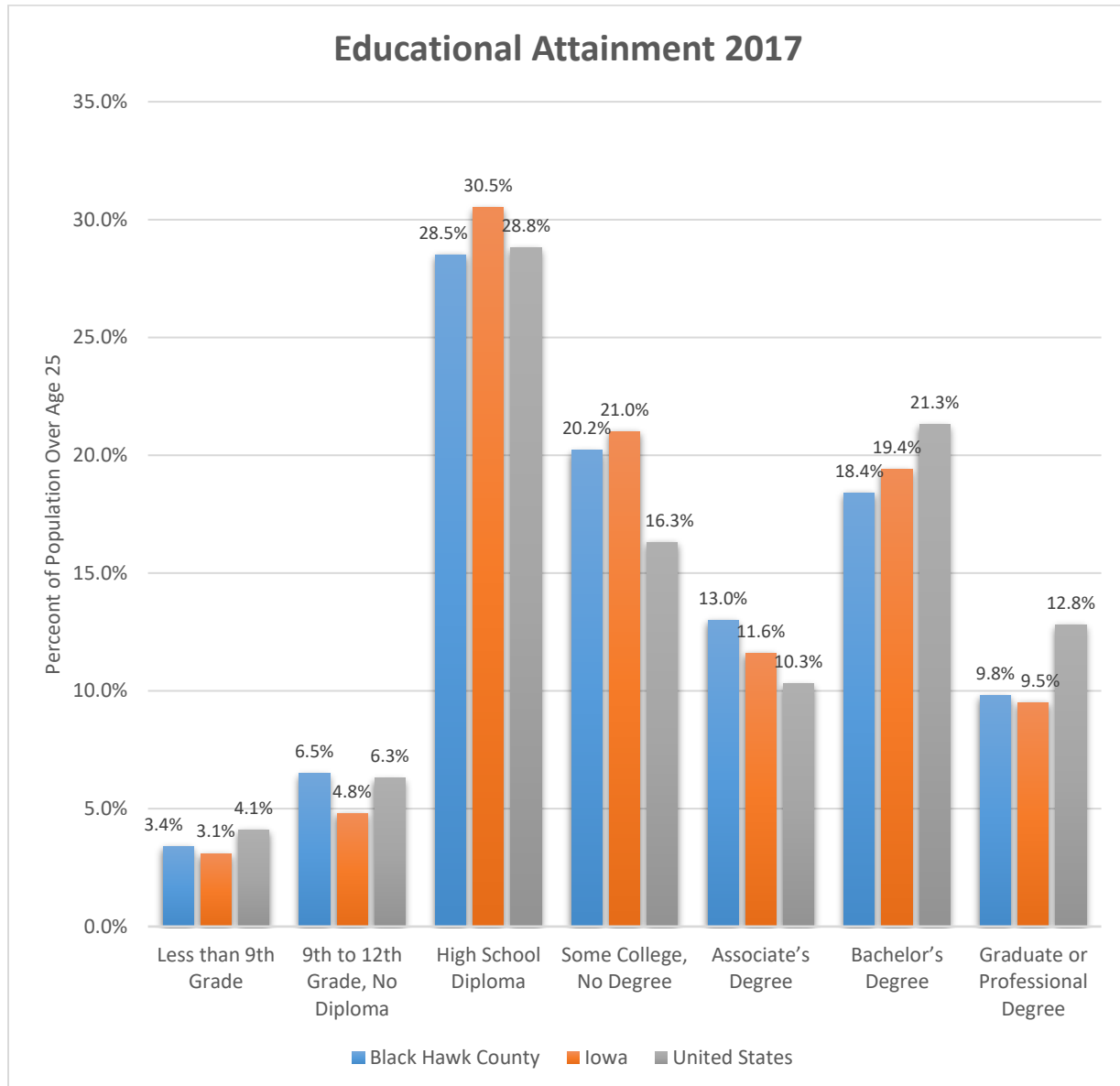
Figure 15. Comparison of educational attainment of population age 25 and older between local, state and federal levels in 2017.[1]
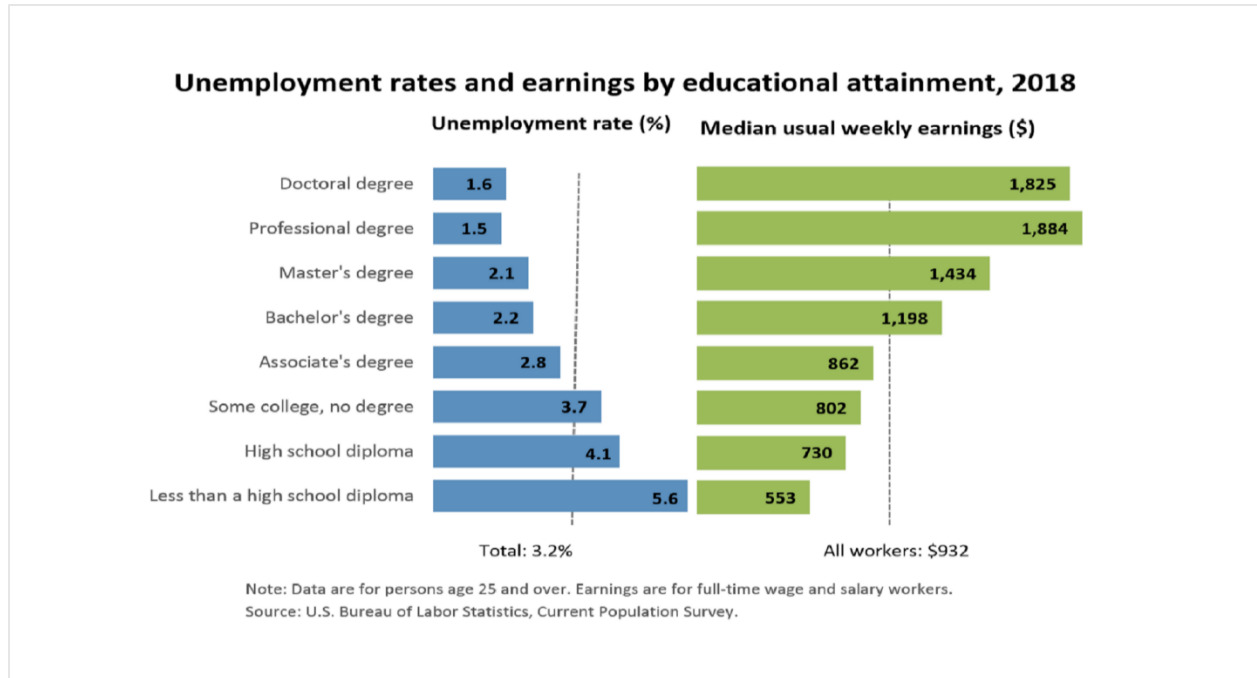
Figure 16. Calculated averages of educational attainment by unemployment rate and median weekly earnings in the United States in 2018.[6]

	2015	2016	2017	2018
Cedar Falls	95.2%	96.0%	96.2%	96.8%
Dunkerton	96.9%	94.6%	96.9%	92.3%
Hudson	96.4%	98.3%	94.3%	97.7%
Union	95.9%	95.2%	96.2%	90.4%
Waterloo	80.3%	77.4%	84.2%	84.2%
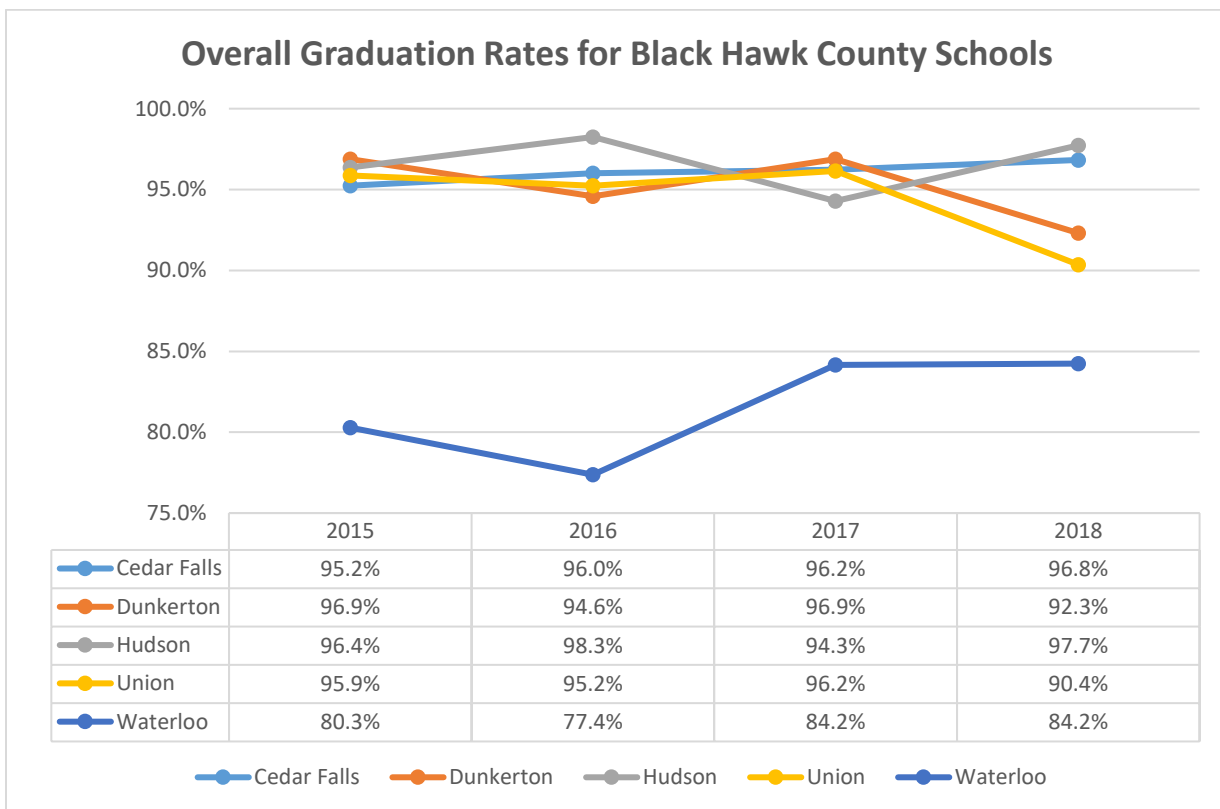
Figure 17. Graduation rates of BHC public school districts for graduation years 2015 to 2018.[8] It should be noted that Union also includes students that live in Tama County.

The Iowa Youth Survey (IYS) gathers information on students in grades 6, 8, and 11 on topics such as behaviors, perceptions, and environment. There have been 6 to 11 different school districts that participate in the IYS, with the most recent year representing 9 school districts. The objectives of the IYS are to identify youth developmental needs and implement targeted interventions to help Iowa students.

The IYS found that there has been a decrease in the percentage of students indicating binge drinking and cigarette use. From 2012 to 2018, BHC's percentages have decreased by 53.7% for binge drinking (8.2% to 3.8%) and 72.5% for cigarette use (5.1% to 1.4%). All participating schools in Iowa had an average decrease of 36.3% for binge drinking (8% to 5.1%) and 57.1% for cigarette use (4.9% to 2.1%). Cigarette use did not previously include vaping, but for years 2016 and 2018 a question was added that asks if students smoked vape or e-cigarettes. In 2016, 5% of the students indicated they vaped within 30 days (6th grade = 1%, 8th grade = 5%, 11th grade = 10%). In 2018, 9% of the students indicated they vaped within 30 days (6th grade = 2%, 8th grade = 7%, 11th grade = 20%).

Bullying in school for BHC is similar to the Iowa average with trends maintaining around 40%. Students across Iowa have indicated that they feel less safe in schools in recent years. In 2018, BHC students felt much safer than the Iowa average. There is a high percentage of students that indicated they felt hopeless or had serious suicidal intentions. The population most affected is 11th grade females, but female students in all grades were higher than male students. There was also an increase of suicide plans of students. Since 2012, Iowa students that had a suicide plan within the last year increased by 53% (6.6% to 10.1%) and BHC has increased by 25.4% (6.7% to 8.4%).

Students Who Binged Alcohol in Last 30 Days

	2012	2014	2016	2018
Iowa	8.00%	5.80%	5.10%	5.10%
Black Hawk County	8.20%	6.10%	4.80%	3.80%
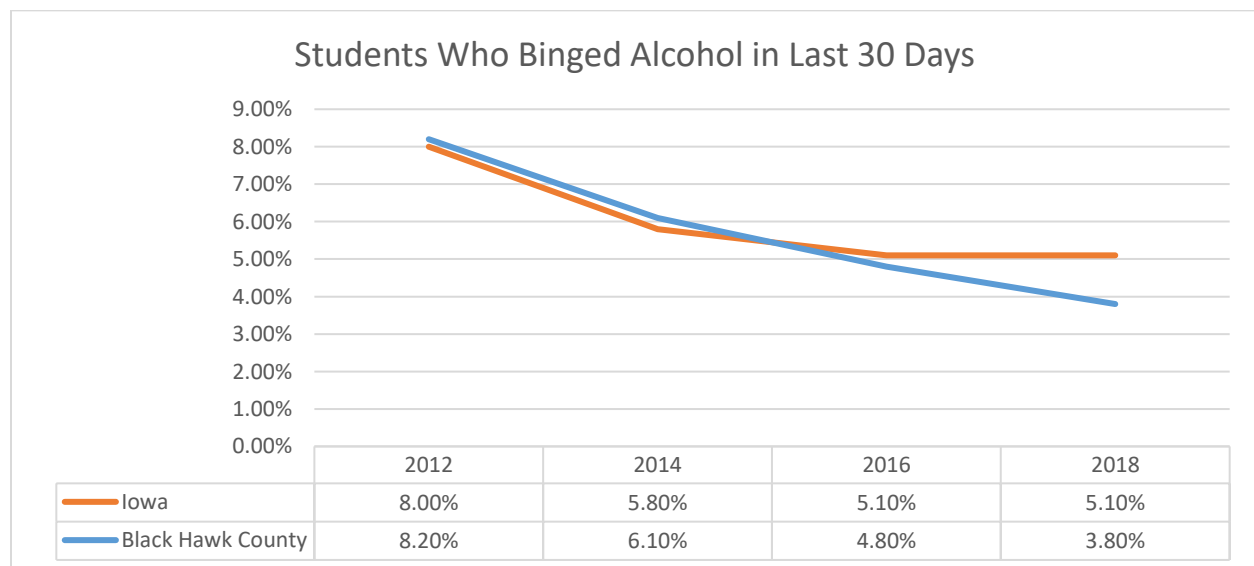
Figure 18. Proportion of survey participants that reported binge drinking in the last 30 days.[9] Rates were significantly different between grade levels. For BHC 11th grade had a rate of 10.5%, while 8th grade had 1.4% and 6h grade had 0.9% in 2018.

Students Who Used Cigarettes in Last 30 Days

	2012	2014	2016	2018
Iowa	4.90%	3.90%	2.60%	2.10%
Black Hawk County	5.10%	4.50%	3.00%	1.40%
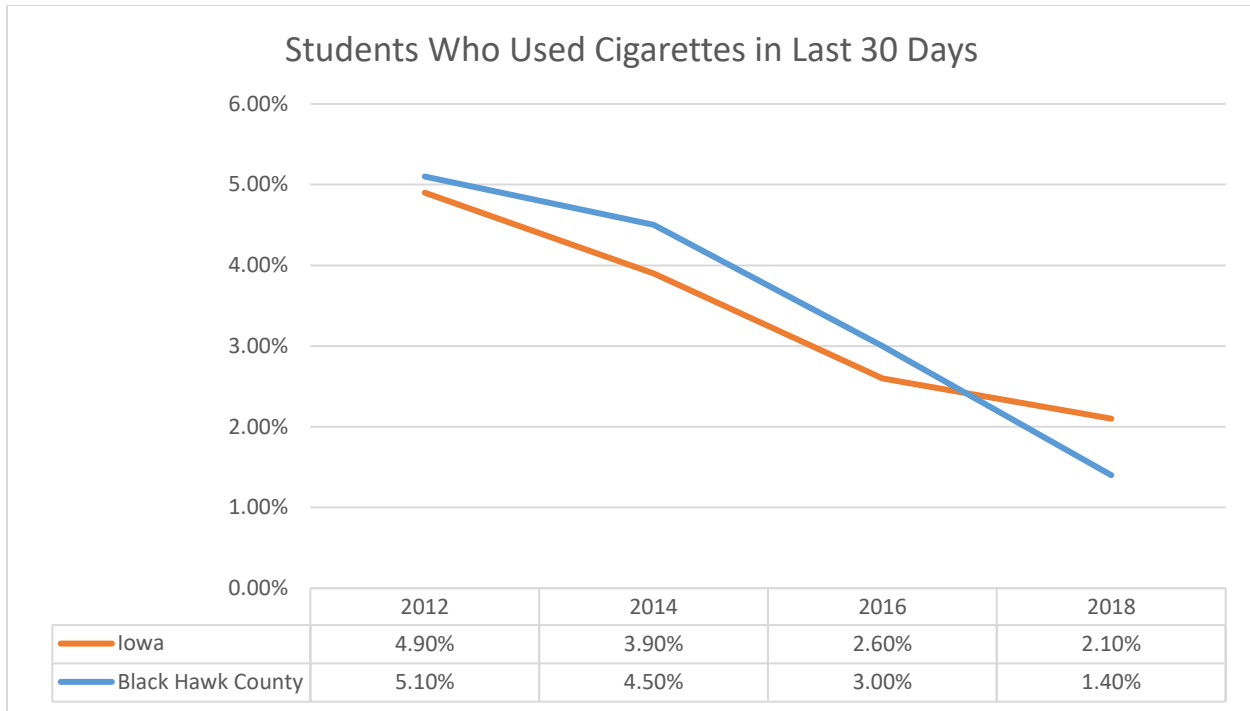
Figure 19. Proportion of survey participants that reported cigarettes use in the last 30 days[9]. Cigarette use was similar between grade levels. For BHC 11th graders had a rate of 3.3%, 8th graders had 1.1%, and 0.3% for 6th in 2018. Figure does not include vaping or e-cigarettes use.

Students Witnessed Bullying at School in Past 30 Days

	2012	2014	2016	2018
Iowa	41.50%	38.70%	36.90%	39.30%
Black Hawk County	39.70%	36.20%	33.70%	39.00%
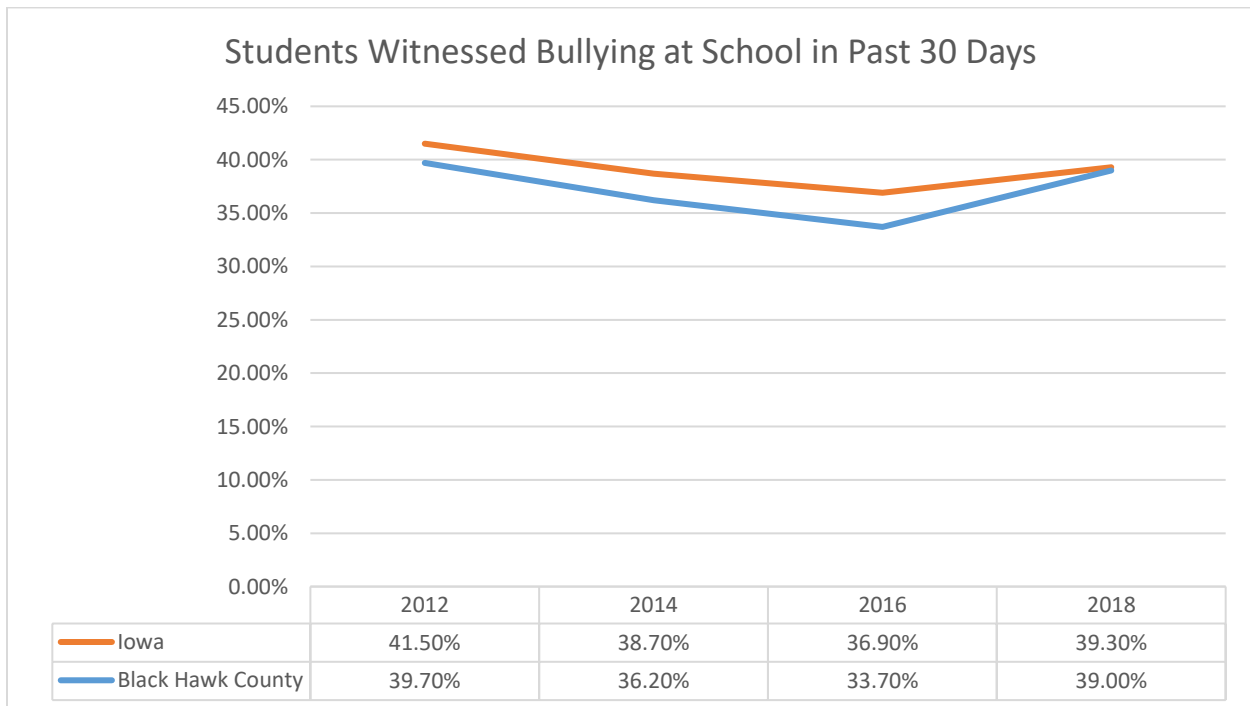
Figure 20. Proportion of survey respondents reporting they had observed bullying occur in their school in the last 30 days[9]. For BHC 11th grade had a rate of 31.4%, 8th grade was 42.9%, and 6th grade was 41.3% in 2018.

All Grades Feelings of Sadness or Hopelessness

	2012	2014	2016	2018
Black Hawk County	15.0%	17.0%	18.0%	22.0%
Iowa	16.0%	17.0%	18.0%	25.0%
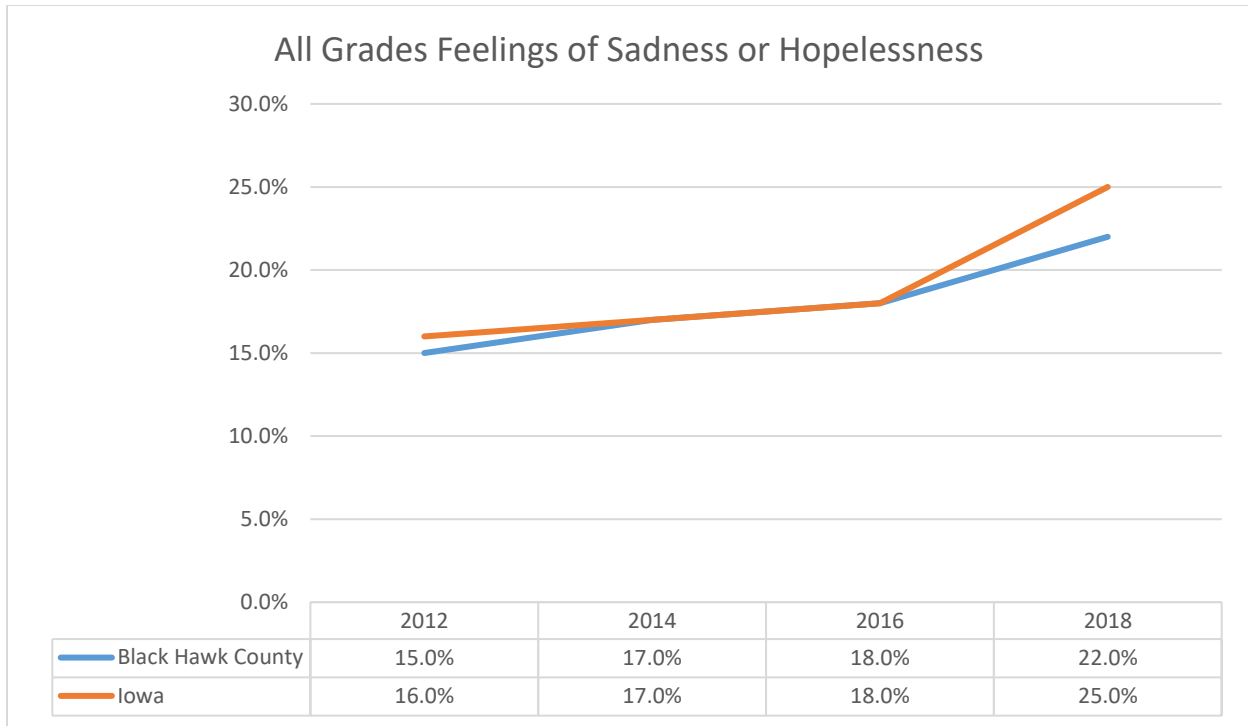
Figure 21. Proportion of students reporting they had felt so sad or hopeless almost every day for 2 weeks or more in a row that you stopped doing some usual activities in the last 12 months.[9]

11th Grade Female vs Male Feelings of Sadness or Hoplessness

	2012	2014	2016	2018
Female	33.0%	31.0%	32.0%	40.0%
Male	15.0%	15.0%	17.0%	25.0%
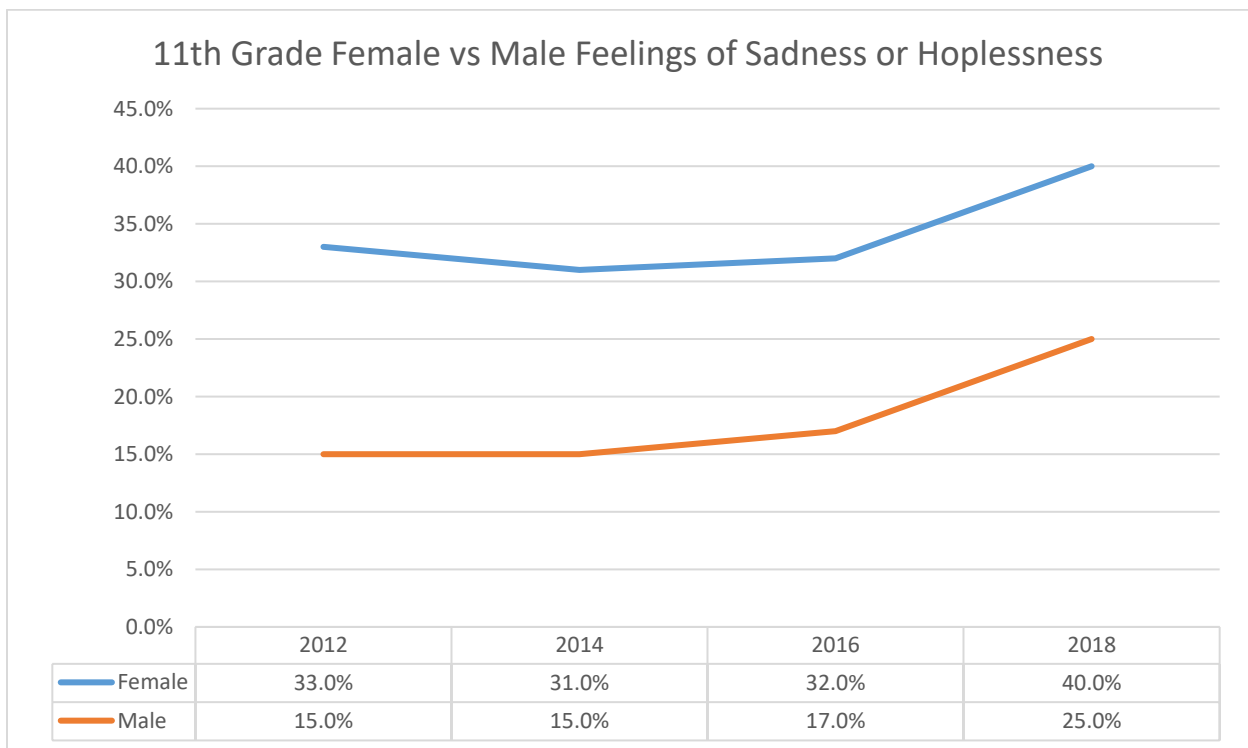
Figure 22. Proportion of students reporting they seriously thought about killing themselves in the last 12 months.[9] 11th grade was chosen because they had the highest proportions of all grades.

25

Students With a Suicide Plan in the Past 12 Months

	2012	2014	2016	2018
Iowa	6.60%	7.90%	7.90%	10.10%
Black Hawk County	6.70%	8.30%	8.20%	8.40%
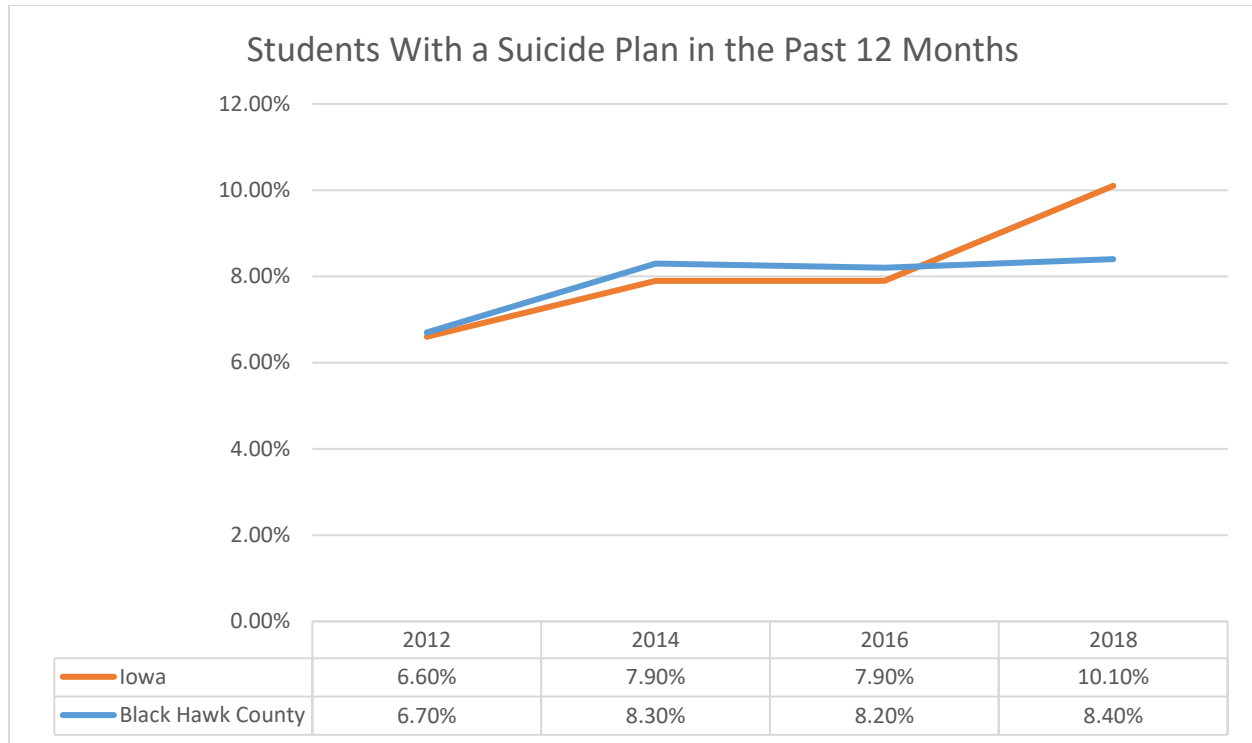
Figure 23. Proportion of survey respondents reporting they had created a suicide plan within the last 12 months.[9] For BHC 11th grade had a rate of 12.2%, 8th graders was 9.0%, and 6th graders was 5.2% in 2018.

11th Grade Female vs Male Suicidal Intentions

	2012	2014	2016	2018
Female	26.0%	20.0%	21.0%	33.0%
Male	14.0%	11.0%	13.0%	21.0%
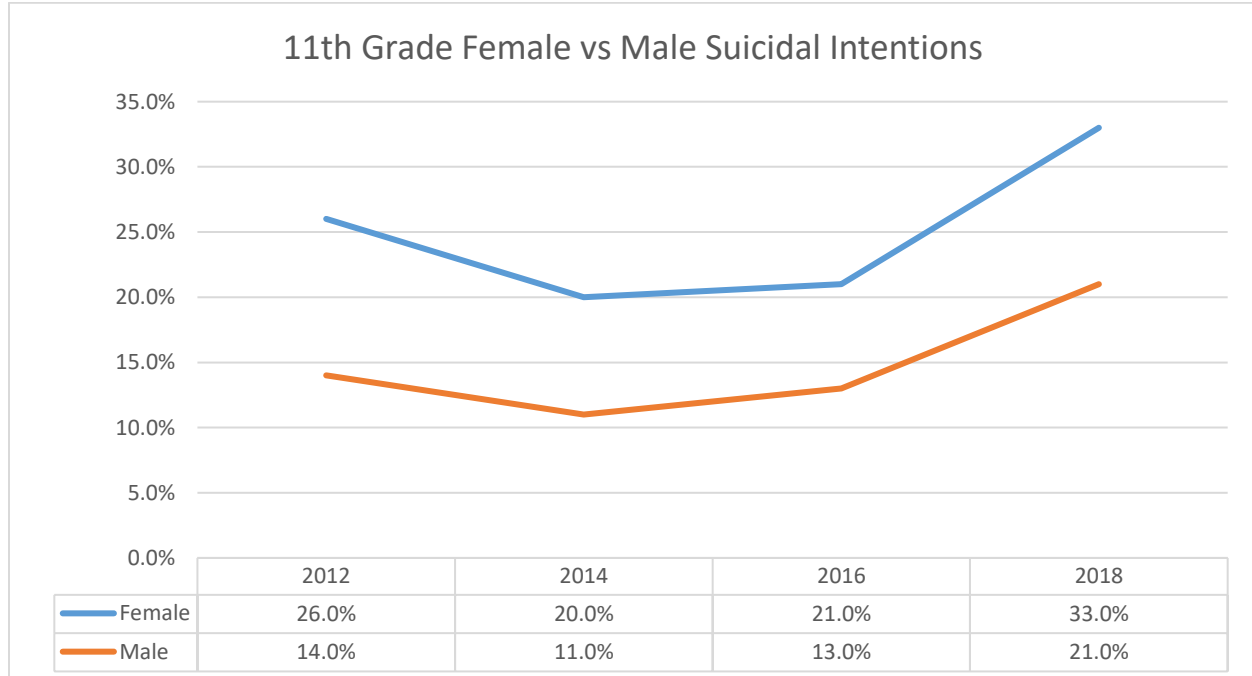
Figure 24. Proportion of survey respondents reporting that they had serious thoughts of killing themselves.[9] 11th grade was chosen because they had the highest proportions of all grades.

Students Who Feel Safe at School

	2012	2014	2016	2018
Iowa	90.10%	89.40%	88.50%	84.30%
Black Hawk County	90.80%	87.30%	87.50%	87.90%

Iowa   Black Hawk County
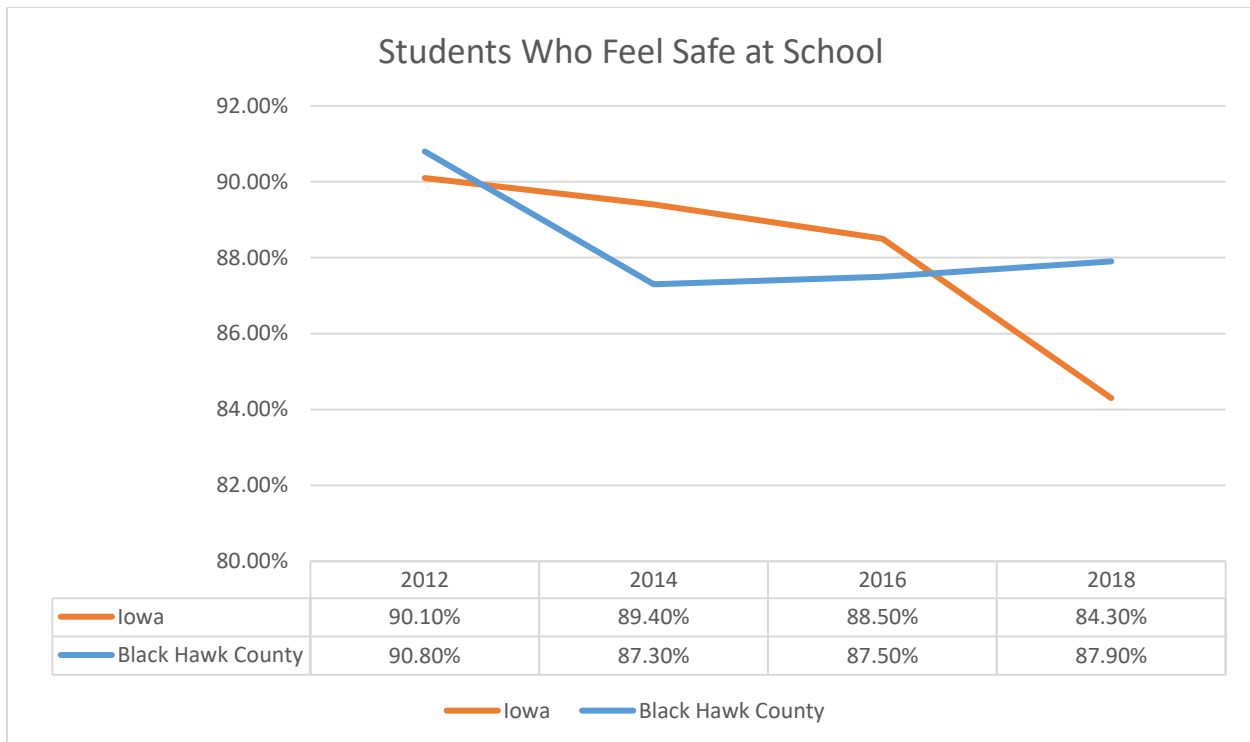
Figure 25. Proportion of survey respondents reporting they feel safe at school.[9] For BHC, 11th grade was 82.2%, 8th grade was 88%, and 6th grade was 91.9% in 2018.

Environmental Health

The population in Iowa using public water supply has increased in the last 4 years. There has been in increase of over 60,000 residents that use public water supply instead of private well water. Moving from a private well to a public water supply may help regulate water contamination. Contamination can occur through natural sources like radon, arsenic, uranium, manganese and nitrate, or the presence of bacteria. Contamination can cause gastrointestinal disease or other adverse health outcomes if not properly treated. Although city water is not completely free of contaminants, there are water treatment methods to reduce bacteria and carcinogens that can cause illness.

Recent trends show that almost 1/3 of private wells tested for coliform bacteria are positive. In BHC over 40% of the wells tested in 2015 and 2016 were positive for coliform bacteria. The wells tested for nitrate show a decreasing trend for positive results. In 2018, less than 15% of the wells tested for nitrate were positive.

Lead exposure is another hazardous environmental factor that is occurring in BHC. The risk of developing lead poisoning or elevated blood lead levels is associated with multiple risk factors common in Waterloo and Cedar Falls. This includes houses built before 1949 and children in families with income below the federal poverty level. The map of BHC illustrates the highest risk areas for homes built earlier

than 1949, with a majority in Waterloo. Throughout the county there is a high lead risk for children under the age of 5 that belong to families earning below the federal poverty level. Western Waterloo has census blocks in both categories of high lead risk and is an area of concern.
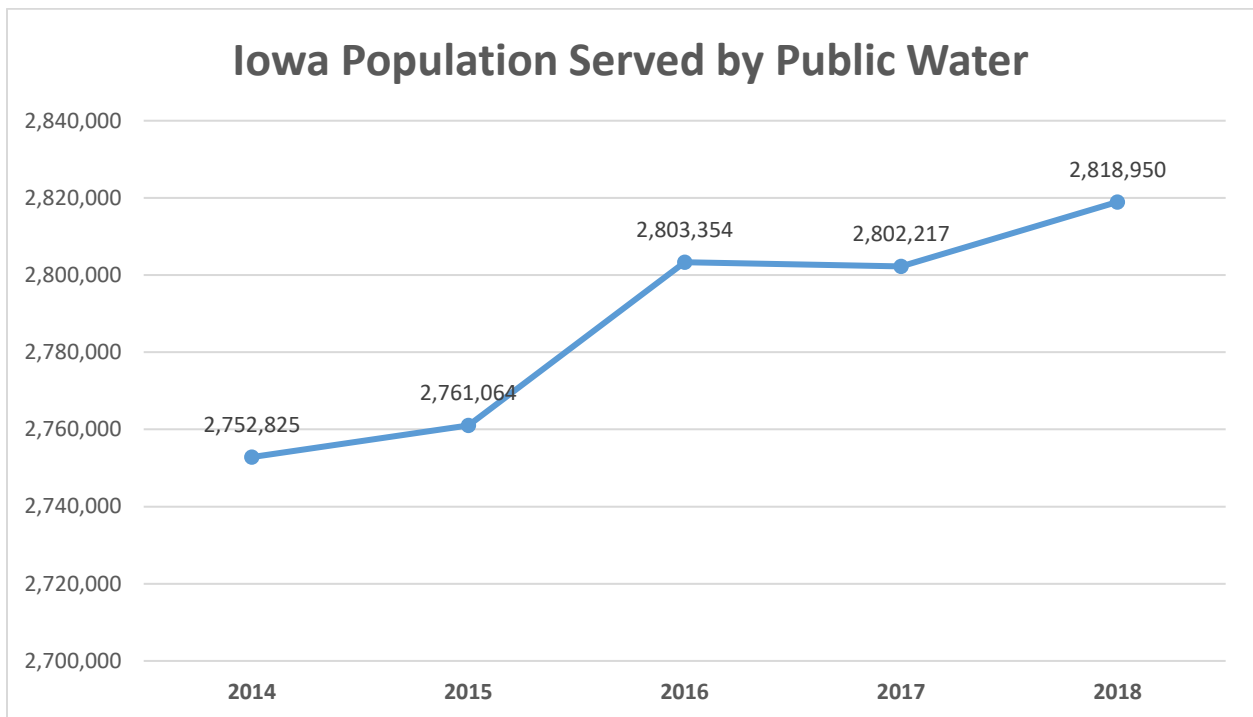
Figure 26. Count of Iowans that use a public water system for a portion of their water needs.[10]

Positive Total Coliform Bacteria in Private Wells

	2014	2015	2016	2017	2018
Black Hawk County	29.60%	44.60%	42.70%	23.50%	30.30%
Iowa	30.30%	32.80%	34.20%	31.80%	35.70%
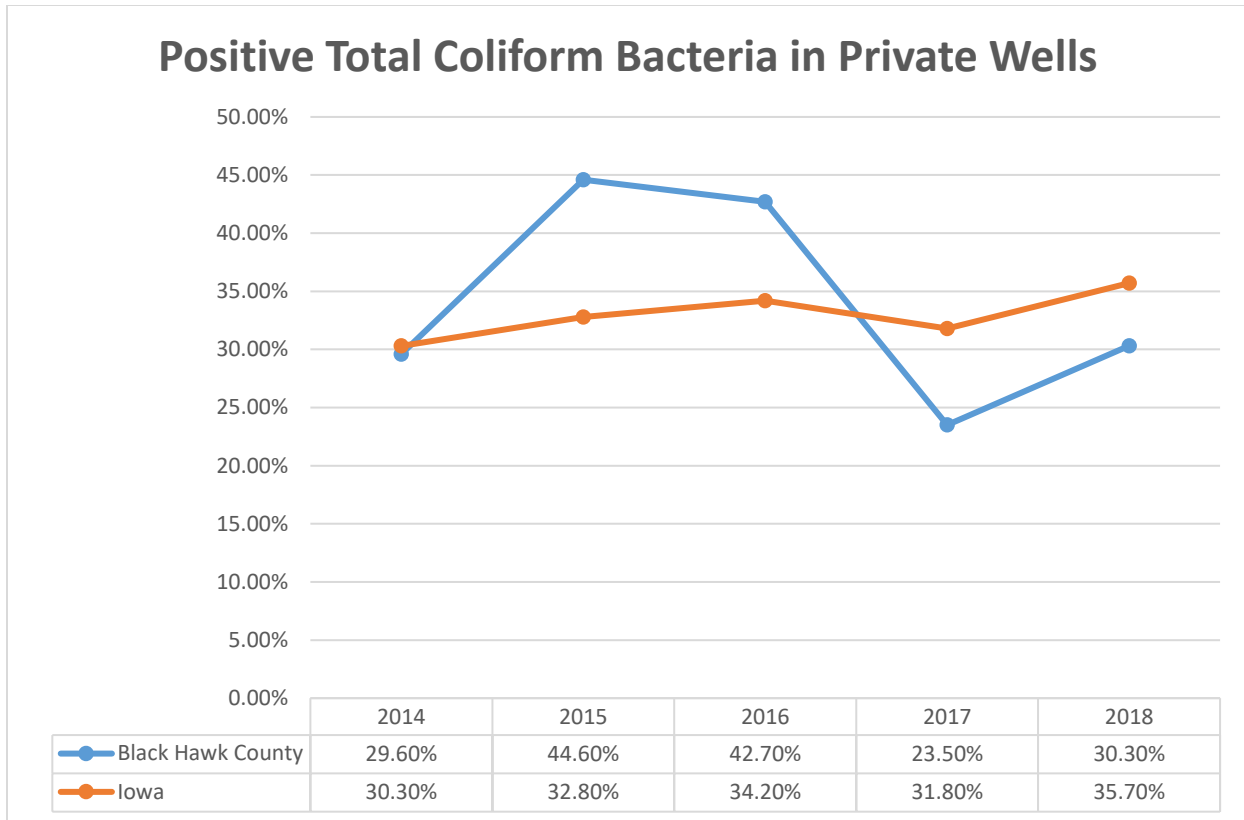
Figure 27. Proportion of positive well water tests that indicate presence of coliform bacteria.[10]

Positive Nitrate Testing in Private Wells

	2014	2015	2016	2017	2018
Black Hawk County	34.80%	35.50%	23.20%	19.50%	12.60%
Iowa	29.10%	16.40%	18.70%	15.80%	11.80%
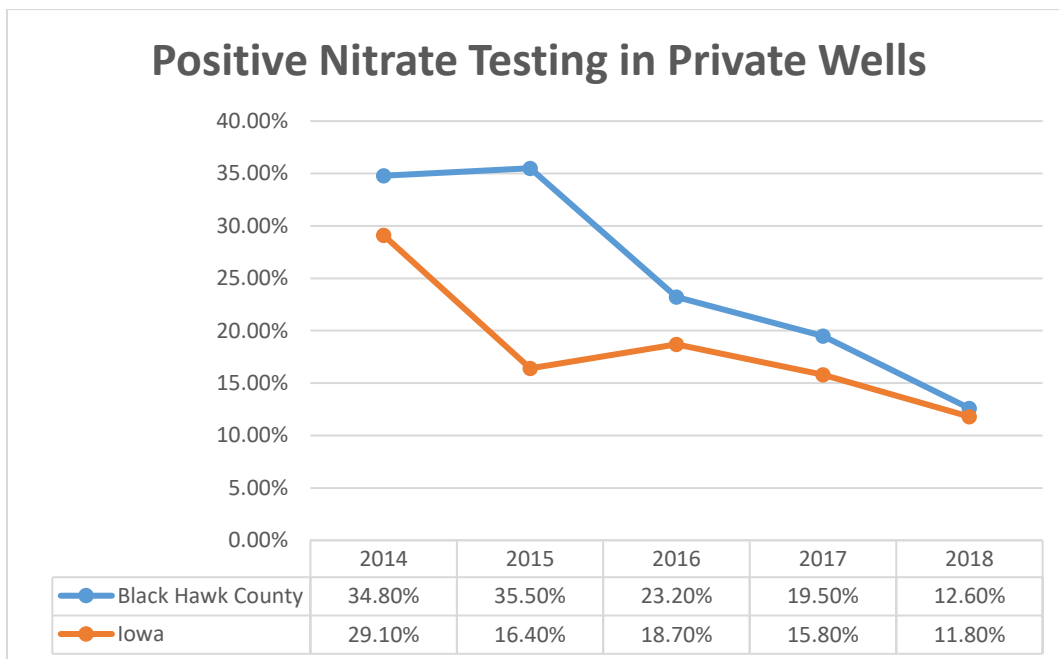
Figure 28. Proportion of positive well water tests that indicate elevated nitrate levels.[10]
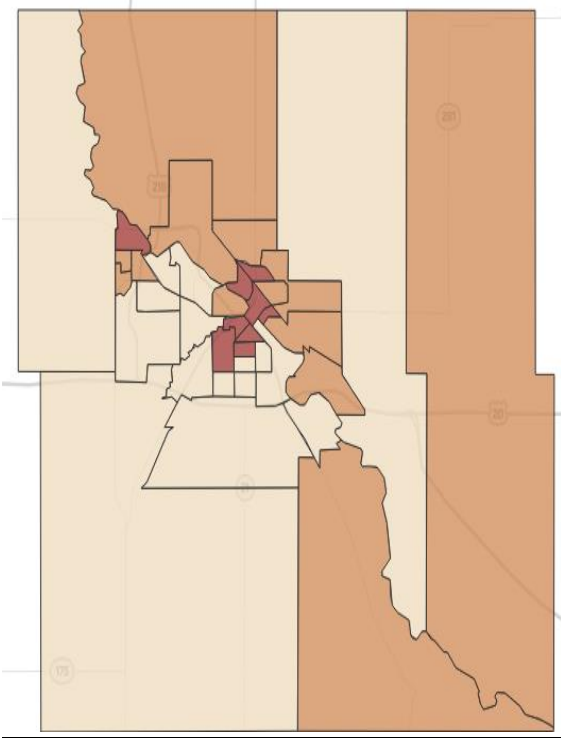
Figure 29. Five year period of lead risks for years 2012-2016. Map broken into census blocks and categorized by increasing risk levels for homes build prior to 1949. Red is the highest lead risk and tan is the lowest.[10]
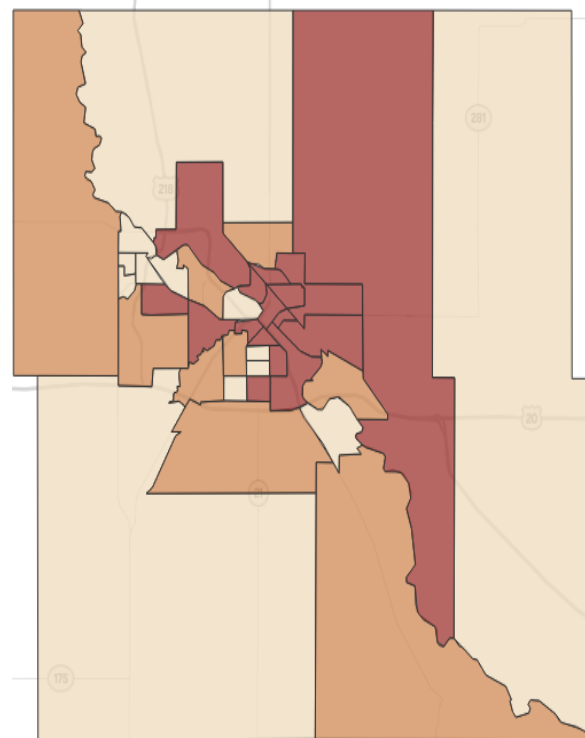
Figure 30. Five year period of lead risks for years 2012-2016. Map broken into census blocks and categorized by increasing risk levels for children under age 5. Red is the highest lead risk and tan is the lowest.[10]

Maternal Child Health

Birth rates in Iowa have been decreasing since 2010. BHC's birth rates have fluctuated each year but have been higher than the Iowa average for every year beside 2011. Birth rates from mothers under age 20 are similar between Iowa and BHC, and have decreased. The age of birth mothers is increasing in Iowa and BHC. The average age increased a little over 1 year from 2010 to 2018, but BHC's mothers on average are 1/3 year younger than the state average. This trend is also clear at the federal level. The CDC attributes the increase in average age to fewer teens having babies. BHC had a higher proportion of singleton births that were low birth rate compared to Iowa.

Live Births per 1000 Population

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Black Hawk County	12.9	12.4	13.1	12.7	13.3	13.3	12.6	13	12.3
Iowa	12.6	12.5	12.6	12.6	12.8	12.6	12.5	12.2	11.9
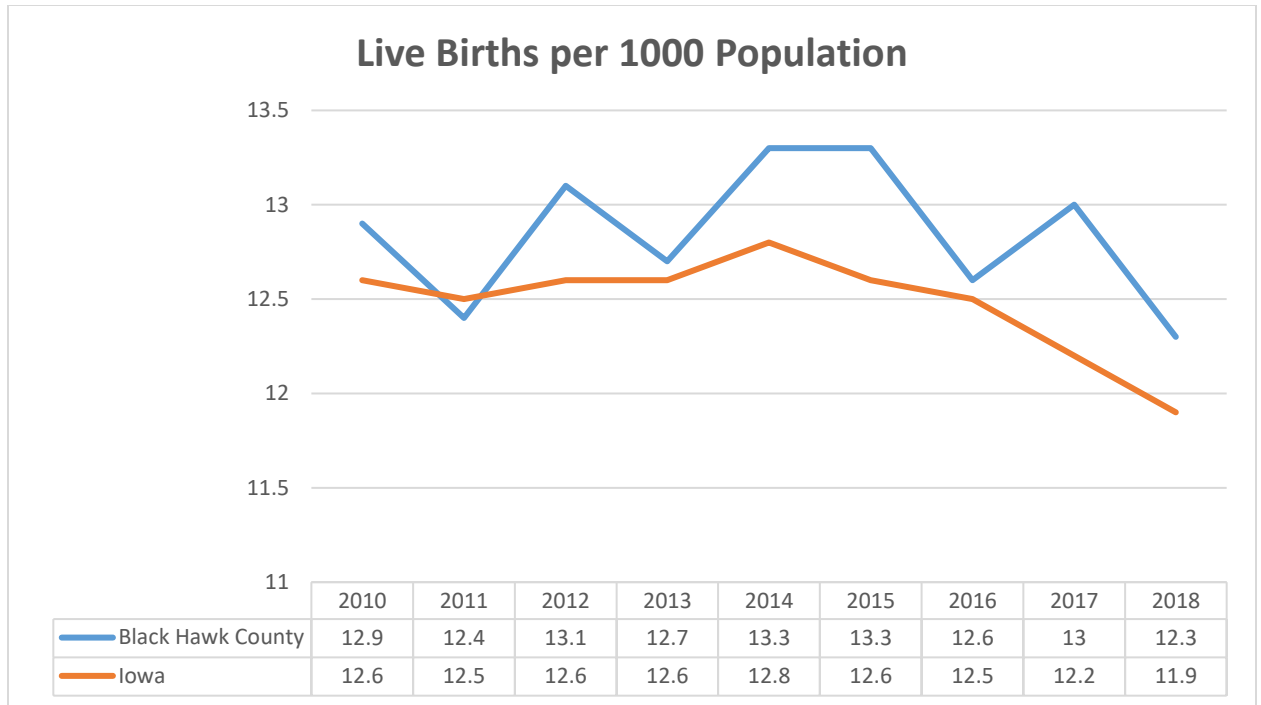
Figure 31. Trend comparison between Iowa and Black Hawk County. Live birth rates include first time mothers of all ages. Rates calculated per 1000 population.[10]

Live Birth Rates of Mothers Under 20 per 1000 Population

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Black Hawk County	16.4	11.5	11.2	10.4	9.7	9.7	7.7	8.2	7.3
Iowa	13.8	12.3	11.6	10.7	9.6	9	8.2	7.7	7.4
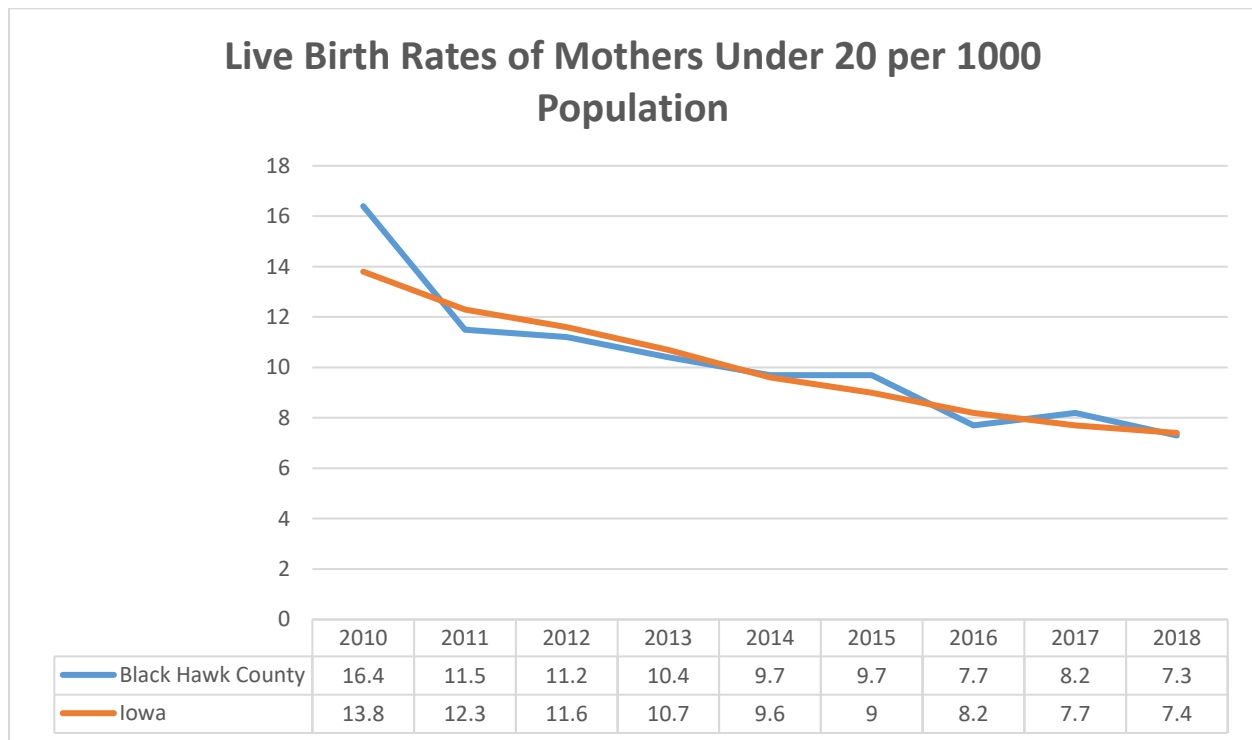
Figure 32. Trend comparison of birth rates in Iowa and Black Hawk County. Rates are first time mothers under 20 years and calculated per 1000 population.[10]
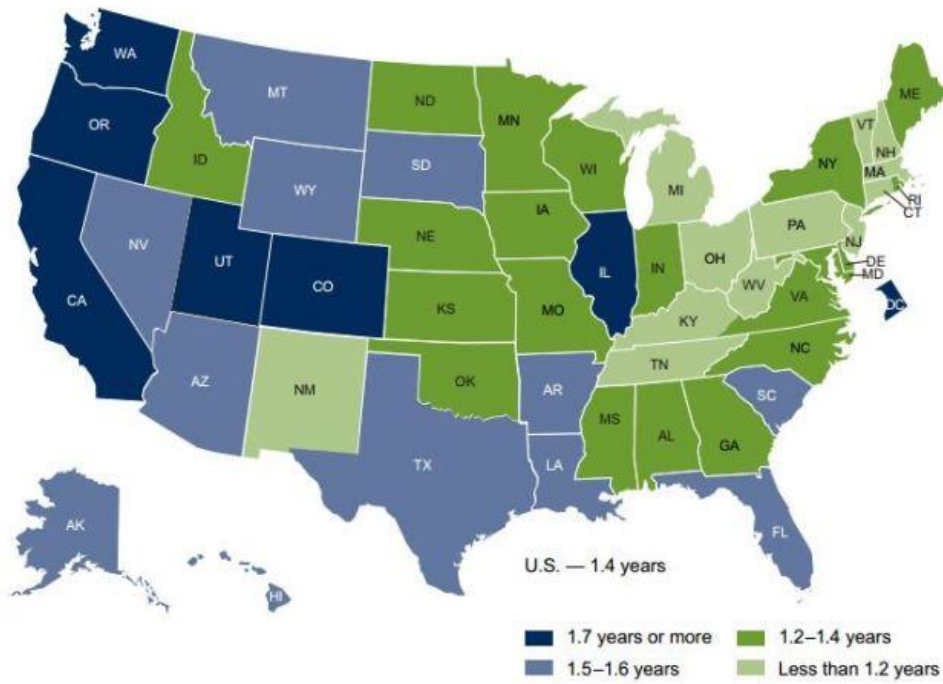
Figure 33. 2014 maternal age trends across the United States.[11]

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Black Hawk County	26.9	27.1	27.5	27.3	27.6	28.2	27.7	28.1	28.3
Iowa	27.4	27.5	27.6	27.8	28	28.2	28.3	28.5	28.6
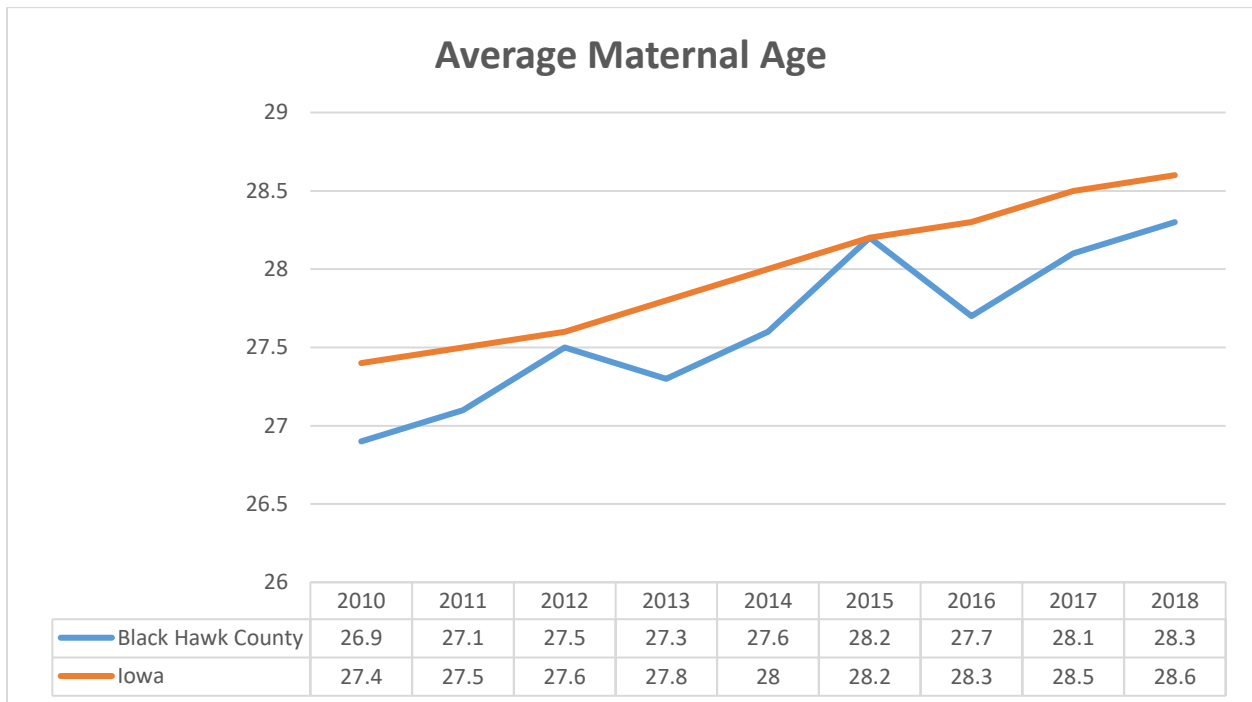
Figure 34. Average maternal age comparison between Iowa and Black Hawk County. Mothers were defined as the first name on the birth certificate. Mothers that did not birth the child were excluded.[10]

Low Birth Weight Singleton Full Term Births

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Black Hawk County	2.12%	2.02%	1.43%	2.05%	1.52%	1.79%	2.33%	2.21%	2.14%
Iowa	1.72%	1.71%	1.63%	1.66%	1.59%	1.73%	1.75%	1.78%	1.82%
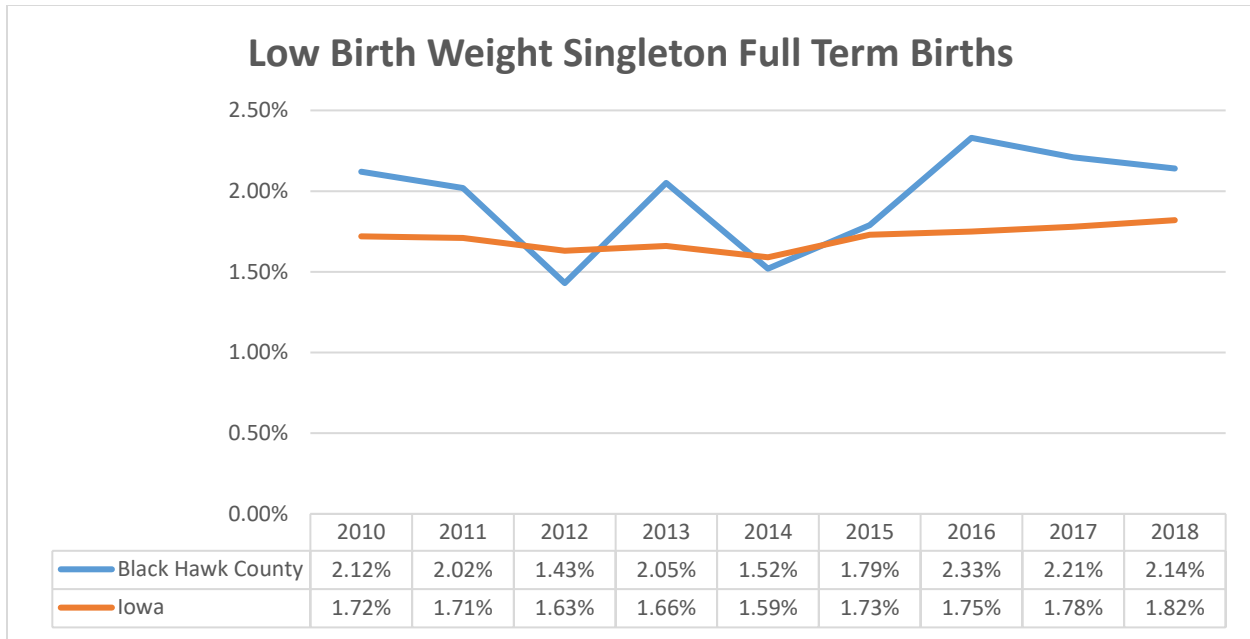
Figure 35. Trend comparison between Iowa and Black Hawk County of low birth weight singleton births.[10]

Injury and Mortality

BHC has lower 5 year age-adjusted mortality rates for transportation, poison, and fall mortality compared to Iowa. Further, motor vehicle traffic and all transportation mortality is much lower than the Iowa average. In BHC, less than 1% of the motor vehicle accidents result in fatality with 52.6% occurring in Waterloo and 15.8% in Cedar Falls.

BHC has a higher homicide and all other unintentional mortality rate compared to Iowa. This is potentially due to the presence of large cities in BHC. To further investigate the homicide rate, we compared BHC to Linn County and Johnson County. However, Johnson County's rate was suppressed due to their lower rates. Although Linn County has demographic and population differences compared to Black Hawk, it offers a reference point to compare BHC to other counties in Iowa. Linn County's homicide rate is only 3.5 per 100,000 compared to BHC's 4.2 per 100,000. This shows us that there might still be an underlying factor contributing to the higher rate of homicide. The United States homicide rate is 2.2X higher than BHC's (BHC = 4.2, US = 9.2), so BHC's rate is low relative to other areas in the United States.

The suicide rate in Iowa and BHC is higher than The United States average. The United States average for suicides is 13.2 per 100,000 population, which is lower than Iowa and BHC rates (Iowa = 13.8 per 100k, BHC = 14 per 100k).

5 Year Mortality Age-Adjusted Rate per 100k Population (2013-2017)

	All Transportation Mortality	Falls Mortality	Motor Vehicle Traffic Mortality	Suicides Mortality	Firearms Mortality	Poison Mortality	Homicides Mortality	Burns Mortality	All other Unintentional Mortality
Iowa	11.1	12.2	9.8	13.8	8	9	2.6	1.1	6.4
Black Hawk County	8	11.6	7	14	8.2	8.9	4.2	1.5	7.4
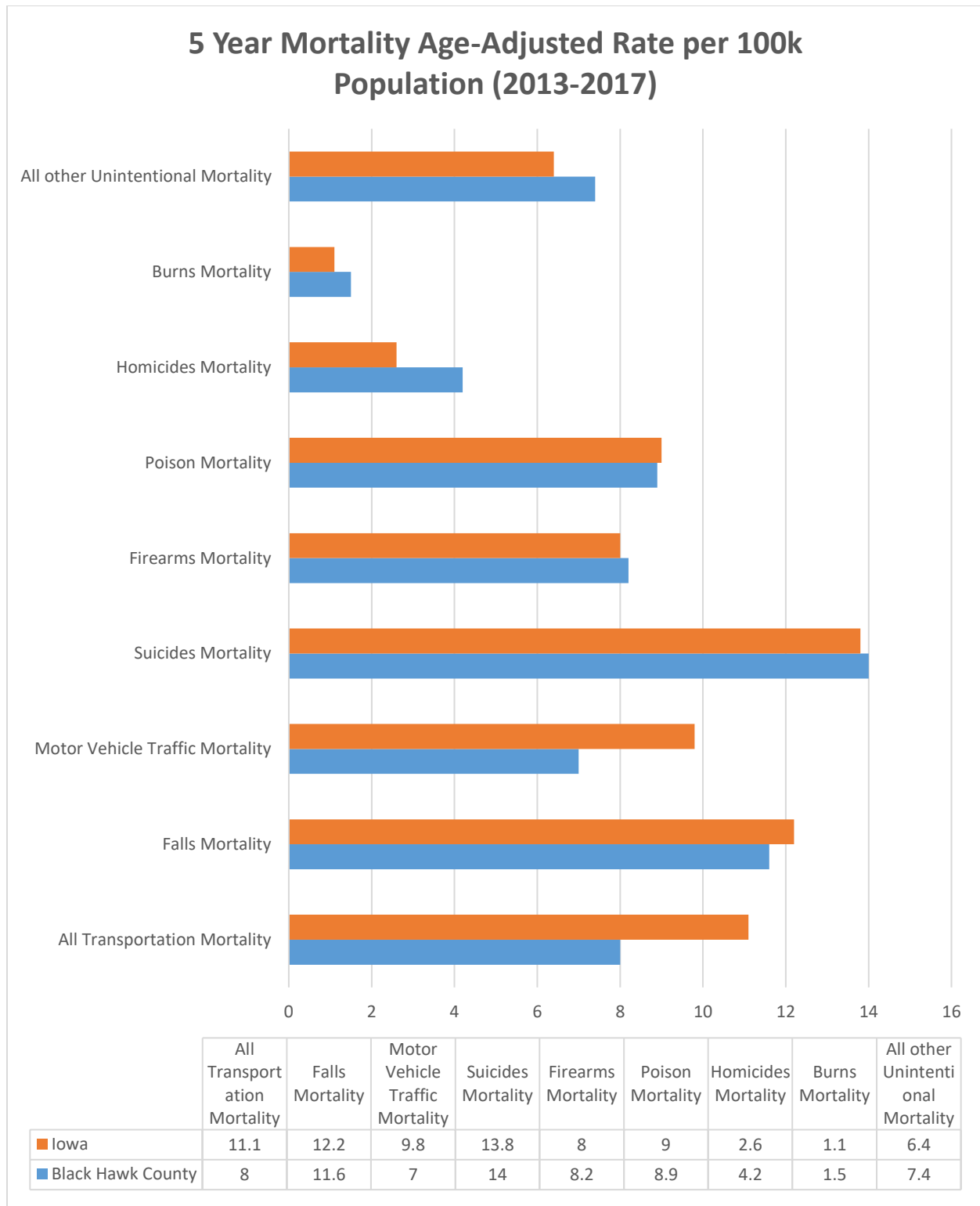
Figure 36. 2013-2017 Five year mortality rates of Iowa and BHC. All age groups were included in analysis and were age adjusted. Rates calculated per 100,000 population.[15]

Chronic Disease

Chronic diseases account for 7 of the 10 top leading causes of death in the United States. The top 2 leading causes of death are heart disease and cancer. According to the American Cancer Society (2019), they expect almost 6,500 Iowans to die of cancer in 2019.[12] The American Heart Association recently published an article for cardiovascular disease. They found that the cardiovascular disease death rate for Iowa was 213.5 per 100,000 population for 2013-2015.[13] This is 22.4% lower than the rate in 2003-2005 (275.1 per 100,000). The average cardiovascular disease death rate in the United States has decreased by 25.5% since 2003-2005 to 2013-2015 (297.9 to 221.9).[13]

The 5-year cancer incidence for 2012-2016 is similar between BHC and the Iowa average. BHC has a lower incidence rate for colorectal cancer and thyroid cancer, but a higher breast cancer incidence rate and lung cancer rate compared to the Iowa average. The United States incidence rates for 2011-2015 were 124.7, which is lower than the BHC rate of 140.1.[10]

COPD hospitalization trends for Iowa and BHC are decreasing for every age group excluding 45-64 years. Although the Iowa average appears to be decreasing since 2015, BHC's rates for this group are increasing. The COPD rates in BHC have been far lower than the Iowa average. The asthma hospitalization rates for the children under the age of 5 is much higher in BHC than the rest of Iowa. In 2018, the Iowa average was only 58.0% of BHC's (BHC = 143.4, Iowa = 83.2).

5 Year Cancer Incidence 2012-2016

Cancer Type	Iowa	Black Hawk County
Thyroid Cancer	14.4	10
Pancreatic Cancer	13.2	15.1
Oral Cavity and Pharynx Cancer	13	11.5
Melanoma of the Skin	26.2	26.8
Non-Hodgkin Lymphoma	21.2	19.2
Lung and Bronchus Cancer	62.7	66.3
Liver Cancer	6.5	5.9
Leukemia	16.5	13.6
Laryngeal Cancer	3.8	5.6
Kidney Cancer	18.8	19.8
Female Breast Cancer (50 years and older)	336.1	361.9
Female Breast Cancer (Under 50 years old)	42.6	55.4
Female Breast Cancer (all ages)	123.7	140.1
Esophageal Cancer	5.6	4.1
Colorectal Cancer	44.2	39.5
Bladder Cancer	21.4	23.7

■ Iowa ■ Black Hawk County

Figure 37. 2012-2016 Five year cancer incidence of Iowa and BHC. All age groups were included in analysis and were age adjusted. Female breast cancer was further broken down by age to show differences in rates. Rates calculated per 100,000 population.[10]

COPD Hospitalization Rates per 100K Population for Age 45-64 Years

	2015	2016	2017	2018
Black Hawk County	179.8	166.8	180.2	207.2
Iowa	202.1	217.3	229.3	179.9
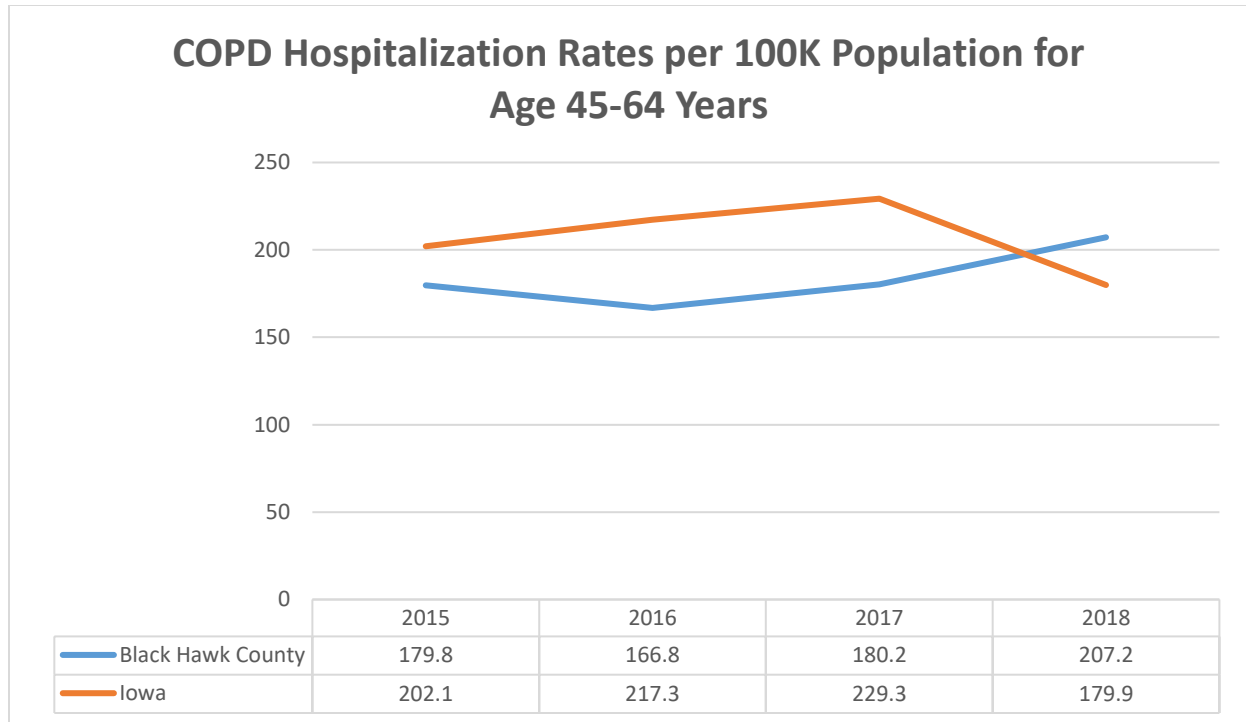
Figure 38. COPD hospitalization rates for Iowa and BHC. Rates calculated for individuals age 45-64. Rates calculated per 100,000 population.[10]

COPD Hospitalization Rates per 100K Population for Age 65-84 Years

	2015	2016	2017	2018
Black Hawk County	569.3	445	550.2	434.7
Iowa	671	661.7	782.1	534.6
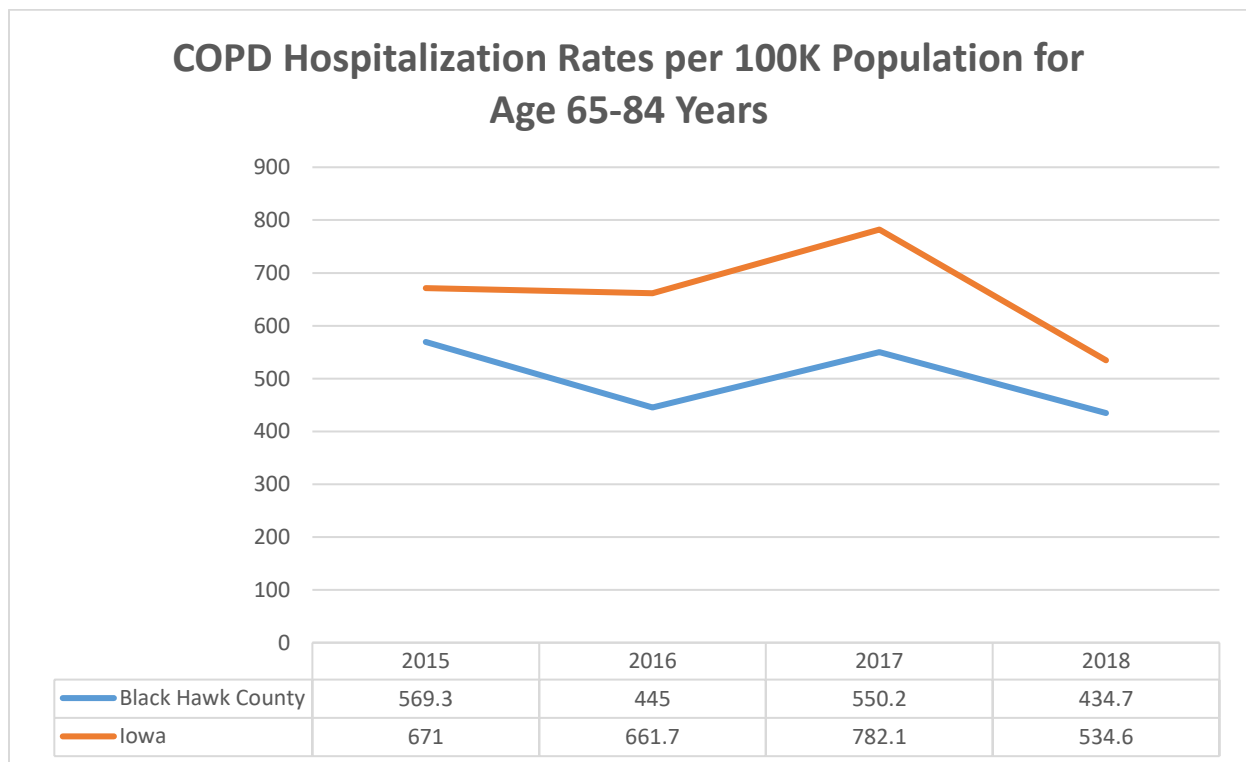
Figure 39. COPD hospitalization rates for Iowa and BHC. Rates calculated for individuals age 65-84. Rates calculated per 100,000 population.[10]

	2015	2016	2017	2018
Black Hawk County	938.4	861.8	1067.2	356.4
Iowa	824.6	906	1203.7	768.7
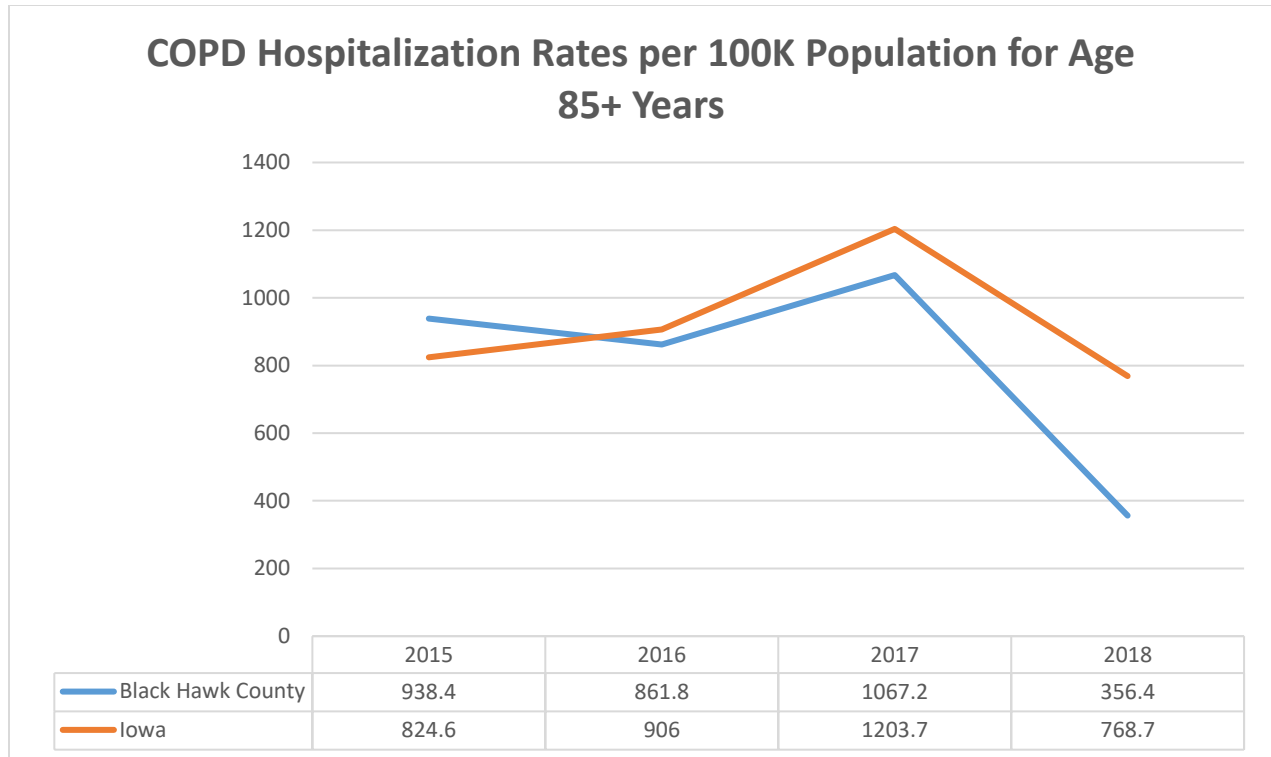
Figure 40. COPD hospitalization rates for Iowa and BHC. Rates calculated for ages 85+. Rates calculated per 100,000 population.[10]

	2015	2016	2017	2018
Black Hawk County	132.6	163	165.7	143.4
Iowa	100.6	101.3	106.5	83.2
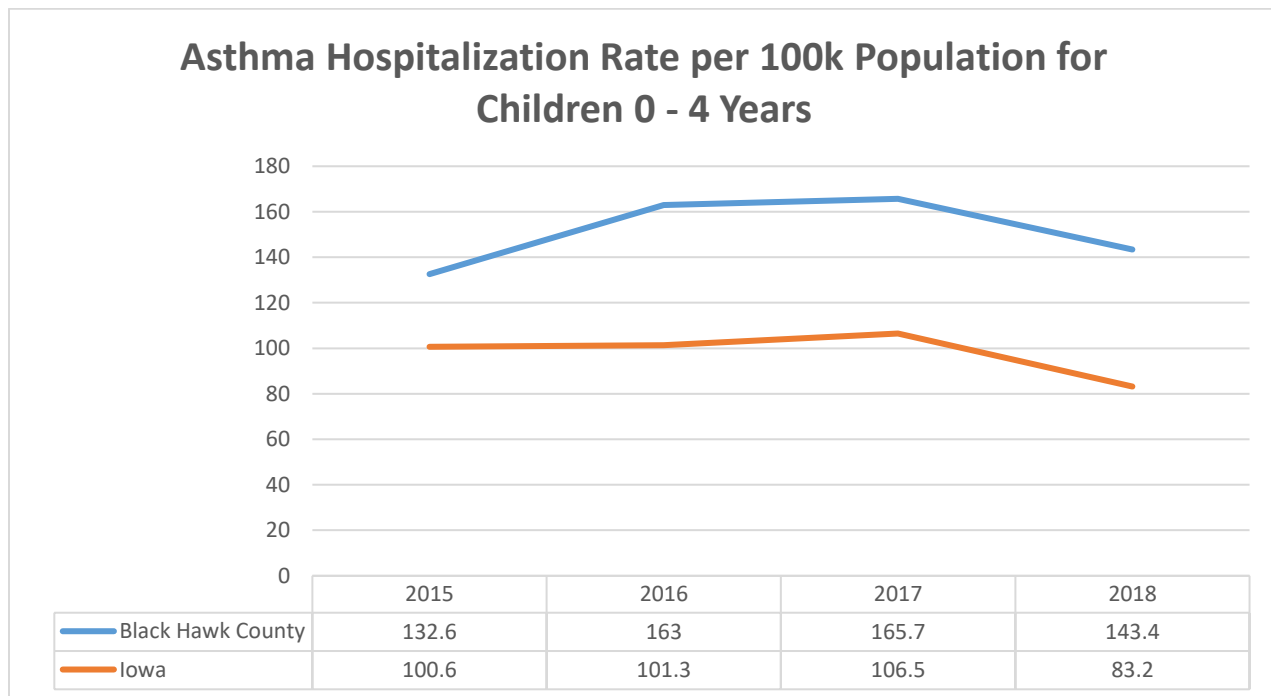
Figure 41. Asthma hospitalization rates for Iowa and BHC. Rates for children under age 5 and calculated per 100,000 population.[10]

Heart Attack Hospitalization Age-Adjusted Rate per 100k Population

	2015	2016	2017	2018
Black Hawk County	316.5	327.6	323.2	272.4
Iowa	289.1	304.5	304	278.7
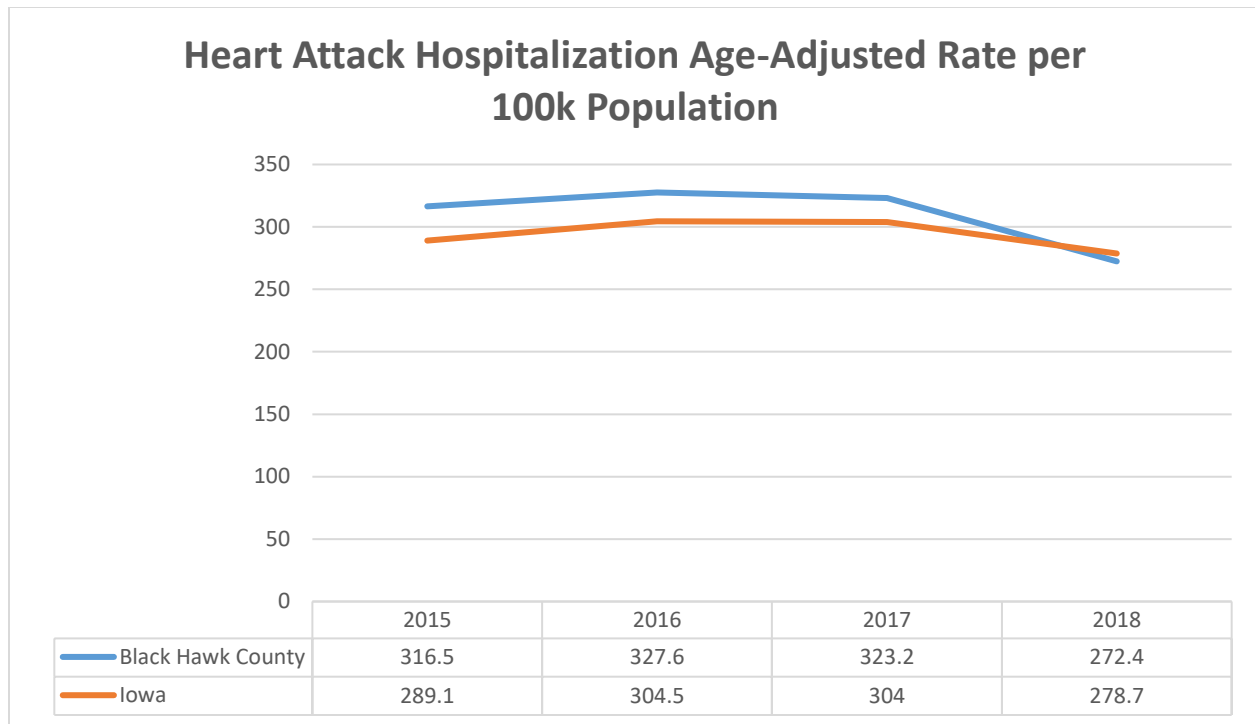
Figure 42. Heart attack hospitalization rates for Iowa and BHC. Rates include all ages and were age-adjusted. Rates calculated per 100,000 population.[10]

Communicable Disease

Combined cases of syphilis, chlamydia, and gonorrhea are increasing in the United States. In 2018, these sexually transmitted infections (STIs) reached an all-time high.[11] Medical treatment can cure these STIs, but they can cause health problems if left untreated including miscarriage, stillbirth, and newborn death. The CDC suggests that the rates are increasing due to multiple factors, including access to STI prevention and care, decreased condom use in vulnerable populations, and STI program cuts.

There has been a steady increase in STI rates in BHC and the rest of Iowa. BHC has had higher Chlamydia and Gonorrhea rates than the rest of Iowa. In 2018, Iowa ranked as one of the better states for average STI rate, but BHC had similar rates to the bottom ranking states. Although BHC does not have the worst rate in the United States, the CDC has classified it with the worst ranking counties.

Enteric diseases in BHC have been lower than the Iowa average for most years between 2006 and 2018. Both trends appear to be increasing since 2006, but the Iowa average is increasing at a faster rate than BHC. In 2018, BHC's rate for all enteric diseases was only 67.1% of Iowa's (BHC = 38.45, Iowa = 57.28). The sporadic trend of enteric diseases can be explained by clustered outbreaks. In 2015, BHC had an outbreak of diarrhea in a school, which explains why the BHC rate is higher than Iowa's for that year.
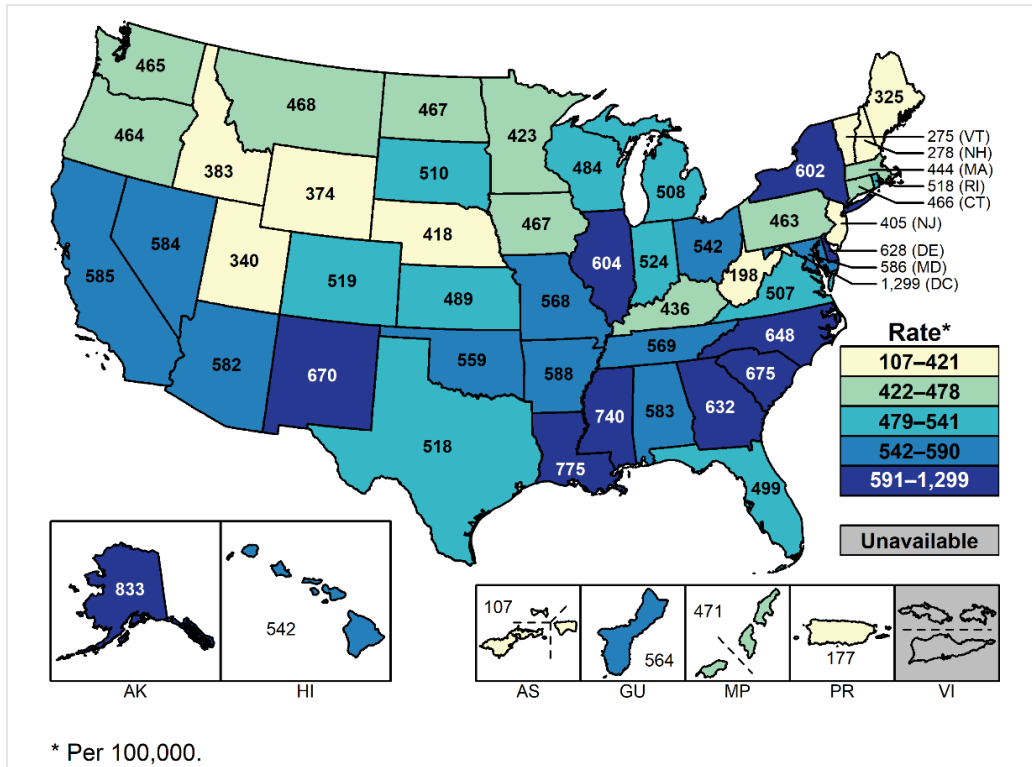
Figure 43. Sexually transmitted infection rates across the United States. Rates calculated per 100,000 population.[11]
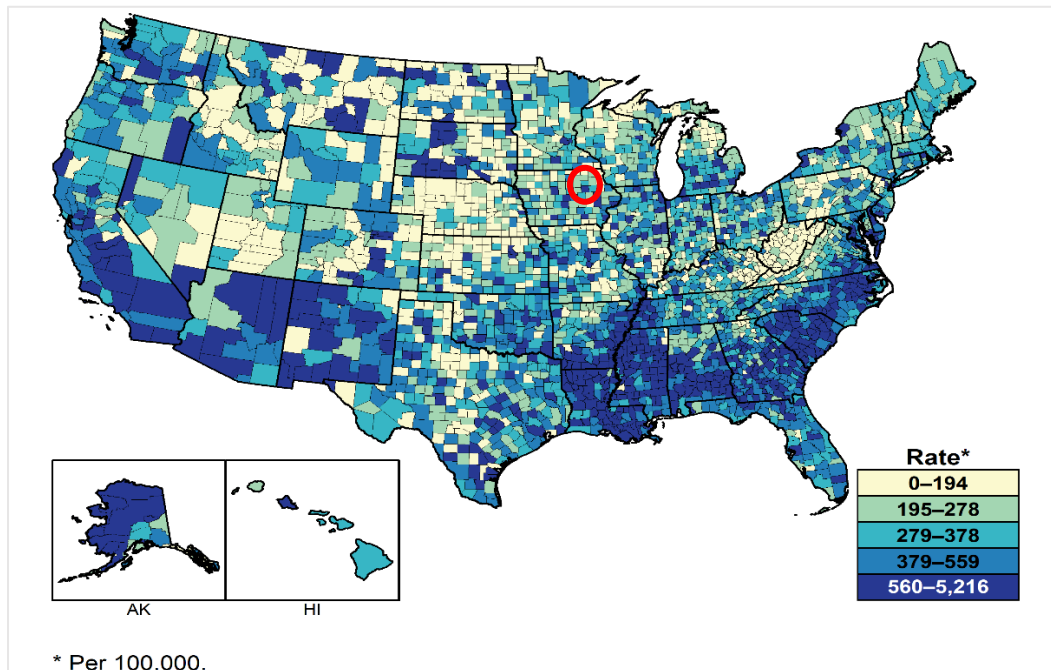
Figure 44. Sexually transmitted infection rates across the United States broken down by county. Red circle indicates BHC. Rates calculated per 100,000 population.[11]

Chlamydia Rates per 100,000 Population

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
BHC	532	581	642	746	730	693	662	670	617	631	718	776	757
State	284	291	314	313	350	363	366	361	376	390	416	443	467
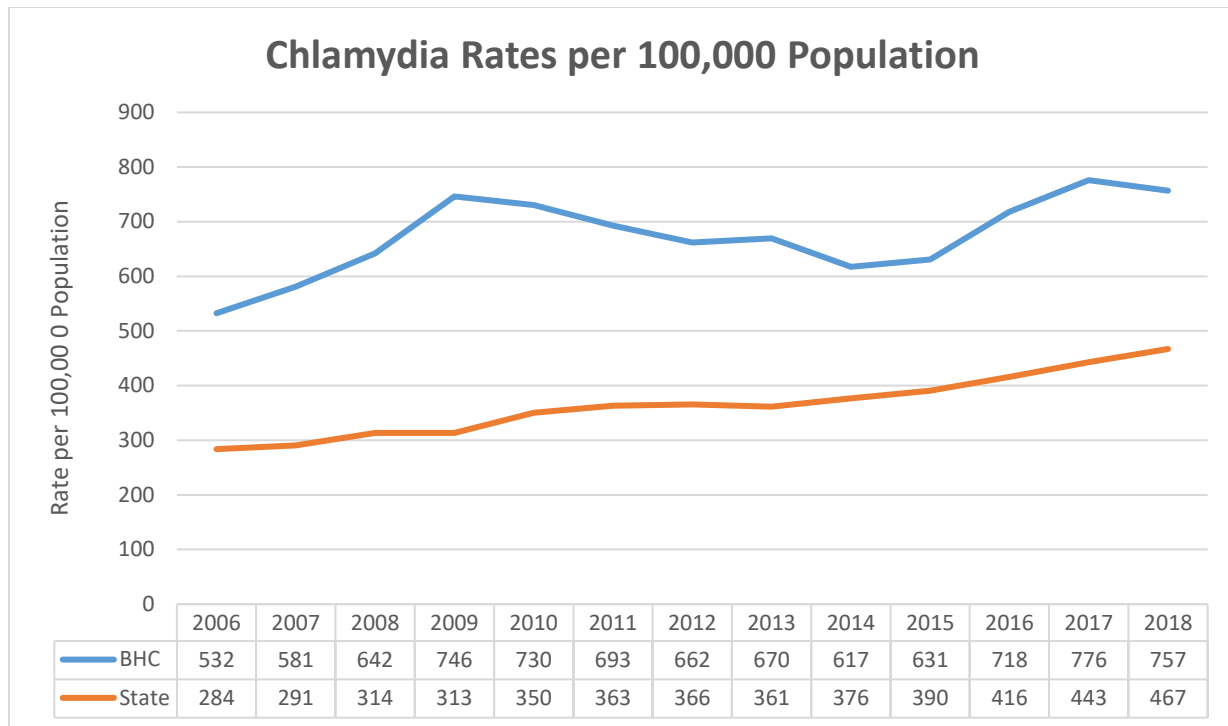
Figure 45. Chlamydia rates for Iowa and BHC. Rates calculated per 100,000 population.[10]

Gonorrhea Rates per 100,000 Population

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
BHC	177	183	167	180	153	205	138	68	150	204	203	239	310
State	67	65	57	55	60	65	65	48	53	72	83	120	154
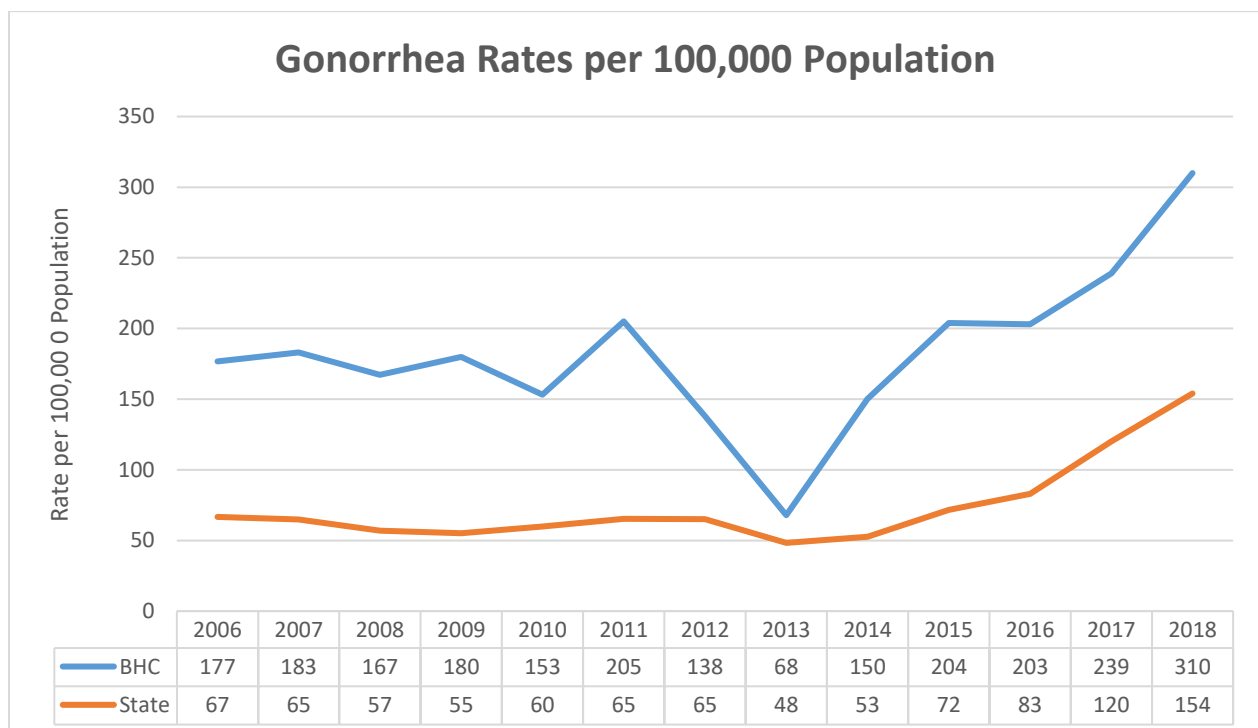
Figure 46. Gonorrhea rates for Iowa and BHC. Rates calculated per 100,000 population.[10]

Enteric Disease Rates per 100,000 Population

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
BHC	48.43	25.00	17.14	15.62	18.86	26.41	24.30	21.90	24.14	62.62	31.69	25.58	38.45
Iowa	26.76	27.65	31.84	22.62	25.31	21.76	29.30	35.60	31.84	48.62	49.73	38.19	57.28
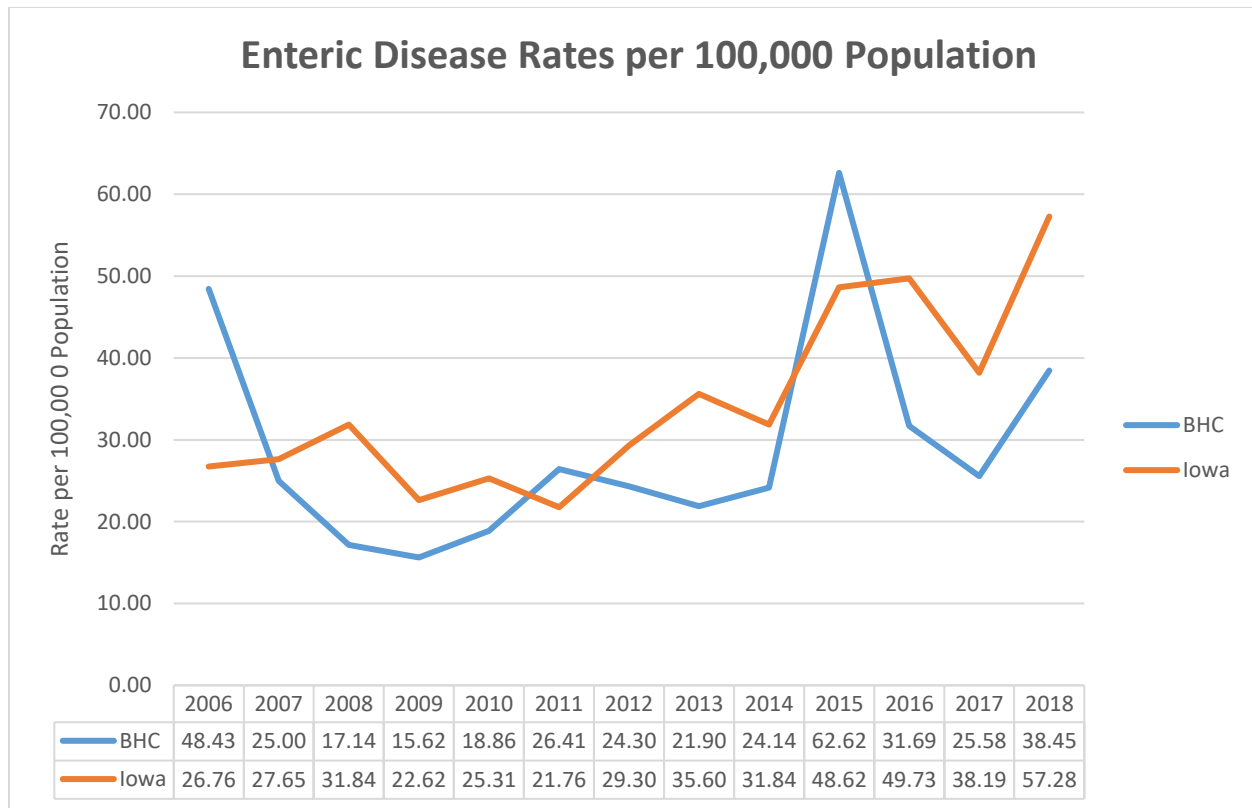
Figure 47. Enteric disease rates for Iowa and BHC. Rates calculated per 100,000 population.[10]

Inpatient / Outpatient

Inpatient and Outpatient records were obtained from IDPH for discharge dates 1/1/2013 through 12/31/2017. The data query was based on principal diagnosis of the following diagnoses, mental disorders, acute myocardial infarction, heart failure, asthma, cerebrovascular diseases, and accidental falls. The ICD-9 codes were all mental health diagnoses, acute myocardial infarction, heart failure, cerebrovascular diseases (excludes transient cerebral ischemia), asthma, accidental falls, and injuries due to war by other forms of unconventional warfare. Additional ICD-9 codes were obtained for outpatient records including, oral diseases and damaged teeth. These codes represent falls and oral health. Comorbidity data was also collected for each primary diagnosis, but is not included in this report.

Inpatient

The analysis of inpatients diagnosed with asthma showed that patients were 59% female and 41% male. The average age was 25.9 years with a range of patients age 1 to 87. Children under the age of 5 made up 29.4% of the asthma patient population. The patients needing to go to the emergency room was 75%. The racial composition of these patients was 49% White, 43% Black, and 8% all other races combined.

Mental disorders made up the majority of data requested for inpatient hospitalizations. This was due to the emphasis on understanding mental health care and treatment in our community. The breakdown of patients diagnosed with mental health disorders by race showed that 82.5% were White, 14.6% were Black or African American, and 2.9% were all other races combined. The patients were 45.7% female and

54.3% male. The average age of a mental disorder patient was 37.8 years, with an age range of 5 to 91. Of patients hospitalized for a mental health disorder 79.1% were admitted through the emergency room. A majority of patients were diagnosed with mood [affective] disorders (51.0%) or mental and behavioral disorders due to psychoactive substance use (24.2%).

Patients that were diagnosed with heart failure had an average age of 73 years old. The sex distribution was 53.1% female and 46.9% male. A majority of the patients were White (85.9%). A large portion (84.0%) of the patients presented to the emergency room for their diagnosis. Patients that were diagnosed with acute myocardial infarction had an average age of 68 years. The sex distribution was 39.5% female and 60.5% male. A majority of the patients were White (87.9%). A large portion (90.6%) of the patients went to the emergency room for their diagnosis.

Patients that were diagnosed with cerebrovascular disease had an average age of 73 years old. The sex distribution was 45.9% female and 54.1% male. A majority of the patients were White (83.5%). A large portion (68.1%) of the patients presented to the emergency room for their diagnosis.

Outpatient

The analysis of outpatients diagnosed with Asthma showed that patients were 56.2% female and 43.8% male. The average age was 36.2 years with a range of patients age 0 to 105. Children under the age of 5 made up 8.9% of the Asthma patient population. Of outpatient visits for asthma, 50.1% were at an emergency room. The race composition of these patients was 60.3% White, 34.7% Black, and 4.9% all other races combined.

The breakdown of total mental health disorders by race showed that 82.1% were White, 12.9% were Black, and 5.0% were all other races combined. The patients were 48.7% female and 51.3% male. The average age of a mental disorder patient was 36 years, with an age range of 0 to 105. The patients needing to go to the emergency room was 72.3%. A largest proportion of patients were diagnosed with mood [affective] disorders (28.0%), and the next largest was pervasive and specific developmental disorders (20.3%).

Patients that were diagnosed with heart failure had an average age of 70.5 years old. The sex distribution was 47.2% female and 52.8% male. A majority of the patients were White (86.7%). A small portion (12.8%) of the patients went to the emergency room for their diagnosis. Patients that were diagnosed with acute myocardial infarction had an average age of 64.4 years. The sex distribution was 26.9% female and 73.1% male. A majority of the patients were White (87.4% were White, other race categories were too small to include without violating the data sharing agreement). A small portion (12.0%) of the patients went to the emergency room for their diagnosis.

Patients that were diagnosed with cerebrovascular disease had an average age of 66.5 years old. The sex distribution was 55.5% female and 44.5% male. A majority of the patients were White (88.7%, other race categories were too small to include without violating the data sharing agreement). A small portion (5.4%) of the patients went to the emergency room for their diagnosis.

	Extremely Unsatisfied	Unsatisfied	Neutral	Satisfied	Extremely Satisfied	Rating Average
Miles of trail available	2	5	3	70	**108**	4.47
Trail surface conditions	3	9	21	**118**	37	3.94
Trail signage	6	22	41	**92**	23	3.57
Trail access and parking	2	3	23	**112**	47	4.06
Benches/seating	2	4	25	**105**	48	4.05
Safety	2	5	24	**113**	41	4.01
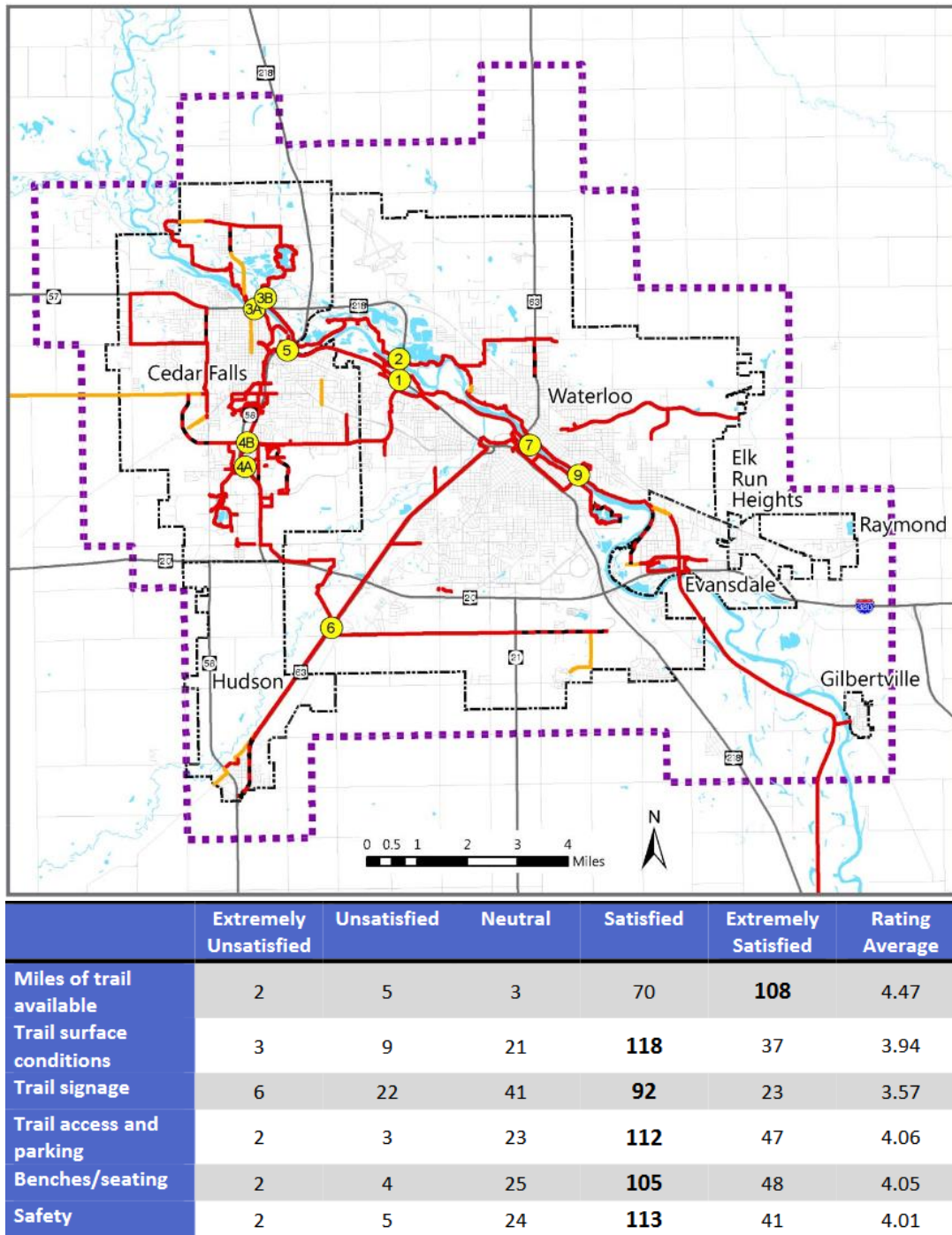
Figure 48. An online trail use survey was developed as part of the 2014 Waterloo/Cedar Falls Metropolitan Area Trail Count. The survey was open from June 15th through June 26 (2014) and consisted of 22 questions. The purpose of the survey was to determine the demographic make-up of trail users. A total of 205 surveys were submitted.
http://www.inrcog.org/pdf/2014_Trail_Count_Summary_Report.pdf

Iowa Kids Count

Iowa Kids Count looked at BHC indicators and outcomes that are associated to Adverse Childhood Experiences (ACEs). ACEs are potentially traumatic events that occur in childhood (0-17 years). They are common in the United States population with 61% of adults reporting that they had experienced at least 1 type of ACE. According to the 2016 ACEs Report, 14.5% of Iowa adults report experiencing four or more ACEs. The report went on to show that 12.9% of BHC residents had four or more ACEs. ACEs have been found to have a large impact on future health, violence victimization, mental illness, substance misuse, and health opportunities. The data displayed in this section does not indicate the level of ACEs in the community, but are outcomes associated with ACEs.

According to the CDC, 1.9 million cases of heart disease and 21 million cases of depression could have been avoided if ACEs were prevented. Further, ACEs have been found to have a graded dose-response relationship with obesity, diabetes, STDs, cancer, smoking, alcoholism, and COPD. These could have been prevented by connecting youth to caring adults, strengthening economic supports for families, and ensuring a strong start for children.

The data displayed in the table shows the change from 2000 to 2017 for BHC and Iowa. Some data overlaps with the Census and BRFSS, but the Child and Family Policy Center focuses on indicators that affect children. These trends will help determine targeted interventions to help the children within BHC.
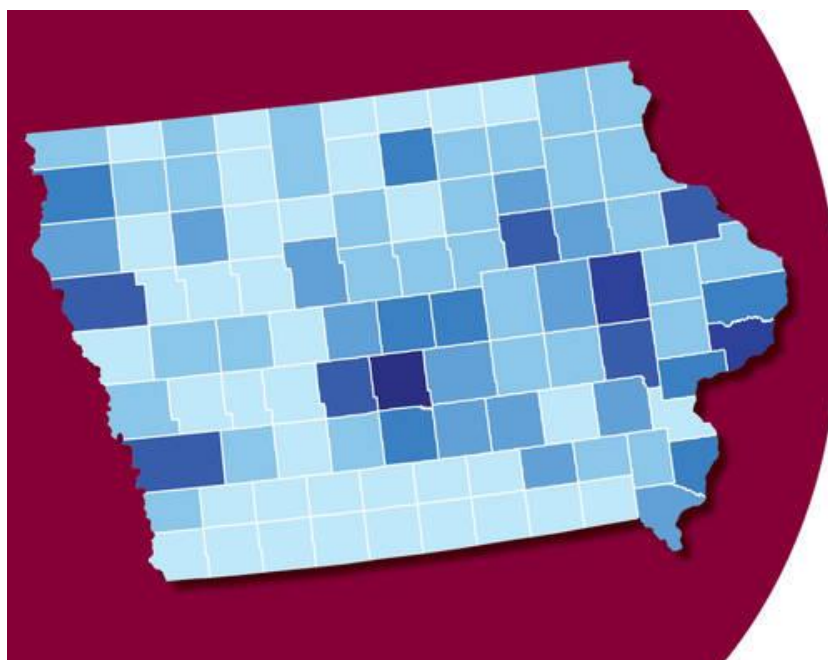
Iowa Kids Count: 2017 Snapshot				
Indicator	**Count**	**Percentage**	**Change from 2000**	**Source**
Demographics of Children (under 18)				
Race and Ethnicity				
African American	3,727	13.0%	.	Iowa Kids Count
Asian	803	2.8%	.	Iowa Kids Count
Native American	140	0.5%	.	Iowa Kids Count
White, non-Hispanic	20,094	69.9%	.	Iowa Kids Count
Other	595	2.1%	.	Iowa Kids Count
Multiple Races	1,922	6.7%	.	Iowa Kids Count
Hispanic any Race	2,262	7.9%	.	Iowa Kids Count
Black Hawk County				
Family and Community Economic Well-Being				
Children Living Under the Poverty Level	4,683	16.5%	+26.0%	Iowa Kids Count
Unemployed Individuals Age 16 and Over	2,592	3.8%	+29.5%	Iowa Kids Count
School Readiness and Success				
3- and 4- Year-Olds Participating in Preschool (2013-17 average)	1,349	40.0%	-19.0%	Iowa Kids Count
Fourth Graders Proficient in Reading (2003)	952	69.4%	+3.9%	Iowa Kids Count
Eighth Graders Proficient in Mathematics (2003)	914	76.0%	+21.5%	Iowa Kids Count
High School Graduation	1,104	89.4%	+14.6%	Iowa Kids Count
Stable, Secure Families				
Cases of Child Abuse/Neglect (rate per 1,000)	457	15.8	+8.1%	Iowa Kids Count
Single-Parent Families (2013-17 average)	5,112	36.0%	+14.9%	Iowa Kids Count
Teen Births (females 15-19 giving birth)	77	1.5%	-52.0%	Iowa Kids Count
Live Births That Are to Unmarried Teens	73	4.2%	-62.6%	Iowa Kids Count
Healthy Children				
Live Births Where Prenatal Care Began During First Trimester (2007)	1,437	83.2%	+9.6%	Iowa Kids Count
Infant Mortality (rate per 1,000)	8	4.6%	-34.8%	Iowa Kids Count
Child Deaths (rate per 100,000)	**	**	**	Iowa Kids Count
Low Birthweight (less than 5.5 pounds)	133	7.7%	+24.2%	Iowa Kids Count
Children Uninsured During the Year (2013-17 average)	1,658	5.4%	.	Iowa Kids Count
Use of Public Supports				
Children 0-4 Receiving WIC (2003)	3,279	38.8%	+1.4%	Iowa Kids Count
Students Eligible for Free or Reduced-Price Lunch	8,891	49.6%	+38.9%	Iowa Kids Count
Individual Tax Fliers Who Receive the EITC (2016)	9,880	16.9%	+31.0%	Iowa Kids Count
Individuals Receiving Food Assistance	19,036	14.4%	+109.3%	Iowa Kids Count
Individuals Participating in Family Investment Program	1,617	1.2%	-63.2%	Iowa Kids Count
Iowa				
Family and Community Economic Well-Being				
Children Living Under the Poverty Level	90,244	12.6%	+16.4%	Iowa Kids Count
Unemployed Individuals Age 16 and Over	52,524	3.1%	+20.8%	Iowa Kids Count
School Readiness and Success				
3- and 4- Year-Olds Participating in Preschool (2013-17 average)	37,780	47.5%	+6.5%	Iowa Kids Count
Fourth Graders Proficient in Reading (2003)	25,718	75.3%	-1.6%	Iowa Kids Count

Indicator	Count	Percentage	Change from 2000	Source
Either Graders Proficient in Mathematics (2003)	25,321	76.1%	+6.1%	Iowa Kids Count
High School Graduation	31,661	91.1%	+2.6%	Iowa Kids Count
Stable, Secure Families				
Cases of Child Abuse/Neglect (rate per 1,000)	9,439	12.9	+26.0%	Iowa Kids Count
Single-Parent Families (2013-17 average)	114,705	31.0%	+24.1%	Iowa Kids Count
Teen Births (females 15-19 giving birth)	1,698	1.6%	-52.7%	Iowa Kids Count
Live Births That Are to Unmarried Teens	1,571	4.1%	-51.1%	Iowa Kids Count
Healthy Children				
Live Births Where Prenatal Care Began During First Trimester (2007)	30,236	79.1%	+11.2%	Iowa Kids Count
Infant Mortality (rate per 1,000)	202	5.3	-16.5%	Iowa Kids Count
Child Deaths (rate per 100,000)	99	17	-19.0%	Iowa Kids Count
Low Birthweight (less than 5.5 pounds)	2,528	6.6%	+7.3%	Iowa Kids Count
Children Uninsured During the Year (2013-17 average)	26,207	3.4%	.	Iowa Kids Count
Use of Public Supports				
Children 0-4 Receiving WIC (2003)	53,604	26.9%	-4.5%	Iowa Kids Count
Students Eligible for Free or Reduced-Price Lunch	198,885	41.3%	+56.1%	Iowa Kids Count
Individual Tax Fliers Who Receive the EITC (2016)	209,230	14.5%	+37.8%	Iowa Kids Count
Individuals Receiving Food Assistance	366,070	11.6%	+173.8%	Iowa Kids Count
Individuals Participating in Family Investment Program	22,504	0.7%	-59.6%	Iowa Kids Count

Black Hawk County Immunization Recommendations				
Indicator	**Unit**	**Year**		**Source**
		2 Year Old	**Adolescent**	
Immunization Series Completed	Percentage	84.5%	85.2%	IDPH
Fulfilled DTP/DTaP or Td/Tdap Recommendation	Percentage	89.8%	90.4%	IDPH
Fulfilled Polio Recommendation	Percentage	95.3%	.	IDPH
Fulfilled Haemophilus influenzaetype B Recommendation	Percentage	92.3%	.	IDPH
Fulfilled Pneumococcal Recommendation	Percentage	88.2%	.	IDPH
Fulfilled Hepatitis B Recommendation	Percentage	95.9%	98.9%	IDPH
Fulfilled MMR Recommendation	Percentage	91.8%	95.9%	IDPH
Fulfilled Varicella Recommendation	Percentage	91.0%	93.4%	IDPH
Fulfilled Meningococcal Recommendation	Percentage	.	79.3%	IDPH
Immunization Series Completed by Race				
White	Percentage	86.6%	88.0%	IDPH
Black or African American	Percentage	77.4%	80.3%	IDPH
Other Race	Percentage	83.1%	79.4%	IDPH
Immunization Series Completed by City				
Waterloo	Percentage	82.9%	83.2%	IDPH
Cedar Falls	Percentage	86.2%	87.9%	IDPH
Evansdale	Percentage	84.6%	80.0%	IDPH

*Immunization data was obtained for the 2018 school year. 2 Year olds were defined as children with birthdates ranging from 01/01/2015 through 12/31/2015. Adolescents were defined as children with birthdates ranging from 01/01/2002 through 12/13/2004.

The children age 2 vaccination recommendations are to have at least 4 DTP/DTaP, 3 Polio, 1 MMR, 3 Haemophilus influenzaetype B, 3 Hepatitis B, 1 Varicella, and 4 Pneumococcal vaccines to be classified as a complete series.

The adolescent vaccination recommendations are to have at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Td/Tdap at age 10, 1 Meningococcal at age 10 and 1 at age 16 to be classified as a complete series.

This data is based on the number of doses of each vaccine received, and does not account for the validity of doses due to minimum spacing between doses, or children on the catch-up immunization schedule. The Meningococcal vaccine fulfillment for adolescents is likely to increase over the next several years as Iowa implemented a school requirement starting in the 2017-2018 school year, and only a small fraction of the adolescents included in the data obtained would have been required to obtain the Meningococcal vaccine.

The CDC's Behavioral Risk Factor Surveillance System

The *Behavioral Risk Factor Surveillance System* (BRFSS) is a nationwide surveillance tool that aims to understand and measure the behaviors associated with adverse health outcomes within different populations. This information is then used as a tool to target specific behaviors that affect health. BRFSS completes more than 400,000 adult interviews each year, making it the largest continuously conducted health survey system in the world.

The data presented in this health status assessment is limited to the BHC participants of the BRFSS. The demographic distribution of the BHC participants were similar to the census distributions. However, there was a higher proportion of White, non-Hispanic participants represented than the demographic makeup within BHC. Our intention was to deliver the BRFSS data by racial ethnic groups, but there was a limited number of participants from Black Hawk County that took the survey. We were unable to break down the data by racial ethnic groups without running the risk of revealing identifiable information.

BHC data was obtained for the years 2012 through 2017. We received a total of 70 interview questions, and 43 of the 70 questions were used in analysis. The questions that were excluded were demographic information and questions that contained less than 2 years of data. The questions that were not asked in a given year are labeled with a "." and the suppressed data is marked by the symbol "**". Overall totals at the end of this section were obtained by combining all years of data (2011 - 2017). This made the proportion of Black or African American population large enough to analyze separate from the White population.

Black Hawk County Behavioral Risk Factor Surveillance System								
Demographics								
Indicator	**Unit**	**Year**						**Source**
		2012	**2013**	**2014**	**2015**	**2016**	**2017**	
Employment status								
Out of work	Percentage	4.3%	4.9%	3.2%	2.6%	2.6%	3.6%	BRFSS
Retired	Percentage	33.9%	33.1%	32.1%	29.3%	36.8%	29.2%	BRFSS
Unable to work	Percentage	4.0%	5.6%	4.9%	5.8%	3.7%	5.2%	BRFSS
Income level								
Less than $10,000	Percentage	4.7%	4.9%	2.3%	**	2.2%	5.8%	BRFSS
$10,000 to less than $15,000	Percentage	6.1%	5.2%	3.2%	8.0%	4.0%	4.0%	BRFSS
$15,000 to less than $20,000	Percentage	5.1%	8.2%	6.5%	5.8%	7.0%	7.6%	BRFSS
$20,000 to less than $25,000	Percentage	10.1%	7.9%	7.5%	4.9%	7.4%	6.4%	BRFSS
$25,000 to less than $35,000	Percentage	6.9%	10.8%	13.3%	7.6%	5.9%	6.7%	BRFSS
$35,000 to less than $50,000	Percentage	13.0%	13.1%	14.6%	12.4%	13.6%	13.7%	BRFSS
$50,000 to less than $75,000	Percentage	15.2%	14.4%	16.2%	14.7%	15.8%	19.1%	BRFSS
$75,000 or more	Percentage	24.5%	24.3%	20.8%	24.9%	28.3%	22.2%	BRFSS
Rent home	Percentage	18.4%	20.7%	21.4%	20.9%	19.9%	24.0%	BRFSS
Activity limitation due to health problems	Percentage	25.3%	22.3%	22.4%	19.1%	22.8%	.	BRFSS
Health problems requiring special equipment	Percentage	.	9.2%	11.7%	12.9%	9.2%	.	BRFSS
General Health Problems								
Self-Rating of Health								
Excellent	Percentage	15.9%	13.4%	17.5%	15.1%	13.6%	14.3%	BRFSS
Very good	Percentage	33.6%	38.4%	33.4%	32.0%	39.0%	37.4%	BRFSS
Good	Percentage	35.0%	33.8%	31.5%	34.2%	35.3%	34.3%	BRFSS
Fair	Percentage	11.2%	11.5%	13.6%	12.4%	**	9.7%	BRFSS
Poor	Percentage	3.6%	2.6%	3.6%	5.8%	**	4.3%	BRFSS
Number of Days physical health not good in last 30 days	Average	3.3	3.5	3.4	4	2.5	3.6	BRFSS
Number of days mental health not good in last 30 days	Average	2.6	2.6	2.6	3.6	2.4	2.8	BRFSS
Health Care Access								
Have any health care coverage	Percentage	92.1%	90.8%	94.5%	94.2%	98.9%	92.7%	BRFSS
Could not see doctor because of cost	Percentage	7.2%	5.9%	5.8%	6.2%	4.8%	4.6%	BRFSS
More than 2 years since last routine checkup	Percentage	10.5%	13.8%	10.0%	13.3%	9.5%	14.9%	BRFSS
Without health care coverage 12 months	Percentage	**	3.3%	2.3%	**	**	**	BRFSS
Adults who received dental care within the past year	Percentage	77.3%	.	73.4%	.	76.1%	.	BRFSS
Experienced a barrier to medical care in the last 12 months	Percentage	.	20.4%	16.1%	.	.	.	BRFSS

Heart disease and stroke								
Indicator	**Unit**	**Year**						**Source**
		2012	**2013**	**2014**	**2015**	**2016**	**2017**	
Ever diagnosed with heart attack	Percentage	7.6%	6.6%	6.8%	5.3%	5.5%	4.0%	BRFSS
Ever diagnosed with angina or coronary heart disease	Percentage	5.1%	6.9%	8.4%	4.9%	2.9%	6.1%	BRFSS
Ever diagnosed with stroke	Percentage	5.8%	5.2%	5.5%	3.1%	5.1%	2.7%	BRFSS
Taking Aspirin to reduce chance of heart attack	Percentage	.	28.9%	.	24.4%	.	26.4%	BRFSS
Taking Aspirin to reduce chance of stroke	Percentage	.	23.9%	.	20.0%	.	21.0%	BRFSS
Ever told blood pressure high (excluding only during pregnancy)	Percentage	.	36.1%	.	41.3%	.	36.8%	BRFSS
Currently taking blood pressure medication	Percentage	.	29.8%	.	34.2%	.	27.1%	BRFSS
Ever told blood cholesterol high	Percentage	.	39.7%	.	34.7%	.	36.8%	BRFSS
Doctor advised reduced sodium/salt intake	Percentage	.	18.0%	.	20.4%	.	9.7%	BRFSS
Watching sodium or salt intake	Percentage	.	48.9%	.	52.0%	.	21.0%	BRFSS
Mental Health								
Ever told you had a depressive disorder	Percentage	17.0%	20.0%	20.8%	19.6%	12.5%	19.5%	BRFSS
Ever told you had a depressive disorder (Iowa average)	Percentage	17.0%	19.2%	18.7%	19.0%	14.8%		
Felt depressed in last 30 days	Percentage	12.7%	13.1%	4.5%	4.5%	.	3.3%	BRFSS
Felt hopeless in last 30 days	Percentage	16.9%	18.3%	7.4%	8.0%	.	5.2%	BRFSS
Felt restless in last 30 days	Percentage	22.7%	45.9%	17.5%	20.0%	.	14.3%	BRFSS
Felt worthless in last 30 days	Percentage	10.0%	11.8%	4.2%	4.4%	.	2.4%	BRFSS
Felt nervous in last 30 days	Percentage	48.7%	50.8%	20.7%	23.1%	.	18.3%	BRFSS
Felt everything was an effort	Percentage	25.8%	28.8%	13.3%	12.8%	.	8.8%	BRFSS
Fitness and Physical Activity								
Computed BMI categories								
Overweight	Percentage	36.8%	37.0%	34.4%	27.6%	34.6%	31.9%	BRFSS
Obese	Percentage	26.4%	28.2%	30.2%	28.4%	29.0%	29.2%	BRFSS
Exercised in past 30 days	Percentage	74.4%	64.6%	76.9%	67.6%	75.4%	70.2%	BRFSS
Neighborhood streets have sidewalks	Percentage	.	.	.	27.1%	58.8%	29.5%	BRFSS
Unpleasant rating for neighborhood walking	Percentage	.	.	.	**	3.6%	3.3%	BRFSS
Use schools resources for public recreational activities	Percentage	.	.	.	8.4%	18.0%	11.2%	BRFSS
Did not meet requirements of physical activity	Percentage	.	47.9%	.	49.4%	.	45.6%	BRFSS
Did not meet requirements of either aerobic activity, strength activity, or both	Percentage	.	73.0%	.	70.6%	.	69.3%	BRFSS

Nutrition								
Indicator	Unit	Year						Source
		2012	2013	2014	2015	2016	2017	
Eat at least 1 Fruit a Day								
United States Average	Percentage	.	60.3%	.	67.6%	.	.	BRFSS
Iowa Average	Percentage	.	60.8%	.	58.3%	.	.	BRFSS
Black Hawk County	Percentage	.	54.0%	.	50.2%	.	.	BRFSS
Eat at Least 1 Vegetable a Day								
United States Average	Percentage	.	76.1%	.	77.9%	.	.	BRFSS
Iowa Average	Percentage	.	73.2%	.	73.1%	.	.	BRFSS
Black Hawk County								
Dark Green Vegetables	Percentage	.	13.8%	.	15.1%	.	.	BRFSS
Orange-Colored Vegetables	Percentage	.	11.6%	.	9.5%	.	.	BRFSS
Other Vegetables	Percentage	.	40.0%	.	39.7%	.	.	BRFSS
Falls								
Fell in the past 12 months	Percentage	.	.	24.8%	.	27.2%	.	BRFSS
Times fallen in last 12 months	Average	.	.	2.5	.	2.7	.	BRFSS
Injured in a fall	Percentage	.	.	5.2%	.	5.3%	.	BRFSS

Overall Average (2011-2017)					
Indicator	Unit	White	African American/Black	Date Range	Source
General Health					
Self-Rating of Health					
Excellent	Percentage	16.5%	7.6%	2011-2017	BRFSS
Very good	Percentage	37.2%	23.7%	2011-2017	BRFSS
Good	Percentage	32.8%	38.9%	2011-2017	BRFSS
Fair	Percentage	10.1%	24.4%	2011-2017	BRFSS
Poor	Percentage	3.4%	5.3%	2011-2017	BRFSS
Number of Days physical health not good in last 30 days	Average	3.3	3.7	2011-2017	BRFSS
Number of days mental health not good in last 30 days	Average	2.7	3.4	2011-2017	BRFSS
Health Care Access					
Have any health care coverage	Percentage	94.6%	86.9%	2011-2017	BRFSS
Could not see doctor because of cost	Percentage	5.1%	16.0%	2011-2017	BRFSS
More than 2 years since last routine checkup	Percentage	12.2%	5.4%	2011-2017	BRFSS
Heart Disease and Stroke					
Ever diagnosed with heart attack	Percentage	5.5%	7.7%	2011-2017	BRFSS
Mental Health					
Ever told you had a depressive disorder	Percentage	17.4%	22.9%	2011-2017	BRFSS
Fitness and Physical Activity					
Categorized as Overweight	Percentage	37.1%	33.0%	2011-2017	BRFSS

Categorized as Obese	Percentage	29.3%	49.6%	2011-2017	BRFSS
Exercised in past 30 days	Percentage	75.3%	53.4%	2011-2017	BRFSS
*Overall data only included date ranges of 2011-2017 due to small population sizes. We were only able to break down by race for the White population and Black/African American due to too small of population sizes in other races. This occurred even when combining all other races groups into one. Data displayed in the table were the only indicators that had ample population sizes to analyze.					

500 Cities Project

The 500 Cities Project is a collaborative project between the CDC Foundation and The Robert Wood Johnson Foundation. It first launched in 2015 and has been extended through 2020. The 500 Cities Project aims to provide census tract-level data on chronic disease measurements for the 500 largest cities in the United States. This information complements other data obtained by the County Health Rankings and Roadmaps, the Census Bureau, and the BRFSS. With this information it is possible to develop more targeted interventions for cities.

A total of 103,020,808 people were included, which represents 33.4% of the United States population. The city's population ranged from 42,417 to 8,175,133. Waterloo, Iowa was listed as one of the 500 cities evaluated in the project. The other cities in Iowa included were Des Moines, Cedar Rapids, Davenport, Sioux City, and Iowa City. There were 24 measures analyzed to understand behavioral risk factors and chronic disease.

This report used the most recent data published, which was from 2016 and 2017. Indicators were measured in crude rates and age-adjusted rates. A side by side comparison between 2016 and 2017 was created to identify and trends between the years. The second table compares the United States 500 City average, Cedar Rapids, Iowa City, and Waterloo. This assessment will continue to add data as it is released in order to better identify and target public health threats in Waterloo, Iowa.

500 Cities Project: Waterloo, Iowa (City Average)				
Indicators	**Units**	**Year**		**Data Source**
		2016	**2017**	
		Age Adjusted Prevalence	**Age Adjusted Prevalence**	
Arthritis	Prevalence %	25.6%	25%	500 Cities Project
Binge Drinking	Prevalence %	21.5%	22.2%	500 Cities Project
Cancer (except skin)	Prevalence %	6.2%	6.4%	500 Cities Project
Chronic Kidney Disease	Prevalence %	2.8%	3%	500 Cities Project
COPD	Prevalence %	6.2%	6.9%	500 Cities Project
Core preventive services				
Older men	Prevalence %	51.8%	51.8%	500 Cities Project
Older women	Prevalence %	35.6%	35.6%	500 Cities Project
Coronary Heart Disease	Prevalence %	6.1%	6.1%	500 Cities Project
Current Asthma	Prevalence %	8.9%	9.8%	500 Cities Project
Current Smoking	Prevalence %	20.2%	22.9%	500 Cities Project
Diabetes	Prevalence %	10.7%	10.0%	500 Cities Project
Lack Health Insurance	Prevalence %	10.0%	12.0%	500 Cities Project
Cholesterol Screening	Prevalence %	**	73.8%	500 Cities Project
High Blood Pressure	Prevalence %	**	31.0%	500 Cities Project
High Cholesterol	Prevalence %	**	31.5%	500 Cities Project
Mental Health Not Good	Prevalence %	12.3%	13.2%	500 Cities Project
Obesity	Prevalence %	35.6%	36.7%	500 Cities Project
Pap Smear Test	Prevalence %	78.5%	78.5%	500 Cities Project
Physical Health	Prevalence %	11.4%	12.1%	500 Cities Project
Physical Inactivity	Prevalence %	26.4%	28.6%	500 Cities Project
Sleep <7 hours	Prevalence %	30.4%	30.4%	500 Cities Project
Stroke	Prevalence %	3.4%	3.3%	500 Cities Project
Taking Blood Pressure Medication	Prevalence %	**	58.8%	500 Cities Project
Teeth Loss among adults >=65 years	Prevalence %	16.0%	16.0%	500 Cities Project

500 Cities Project: Age-Adjusted Rates 2017						
Indicators	**Units**	**Cities in Iowa and United States Average**				**Data Source**
		United States	**Cedar Rapids**	**Iowa City**	**Waterloo**	
Arthritis	Prevalence %	22.1%	20.9%	21.9%	25%	500 Cities Project
Binge Drinking	Prevalence %	18.1%	21.1%	20.4%	22.2%	500 Cities Project
Cancer (except skin)	Prevalence %	6%	6.7%	6.5%	6.4%	500 Cities Project
Chronic Kidney Disease	Prevalence %	2.9%	2.6%	2.75	3%	500 Cities Project
COPD	Prevalence %	5.9%	5.7%	5.2%	6.9%	500 Cities Project
Core preventive services						
Older men	Prevalence %	35%	44.9%	46.6%	51.8%	500 Cities Project
Older women	Prevalence %	31.5%	40.2%	37.8%	35.6%	500 Cities Project
Coronary Heart Disease	Prevalence %	5.6%	5.2%	5.1%	6.1%	500 Cities Project
Current Asthma	Prevalence %	8.9%	9.2%	8.9%	9.8%	500 Cities Project
Current Smoking	Prevalence %	16.7%	18.9%	15.3%	22.9%	500 Cities Project

Indicators	Units	Cities in Iowa and United States Average				Data Source
		United States	**Cedar Rapids**	**Iowa City**	**Waterloo**	
Diabetes	Prevalence %	9.6%	8.3%	8.6%	10%	500 Cities Project
Lack Health Insurance	Prevalence %	15.2%	9.1%	8.7%	12%	500 Cities Project
Cholesterol Screening	Prevalence %	80.3%	75.6%	76.3%	73.8%	500 Cities Project
High Blood Pressure	Prevalence %	29.7%	27.1%	28.7%	31%	500 Cities Project
High Cholesterol	Prevalence %	29.3%	29.5%	28%	31.5%	500 Cities Project
Mental Health Not Good	Prevalence %	12.6%	11.8%	11.2%	13.2%	500 Cities Project
Obesity	Prevalence %	29.9%	34.5%	32.7%	36.7%	500 Cities Project
Pap Smear Test	Prevalence %	80.3%	83.1%	79.9%	78.5%	500 Cities Project
Physical Health Not Good	Prevalence %	11.7%	9.8%	9.6%	12.1%	500 Cities Project
Physical Inactivity	Prevalence %	26.2%	24%	22.1%	28.6%	500 Cities Project
Sleep <7 hours	Prevalence %	35.1%	28.4%	27.5%	30.4%	500 Cities Project
Stroke	Prevalence %	2.9%	2.7%	2.6%	3.3%	500 Cities Project
Taking Blood Pressure Medication	Prevalence %	56.2%	57%	59.1%	58.8%	500 Cities Project
Teeth Loss among adults >=65 years	Prevalence %	15%	13%	10.1%	16%	500 Cities Project

County Data

Demographic Characteristics						
Indicators	**Units**	**Year**				**Source**
		2015	**2016**	**2017**	**2018**	
Total Population	Number	133,711	133,116	132,409	132,408	Census, 2018 estimates
Growth From Last Year	Percentage	0.2%	-0.4%	-0.5%	0.0%	Census, 2018 estimates
Sex						
Male	Percentage	49%	49%	49.1%	49.2%	Census, 2018 estimates
Female	Percentage	51%	51%	50.9%	50.8%	Census, 2018 estimates
Race and Ethnicity						
Non-Hispanic White	Percentage	84.0%	83.7%	83.4%	83.0%	Census, 2018 estimates
Non-Hispanic Black or African American	Percentage	10.5%	10.6%	10.8%	11.0%	Census, 2018 estimates
American Indian/Alaska Native	Percentage	0.6%	0.6%	0.6%	0.6%	Census, 2018 estimates
Asian	Percentage	2.6%	2.7%	2.9%	3.0%	Census, 2018 estimates
Native Hawaiian/Pacific Islander	Percentage	0.3%	0.4%	0.4%	0.4%	Census, 2018 estimates
Hispanic	Percentage	4.5%	4.5%	4.6%	4.7%	Census, 2018 estimates
Highest Education Achieved (Population 25 and Over)						
Less than 9th Grade	Percentage	3.1%	3.6%	3.4%	.	Census, 2015-2017
9th to 12th Grade, No Diploma	Percentage	5.9%	5.1%	6.5%	.	Census, 2015-2017
High School Diploma	Percentage	30.0%	31.7%	28.5%	.	Census, 2015-2017
Some College, No Degree	Percentage	21.6%	21.5%	20.2%	.	Census, 2015-2017
Associate's Degree	Percentage	10.2%	9.9%	13.0%	.	Census, 2015-2017
Bachelor's Degree	Percentage	18.5%	18.4%	18.4%	.	Census, 2015-2017
Graduate or Professional Degree	Percentage	10.7%	9.7%	9.8%	.	Census, 2015-2017
Age (years)						
Under 5	Percentage	6.4%	6.4%	6.4%	6.3%	Census, 2018
5 to 14	Percentage	11.9%	11.9%	12.0%	12.0%	Census, 2018
15 to 19	Percentage	7.0%	7.0%	6.8%	6.8%	Census, 2018
20 to 24	Percentage	12.0%	11.8%	11.5%	11.3%	Census, 2018
25 to 34	Percentage	13.2%	13.0%	13.1%	13.1%	Census, 2018
35 to 44	Percentage	10.9%	10.9%	11.2%	11.4%	Census, 2018
45 to 54	Percentage	11.1%	10.9%	10.7%	10.4%	Census, 2018
55 to 64	Percentage	12.5%	12.5%	12.4%	12.2%	Census, 2018
65 to 74	Percentage	8.2%	8.6%	9.0%	9.3%	Census, 2018
75+	Percentage	6.9%	6.9%	7.0%	7.1%	Census, 2018
Voting						
Republican Voters Registered	Number	.	21,154	.	20,650	Iowa Secretary of State
Republic Voter Turnout	Percentage	.	3.9%	.	7.9%	Iowa Secretary of State
Democratic Voter Registered	Number	.	29,428	.	28,417	Iowa Secretary of State
Democratic Voter Turnout	Percentage	.	11.7%	.	21.8%	Iowa Secretary of State

Transportation						
Indicators	**Units**	**Year**				**Source**
		2015	**2016**	**2017**	**2018**	
Method of Travel for Work						
Drove Alone	Percentage	82.7%	82.4%	82.1%	.	Census
Carpooled	Percentage	7.9%	8.3%	8.5%	.	Census
Walked	Percentage	4.6%	4.6%	4.1%	.	Census
Travel Time to Work						
U.S. Average	Minutes	15.2	15.2	15.2	.	Census
Iowa Average	Minutes	19.0	19.0	19.4	.	Census

Socioeconomic Characteristics					
Poverty (Families and People Whose Income In The Past 12 Months Is Below Poverty Level)					
Indicators	**Units**	**Year**			**Source**
		2015	**2016**	**2017**	
Total Population	Percentage	13.7%	17.1%	15.9%	Census, 2015-2017
All Families	Percentage	6.7%	10.6%	11.3%	
Families (with children under 18 years)	Percentage	12.8%	17.9%	17.1%	Census, 2015-2017
Married Couple (with children under 18 years)	Percentage	3.4%	7.3%	7.4%	
Single Female (with children under 18 years)	Percentage	32.5%	46.3%	38.1%	Census, 2015-2017
Poverty by Race and Ethnicity					
White	Percentage	10.7%	14.7%	14.9%	Census
Black	Percentage	39.3%	40.1%	27.5%	Census
Asian	Percentage	**	**	**	Census
Native American	Percentage	**	**	**	Census
Native Hawaiian / Pacific Islander	Percentage	**	**	**	Census
Two or more races	Percentage	**	**	25.6%	Census
Hispanic (of any race)	Percentage	15.1%	27.4%	**	Census
Food Stamps / Supplemental Nutrition Assistance Program (SNAP)					
Indicators	**Units**	**Year**			**Source**
		2015	**2016**	**2017**	**2018**	
Total Households	Percentage	11.7%	13.1%	14.2%	.	Census
Married-couple family	Percentage	21.8%	25.5%	21.6%	.	Census
Married-couple family (with children under 18 years)	Percentage	14.0%	17.6%	19.2%	.	Census
Single Female	Percentage	39.7%	36.1%	30.4%	.	Census
Single Female (with children under 18 years)	Percentage	33.7%	31.6%	24.9%	.	Census
Householder Race						
White - not Hispanic or Latino	Percentage	65.8%	66.9%	67.7%	.	Census
Black or African American	Percentage	27.2%	26.0%	26.2%	.	Census
American Indian / Alaska Native	Percentage	**	**	**	.	Census
Asian	Percentage	**	1.3%	1.8%	.	Census

Indicators	Units	Year				Source
		2015	**2016**	**2017**	**2018**	
Native Hawaiian/Pacific Islander	Percentage	**	**	**	.	Census
Two or more races	Percentage	0.9%	**	0.5%	.	Census
Hispanic or Latino origin (of any race)	Percentage	4.3%	2.1%	3.3%	.	Census
Disability Status (with one or more people with a disability)	Percentage	28.7%	36.8%	38.6%	.	Census
Prevalence of Food Insecurity						
Iowa		2010-2012 Average		2014-2016 Average		
Total Population	Percentage	12.7%		11.5%		Iowa State
Income <= 185% of Poverty	Percentage	7.6%		6.6%		Iowa State
Income > 185% Poverty	Percentage	5.0%		4.9%		Iowa State
Children <18 Years	Percentage	.		15.9%		Iowa State
Children Likely Ineligible for Nutrition Assistance	Percentage	.		6.9%		Iowa State
Black Hawk County		2010-2012 Average		2014-2016 Average		
Total Population	Percentage	14.6%		14.3%		Iowa State
Income <= 185% of Poverty	Percentage	9.5%		8.9%		Iowa State
Income > 185% Poverty	Percentage	5.1%		5.4%		Iowa State
Children <18 Years	Percentage	.		17.5%		Iowa State
Children Likely Ineligible for Nutrition Assistance	Percentage	.		7.0%		Iowa State
Employment (Population 16 Years and Over in Civilian Labor Force)						
Indicators	Units	Year				Source
		2015	**2016**	**2017**	**2018**	
Unemployment Rate	Percentage	6.6%	6.3%	5.3%	.	Census, 2015-2017
Household income less than $10,000	Percentage	7.9%	8.0%	7.5%	.	Census, 2015-2017
Household income $10,000 to $24,999	Percentage	16.0%	15.3%	15.8%	.	Census, 2015-2017
Household income $25,000 to $49,999	Percentage	27.5%	26.3%	25.7%	.	Census, 2015-2017
Household income $50,000 to $74,999	Percentage	20.3%	20.3%	19.1%	.	Census, 2015-2017
Household income $75,000 to $99,999	Percentage	11.8%	12.9%	13.0%	.	Census, 2015-2017
Household income $100,000 to $149,000	Percentage	11.5%	11.7%	12.5%	.	Census, 2015-2017
Household income $150,000 +	Percentage	5.0%	5.4%	6.4%	.	Census, 2015-2017
Median household income	Number	$48,369	$50,348	$50,916	.	Census, 2015-2017

Housing burden (30% or more of income to rent)						
Indicators	**Units**	**Year**				**Source**
		2015	**2016**	**2017**	**2018**	
Renter	Percentage	50.9%	50.2%	49.1%	.	Census, 2015-2017
Owned (with a mortgage)	Percentage	20.7%	19.7%	20.5%	.	Census, 2015-2017
Owned (without a mortgage)	Percentage	8.5%	8.9%	10.1%	.	Census, 2015-2017
Health Resource Availability						
Uninsured (under 65 years)	Percentage	14.2%	13.7%	13.2%	.	Census, 2015-2017
Uninsured adults	Percentage	7%	6%	.	.	County Health Rankings
Uninsured children	Percentage	4%	3%	.	.	County Health Rankings
Race and Ethnicity by Uninsured						
White	Percentage	5.7%	4.8%	4.5%	.	Census, 2015-2017
Black or African American	Percentage	14.8%	9.1%	8.0%	.	Census, 2015-2017
American Indian / Alaska Native	Percentage	**	**	**	.	Census, 2015-2017
Asian	Percentage	**	**	**	.	Census, 2015-2017
Native Hawaiian / Pacific Islander	Percentage	**	**	**	.	Census, 2015-2017
Two or more races	Percentage	**	**	**	.	Census, 2015-2017
Hispanic or Latino (of any race)	Percentage	26.7%	15.6%	**	.	Census, 2015-2017
Disability Status (with a disability)	Percentage	3.9%	2.9%	2.8%	.	Census, 2015-2017
Preventable Hospital Stays (per Medicare enrollee)	Rate per 100k	3570	3456	.	.	County Health Rankings
Access to Providers						
Primary care physician	Ratio	1103:1	1072:1	.	.	County Health Rankings
Dental provider	Ratio	1451:1	1399:1	1382:1	.	County Health Rankings
Mental health provider	Ratio	.	.	.	660:1	County Health Rankings
Mammography screening (% Medicare enrollees screened)	Percentage	53%	52%	.	.	County Health Rankings
Flu vaccinations (% Medicare enrollees screened)	Percentage	57%	56%	.	.	County Health Rankings

Indicators	Units	Year				Source
		2015	**2016**	**2017**	**2018**	
Residents with Access to Exercise Opportunities	Percentage	66.4%	79.8%	79.8%	86.6%	County Health Rankings
Additional SES factors						
Homicides (2011 – 2017)	Rate per 100k	4				County Health Rankings
Firearm fatalities (2013 – 2017)	Number	56				County Health Rankings
Firearm fatalities (2013 – 2017)	Rate per 100k	8				County Health Rankings
Children eligible for free or reduced price lunch (2016 – 2017)	Percentage	50%				County Health Rankings
Children in single-parent households (2013 – 2017)	Percentage	32%				County Health Rankings
Violent crime (2014 & 2016)	Rate per 100k	511				County Health Rankings
Injury deaths (2013 – 2017)	Rate per 100k	60				County Health Rankings

Student Enrollment by School District						
Indicators	**Units**	**Year**				**Source**
		2015	**2016**	**2017**	**2018**	
School Enrollment (Rounded to the nearest whole number)						
Cedar Falls	Number	5052	5147	5128	5238	Iowa Department of Education
Dunkerton	Number	445	419	419	407	Iowa Department of Education
Hudson	Number	679	666	677	690	Iowa Department of Education
Union	Number	1127	1102	1054	1054	Iowa Department of Education
Waterloo	Number	10936	10835	10879	10777	Iowa Department of Education
School Enrollment Projections (Rounded to the nearest whole number)						
Indicator	**Units**	**Year**				**Source**
		2020-21	**2021-22**	**2022-23**	**2023-24**	
Cedar Falls	Number	5385	5457	5467	5535	Iowa Department of Education
Dunkerton	Number	372	372	360	360	Iowa Department of Education
Hudson	Number	687	675	675	663	Iowa Department of Education
Union	Number	992	968	919	919	Iowa Department of Education
Waterloo	Number	10861	10836	10773	10728	Iowa Department of Education

Graduation Rates by School District						
Indicator	**Units**	**Year**				**Source**
		2015	**2016**	**2017**	**2018**	
Cedar Falls						
Overall Graduation Rate	Percentage	95.2%	96.0%	96.2%	96.8%	Iowa Department of Education
IEP Graduation Rate	Percentage	80%	73.2%	81.3%	85.4%	Iowa Department of Education
Race and Ethnicity Graduation Rates						
African American Rate	Percentage	90.9%	93.3%	88.2%	93.3%	Iowa Department of Education
Hispanic Rate	Percentage	100%	100%	91.7%	100%	Iowa Department of Education
White Rate	Percentage	95.1%	95.9%	96.5%	96.6%	Iowa Department of Education
Two or More Races Rate	Percentage	91.7%	93.3%	100%	**	Iowa Department of Education
Female Rate	Percentage	97.6%	97.6%	98.5%	97.0%	Iowa Department of Education
Male Rate	Percentage	93.1%	94.3%	94.3%	96.6%	Iowa Department of Education
Dunkerton						
Overall Graduation Rate	Percentage	96.9%	94.6%	96.9%	92.3%	Iowa Department of Education
Race and Ethnicity Graduation Rates						
African American Rate	Percentage	**	**	**	**	Iowa Department of Education
Hispanic Rate	Percentage	**	**	**	**	Iowa Department of Education
White Rate	Percentage	96.9%	93.9%	96.6%	91.9%	Iowa Department of Education
Female Rate	Percentage	93.8%	93.8%	92.3%	93.8%	Iowa Department of Education
Male Rate	Percentage	100%	88.9%	88.9%	91.3%	Iowa Department of Education
Hudson						
Overall Graduation Rate	Percentage	96.4%	98.3%	94.3%	97.7%	Iowa Department of Education
Race and Ethnicity Graduation Rates						
African American Rate	Percentage	**	**	**	**	Iowa Department of Education
Hispanic Rate	Percentage	**	**	**	**	Iowa Department of Education
White Rate	Percentage	96.2%	100%	94.3%	97.7%	Iowa Department of Education
Female Rate	Percentage	97.1%	100%	100%	100%	Iowa Department of Education
Male Rate	Percentage	95.2%	96.6%	96.6%	96.4%	Iowa Department of Education
Union						
Overall Graduation Rate	Percentage	95.9%	95.2%	96.2%	90.4%	Iowa Department of Education
IEP Graduation Rate	Percentage	90%	**	87.5%	90.9%	Iowa Department of Education
Race and Ethnicity Graduation Rates						
African American Rate	Percentage	**	**	**	**	Iowa Department of Education
Hispanic Rate	Percentage	**	**	**	**	Iowa Department of Education
White Rate	Percentage	97.8%	96.3%	97.0%	90%	Iowa Department of Education
Female Rate	Percentage	92.3%	92.3%	95.7%	92.5%	Iowa Department of Education
Male Rate	Percentage	98.3%	93.6%	93.6%	88.4%	Iowa Department of Education
Waterloo						
Overall Graduation Rate	Percentage	80.3%	77.4%	84.2%	84.2%	Iowa Department of Education
IEP Graduation Rate	Percentage	65.1%	58.4%	71.3%	67.0%	Iowa Department of Education
ELL Graduation Rate	Percentage	95.4%	76.7%	90.9%	83.3%	Iowa Department of Education
Race and Ethnicity Graduation Rates						
African American Rate	Percentage	74.8%	65.6%	81.8%	79.8%	Iowa Department of Education
Hispanic Rate	Percentage	82.1%	77.1%	77.1%	82.5%	Iowa Department of Education
White Rate	Percentage	82.5%	81.6%	87.6%	86.1%	Iowa Department of Education
Two or More Races Rate	Percentage	69.7%	74.4%	70%	84.6%	Iowa Department of Education
Female Rate	Percentage	85.3%	100%	82.5%	86.1%	Iowa Department of Education
Male Rate	Percentage	75.1%	74.7%	74.7%	82.3%	Iowa Department of Education

Iowa Youth Survey (All Grades)						
Indicators	**Units**	**Year**				**Source**
		2012	**2014**	**2016**	**2018**	
Alcohol Use in Past 30 Days						
Iowa	Percentage	11.4%	10.4%	9.4%	9.6%	IYS
Black Hawk County	Percentage	11.9%	10.7%	8.8%	7.4%	IYS
Binge Drinking in Past 30 Days						
Iowa	Percentage	8.0%	5.8%	5.1%	5.1%	IYS
Black Hawk County	Percentage	8.2%	6.1%	4.8%	3.8%	IYS
Cigarettes Use in Past 30 Days						
Iowa	Percentage	4.9%	3.9%	2.6%	2.1%	IYS
Black Hawk County	Percentage	5.1%	4.5%	3.0%	1.4%	IYS
Marijuana Use in Past 30 Days						
Iowa	Percentage	4.6%	4.4%	4.0%	4.3%	IYS
Black Hawk County	Percentage	5.7%	6.6%	5.2%	2.4%	IYS
Suicide Plan in Past 12 Months						
Iowa	Percentage	6.6%	7.9%	7.9%	10.1%	IYS
Black Hawk County	Percentage	6.7%	8.3%	8.2%	8.4%	IYS
Bullying at School in Past 30 Days						
Iowa	Percentage	41.5%	38.7%	36.9%	39.3%	IYS
Black Hawk County	Percentage	39.7%	36.2%	33.7%	39.0%	IYS
Teachers or Other Adults Put a Stop to Bullying at School						
Iowa	Percentage	54.4%	52.8%	53.2%	48.7%	IYS
Black Hawk County	Percentage	55.4%	52.1%	52.6%	54.8%	IYS
Students Feel Safe at School						
Iowa	Percentage	90.1%	89.4%	88.5%	84.3%	IYS
Black Hawk County	Percentage	90.8%	87.3%	87.5%	87.9%	IYS
Students Have People in Their Home with Serious Alcohol or Drug Problem						
Iowa	Percentage	13.2%	13.2%	14.0%	15.4%	IYS
Black Hawk County	Percentage	10.9%	15.4%	15.8%	12.4%	IYS
Difficulty of Getting Handgun in Community (Higher % is harder to obtain)						
Iowa	Percentage	65.8%	66.2%	64.2%	66.6%	IYS
Black Hawk County	Percentage	69.4%	63.7%	63.6%	70.8%	IYS

Environmental Health							
Indicators	**Units**	**Year**					**Source**
		2014	**2015**	**2016**	**2017**	**2018**	
Water Systems							
State Average							
Population Served by Public Water	Number	2,752,825	2,761,064	2,803,354	2,802,217	2,818,950	IDPH
Average Nitrate Testing in Public Water	mg/L	8.7	9.2	8.5	8.5	9.0	IDPH

Indicators	Units	Year					Source
		2014	**2015**	**2016**	**2017**	**2018**	
Positive Total Coliform Bacteria in Private Water Wells	Percentage	30.3%	32.8%	34.2%	31.8%	35.7%	IDPH
Positive Nitrate Testing in Private Water Wells	Percentage	29.1%	16.4%	18.7%	15.8%	11.8%	IDPH
Black Hawk County							
Average Nitrate Testing in Public Water	mg/L	1.3	1.4	1.7	1.6	1.4	IDPH
Positive Total Coliform Bacteria in Private Water Wells	Percentage	29.6%	44.6%	42.7%	23.5%	30.3%	IDPH
Positive Nitrate Testing in Private Water Wells	Percentage	34.8%	35.5%	23.2%	19.5%	12.6%	IDPH
Foodborne Illness							
Campylobacteriosis	Rate per 100k	.	5.2	16.5	4.5	18.9	IDPH CADE
Cryptosporidiosis	Rate per 100k	.	**	3.8	3	3	IDPH CADE
E. Coli	Rate per 100k	.	3	**	**	5.3	IDPH CADE
Giardia	Rate per 100k	.	4.5	6.8	6.8	**	IDPH CADE
Salmonellosis	Rate per 100k	.	17.2	27.8	23.4	30.2	IDPH CADE
Shigellosis	Rate per 100k	.	41.1	**	**	3	IDPH CADE
Other Environmental Indicators							
State Average							
High Heat Days	Number	0.1	0.7	1.4	1.5	3.7	IDPH
Elevated Blood Lead Levels in Children Under 6	Percentage	0.5%	0.6%	0.6%	0.5%	0.6%	IDPH
Black Hawk County							
High Heat Days above 95	Number	0	1	1	1	2	IDPH
Elevated Blood Lead Levels in Children Under 6	Percentage	1.1%	0.8%	0.7%	1.0%	0.6%	IDPH

Maternal and Child Health								
Indicators	**Units**	**Year**						**Source**
		2012	**2013**	**2014**	**2015**	**2016**	**2017**	
Low Birth Weight (<2500g)								
Mother's Age								
19 years or younger	Percentage	8.7%	6.7%	5.8%	5.7%	9.3%	**	IDPH
20-24 Years	Percentage	30.0%	30.0%	29.5%	22.0%	33.1%	27.8%	IDPH
25-29 Years	Percentage	27.9%	34.3%	28.1%	31.7%	29.7%	30.8%	IDPH
30-34 Years	Percentage	25.0%	21.0%	25.2%	20.3%	15.3%	25.6%	IDPH
35 Years and Older	Percentage	12.5%	8.6%	11.5%	20.3%	12.7%	12.0%	IDPH
Mother's Race and Ethnicity								
White	Percentage	73.1%	66.7%	69.8%	69.1%	58.5%	58.6%	IDPH
African American	Percentage	23.1%	24.8%	24.5%	25.2%	32.2%	32.3%	IDPH
Other	Percentage	**	8.6%	5.8%	5.7%	9.3%	9.0%	IDPH
Hispanic	Percentage	**	6.7%	4.3%	**	**	**	IDPH

Indicators	Units	Year						Source
		2012	2013	2014	2015	2016	2017	
Marital Status								
No	Percentage	56.7%	54.3%	52.5%	50.4%	64.4%	57.9%	
Yes	Percentage	43.3%	45.7%	47.5%	49.6%	35.6%	42.1%	
Women, Infants, and Children Status								
Yes	Percentage	58.7%	56.2%	53.2%	56.1%	63.6%	57.1%	IDPH
No	Percentage	41.3%	43.8%	46.8%	43.9%	36.4%	42.9%	IDPH
Education								
8th Grade or Less	Percentage	**	**	**	**	**	**	IDPH
9-12th Grade; No Diploma	Percentage	12.5%	20.0%	15.8%	17.9%	21.2%	14.3%	
High School Graduate/GED	Percentage	16.3%	20.0%	20.9%	19.5%	31.4%	30.8%	IDPH
College; No Degree	Percentage	25.0%	28.6%	22.3%	19.5%	24.1%	24.1%	IDPH
Associate Degree	Percentage	19.2%	6.7%	15.9%	13.8%	8.5%	5.3%	IDPH
Bachelor's Degree	Percentage	18.3%	14.3%	16.5%	17.1%	13.6%	16.5%	IDPH
Graduate Degree	Percentage	**	9.5%	6.5%	8.9%	**	5.3%	
Prenatal Care Visits								
1-9	Percentage	41.3%	32.4%	36.7%	46.3%	47.5%	50.4%	IDPH
10-14	Percentage	41.3%	50.5%	48.2%	39.0%	43.2%	36.8%	IDPH
15-19	Percentage	13.5%	10.5%	10.8%	13.0%	5.1%	9.0%	IDPH
20 and Over	Percentage	**	**	**	**	**	**	IDPH
Gestational Estimate								
Under 28	Percentage	12.5%	10.5%	12.9%	10.6%	7.6%	9.0%	IDPH
28-31	Percentage	9.6%	9.5%	7.9%	8.9%	10.2%	8.3%	IDPH
32-33	Percentage	11.5%	15.2%	17.3%	16.3%	10.2%	18.8%	IDPH
34-36	Percentage	40.4%	34.3%	39.6%	37.4%	39.8%	34.6%	IDPH
37-38	Percentage	16.3%	23.8%	18.7%	17.9%	24.6%	23.3%	IDPH
39-40	Percentage	8.7%	5.7%	**	8.9%	7.6%	6.0%	IDPH
41 and Over	Percentage	**	**	**	**	**	**	IDPH
City (Based on zip code)								
Waterloo	Percentage	63.5%	66.7%	69.8%	68.3%	78.8%	71.4%	IDPH
Cedar Falls	Percentage	22.1%	20.0%	20.1%	24.4%	14.4%	15.0%	IDPH
Other	Percentage	14.4%	13.3%	10.1%	7.3%	6.8%	13.5%	IDPH
Normal Birth Weight (>2500g)								
Mother's Age								
19 years or younger	Percentage	6.1%	6.1%	5.1%	4.3%	4.0%	4.5%	IDPH
20-24 Years	Percentage	25.5%	25.6%	23.7%	19.2%	22.6%	21.8%	IDPH
25-29 Years	Percentage	32.6%	33.2%	35.0%	32.8%	36.9%	34.2%	IDPH
30-34 Years	Percentage	26.0%	25.7%	27.0%	30.2%	27.3%	27.6%	IDPH
35 Years and Older	Percentage	9.8%	9.5%	9.1%	13.5%	9.2%	11.7%	IDPH
Marital Status								
No		40.1%	43.0%	41.3%	39.9%	41.1%	44.2%	IDPH
Yes		59.9%	57.0%	58.7%	60.1%	58.9%	55.8%	IDPH

Indicators	Units	Year						Source
		2012	**2013**	**2014**	**2015**	**2016**	**2017**	
Mother's Race and Ethnicity								
White	Percentage	79.6%	78.1%	78.2%	77.9%	77.9%	75.1%	IDPH
African American	Percentage	13.9%	14.0%	13.6%	13.5%	14.1%	16.3%	IDPH
Other	Percentage	6.5%	7.9%	8.1%	7.4%	8.0%	8.6%	IDPH
Hispanic	Percentage	5.7%	5.9%	5.9%	5.4%	5.9%	6.1%	IDPH
Women, Infants, and Children Status								
Yes	Percentage	44.3%	46.3%	44.7%	42.3%	44.0%	44.7%	IDPH
No	Percentage	55.7%	53.7%	55.3%	57.7%	56.0%	55.3%	IDPH
Education								
8th Grade or Less	Percentage	2.5%	3.3%	2.2%	2.4%	2.1%	2.8%	IDPH
9-12th Grade; No Diploma	Percentage	10.6%	9.6%	9.8%	9.3%	10.4%	10.5%	IDPH
High School Graduate/GED	Percentage	18.6%	18.5%	20.4%	21.1%	22.1%	23.8%	IDPH
College; No Degree	Percentage	20.7%	22.5%	20.0%	18.0%	18.2%	16.7%	IDPH
Associate Degree	Percentage	11.4%	13.4%	13.2%	13.3%	14.0%	12.8%	IDPH
Bachelor's Degree	Percentage	25.1%	24.1%	24.8%	25.3%	24.2%	23.8%	IDPH
Graduate Degree	Percentage	11.0%	8.6%	9.6%	2.8%	8.8%	9.5%	IDPH
Prenatal Care Visits								
1-9	Percentage	10.0%	10.0%	7.8%	10.7%	13.5%	18.7%	IDPH
10-14	Percentage	69.0%	67.4%	73.6%	71.5%	68.9%	67.3%	IDPH
15-19	Percentage	19.2%	21.3%	17.1%	15.7%	15.9%	12.8%	IDPH
20 and Over	Percentage	1.2%	1.1%	1.1%	1.1%	1.0%	1.0%	IDPH
Gestational Estimate								
Under 28	Percentage	**	**	**	**	**	**	IDPH
28-31	Percentage	**	**	**	**	**	**	IDPH
32-33	Percentage	**	**	**	**	**	**	IDPH
34-36	Percentage	5.8%	5.0%	3.7%	3.0%	4.8%	4.4%	IDPH
37-38	Percentage	24.4%	22.5%	21.1%	24.2%	23.9%	24.2%	IDPH
39-40	Percentage	63.6%	66.8%	66.8%	63.9%	63.3%	64.9%	IDPH
41 and Over	Percentage	6.1%	7.5%	8.3%	8.8%	7.9%	6.4%	IDPH
City (Based on zip code)								
Waterloo	Percentage	62.7%	64.0%	61.6%	60.4%	59.5%	60.4%	IDPH
Cedar Falls	Percentage	23.4%	24.3%	26.5%	27.2%	27.8%	27.2%	IDPH
Other	Percentage	13.9%	11.7%	11.9%	12.4%	12.7%	12.4%	IDPH

Vital Statistics: Mortality								
Indicators	Units	Year						Source
		2012	**2013**	**2014**	**2015**	**2016**	**2017**	
Sex								
Female	Number	47.0%	46.2%	44.6%	37.4%	51.0%	50.4%	IDPH
Male	Number	53.0%	53.8%	55.4%	62.6%	49.0%	49.6%	IDPH
Age Groups								
Less than 64	Number	21.3%	22.8%	22.9%	23.7%	15.4%	16.1%	IDPH

65 and Older	Number	78.7%	77.2%	76.1%	76.3%	84.6%	83.9%	IDPH

Marital Status								
Indicators	**Units**	**Year**						**Source**
		2012	**2013**	**2014**	**2015**	**2016**	**2017**	
Married	Number	31.7%	38.6%	36.0%	39.6%	30.2%	33.6%	IDPH
Divorced	Number	17.7%	16.2%	17.7%	16.5%	12.8%	16.8%	IDPH
Never Married	Number	8.5%	10.7%	9.7%	9.4%	8.7%	9.5%	IDPH
Widowed	Number	42.1%	34.5%	36.6%	34.5%	48.3%	40.1%	IDPH
Race								
African American	Number	12.8%	7.6%	9.7%	8.6%	10.1%	6.6%	IDPH
White	Number	86.6%	91.9%	88.0%	90.6%	89.3%	92.0%	IDPH
Education								
8th Grade or Less	Number	14.6%	10.2%	11.4%	9.4%	14.8%	9.5%	IDPH
9-12th Grade; No Diploma	Number	15.9%	13.7%	7.4%	10.1%	11.4%	11.7%	IDPH
High School Graduate or GED	Number	46.3%	40.6%	51.4%	54.7%	45.6%	57.7%	IDPH
College; No Degree	Number	9.8%	9.6%	12.6%	7.2%	7.4%	10.2%	IDPH
Associate Degree	Number	3.7%	8.1%	6.9%	7.2%	8.1%	**	IDPH
Bachelor's Degree	Number	5.5%	11.2%	5.7%	5.8%	10.1%	5.8%	IDPH
Graduate Degree	Number	4.3%	6.6%	4.6%	5.8%	**	**	IDPH
City								
Waterloo	Number	64.0%	56.3%	48.6%	64.7%	62.4%	60.6%	IDPH
Cedar Falls	Number	25.0%	29.4%	32.6%	23.7%	24.8%	27.0%	IDPH
Other	Number	11.0%	14.2%	18.9%	12.2%	12.8%	12.4%	IDPH

Injury and Death				
5 Year Injury mortality rates (2013 -2017)				
Indicator	**Unit**	**Crude Rate**	**Age-adjusted Rate**	**Source**
All Transportation Mortality	Rate per 100k	8.7	8.0	Iowa Health Fact Book
Falls Mortality	Rate per 100k	14.3	11.6	Iowa Health Fact Book
Motor Vehicle Traffic Mortality	Rate per 100k	7.7	7.0	Iowa Health Fact Book
Suicides Mortality	Rate per 100k	13.1	14.0	Iowa Health Fact Book
Firearms Mortality	Rate per 100k	8.0	8.2	Iowa Health Fact Book
Poison Mortality	Rate per 100k	7.8	8.9	Iowa Health Fact Book
Homicides Mortality	Rate per 100k	4.1	4.2	Iowa Health Fact Book
Burns Mortality	Rate per 100k	1.5	1.5	Iowa Health Fact Book
All other Unintentional Mortality	Rate per 100k	8.3	7.4	Iowa Health Fact Book

Vehicle Accidents					
Indicator	**Unit**	**Year**			**Source**
		2015	**2016**	**2017**	
Total Accidents Reported	Number	2345	2284	2117	Department of Transportation

Crash Severity (resulting in known injuries or fatality)	Percent	11.1%	12.0%	11.0%	Department of Transportation
Drug/Alcohol Related	Number	88	77	90	Department of Transportation

Indicator	Unit	Year			Source
		2015	**2016**	**2017**	
Average Property Damage per Accident	Number	$5774.79	$5842.19	$6186.79	Department of Transportation
Average Vehicles Involved	Number	1.8	1.8	1.8	Department of Transportation
Average Occupants Involved	Number	2.5	2.5	2.4	Department of Transportation
Injuries					
Total	Number	907	878	832	Department of Transportation
Fatality	Number	11	11	8	Department of Transportation
Major	Number	47	51	30	Department of Transportation
Minor	Number	280	272	244	Department of Transportation
Possible/Unknown	Number	580	555	558	Department of Transportation

Chronic Disease				
5 Year Age-adjusted Cancer Incidence (2012-2016)				
Indicator	**Unit**	**Age-adjusted Rate**	**Average Annual Count (Number)**	**Source**
Bladder Cancer	Rate per 100k, Number	23.7	36.4	IDPH
Colorectal Cancer	Rate per 100k, Number	39.5	59.4	IDPH
Esophageal Cancer	Rate per 100k, Number	4.1	6.4	IDPH
Female Breast Cancer (all ages)	Rate per 100k, Number	140.1	105.2	IDPH
Female Breast Cancer (Under 50 years old)	Rate per 100k, Number	55.4	**	IDPH
Female Breast Cancer (50 years and older)	Rate per 100k, Number	361.9	**	IDPH
Kidney Cancer	Rate per 100k, Number	19.8	29.4	IDPH
Laryngeal Cancer	Rate per 100k, Number	5.6	8.4	IDPH
Leukemia	Rate per 100k, Number	13.6	20.6	IDPH
Liver Cancer	Rate per 100k, Number	5.9	8.8	IDPH
Lung and Bronchus Cancer	Rate per 100k, Number	66.3	102.0	IDPH
Non-Hodgkin Lymphoma	Rate per 100k, Number	19.2	28.8	IDPH
Melanoma of the Skin	Rate per 100k, Number	26.8	37.0	IDPH
Oral Cavity and Pharynx Cancer	Rate per 100k, Number	11.5	17.2	IDPH
Pancreatic Cancer	Rate per 100k, Number	15.1	24.0	IDPH
Thyroid Cancer	Rate per 100k, Number	10.0	13.0	IDPH

COPD						
Indicator	Unit	Year				Source
		2015	**2016**	**2017**	**2018**	
State of Iowa Emergency Department Visits (by age group)						
25-44 years old	Rate per 100k	163.5	158.2	128.0	103.1	IDPH
45-64 years old	Rate per 100k	1021.4	1204.9	992.4	984.8	IDPH

| 65-84 years old | Rate per 100k | 2955.5 | 3515.8 | 2936.1 | 2978.3 | IDPH |
| 85+ years old | Rate per 100k | 2688.6 | 3146.1 | 2440.2 | 2346.7 | IDPH |

Indicator	Unit	Year				Source
		2015	**2016**	**2017**	**2018**	
Black Hawk County Emergency Department Visits (by age group)						
25-44 years old	Rate per 100k	294.6	346.0	153.7	40.1	IDPH
45-64 years old	Rate per 100k	1413.2	1376.4	1084.6	688.5	IDPH
65-84 years old	Rate per 100k	5998.0	5784.4	4067.8	1363.2	IDPH
85+ years old	Rate per 100k	7194.2	5681.5	3954.8	615.7	IDPH
State of Iowa Hospitalization Rates (by age group)						
25-44 years old	Rate per 100k	14.8	12.9	12.4	8.9	IDPH
45-64 years old	Rate per 100k	202.1	217.3	229.3	179.9	IDPH
65-84 years old	Rate per 100k	671.0	661.7	782.1	534.6	IDPH
85+ years old	Rate per 100k	824.6	906.0	1203.7	768.7	IDPH
Black Hawk County Hospitalization Rates (by age group)						
25-44 years old	Rate per 100k	**	**	**	**	IDPH
45-64 years old	Rate per 100k	179.8	166.8	180.2	207.2	IDPH
65-84 years old	Rate per 100k	569.3	445.0	550.2	434.7	IDPH
85+ years old	Rate per 100k	938.4	861.8	1067.2	356.4	IDPH
Asthma						
State of Iowa Hospitalization Rates (by age group)						
0 – 4 years old	Rate per 100k	100.6	101.3	106.5	83.2	IDPH
5 – 14 years old	Rate per 100k	49.7	41.5	41.8	43.7	IDPH
Black Hawk County Hospitalization Rates (by age group)						
0 – 4 years old	Rate per 100k	132.6	163.0	165.7	143.4	IDPH
5 – 14 years old	Rate per 100k	69.2	82.9	37.8	75.3	IDPH
State of Iowa Emergency Room Visit (by age group)						
0 – 4 years old	Rate per 100k	725.2	669.5	684.9	614.5	IDPH
5 – 14 years old	Rate per 100k	503.7	428.8	446.1	418.9	IDPH
Black Hawk County Emergency Room Visit Rates (by age group)						
0 – 4 years old	Rate per 100k	1132.7	757.0	828.6	693.2	IDPH
5 – 14 years old	Rate per 100k	691.5	599.7	580.2	658.8	IDPH
Cardiovascular Disease						
State of Iowa Heart Attack Hospitalization Rate (age adjusted)	Rate per 100k	289.1	304.5	304.0	278.7	IDPH
Black Hawk County Heart Attack Hospitalization Rate (age adjusted)	Rate per 100k	316.5	327.6	323.2	272.4	IDPH

Communicable Disease						
Indicator	Unit	Year				Source
		2015	**2016**	**2017**	**2018**	
STI						
Overall Rate	Rate per 100k	667	665	616	643	County Health Rankings

Chlamydia	Rate per 100k	631	718	776	757	IDPH
Gonorrhea	Rate per 100k	204	203	239	310	IDPH
Syphilis	Rate per 100k	**	14	**	11	IDPH
HIV Incidence	Rate per 100k	66.7	68.5	77.2	90.9	County Health Rankings
Other Diseases						
Lyme Disease	Rate per 100k	6	**	5.3	3	IDPH CADE
Mumps	Rate per 100k	18.7	159.3	9.1	3	IDPH CADE
Pertussis (whopping cough)	Rate per 100k	4.5	3.8	10.6	**	IDPH CADE

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The figures above illustrate BRFSS data on adult obesity prevalence for each state. Each map displays data for a given year from 2013 to 2018. The prevalence of obesity has been increasing every year throughout the United States. In 2018, there were no states that had a prevalence of obesity less than 20%. Iowa was ranked alongside the highest states with an obesity prevalence greater than 35%. In Iowa, the average obesity prevalence for all racial ethnic groups for 2016-2018 was 34.6%. The average obesity prevalence in Iowa was broken down by race and ethnicity for 2016-2018 as well. Non-Hispanic White adults was 34.5%, non-Hispanic Black/African American adults was 41.7%, and Hispanic adults of all races was 34.4%.

Data obtained from: http://www.cdc.gov/obesity/data/prevalence-maps.html.

Leading causes of death by age group: 2016

Age 65 to 84 years of age

All Other Diseases (Residual)
16.7%

Malignant Neoplasms
28.8%

Cerebrovascular Disease
4.3%

Chronic Lower Respiratory Diseases
9.3%

Diseases of the Heart
21.7%

85 years of age and over

Malignant Neoplasms
11.3%

All Other Diseases (Residual)
21.7%

Diseases of the Heart
28.2%

Alzheimer's Disease
8.9%

Cerebrovascular Disease
6.4%
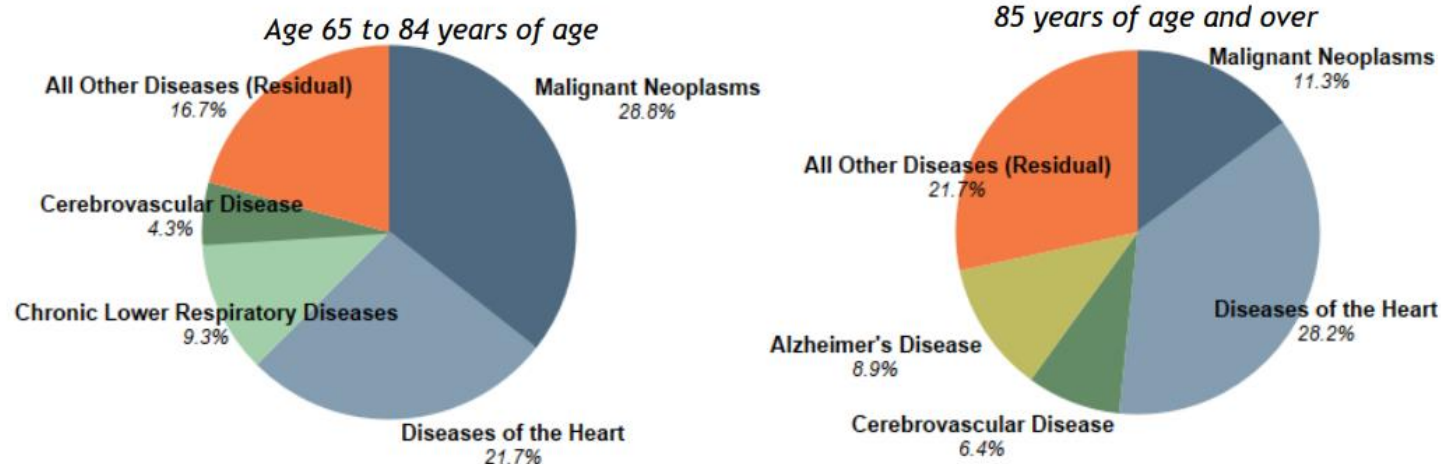
Leading causes of death for all Iowans: 2016

Disease of the heart:
23.3%

Malignant Neoplasms:
21.6%

Chronic lower respiratory:
6.7%

Unintentional injuries:
5.3%

Alzheimer's Disease:
4.8%

Other:
38.3%

In 2016, 16.4% of the total population in Iowa was 65 and older, and it is projected by the year 2050 this group will make up 19.7% of the population. As the population ages it is becoming increasingly important to understand health indicators and the barriers faced by this age group. The MHI for an individual in Iowa 65 years and older was $39,433 compared to all Iowans averaging $56,247. The poverty rate for people 65 and older in 2016 was 6.9% compared to 11.8% for all Iowans. The percentage of Iowans 65 years or older without health insurance coverage was 0.2% compared to all Iowans at 4.3%.

For Iowans age 65 to 84 years of age the leading cause of death is malignant neoplasms, and the leading cause of death for Iowans older than 85 years is diseases of the heart. Overall, the leading cause of death for Iowans age 65 and older is diseases of the heart when combining both age categories.

Data obtained from: http://publications.iowa.gov/28014/1/older2018.pdf