Johnson County
Community Health Needs Assessment
Table of Contents

EXECUTIVE SUMMARY

When reviewing this data from a purely objective viewpoint, one is naturally led to the conclusion that Johnson County is a very healthy place to live compared to the rest of Iowa and the US as a whole. And you would be correct. Digging down a bit deeper one can begin to see clues as to why this is true. In general, Johnson County is younger, more prosperous and more educated on average. Families tend to be smaller and we have a very favorable array of health-related services. We tend to have healthier behaviors, with a few exceptions, when compared with Iowa and the US as well.

So, when approaching the data with an eye for setting priorities, it can be a difficult task if we rely on comparisons to other populations. A more appropriate approach for Johnson County would be to assess our trends, as much as possible, and analyze where we can make improvements compared to ourselves in the present and past and anticipate where our trends might take us. For instance, while our population is younger than others at present, the growth in our aging population is outpacing other age categories. While youth obesity rates in Iowa are below US rates, the reverse is true for adults. And while death rates in almost all categories are lower than State and US rates, some rates are still below national targets and there continues to be room for improvement. Even though our rates of death may be lower, our top 10 causes of death are virtually the same. It is useful to address causes of morbidity (illness) as they significantly impact our resources and eventually lead to a cause of death or impact our "health" as defined below.

As you review these data, I encourage you to ponder the World Health Organization's definition of health which includes "...complete physical, mental and social well-being and not merely the absence of disease or infirmity." While prevention of premature death and disease are certainly the desired outcomes of our efforts, death is inevitable. Our task is to move the community in directions which will preserve and promote health for all segments of the community. I thank you for your interest in this process and welcome your input and efforts to achieve the goals and objectives which will preserve and promote the health of our community.

DEFINITIONS

N/A: Information not available or not applicable.

Mortality: Death.

Morbidity: Diseased state, disability, or poor health due to any cause.

Rate: A ratio, with the general formula including the number of events in a given time period in the numerator and the number of people at risk of the event during the same time period in the denominator.

Incidence: A measure of the risk of developing a new condition within a specified period of time.

Prevalence: The total number of cases of a disease in the population at a given time; prevalence rate is the total number of cases in the population, divided by the number of individuals in the population.

Crude Rate: (Number of x in the given time period; x could be deaths, births, etc.) / (number of people in the population during that time period) * 100,000. Unless otherwise noted, all crude rates are per 100,000 population and use the 2000 US Std. Population.

Age-Adjusted Rate: Age-adjusted rates are standardized rates that are used in order to adjust for different rates in different age groups. It is essential when comparing age-sensitive rates between geographic areas that have different age distributions. Unless otherwise noted, age-adjusted rates are per 100,000 population and use the 2000 US Std. Population.

Years of Potential Life Lost: A measure of premature mortality. YPLL is an estimate of the average additional years a person would have lived if he or she had not died prematurely.

COMMUNITY ASSESSMENT DATA: SOCIODEMOGRAPHIC & COMMUNITY CHARACTERISTICS

Demographic Characteristics

Population

Johnson County's population continues to grow, with an estimated population of 131,005 in 2009. This represents an 18% population growth from estimates in 2000. The demographic distribution of the Johnson County residents remains consistent with previous census data.

Age

Johnson County has a smaller proportion of children and older adults than state and national population distributions (Figure 1). The large population of 15-19 year old and 20-24 year old citizens is reflected in Johnson County's age distribution (Figure 2). This is due to the large University of Iowa student population that resides in Johnson County.

Figure 1: Percent of Population Who Are Children and Older Adults

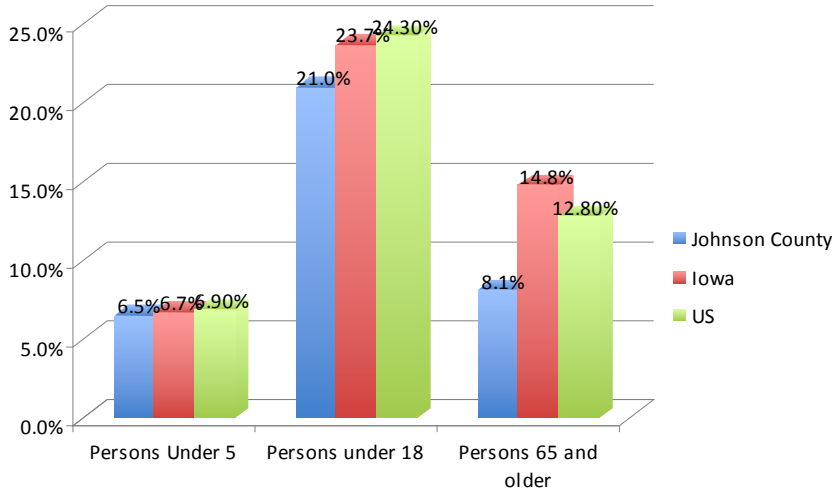
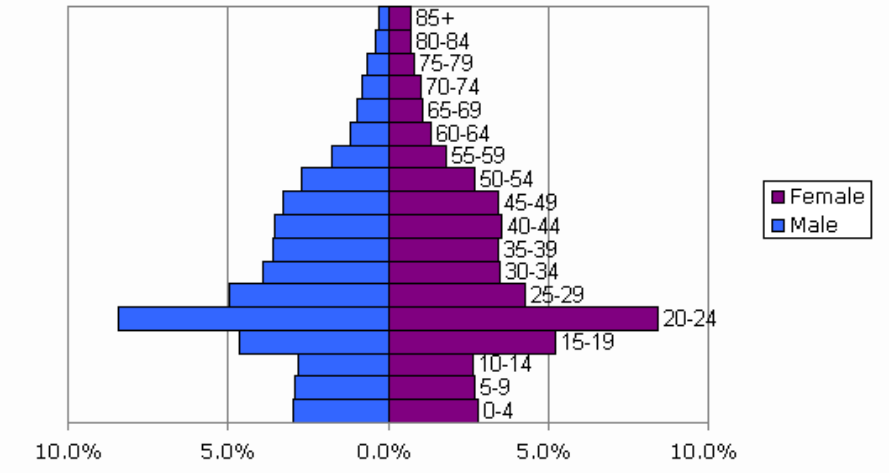


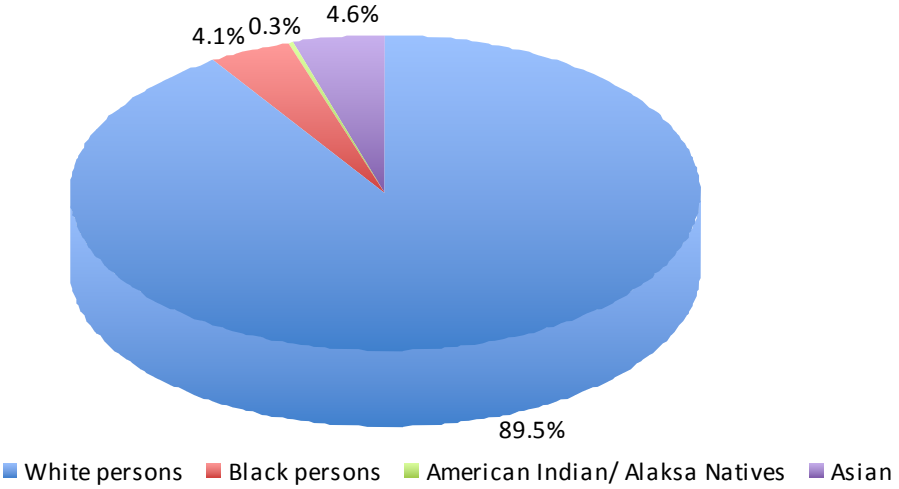
Figure 2: Age Distribution of Johnson County's Population



Race/Ethnicity

Like previous years, the racial background of Johnson County is predominantly white (Figure 3). However, it should be noted that Johnson County is more racially diverse than the rest of the state of Iowa. Along similar lines, the ethnic background of Johnson County is predominantly Caucasians, while persons of Hispanic origin represent 3.3% of the population. The Hispanic representation in Johnson County is lower than the state of Iowa, which reports Hispanics at 4.2% of the population.

Figure 3: Racial Distribution of Johnson County's Population



Gender

The population distribution between males and females is almost equal, with females representing 50.2% of the Johnson County population. Iowa and the United States have slightly higher proportions of female residents.

Sources

Iowa Health Factbook
Johnson County Quick Facts from the US Census Bureau: http://quickfacts.census.gov/qfd/states/19/19103.html
http://www.census.gov/cgi-bin/saipe/saipe.cgi
Robert Wood Johnson Foundation County Profile http://www.countyhealthrankings.org/iowa/johnson

Social Characteristics

Household/Family Characteristics

Household/Family Size

The average household size in Johnson County is 2.3, which is smaller than the national level of 2.6. Similarly, average family size is 3, compared to 3.2 at the national level.

Marital Status

Johnson County has a higher number of single residents than the United States. Of males over the age of 14, 45.2% are currently married, compared to 52.2% at the national level. Of females over the age of 14, 43.6% are currently married, compared to 48.2% at the national level.

Single Parent Families

Johnson County single-parent families represent 6% of the population, compared to 8% of the state.

Foreign Born

Over 6% of Johnson County residents are foreign born, compared to 3.1% of state residents. These people indicated they were either a U.S. citizen by naturalization or they were not a citizen of the United States and

includes: immigrants (legal permanent residents), temporary migrants (e.g., students), humanitarian migrants (e.g., refugees), and unauthorized migrants (people illegally residing in the United States).

Language

Nearly 11% of Johnson County residents speak at least one language other than English at home, compared to 5.8% at the state level. Many of these speak English as well though, so this is not a true measure of English proficiency. The Iowa City Community School District reports that around 350 students are in the English Learning Program because of limited English proficiency.

Sources

http://www.census.gov/cgi-bin/saipe/saipe.cgi
http://quickfacts.census.gov/qfd/states/19/19103.html
Robert Wood Johnson Foundation County Profile http://www.countyhealthrankings.org/iowa/johnson
http://www.iowa-city.k12.ia.us/curriculum/english_language.html#reports

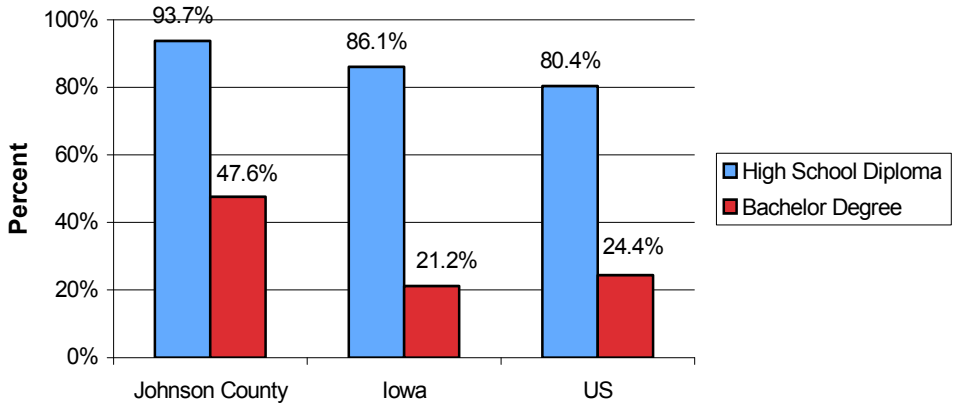
Economic Characteristics

Education

Adults

Johnson County residents are well above state and national rates, with 93% of residents over the age of 25 having completed a high school degree, and 47% holding a bachelors degree (Figure 1).

Figure 1: Percent of Population over the Age of 25 with a High School Diploma and Bachelor Degree (2000)



Youth

Johnson County had a significantly higher percentage of ninth graders graduating with their class in four years compared to the state and the nation in both 2000 and 2008 (Table 1). There was very little change in the county, state or nation between those years. When comparing the test scores from the Iowa Test of Basic Skills (ITBS), it appears that students in the state of Iowa increased their scores for both 4th grade reading and 8th grade math from 2003 to 2008 (Table 2). Unfortunately students in Johnson County scored lower in both 4th grade reading and 8th grade math in 2008, although not significantly. When comparing proficiency on the ITBS reading comprehension section from 2001-2003 and 2007-2009 school years, the percentage of 4th and 8th grade students who were proficient increased (Table 3). Students in 11th grade had a slight decrease. In all grades, students who were female, white, not eligible for free or reduced priced meals, non-disabled, English speaking and non-migrant scored higher. Students who were male, African American, eligible for free or reduced-priced meals, disabled, ELL and migrant scored the lowest (Table 3). A significant percentage difference occurred with all of these but males. School attendance for Kindergarten through 8th grade for ICCSD was 95.4%, just missing the *No Child Left Behind* target of 95.9%.

Table 1: High School Graduation: Ninth Graders Graduating with Their Class in Four Years

	2000			2008		
	Ninth Grade Enrollment	Graduates	Percentage	Ninth Grade Enrollment	Graduates	Percentage
Johnson County	945	883	93.4%	1090	1023	93.9%
Iowa	37,759	33,504	88.7%	38,960	34,562	88.7%
US	3,561,187	2,553,844	71.7%	4,013,000	3,026,000	75.4%

Table 2: Student Test Scores: 4th Grade Reading and 8th Grade Math Scores on the Iowa Test of Basic Skills

	4th Grade Reading		8th Grade Math	
	2003	2008	2003	2008
Johnson County	80.1%	78.7%	80.6%	78.3%
Iowa	75.9%	78.9%	71.6%	76.1%
US	60.0%	60.0%	60.0%	60.0%

(national percentages are based on standards developed in 2000)

Table 3: Percent of Iowa Students Proficient on ITBS Reading Comprehension Tests

	4th Grade		8th Grade		11th Grade	
	01-03	07-09	01-03	07-09	01-03	07-09
ALL	75.9	79.2	69.3	72.8	77.0	76.8
Females	78.1	81.3	72.2	75.1	81.7	80.2
Males	73.7	77.2	66.5	70.6	72.6	73.5
White	78.6	82.2	72.0	76.2	78.6	79.2
African American	48.4	56.3	35.9	45.2	49.7	50.8
Hispanic	52.6	62.6	43.0	49.1	53.5	55.9
Asian	75.5	80.9	68.6	74.3	75.1	76.1
American Indian	60.6	63.6	49.2	61.2	62.5	59.6
Eligible for free or reduced priced meals	60.5	66.4	49.7	55.1	60.8	60.3
Non-eligible for free or reduced priced meals	82.2	86.2	75.4	80.7	79.9	82.1
*Disability	29.1	40.0	22.9	24.6	27.5	29.6
No disability	81.9	84.6	76.9	80.0	82.0	83.1
**ELL	40.6	52.1	27.2	30.8	31.6	32.9
English	76.7	80.5	69.9	74.0	77.5	77.6
***Migrant	43.6	55.4	30.4	41.3	26.0	47.7
Non-migrant	76.7	80.5	69.9	74.0	77.5	77.6

*Disability status is determined by the presence of an individualized education plan (IEP)
**ELL – English Language Learner
***Migrant –Has moved districts in past 36 months so parents could obtain temporary/seasonal employment in agriculture as principle means of livelihood

Employment

The unemployment rate in Johnson County is 3%, lower than the state level of 4% (Figure 2). Johnson County has consistently had lower unemployment rates than that state for the past 20 years. Of the employed, many Johnson County residents hold professional positions, a much higher proportion in that sector compared to the state level (Figure 3). Other common occupations include administration support workers, service workers and sales workers.

Figure 2: Unemployment Rates in Johnson County and Iowa

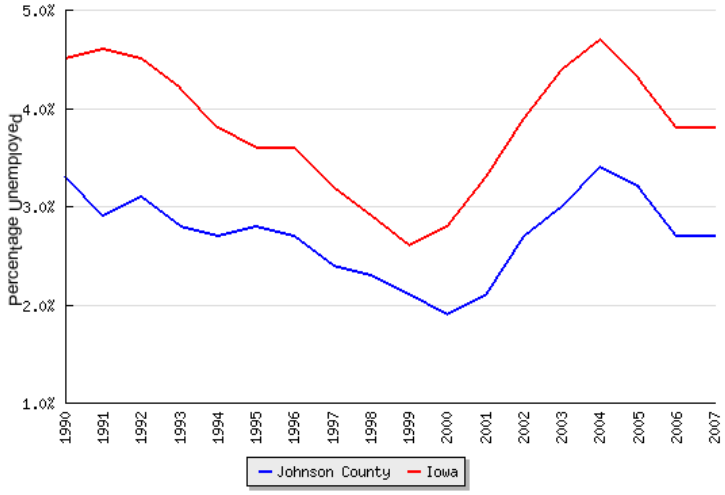
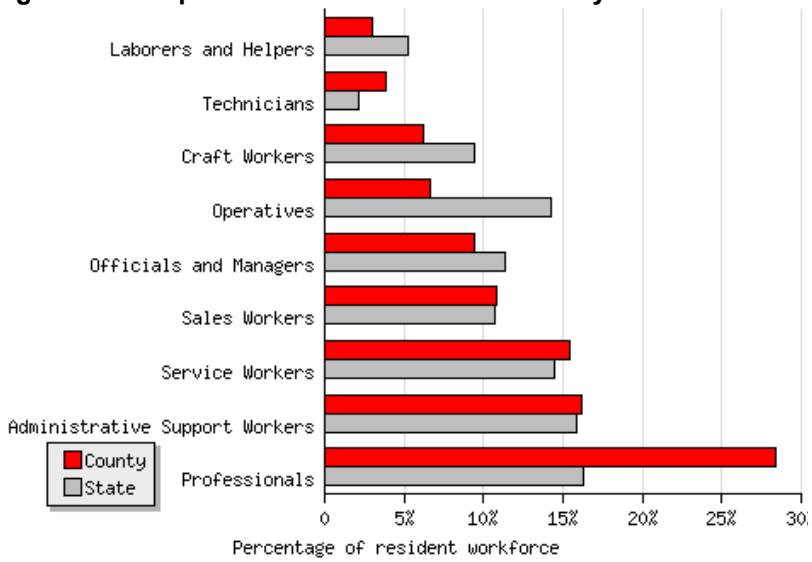


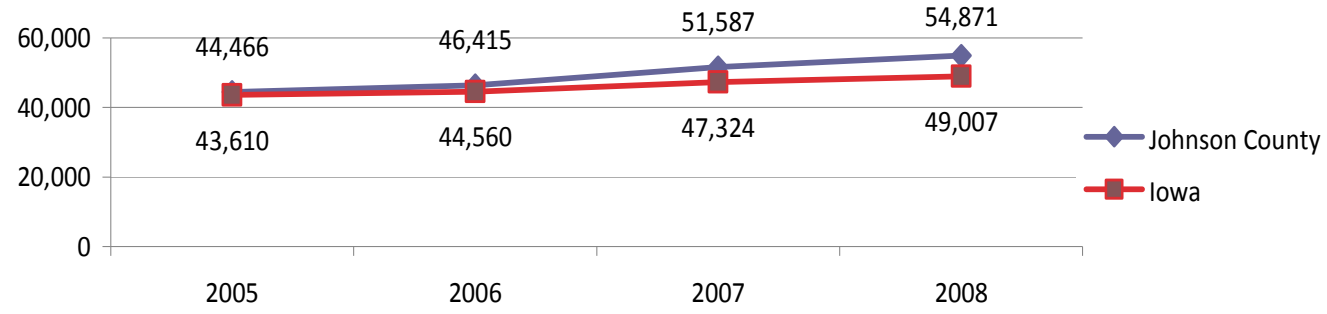
Figure 3: Occupation Levels at State and County Level



Income

The median yearly income in Johnson County is $54,871, which is higher than the state of Iowa median by over $5,000 (Figure 4). Income levels have risen at both the state and national levels for the past few years.

Figure 4: Yearly Income Levels and State and County Level

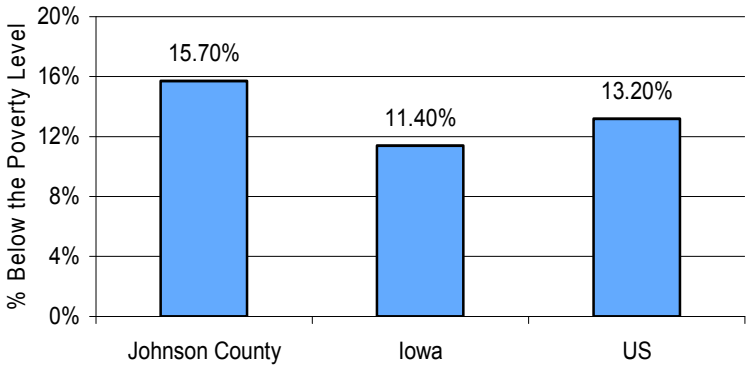


Poverty

Poverty rates in Johnson County were higher than the state and national rates in 2008, with the census reporting 15.7% of Johnson County residents living below the poverty line; the state of Iowa reports 11.4% below the

poverty line, whereas national trends indicate 13.2% are below the poverty line (Figure 5). The number of Johnson County residents living in poverty has increased for the past three years. An estimated 2,966 children under age 18, or 11%, live in poverty, although this is lower than the state rate of 14% of children who live in poverty.

Figure 5: Percent of Population below the Poverty Level



Assistance Programs

Income maintenance refers to a collection of assistance programs for low-income individuals and families (from federal, state, and local programs). Johnson County residents have a lower percent of personal income from income maintenance payments, compared to the state (Figure 6). Similarly, Johnson County has a lower percentage of residents receiving services from the Food Assistance Program and Family Investment Program, and a lower rate of students eligible for free or reduced school lunch compared to the state (Table 5). Although the percent of the Johnson County population utilizing the Family Investment Program has varied over time (Figure 7), participation in the Food Assistance Program and eligibility for free or reduced school lunch has increased the past five years in Johnson County (Figures 8 & 9).

Figure 6: Share of Local Personal Income from Income Maintenance Payments (2006)

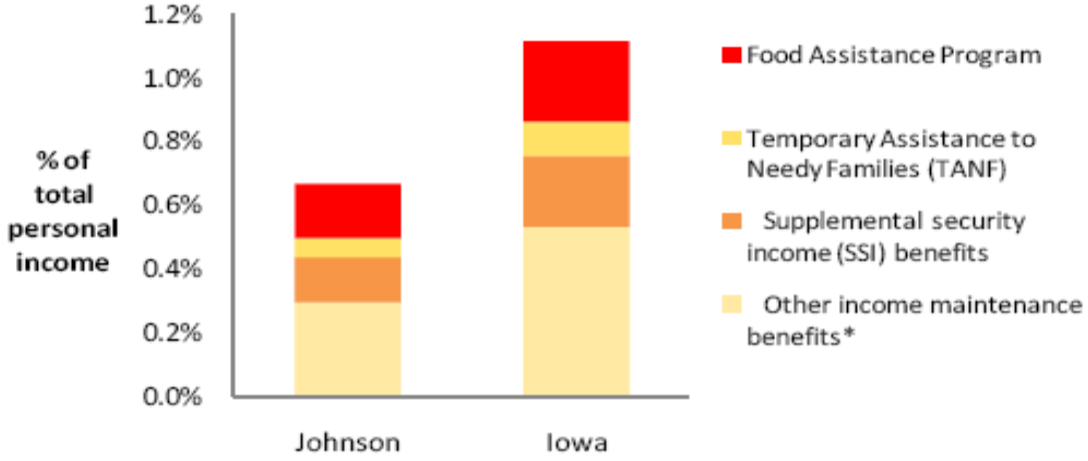


Table 5: Participation in Selected Assistance Programs (2007)

	Johnson County	State of Iowa
Food Assistance Program (fiscal year 2007)		
Average number of participants per month	7,160	
Average payment per recipient ($)	105	94
Recipients as a % of the total population	5.7%	8.1%
Family Investment Program (calendar year 2007)		
Average number of participants per month	1,346	
Average payment per recipient ($)	125	129
Recipients as a % of the total population	1.1%	1.4%
WIC (average for calendar years 2006-2007)		
Unduplicated annual participation counts*	*3,446*	*115,976*
Women	*1,063*	*34,801*
Children	*2,384*	*81,175*
Free or Reduced School Lunch (academic year 2007-2008)		
Number of students elibible	3,593	
Free Lunch	*3004*	
Reduced Price Lunch	*589*	
Eligible students as a % of total enrollment	24.3%	33.4%

*Unduplicated counts of persons issued food benefits during the year, with each participant counted only once each year. These values were incorrectly converted to monthly averages in an earlier (September 2008) version of this report.

Figure 7: Family Investment Program Participation at State and County Levels

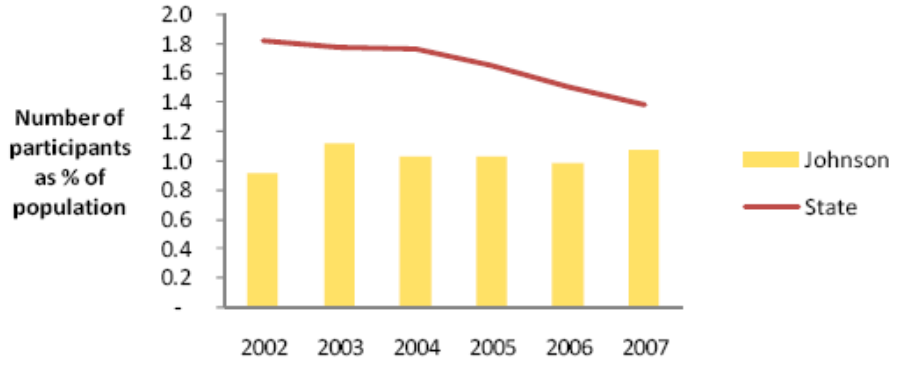


Figure 8: Food Assistance Program Participation at State and County Levels

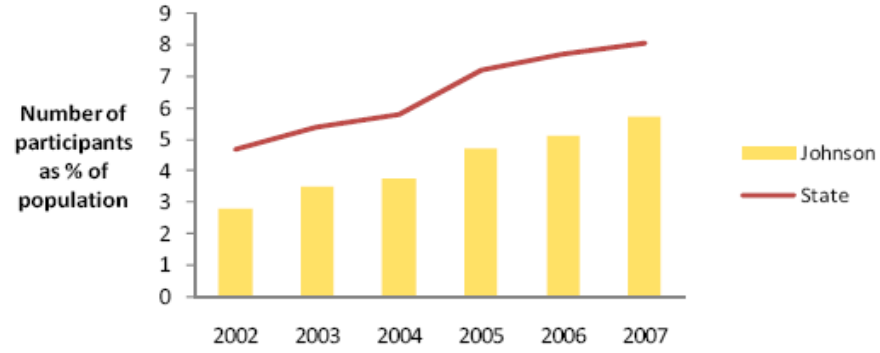
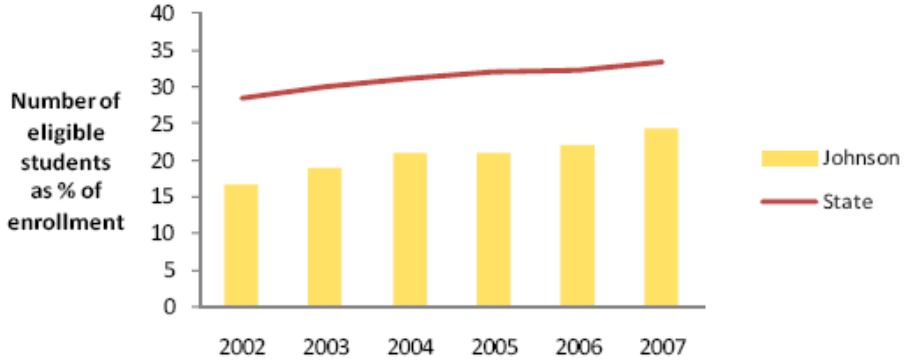


Figure 9: Eligibility for Free or Reduced School Lunch at State and County Levels



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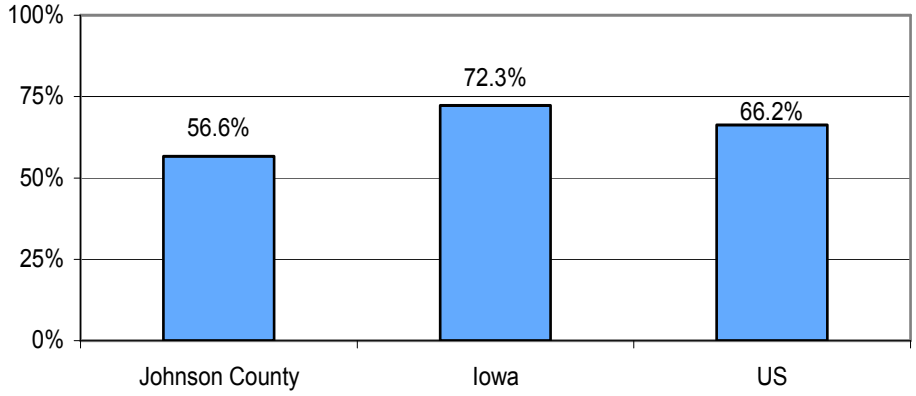
The Annual Condition of Education Report 2009
Iowa Kids Count: Trend in the Well Being of Iowa Children 2008
http://www.recap.iastate.edu/takecharge/select.php?state=19000
http://www.census.gov/cgi-bin/saipe/saipe.cgi
http://quickfacts.census.gov/qfd/states/19/19103.html
Robert Wood Johnson Foundation County Profile http://www.countyhealthrankings.org/iowa/johnson
http://www.recap.iastate.edu/local/poverty/files/poverty_19103.pdf

Housing Characteristics

Homeownership

Johnson County has approximately 41,007 buildings/houses for residential dwelling, not including units within counted apartment/condo buildings. Homeownership in Johnson County is lower than the state rate, at 56.6% (Figure 1). This is likely reflective of the large number of students and therefore large number of rental properties in the county. There are 6,283 apartment rental units in Iowa City alone. Of the homes that are owned, the median value is 176,200, which is quite higher than the state home price median. The selected monthly owner costs for homes with a mortgage total $1,437, which is also less affordable than the state average.

Figure 1: Homeownership at County, State and National Levels



Assisted Housing

The Iowa City Housing Authority has 81 Public Housing Units and 1,214 Vouchers available for the Housing Choice Voucher program (Section 8 Housing). In the last 16 months of data collected, the voucher program served 1,296 families in Iowa City and Coralville. The waiting list for the public housing units is approximately 1,000 persons long, and the voucher program has a waiting list of approximately 1,700 people.

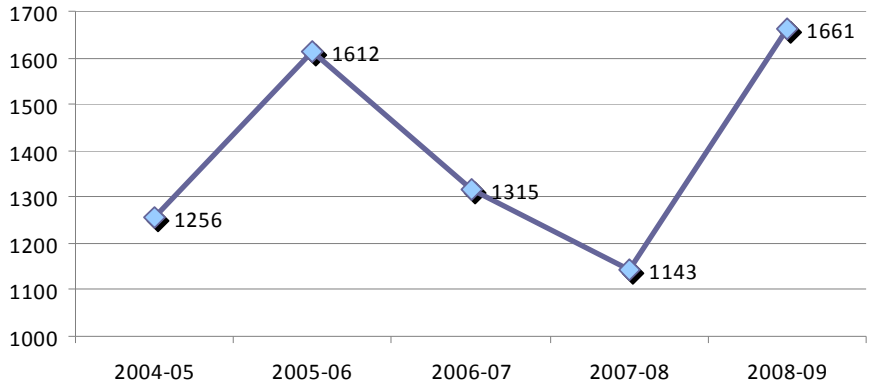
Homelessness

Homelessness is an indicator that is difficult to track. However, taking a look at the agencies that serve the homeless can help identify needs in Johnson County. The Shelter House provided direct services to 857 people in fiscal year 2010. This is a conservative estimate, and they believe this is a slight decrease from what was expected due to a new HUD pilot program providing subsidies for rent for low-income families. This program, coordinated through HACAP, will run for three years. The majority (62%) of people using the Shelter House were male. Interestingly, the racial and ethnic background of users was a high proportion of blacks (44%), while Hispanics represented 6% of those served. When looking at nights of shelter provided, the number of nights of shelter increased sharply in 2009, as have the number of people receiving shelter and average number of nights per stay (Table 1 & Figure 2).

Table 1: Nights of Shelter Provided by the Shelter House, 2004-2009

Year	Nights of Shelter	Unduplicated Counts	Nightly Average
2004-05	1256	166	8
2005-06	1612	173	11
2006-07	1315	186	9
2007-08	1143	163	9
2008-09	1661	209	12

Figure 2: Number of Nights of Shelter Provided by the Shelter House



Sources

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Johnson County and Iowa City Assessor
Shelter House Brochure, Iowa City, Iowa
http://www.shelterhouseiowa.org/home.aspx
Iowa City Housing Authority Annual Report, http://www.icgov.org/default/?id=1213

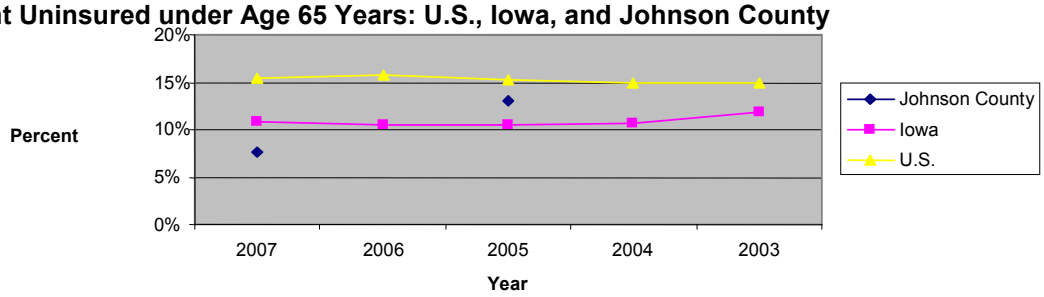
COMMUNITY ASSESSMENT DATA: ACCESS TO HEALTHCARE

At the state and national level, private health insurance coverage declined slightly from 2003 to 2007, however, enrollment in public options (particularly Medicare and Medicaid) increased.

Uninsured

Health insurance coverage is an important aspect of access to healthcare. Between 2003 and 2007 both Iowa and the United States observed a steady percentage of the population living without health insurance. In Iowa, the percent of uninsured ranged from 11.9% in 2003 to 10.8% in 2007, compared with the national average of 15% in 2003 to 15.4% in 2007. In Johnson County, there was a decline in uninsured from 2005 to 2007 from 13% to 10.8% (Figure 1).

Figure 1: Percent Uninsured under Age 65 Years: U.S., Iowa, and Johnson County



In 2006, 6% of uninsured Johnson County residents were under the age of 19 years, while nearly 16% were between the ages of 18 to 64 years (Table 1). Nearly 13% of Johnson County females were uninsured, compared to 15% of males (Table 2). Furthermore, an astounding 73% of the uninsured population was at or below 200% of the poverty line, while 27% were above 200% of the poverty line (Table 3). Between 2004 and 2006, there was a slight increase in Medicare beneficiaries who were elderly or who were disabled in Johnson County, Iowa and the United States (Tables 4, 5).

Table 1: Johnson Co. Uninsured by Age

Age Group	Number	Percent
Under 19yrs	1535	6%
18-64 yrs	13168	16%

Table 2: Johnson Co. Uninsured by Gender

Gender	Number	Percent
Female	6860	13%
Male	8007	15%

Table 3: Johnson Co. Uninsured by Income Level

Income	Number	Percent
Above 200% Poverty Line	3911	27%
At or Below 200% Poverty Line	10956	73%

Table 4: Number of Medicare Beneficiaries who are Elderly: U.S., Iowa, and Johnson County

Level	2006	2005	2004
Johnson County	16,745	16,790	16,549
Iowa	427,250	421,846	425,803
U.S.	35,224,339	35,633,683	35,300,848

Table 5: Number of Medicare Beneficiaries Who Are Disabled

Level	2006	2005	2004
Johnson County	2,991	2,951	2,832
Iowa	63,198	61,422	59,496
U.S.	6,689,118	6,483,556	6,222,184

Sources

Iowa Health Fact Book
www.ada.org/ada/prod/survey/faq.asp
http://www.cms.hhs.gov/MedicareEnrpts/
http://hcupnet.ahrq.gov/
http://www.ihaonline.org
http://www.statehealthfacts.org
http://www.nschdata.org/StateProfiles

Access to Preventive Care

Preventive care is becoming a greater issue due to the rise of chronic illnesses. There are approximately 1.1 primary care physicians per 1,000 population in Iowa, which is nearly equivalent to the United States (1.2 physicians per 1,000 population). Along with an adequate number of physicians, there was an increase in the number of people who have a medical home from 2003 to 2007 in both Iowa and the United States. Iowa children ages 0-17 years with a medical home went from 52.1% in 2003 to 66.9% in 2007, which was above the national percentage of 46.1% in 2003 to 57.5% in 2007 (Table 1). Nearly 80% of Johnson County residents reported having a medical home in 2008 (Table 2).

Table 1: Percentage of Children Age 0-17 Years with a Medical Home

Level	2007	2005	2003
Iowa	66.9%	57.4%	52.1%
U.S.	57.5%	47.1%	46.1%

Table 2: Number and Percentage of Johnson County Residents with a Medical Home in 2008

All Ages		Less than 1 yr		Ages 1-21		Ages 22 & over	
Number	% of Pop.	Number	% of Pop.	Number	% of Pop.	Number	% of Pop.
99,799	79.4%	92,886	73.9%	100,805	80.2%	72,147	57.4%

The Free Medical Clinic in Johnson County also serves as a means of preventive care for the uninsured. Between 2006 and 2009, total clients and total clinic visits increased (Table 3). A majority of clients who visit the clinic are between the ages of 25-34 years and 45-64 years, and are generally Caucasian or Hispanic (Tables 4 & 5). Further, most of the clients are a resident of Iowa City or Coralville, although there is a small amount of clients who are residents of surrounding counties (Table 6). Finally, many patients receive vouchers for medications and eyeglasses/exams (Table 7).

Table 3: Number of Iowa City Free Medical Clinic Clients and Clinic Visits

	FY 09	FY 08	FY07	FY 06
Total Clients	2669	2585	2516	2474
Total Clinic Visits	6354	6118	5944	5792

Table 4: Age of Iowa City Free Medical Clinic Clients

	FY09	FY08	FY07	FY 06
Under 18	127	144	131	133
18-24	518	563	512	511
25-34	678	657	694	646
35-44	489	453	449	442
45-64	772	696	660	677
65 and over	85	72	70	65

Table 5: Iowa City Free Medical Clinic Clients by Race/Ethnicity

	FY 09	FY 08	FY 07	FY 06
Asian	96 (4%)	95	70	94
Black	480 (18%)	507	408	385
Hispanic	761 (29%)	622	675	611
No Answer	15 (<1%)	38	93	126
Native American	7 (<1%)	9	17	18
Other	54 (2%)	54	30	41
White	1256 (47%)	1260	1223	1199

Table 6: Iowa City Free Medical Clinic Clients by Residence

	FY 09	FY08	FY07	FY06
Iowa City	1576	1550	1493	1385
Coralville	343	402	286	348
Johnson Co.	190	163	184	158
Benton Co.	2	1	2	4
Cedar Co.	44	45	39	35
Jefferson Co.	29	19	20	26
Linn Co.	23	22	20	15
Muscatine Co.	189	149	125	114
Washington Co.	100	84	92	90
State of Iowa	154	135	240	287

Table 7: Number of Vouchers at the Iowa City Free Medical Clinic

	FY09	FY08	FY07	FY06
Medications	172	241	339	427
Eyeglass/exams	105	108	110	64
Hearing aid	2	0	0	2
Joe's Fund	2	13	11	2

Sources

Iowa Health Fact Book
www.ada.org/ada/prod/survey/faq.asp
http://www.cms.hhs.gov/MedicareEnrpts/
http://hcupnet.ahrq.gov/
http://www.ihaonline.org
http://www.statehealthfacts.org
http://www.nschdata.org/StateProfiles

Emergency Room Use

The majority of emergency room visits resulting in an admission to the hospital (in both Iowa and the United States) were patients who either had Medicare only or were uninsured (Table 1). Due to the large percentage of uninsured, nearly 12.5% of UIHC's budget in fiscal year 2008 was allocated to uncompensated care due to patients who either qualified for free or reduced-charge care or the patient failed to pay what was owed (Table 2). Of Mercy Hospital's budget, 2.4% included uncompensated care. The majority of emergency room visits (from 2006 to 2009) listed as "self pay" at UIHC were made by either Caucasians or African Americans (Table 3).

Table 1: Percent Admitted from Emergency Department by Insurance Status

	2006				2005				2004			
Level	**Medicare Only**	**Medicaid Only**	**Uninsured**	**Other**	**Medicare Only**	**Medicaid Only**	**Uninsured**	**Other**	**Medicare Only**	**Medicaid Only**	**Uninsured**	**Other**
Iowa	45.9%	13.4%	3.9%	36.8%	46.8%	13.0%	3.6%	36.6%	46.9%	11.7%	3.6%	37.8%
U.S.	37.3%	19.5%	5.7%	37.5%	37.2%	19.5%	5.4%	38.0%	36.3%	19.0%	5.4%	39.2%

Table 2: Health Care Charges That the Hospital Did Not Receive Payment for Because the Patient Qualified for Free or Reduced-Charge Care or Because the Patient Failed to Pay What was Owed: FY 2008

	Charity Care	Bad Debt	Total Uncompensated Care
Mercy Hospital	$2,822,508 (0.9%)	$4,655,619 (1.5%)	$7,478,127 (2.4%)
UIHC	$188,083,424 (10.8%)	$29,369,045 (1.7%)	$217,452,469 (12.5%)

Table 3: Number of Emergency Room Visits Listed as "Self Pay" at UIHC by Race

Race	2009	2008	2007	2006
Caucasian	1,876	1,709	2,014	1,545
Left Question Blank	948	1,468	1,385	1,510
African American	551	352	356	217
Hispanic/Latino	256	227	211	193
Asian	25	8	18	11

Sources

Iowa Health Fact Book
www.ada.org/ada/prod/survey/faq.asp
http://www.cms.hhs.gov/MedicareEnrpts/
http://hcupnet.ahrq.gov/
http://www.ihaonline.org
http://www.statehealthfacts.org
http://www.nschdata.org/StateProfiles

Health Care Assets

Residents of Johnson County have the advantage of having many health care facilities to choose from. Table 1 lists the number of facilities available in Johnson County and the number of primary care physicians and dentists. The University of Iowa and Mercy Hospital have a variety of different specialists that also practice in Johnson County (Table 2).

Table 1: Number of Health Facilities & Providers in Johnson County

Facilities:	
Hospitals	3
Mercy Hospital Satellite Clinics	4
UIHC Community Outreach Locations	48
Total Hospital Beds	1,680
Trauma Care Facilities	2
Free Clinics	1
Nursing Facilities	9
Total Nursing Facility Beds	594
Chronic Confusion/Dementing Illness Units	1
Intermediate Care Facilities for the Mentally Retarded	1
Residential Care Facilities	1
Preventative Medicine:	
Primary Care Physicians	226
Dentists	159

Table 2: Number of Health Specialists in Johnson County

UIHC Specialties:		
Anesthesia		71
UI Heart and Vascular Center Physicians		
	Cardiac Anesthesia	6
	Thoracic Surgery	3
	Cardiac Surgery	5
	Pediatric and Congenital Cardiothoracic Surgery	1
	Cardiovascular Medicine	31

	Cardiovascular and Nuclear Radiology	3
	Cardiovascular and CT Radiology	4
	Cardiovascular and MRI	2
	Vascular Surgery	5
Holden Comprehensive Cancer Center Physicians		
	Radiation Oncologists	8
	Body Imaging/PET/CT Scans	5
	Palliative Care Program	1
Dermatologists		10
Emergency Medicine Faculty		22
Family Medicine Faculty		27
	Geriatrics, Sports Medicine, Women's Services, Children's Services, and Family Care Center Mental Health Services	
Hospital Dentistry Faculty		
	Oral and Maxillofacial Surgery	6
	Maxillofacial Prosthodontics	1
	Orthodontics	1
	General Dentistry at Hospital Dentistry Institute	5
	Pediatric Dentistry	3
	Periodontics	1
	Endodontics	2
	Oral Pathology	1
Internal Medicine Faculty		
	Cardiovascular Medicine Faculty	52
	Clinical Pharmacology	3
	Endocrinology and Metabolism Faculty	11
	Gastroenterology and Hepatology	25
	General Internal Medicine	55
	Hematology, Oncology, and Blood & Bone Marrow Transplantation	29
	Immunology	26
	Infectious Disease	21
	Nephrology	23
	Pulmonary, Critical Care, and Occupational Medicine	39
	Bioinformatics and Computational Biology	2
Neurology		38
Neurosurgery		8
Obstetrics/Gynecology		51
UI Women's Health Faculty		
	UI Maternity Center	29
	Maternal Fetal Medicine	8
	Prenatal Genetics	9
	Fetal Diagnosis and Treatment	10
	Pre-Menstrual Syndrome Clinic	1
	UI Breast Health	10
	Women's Wellness and Counseling Service	6
	Colposcopy Clinic	9
	Fibroid Clinic	4
	Pediatric and Adolescent Gynecology Clinic	2
	Vulvar Vaginal Disease Clinic	3
	Center for Advanced Reproductive Care	9
	Urogynecology and Reconstructive Surgery Clinic	5
Ophthalmology and Visual Sciences Faculty		
	Carver Family Center for Macular Degeneration	7
	Contact Lens	2
	Cornea/External Disease	3
	Echography	1
	Glaucoma	6
	Heritable Eye Disease	4
	Medical Image Analysis	1
	Molecular and Cellular Ophthalmology	6

	Neuro-Ophthalmology	6
	Ocular Pathology	2
	Oculoplastic, Lacrimal& Orbital Surgery & Ophthalmic Oncology	2
	Optometry	3
	Pediatric Ophthalmology	4
	Primary Eye Care	10
	Refractive Surgery	3
	Retina	6
	Uveitis	1
	Vascular Disease	1
	Vision Rehabilitation	1
	Visual Fields	1
Orthopaedics and Rehabilitation Faculty		28
	Specialties: Amputees, clubfoot, congenital dislocation of the hip, hand reconstruction, hip and knee reconstruction, metabolic diseases, neck and back, neuromuscular diseases, physical medicine and rehabilitation, scoliosis, sports medicine, trauma and tumors	
Otolaryngology (Head and Neck) Faculty		
	Facial Plastics, General Plastic Surgery	2
	General Otolaryngology	2
	Head and Neck Oncology	4
	Laryngology	2
	Neurotology	2
	Pediatric Otolaryngology	3
	Rhinology and Sinus Surgery	2
Pathology Faculty		63
Pediatrics Faculty		
	General Pediatrics	19
	Allergy-Pulmonary	6
	Cardiology	12
	Critical Care	5
	Developmental and Behavioral Medicine	6
	Endocrinology	4
	Gastroenterology	5
	Genetics	6
	Hematology-Oncology	4
	Infectious Diseases	3
	Neonatology	16
	Nephrology, Dialysis and Transplantation	4
	Neurology	7
	Nutrition	3
	Pediatric Surgery	3
	Psychology	6
	Rheumatology	2
Psychiatry Faculty		30+
	Medical psychiatry, child and adolescent psychiatry, child psychiatry school, neuropsychology, eating disorders, mood disorders, chemical dependency	
Radiology Faculty		
	Body Imaging	7
	Breast Imaging	5
	Cardiovascular & Pulmonary Imaging	4
	Interventional Neuroradiology	2
	Musculoskeletal Radiology	4
	Neuroradiology	10
	Nuclear Medicine	6
	Pediatric Radiology	3
	Vascular and Interventional Radiology	3
	Veteran's Administration Medical Center	2
Surgery Faculty		

	Acute Care Surgery	10
	Gastrointestinal Surgery, Minimally-invasive, and Bariatric Surgery	9
	Pediatric Surgery	3
	Plastic and Reconstructive Surgery	2
	Surgical Oncology and Endocrine Surgery	6
	Transplantation and Hepatobilliary Surgery	5
	Vascular Surgery	5
Urology Faculty		16
Mercy Hospital Specialties:		
Breast Imaging, Cancer care, Diabetes education, Digestive services, Ear/Nose/Throat, Emergency Care, Family Birth Care, Heart & Vascular Care, Home Care, Hospitalist Program, Maternity Care, Mental Health, Mercy Lifeline, Mercy Hospice Care, Mercy On Call, Obstetrics, Occupational Health, Orthopedic Care, Ostomy/Wound Care, Plastic Surgery, Primary Care/Family Medicine, Pulmonary Care, Radiology, Respiratory Care, Robotic Surgery, Urology Services, Vascular Screenings, Weight Management Program		

Source

www.public-**health**.u**iowa**.edu/**factbook**

COMMUNITY ASSESSMENT DATA: HEALTH STATUS

Top Ten Causes of Death & Years of Potential Life Lost

The top ten leading causes of death were similar at the county, state and national levels from 2003 to 2007, with the exception being that cancer was the leading cause of death in Johnson County, but the second leading cause of death at the state and national levels (Table 1). Recently, however, the Iowa Department of Public Health has announced that cancer is now the top cause of death at the state level. When looking at death rates for the top ten causes of death, it is clear that Johnson County has lower death rates for all of the top ten causes of death than the state and national levels (Table 2). Though unintentional injuries are the fifth leading cause of death, they contribute the most years per life lost in Iowa, followed by cancer, heart disease and suicide (Table 3).

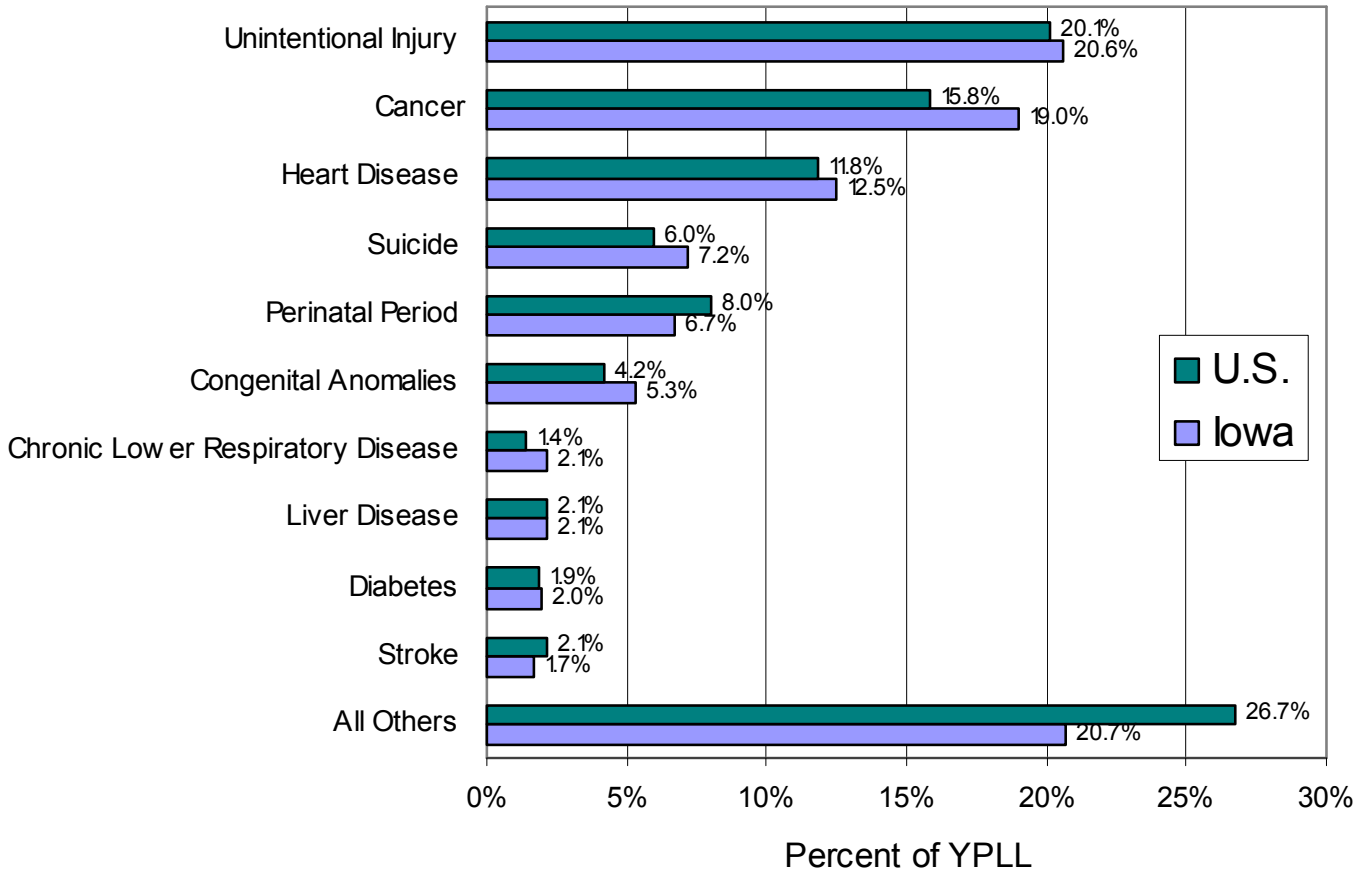
Table 1: Top Ten Leading Causes of Death at the County, State, and National Levels, 2003-2007

Leading Causes of Death	County Rank	Iowa Rank	U.S. Rank
Cancer	1	2	2
Heart Disease	2	1	1
Stroke	3	3	3
Chronic Lower Respiratory Diseases	4	4	4
Unintentional Injuries	5	5	5
Alzheimer's Disease	6	6	7
Flu and Pneumonia	7	7	8
Diabetes Mellitus	8	8	6
Suicide	9	10	11
Infective and Parasitic Diseases	10	9	10

Table 2: Crude Death Rates for Top Ten Causes of Death at County, State, and National Levels, 2003-2007

Leading Causes of Death	County Rate	State Rate	U.S. Rate
Cancer	118.6	214.9	188.3
Heart Disease	98.7	246.0	218.6
Stroke	32.8	62.8	48.8
Chronic Lower Respiratory Diseases	26.2	55.4	42.7
Unintentional Injuries	23.6	39.5	39.0
Alzheimer's Disease	15.2	35.4	23.5
Flu and Pneumonia	12.7	29.2	19.6
Diabetes Mellitus	10.0	25.0	24.7
Suicide	7.7	11.3	11.0
Infective and Parasitic Diseases	6.6	13.2	11.6

Table 3: Top Contributors to Years of Potential Life Lost Before Age 65 at State and National Levels, 2007



Sources

Vital Statistics of Iowa, 2003-2007
National Vital Statistics Reports, 2003-2007

Cancer

From 2003 to 2007, cancer was consistently the number one cause of death in Johnson County and the number two cause of death at the state and national levels. Newer data that is only available at the state level now shows that cancer overtook heart disease as the leading cause of death at the state level as well. Cancer death rates are much lower in Johnson County than at the state and national levels. All three levels have had decreasing death rates in the past few years, although Johnson County's mortality rate has gone down much more significantly (Figure 1). Sixty-eight percent of cancer deaths in Johnson County have been in people aged 65 or older (Table 4). In Iowa, lung cancer causes the most death in males and females, followed by prostate and colorectal cancer for men and breast and colorectal cancer for women (Table 3). Though lung cancer causes the most deaths, it is only the second most common type of new cancer incidence for both genders. Prostate cancer is the most common new type of cancer found in men, while it is breast cancer for women (Tables 7 & 8).

Mortality Data

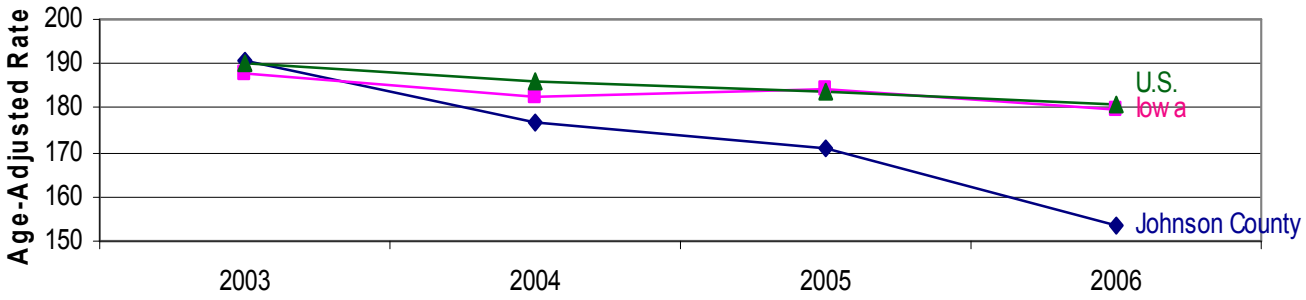
Table 1: Number of Deaths at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths
Johnson Co.	131	25.2%	135	25.0%	142	26.0%	143	27.2%	152	29.0%
Iowa	6,358	23.4%	6,344	23.2%	6,444	23.2%	6,291	23.5%	6,447	23.0%
U.S.	560,187	23.1%	559,888	23.1%	559,312	22.8%	553,888	23.1%	556,902	22.7%

Table 2: Death Rates at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate
Johnson Co.	104.2	¤	109.3	153.3	116.9	170.7	119.2	177.0	129.2	190.5
Iowa	212.8	177	213.9	179.9	218.3	184.2	215.2	182.5	220.3	187.9
U.S.	185.7	¤	187.0	180.7	188.7	183.8	188.6	185.8	191.5	190.1

Figure 1: Age-Adjusted Death Rates at County, State, and National Level



¤ age-adjusted rates have not yet been calculated for 2007

Table 3: Types of Cancer Associated with Most Cancer Deaths in Iowa

	Males
1	Lung
2	Prostate
3	Colon & Rectum
4	Pancreas
5	Leukemia

	Females
1	Lung
2	Breast
3	Colon & Rectum
4	Pancreas
5	Ovary

Johnson County Cancer Deaths, 2002-2006, Detailed

Table 4: Johnson Co. Deaths by Age

Age Group	Number	Pop.	Crude Rate
1-4 years	2	29,159	6.9*
20-24 years	4	94,413	4.2*
25-34 years	6	101,135	5.9*
35-44 years	16	79,334	20.2*
45-54 years	72	74,584	96.5
55-64 years	130	44,494	292.2
65-74 years	161	23,773	677.2
75-84 years	217	15,568	1,393.9
85+ years	110	6,548	1,679.9

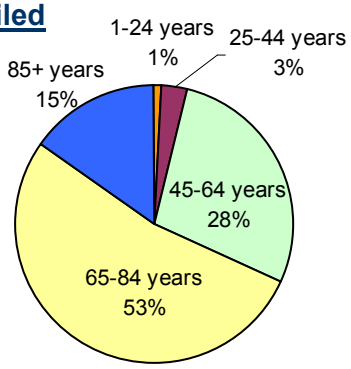


Table 5: Johnson Co. Deaths by Gender

Gender	#	Pop.	Crude Rate	Age-Adj Rate
Female	357	300,888	118.6	153.5
Male	361	297,382	121.4	212.9

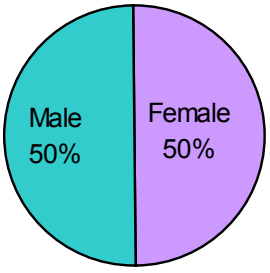
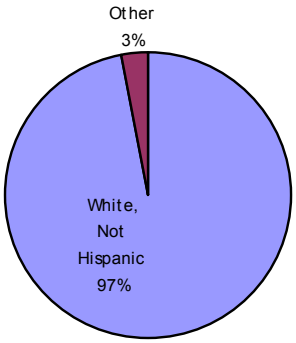


Table 6: Johnson Co. Deaths by Race/Ethnicity

Race/Ethnicity	#	Pop.	Crude Rate	Age-Adj Rate
American Indian, Not Hispanic/Latino	1	1,772	56.4*	116.3*
Asian/Pacific Islander, Not Hispanic/Latino	8	28,860	27.7*	97.3*
Black/African American, Not Hispanic/Latino	8	22,763	35.1*	114.1*
White, Hispanic/Latino	5	16,282	30.7*	97.5*
White, Not Hispanic/Latino	696	527,257	132	178.9

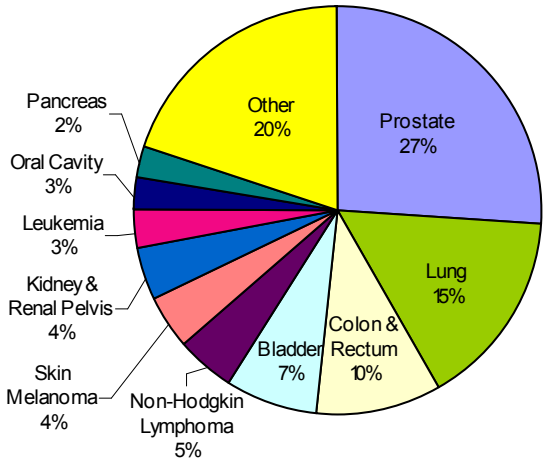
**rate is not reliable*



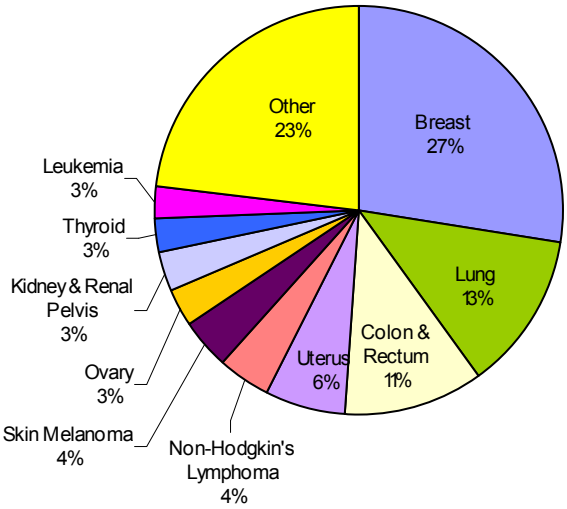
Cancer Prevalence, by Type

Tables 7 and 8: Iowa New Cancer Estimates in Men and Women

	Males		
	Type of Cancer	#	% of New Cancers
1	Prostate	2200	26.2%
2	Lung	1300	15.5%
3	Colon & Rectum	830	9.9%
4	Bladder	620	7.4%
5	Non-Hodgkin Lymphoma	400	4.8%
6	Skin Melanoma	350	4.1%
7	Kidney & Renal Pelvis	350	4.1%
8	Leukemia	250	3.0%
9	Oral Cavity	220	2.6%
10	Pancreas	190	2.3%
	Other	1690	20.1%



	Females		
	Type of Cancer	#	% of New Cancers
1	Breast	2200	27.5%
2	Lung	1000	12.5%
3	Colon & Rectum	900	11.2%
4	Uterus	500	6.2%
5	Non-Hodgkin Lymphoma	350	4.4%
6	Skin Melanoma	300	3.8%
7	Ovary	250	3.1%
8	Kidney & Renal Pelvis	220	2.9%
9	Thyroid	220	2.8%
10	Leukemia	210	2.6%
	Other	1840	23.0%



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Lung Cancer

Lung cancer causes the most deaths in the state of Iowa. For four of the past five years, Johnson County has had a lower lung cancer death rate than the state and national levels (Figure 1). Over three-fourths of deaths in Johnson County are in those aged 65 or greater (Table 3). Sixty percent of deaths in the county have been in males (Table 4). New cases of lung cancer have remained fairly constant over the past few years, only declining slightly. In the past four years, Johnson County has had lower incidence rates than the state of Iowa (Figure 2).

Mortality Data

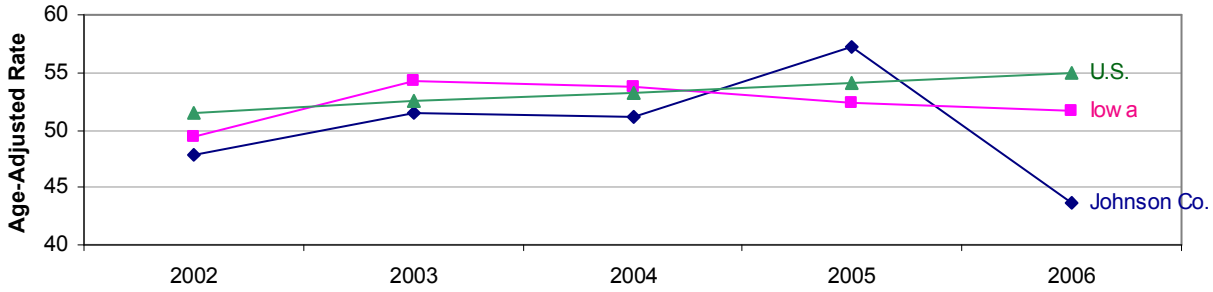
Table 1: Number of Deaths at County, State, and National Level, 2002-2006

Level	2006	2005	2004	2003	2002
Johnson Co.	39	44	41	45	32
Iowa	1,714	1,853	1,823	1,765	1,732
U.S.	158,600	159,220	158,009	157,992	157,630

Table 2: Death Rates at County, State, and National Level, 2002-2006

	2006		2005		2004		2003		2002	
Level	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate
Johnson Co.	27.7	43.7	38.2	57.2	34.2	51.2	36.2	51.5	31.6	47.8
Iowa	59.1	51.6	60.1	52.4	61.9	53.8	62.7	54.2	57.7	49.4
U.S.	54.7	54.9	54.3	54.1	53.8	53.2	53.7	52.6	53	51.5

Figure 1: Death Rates at County, State, and National Level



Johnson County Lung Cancer Deaths, 2002-2006, Detailed

Table 3: Johnson Co. Deaths by Age

Age Group	Number	Pop.	Crude Rate
35-44 years	4	79,334	5.0*
45-54 years	23	74,584	30.8
55-64 years	38	44,494	85.4
65-74 years	48	23,773	201.9
75-84 years	72	15,568	462.5
85+ years	16	6,548	244.3*

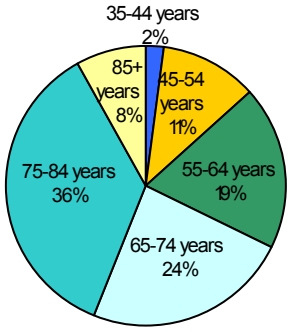


Table 4: Johnson Co. Deaths by Gender

Gender	#	Pop.	Crude Rate	Age-Adj Rate
Female	81	300,888	26.9	36
Male	120	297,382	40.4	70.7

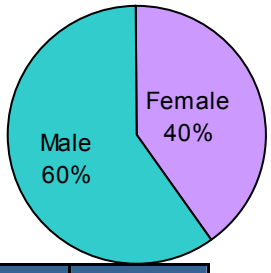
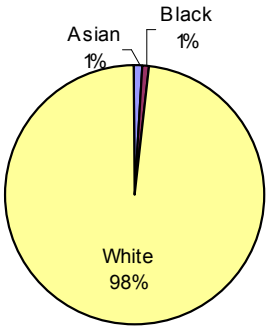


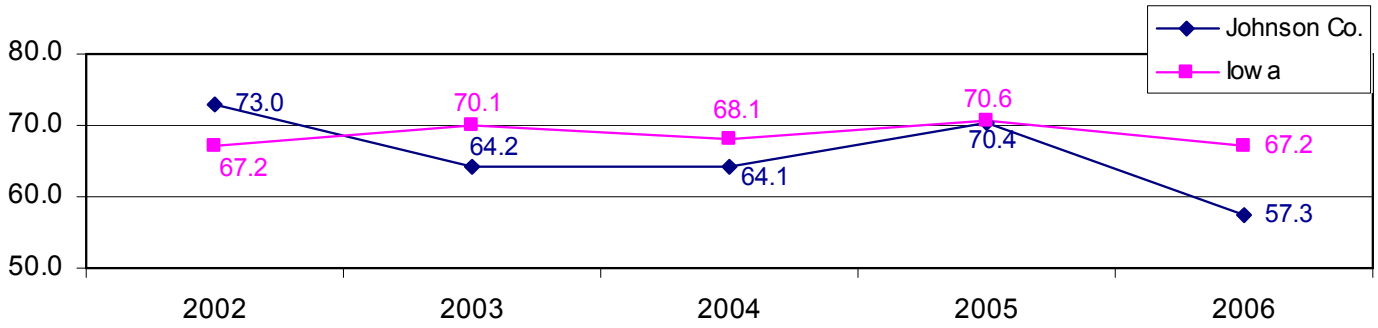
Table 5: Johnson Co. Deaths by Race/Ethnicity

Race/Ethnicity	#	Pop.	Crude Rate	Age-Adj Rate
Asian/Pacific Islander, Not Hispanic/Latino	2	28,601	7.0*	19.5*
Black/African American, Not Hispanic/Latino	2	22,763	17.6*	58.6*
White, Not Hispanic/Latino	195	527,257	37	50.9



Lung Cancer Morbidity Data

Figure 2: Age-Adjusted Incidence Rates (New Cases in Iowa & Johnson County, 2002-2006)



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Breast Cancer

There are too few deaths attributable to breast cancer in Johnson County to calculate reliable rates. However, in the past five years, Iowa's breast cancer death rate has consistently been lower than the national rate, with both levels declining slightly over time (Figure 1). In Johnson County, 62 percent of Johnson County deaths in the last five years that data was available have been in those aged 65 or greater (Table 3). Ninety-eight percent of deaths have been in women (Table 4). Rates of new breast cancer cases in Johnson County have been greater than the state rate in four of the past five years (Figure 2). This may be due to greater detection in the county due to the high number of health care resources.

Mortality Data

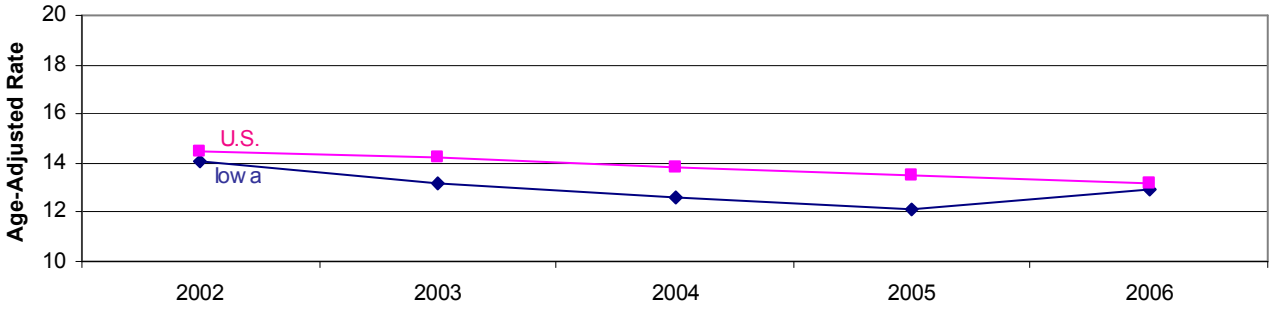
Table 1: Number of Deaths at County, State, and National Level, 2002-2006

	2006	2005	2004	2003	2002
Johnson Co.	9	10	3	20	10
Iowa	457	426	436	457	484
U.S.	41,210	41,491	41,316	42,000	41,883

Table 2: Death Rates at State, and National Level, 2002-2006¤

	2005		2004		2003		2003		2002	
Level	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate
Iowa	15.4	12.9	14.4	12.1	14.8	12.6	15.6	13.2	16.5	14.1
U.S.	13.8	13.2	14	13.5	14.1	13.8	14.4	14.2	14.5	14.5

Figure 1: Breast Cancer Death Rates at State, and National Level, 2002-2006¤



¤ Death numbers at county level are too small for reliable rates

Johnson County Breast Cancer Deaths, 2002-2006, Detailed

Table 3: Johnson Co. Deaths by Age

Age Group	Number	Pop.	Crude Rate
35-44 years	1	79,334	1.3*
45-54 years	8	74,584	10.7*
55-64 years	11	44,494	24.7*
65-74 years	9	23,773	37.9*
75-84 years	9	15,568	57.8*
85+ years	14	6,548	213.8*

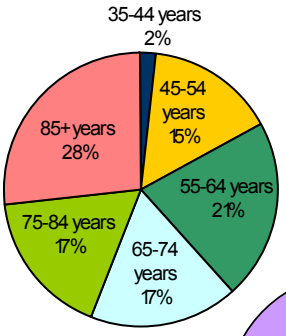


Table 4: Johnson Co. Deaths by Gender

Gender	#	Pop.	Crude Rate	Age-Adj. Rate
Female	51	300,888	16.9	20.9
Male	1	297,382	0.3*	0.4*

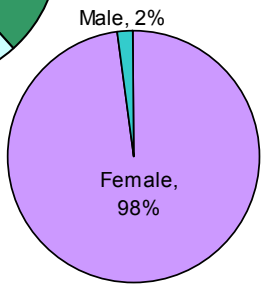


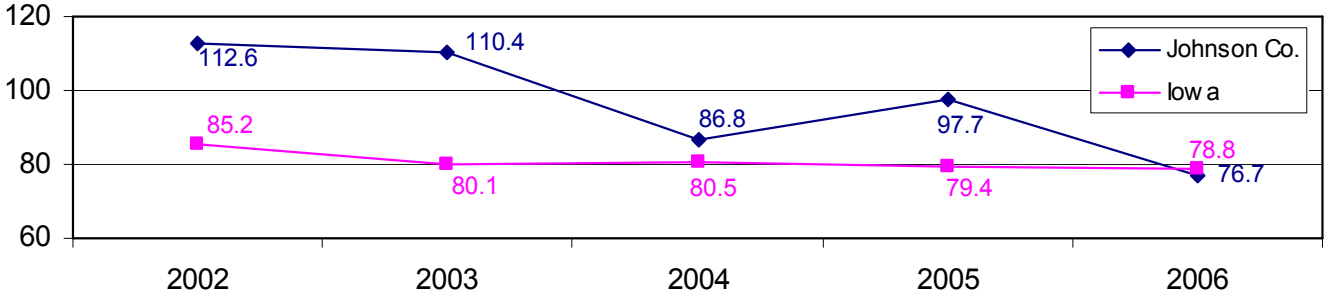
Table 5: Johnson Co. Deaths by Race/Ethnicity

Race/Ethnicity	#	Pop.	Crude Rate	Age-Adj. Rate
White, Not Hispanic/Latino	52	527,257	9.9	12.7
Other	0	71,013	0.0*	0.0*

**rate is not reliable*

Breast Cancer Morbidity Data

Figure 2: Age-Adjusted Incidence Rates (New Cases in Iowa and Johnson County, 2002-2006)



Sources

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http://www.public-health.uiowa.edu/shri/

Colorectal Cancer

There are too few deaths attributable to colorectal cancer in Johnson County to calculate reliable rates. However, in the past five years, Iowa's colorectal cancer death rate has consistently been higher than the national rate, and it has been increasing in the past five years of data available (Figure 1). Eighty-two percent of Johnson County colorectal cancer deaths have been in those aged 65 or greater (Table 3). New colorectal cancer cases have remained relatively flat at the state level, declining only very slightly in the past four years of data available (Figure 2). Johnson County incidence rates have been more variable, declining for a couple of years, and then increasing again.

Mortality Data

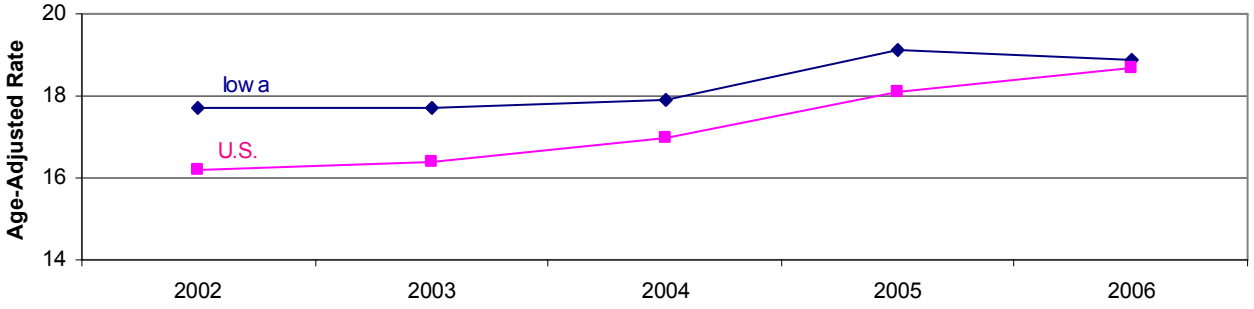
Table 1: Number of Deaths at County, State, and National Level, 2002-2006

	2006	2005	2004	2003	2002
Johnson Co.	5	10	9	15	19
Iowa	640	639	644	678	665
U.S.	50,360	50,179	50,800	53,146	53,926

Table 2: Death Rates at State, and National Level, 2002-2006¤

	2006		2005		2004		2003		2002	
Level	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate
Iowa	22.7	18.9	23.1	19.1	21.9	17.9	21.6	17.7	21.5	17.7
U.S.	18.7	18.7	18.3	18.1	17.3	17	16.9	16.4	16.8	16.2

Figure 1: Colorectal Cancer Death Rates at State, and National Level, 2002-2006¤



¤ Death numbers at county level are too small for reliable rates

Johnson County Colorectal Cancer Deaths, 2002-2006, Detailed

Table 3: Johnson Co. Deaths by Age

Age Group	Number	Pop.	Crude Rate
35-44 years	1	79,334	1.3*
45-54 years	3	74,584	4.0*
55-64 years	7	44,494	15.7*
65-74 years	15	23,773	63.1*
75-84 years	21	15,568	134.9
85+ years	15	6,548	229.1*

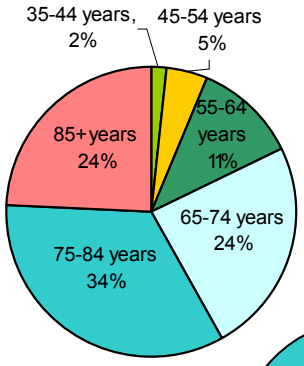


Table 4: Johnson Co. Deaths by Gender

Gender	#	Pop.	Crude Rate	Age-Adj Rate
Female	31	300,888	10.3	13.1
Male	31	297,382	10.4	19.5

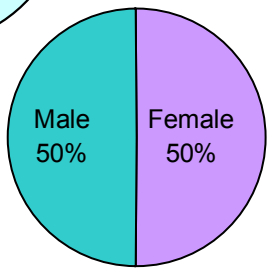
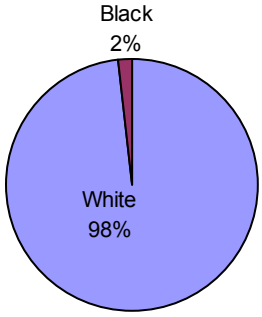


Table 5: Johnson Co. Deaths by Race/Ethnicity

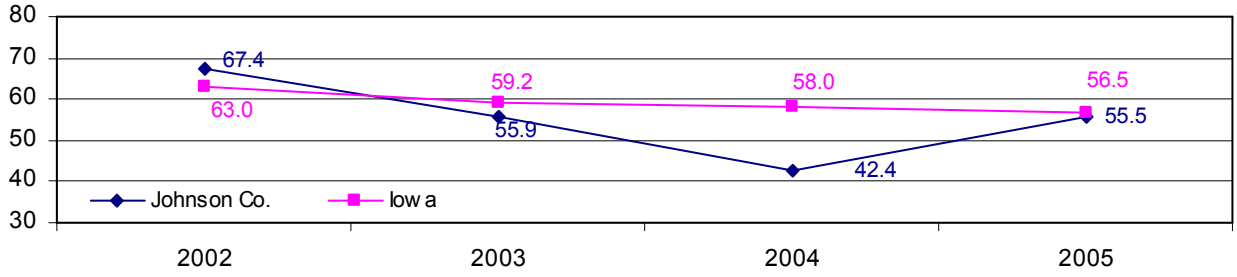
Race/Ethnicity	#	Pop.	Crude Rate	Age-Adj Rate
Black/African American, Not Hispanic/Latino	1	22,763	4.4*	41.9*
White, Not Hispanic/Latino	61	527,257	11.6	16.1

**rate is not reliable*



Colorectal Cancer Morbidity Data

Figure 2: Age-Adjusted Incidence Rates (New Cases in Iowa and Johnson County)



Sources

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http://www.cancer.org
http://www.public-health.uiowa.edu/shri/pubs/pdf/cancer_2009.pdf
http://www.public-health.uiowa.edu/shri/

Heart Disease

It is estimated that in between four and five percent of adult Iowans have heart disease (Table 6). Heart disease is the number one cause of death in the United States, and the number two cause of death in Johnson County. Heart disease mortality rates have declined at the state and national levels, but risen slightly at the county level (Figure 1). Despite this, Johnson County's heart disease mortality rate has consistently been much lower than the death rate at the national and state levels (Figure 1). Eighty-two percent of the deaths in Johnson County from

2002-2006 were in individuals over the age of 64 (Table 3). The most recent estimates put the heart disease prevalence rate below 4% at state and national levels (Figure 2).

Mortality Data

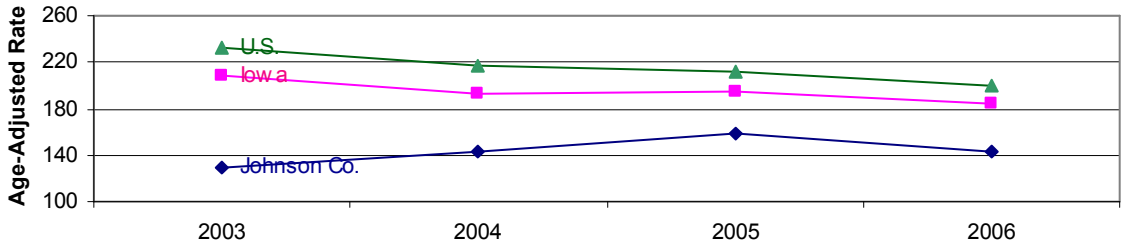
Table 1: Number of Deaths at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths
Johnson Co.	111	21.4%	123	22.8%	130	23.8%	116	22.2%	104	20.0%
Iowa	6,843	25.2%	7,138	26.2%	7,425	26.7%	7,252	27.0%	7,825	28.0%
U.S.	615,651	25.4%	631,636	26.0%	652,091	26.6%	652,486	27.2%	685,089	28.0%

Table 2: Death Rates at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate
Johnson Co.	88.3	¤	104.2	143.1	111.0	158.3	99.9	143.1	90.0	128.7
Iowa	229.0	173	239.4	184.8	250.3	194.3	245.5	192.8	265.8	208.6
U.S.	204.1	¤	211.0	200.2	220.0	211.1	222.2	217.0	235.6	232.3

Figure 1: Death Rates at County, State, and National Level



¤ age-adjusted rates have not yet been calculated for 2007

Johnson County Heart Disease Deaths, 2002-2006, Detailed

Table 3: Johnson Co. Deaths by Age

Age Group	Number	Pop.	Crude Rate
15-34 years	5	251,562	<3.0*
35-44 years	11	79,334	13.9*
45-54 years	49	74,584	65.7
55-64 years	40	44,494	89.9
65-74 years	90	23,773	378.6
75-84 years	157	15,568	1,008.5
85+ years	259	6,548	3,955.4

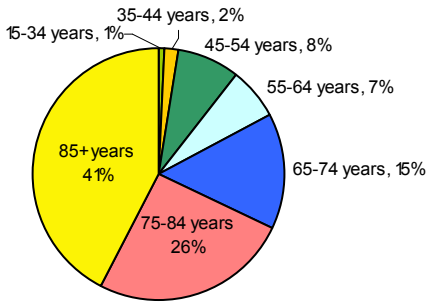


Table 4: Johnson Co. Deaths by Gender

Gender	#	Pop.	Crude Rate	Age-Adj Rate
Female	316	300,888	105	125
Male	295	297,382	99.2	182.4

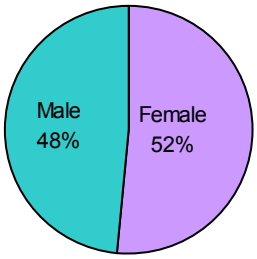
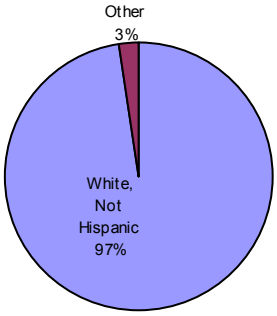


Table 5: Johnson Co. Deaths by Race/Ethnicity

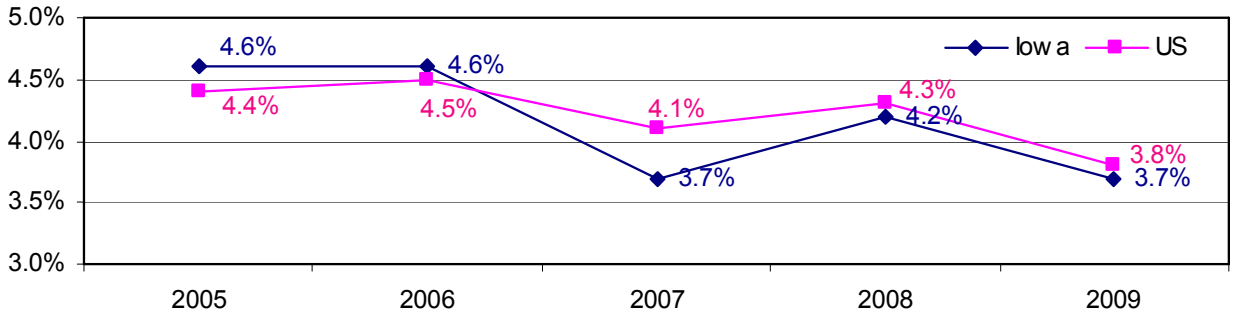
Race/Ethnicity	#	Pop.	Crude Rate	Age-Adj Rate
Asian/Pacific Islander, Not Hispanic/Latino	3	28,601	10.5*	81.8*
Black/African American, Not Hispanic/Latino	10	22,763	43.9*	117.2*
White, Hispanic/Latino	3	16,282	18.4*	81.7*
White, Not Hispanic/Latino	595	527,257	112.8	152.4



*rate is not reliable

Heart Disease Morbidity Data

Figure 2: Percent of Adult Population with Heart Disease



Sources

http://wonder.cdc.gov
http://www.cdc.gov/brfss/
http://www.idph.state.ia.us/apl/vital_stats.asp

Stroke

Stroke is the third leading cause of death in Johnson County. Mortality rates at the national, state and county levels have been declining. Johnson County's death rate had the sharpest decline, and became lower than the state and national levels in the past two years of data collected (Figure 1). Eighty percent of the deaths in Johnson County have been in those aged 75 and above (Table 3). Fifty-seven percent of the deaths have been in women (Table 5). State prevalence estimates were consistently higher than the national rates until 2009 when both were 2.4% of the adult population (Figure 2).

Mortality Data

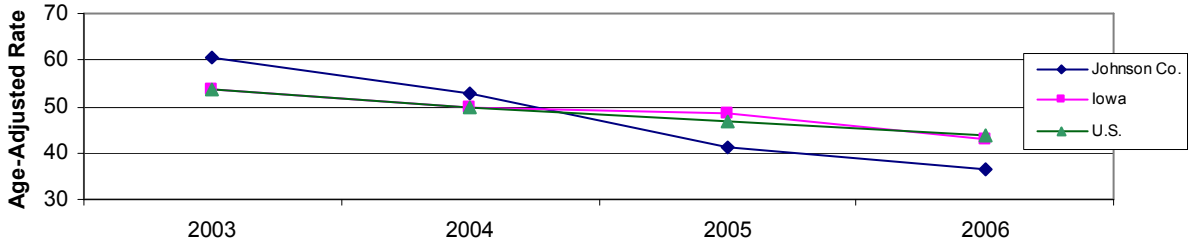
Table 1: Number of Deaths at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths
Johnson Co.	41	7.9%	32	5.9%	33	6.0%	41	7.9%	47	9.0%
Iowa	1,680	6.2%	1,713	6.3%	1,899	6.8%	1,955	7.3%	2,073	7.4%
U.S.	133,990	5.5%	137,119	5.7%	143,579	5.9%	150,074	6.3%	157,689	6.4%

Table 2: Death Rates at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate
Johnson Co.	32.6	¤	27.1	36.3	28.2	41.3	35.3	52.8	40.7	60.4
Iowa	56.2	¤	57.4	42.9	64.0	48.4	66.2	49.7	70.4	53.8
U.S.	44.4	¤	45.8	43.6	48.4	46.6	51.1	50.0	54.2	53.5

Figure 1: Stroke Death Rates at County, State, and National Level



¤ age-adjusted rates have not yet been calculated for 2007

Johnson County Stroke Deaths, 2002-2006, Detailed

Table 3: Johnson Co. Deaths by Age

Age Group	Number	Pop.	Crude Rate
25-44 years	2	180,469	<2.0*
45-54 years	8	74,584	10.7*
55-64 years	8	44,494	18.0*
65-74 years	22	23,773	92.5
75-84 years	49	15,568	314.7
85+ years	108	6,548	1,649.4

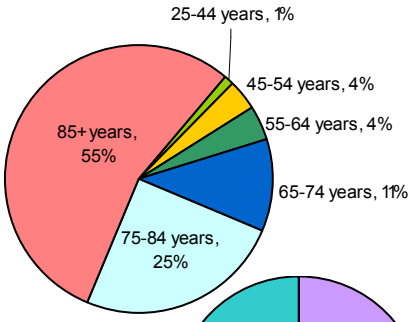


Table 4: Johnson Co. Deaths by Gender

Gender	#	Pop.	Crude Rate	Age-Adj Rate
Female	112	300,888	37.2	43.8
Male	85	297,382	28.6	58.3

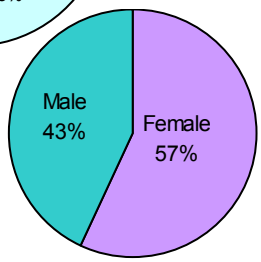
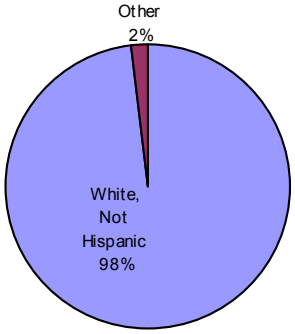


Table 5: Johnson Co. Deaths by Race/Ethnicity

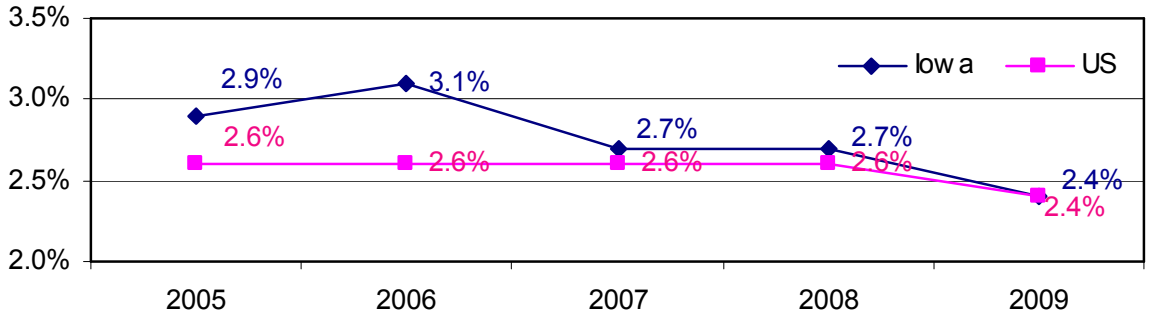
Race/Ethnicity	#	Pop.	Crude Rate	Age-Adj Rate
Black/African American, Not Hispanic/Latino	1	22,763	4.4*	41.9*
White, Hispanic/Latino	3	16,282	18.4*	65.5*
White, Not Hispanic/Latino	193	527,257	36.6	49.6

*rate is not reliable



Stroke Morbidity Data

Figure 2: Percent of Adult Population Who Has Had a Stroke



Sources

http://wonder.cdc.gov
http://www.cdc.gov/brfss/
http://www.idph.state.ia.us/apl/vital_stats.asp

Chronic Lower Respiratory Disease

Chronic lower respiratory diseases are the fourth leading cause of death in Johnson County. Death rates have fluctuated in the past few years, although Johnson County had a lower death rate than the state and national level in the most recent year of data available (Figure 1). Ninety-four percent of deaths in Johnson County were in residents aged 65 or older (Table 3). Estimates from 2009 indicate that Iowa has lower asthma prevalence rates than the nation, with 10.7% of Iowans reporting having asthma in their lifetime and 6.8% reporting having it currently (Figure 2). Over 15% of Iowa high school students reported being told that they had asthma (Table 7).

Mortality Data

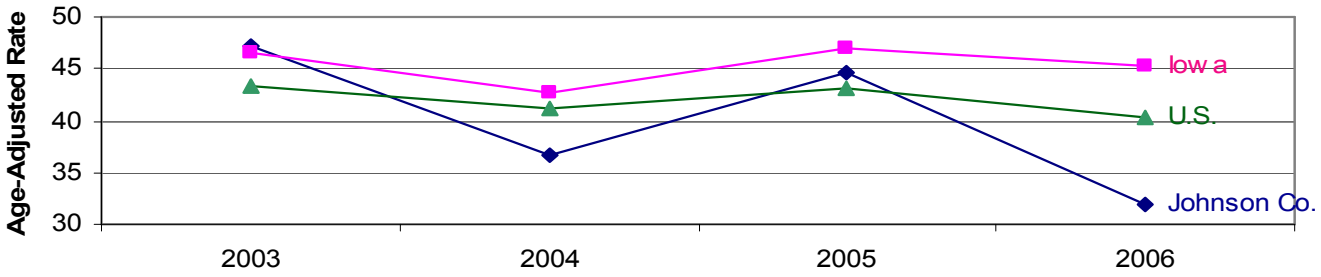
Table 1: Number of Deaths at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths
Johnson Co.	36	6.9%	26	4.8%	34	6.2%	28	5.4%	35	6.7%
Iowa	1,657	6.1%	1,652	6.1%	1,702	6.1%	1,541	5.7%	1,661	5.9%
U.S.	129,311	5.3%	124,583	5.1%	130,933	5.3%	121,987	5.1%	126,382	5.2%

Table 2: Death Rates at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate
Johnson Co.	25.5	¤	22.0	31.9	29.0	44.6	24.1	36.6	30.3	47.2
Iowa	55.5	¤	55.4	45.3	57.4	47.0	52.2	42.6	56.4	46.5
U.S.	42.9	¤	41.6	40.4	44.2	43.2	41.5	41.1	43.5	43.3

Figure 1: Death Rates at the County, State, and National Level, 2003-2006



¤ age-adjusted rates have not yet been calculated for 2007

Johnson County Chronic Lower Respiratory Disease Deaths, 2002-2006, Detailed

Table 3: Johnson Co. Deaths by Age

Age Group	Number	Pop.	Crude Rate
35-44 years	2	79,334	2.5*
55-64 years	8	44,494	18.0*
65-74 years	38	23,773	159.8
75-84 years	57	15,568	366.1
85+ years	49	6,548	748.3

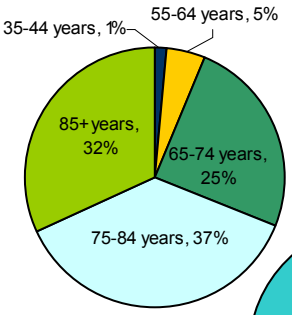


Table 4: Johnson Co. Deaths by Gender

Gender	#	Pop.	Crude Rate	Age-Adj Rate
Female	76	300,888	25.3	32.4
Male	80	297,382	26.9	54

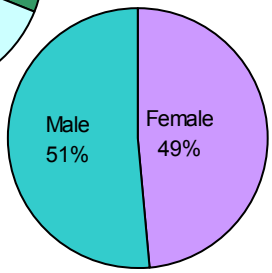
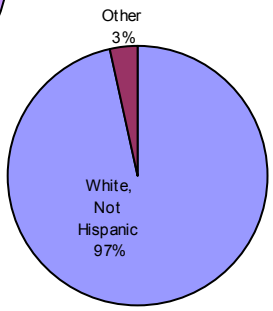


Table 5: Johnson Co. Deaths by Race/Ethnicity

Race/Ethnicity	#	Pop.	Crude Rate	Age-Adj Rate
Asian/Pacific Islander, Not Hispanic/Latino	2	28,601	7.0*	27.8*
White, Hispanic/Latino	3	16,282	18.4*	93.1*
White, Not Hispanic/Latino	151	527,257	28.6	41



*rate is not reliable
All crude and age adjusted rates are per 100,000 Population; Age-adjusted rates use the 2000 US Std. Population

Chronic Lower Respiratory Disease Morbidity Data

Figure 2: Adults with Current & Lifetime Asthma

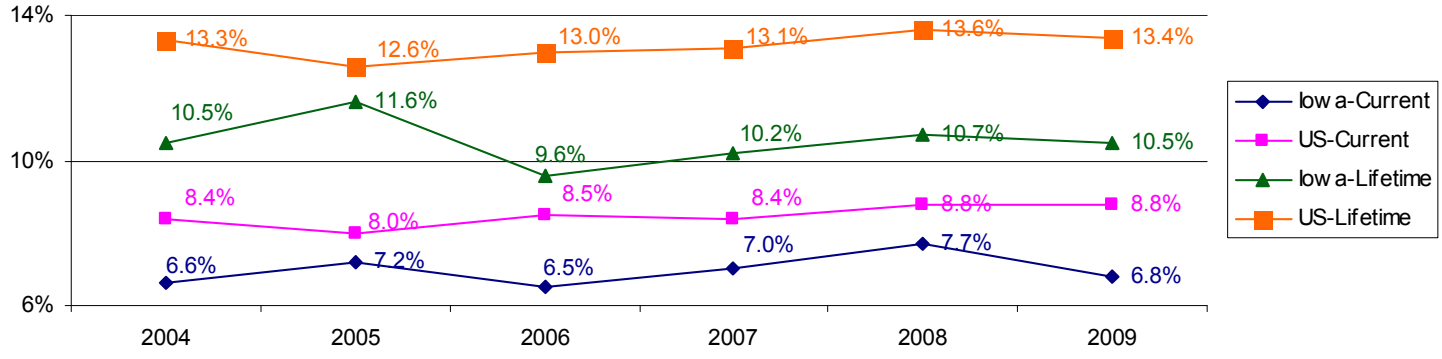


Table 7: Youth Who Have Ever Been Told by a Doctor or Nurse That They Had Asthma

2007		2005	
Iowa	US	Iowa	US
15.4%	10.9%	16.6%	¤

¤ *data not available*

Sources

http://wonder.cdc.gov
http://www.cdc.gov/brfss/
http://www.idph.state.ia.us/apl/vital_stats.asp
http://www.cdc.gov/HealthyYouth/yrbs/

Unintentional Injuries

Unintentional injuries are the fifth leading cause of death in Johnson County. Johnson County has consistently had lower unintentional injury death rates than the state and national levels (Figure 1). Of the deaths in Johnson County in the past 5 years, the most common causes of death include motor vehicle accidents (30%), falls (29%), and poisonings (19%) (Figure 2). Both young and old have died, with 18% of deaths being in individuals under age 25, 20% aged 25-44, 23% aged 45-64, 14% aged 65-84, and 25% over age 84 (Table 3). Men have accounted for 56% of deaths in Johnson County (Table 4).

Mortality Data

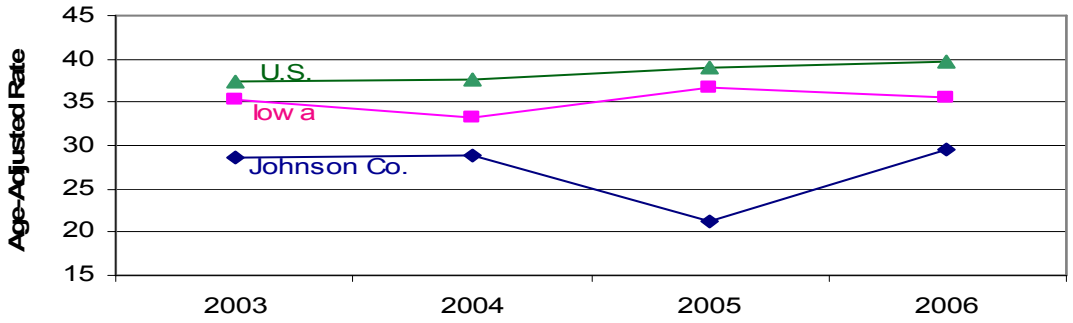
Table 1: Number of Deaths at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths
Johnson Co.	30	5.8%	29	5.4%	26	4.8%	27	5.2%	28	5.4%
Iowa	1,238	4.6%	1,185	4.3%	1,199	4.3%	1,088	4.1%	116	4.1%
U.S.	117,075	4.8%	121,599	5.0%	117,809	4.8%	112,012	4.7%	109,277	4.5%

Table 2: Death Rates at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate
Johnson Co.	23.9	¤	24.6	29.5	22.2	21.2	23.3	28.8	24.2	28.7
Iowa	41.4	¤	39.7	35.5	40.4	36.6	36.8	33.3	39.4	35.2
U.S.	38.8	¤	40.6	39.8	39.7	39.1	38.1	37.7	37.6	37.3

Figure 1: Death Rates at County, State, and National Level, 2003-2006



¤ age-adjusted rates have not yet been calculated for 2007

Johnson County Unintentional Injury Deaths, 2002-2006, Detailed

Figure 2: Causes of Unintentional Injury Deaths in Johnson County

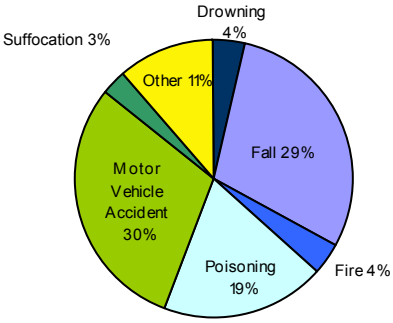


Table 3: Johnson Co. Deaths by Age

Age Group	Number	Pop.	Crude Rate
0-24 years	25	213,051	11.7*
25-44 years	29	180,469	16.1*
45-64 years	32	119,078	26.9*
65-84 years	20	39,341	50.8*
85+ years	36	6,548	549.8

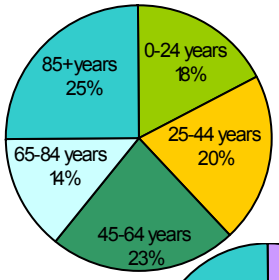


Table 4: Johnson Co. Deaths by Gender

Gender	#	Pop.	Crude Rate	Age-Adj Rate
Female	63	300,888	20.9	22.3
Male	79	297,382	26.6	34.8

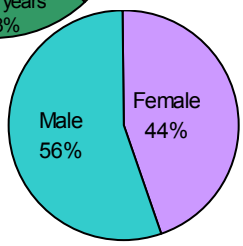
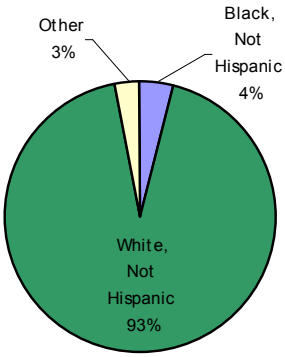


Table 5: Johnson Co. Deaths by Race/Ethnicity

Race/Ethnicity	#	Pop.	Crude Rate	Age-Adj Rate
American Indian, Not Hispanic/Latino	1	1,772	56.4*	116.3*
Asian/Pacific Islander, Not Hispanic/Latino	2	28,601	7.0*	13.7*
Black/African American, Not Hispanic/Latino	6	22,763	26.4*	47.6*
White, Hispanic/Latino	1	16,282	6.1*	3.8*
White, Not Hispanic/Latino	131	527,257	24.8	27.8



*rate is not reliable

Unintentional Injury Morbidity Data

Table 6: Iowa Leading Causes of Unintentional Injury Hospitalizations with Rates, by Age Group, 2002-2006

	0-4 years	5-14 years	15-24 years	25-44 years	45-64 years	65+ years
1	Fall (53.3)	Fall (39.5)	Traffic (56.2)	Fall (55.9)	Fall (134.6)	Fall (1126.9)
2	Suffoc. (<15.0)	Traffic (23.7)	Fall (27.8)	Traffic (39.2)	Traffic (49.1)	Traffic (54.6)
3	Traffic (<15.0)	Bicycle (7.9)	Poisoning (12.5)	Poisoning (15.0)	Poisoning (21.2)	Poisoning (37.1)

Sources

http://wonder.cdc.gov
http://www.cdc.gov/brfss/
http://www.idph.state.ia.us/apl/vital_stats.asp
http://www.public-health.uiowa.edu/iprc/resources/reports/Johnson-County.pdf

Alzheimer's Disease

Alzheimer's disease is the sixth leading cause of death in Johnson County. Death rates have increased in the past few years, with Johnson County's latest death rates exceeding both the state and national rates (Figure 1). Sixty-five percent of deaths in the county have been in residents aged 85+, and another 31% have been in the 75-84 age range (Table 3). Females have accounted for 71% of all deaths in the county in the past 5 years of data (Table 4). This may be due to the fact that women tend to live longer than men. The number of Iowans with Alzheimer's disease is expected to increase in the next few decades as the population ages. It is projected to increase 17% between 2000 and 2025 (Table 6).

Mortality Data

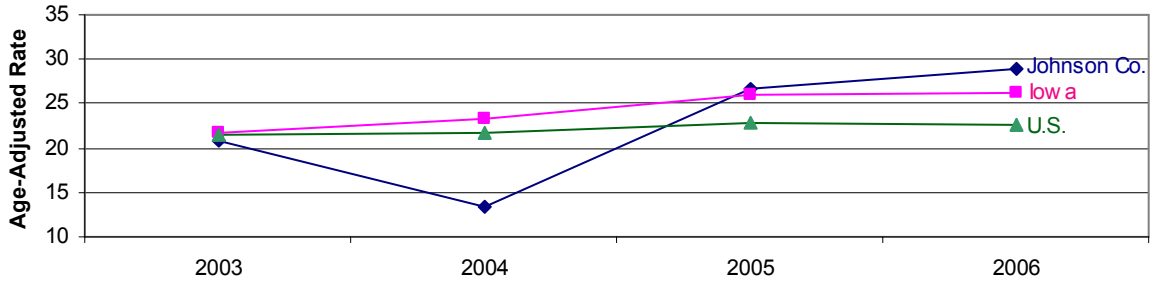
Table 1: Number of Deaths at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths
Johnson Co.	18	3.5%	25	4.6%	21	3.8%	10	1.9%	16	3.1%
Iowa	1,201	4.4%	1,118	4.1%	1,080	3.8%	967	3.6%	885	3.2%
U.S.	74,944	3.1%	72,432	3.0%	71,599	2.9%	65,965	2.8%	63,457	2.6%

Table 2: Death Rates at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate
Johnson Co.	14.3	¤	21.2	28.9	17.9	26.7	8.6	13.4*	13.8	20.7*
Iowa	40.2	¤	37.5	26.3	36.4	25.9	32.7	23.4	30.1	21.6
U.S.	24.8	¤	24.2	22.6	24.2	22.9	22.5	21.8	21.8	21.4

Figure 1: Death Rates at County, State, and National Level, 2003-2006



¤ age-adjusted rates have not yet been calculated for 2007

Johnson County Alzheimer's Disease Deaths, 2002-2006, Detailed

Table 3: Johnson Co. Deaths by Age

Age Group	Number	Pop.	Crude Rate
45-54 years	1	74,584	1.3*
65-74 years	3	23,773	12.6*
75-84 years	27	15,568	173.4
85+ years	56	6,548	855.2

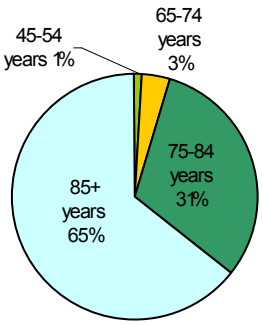


Table 4: Johnson Co. Deaths by Gender

Gender	#	Pop.	Crude Rate	Age-Adj Rate
Female	62	300,888	20.6	23.5
Male	25	297,382	8.4	18.5

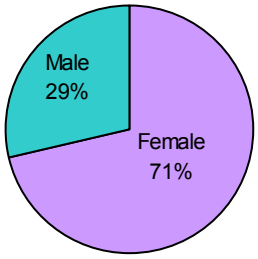
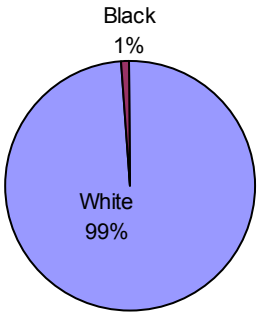


Table 5: Johnson Co. Deaths by Race/Ethnicity

Race/Ethnicity	#	Pop.	Crude Rate	Age-Adj Rate
Black/African American, Not Hispanic/Latino	1	22,763	4.4*	62.0*
White, Not Hispanic/Latino	86	527,257	16.3	22.3

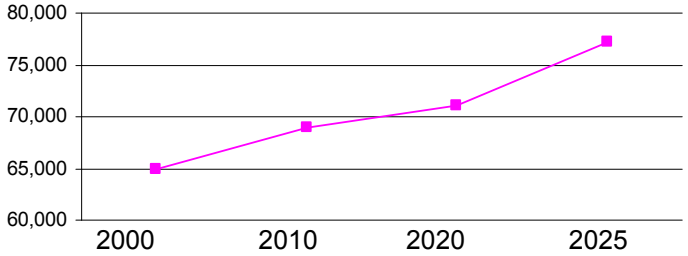
*rate is not reliable



Alzheimer's Disease Morbidity Data

Table 6: Projected Number of Iowans with Alzheimer's Disease

Year	Estimated Prevalence	% Change from 2000
2000	65,000	
2010	69,000	6%
2020	71,000	9%
2025	77,200	17%



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http://www.aging.iowa.gov
http://www.alz.org
http://www.alz.org/national/documents/report_alzfactsfigures2009.pdf

Flu & Pneumonia

Flu and pneumonia is the seventh leading cause of death in Johnson County. Though there are too few deaths at the county level to calculate reliable age-adjusted death rates, Iowa death rates have consistently been higher than the national death rate for flu and pneumonia (Figure 1). At both levels, these death rates have declined in the past few years of data available (Figure 1). In Johnson County, 63% of deaths have been in those aged 85 and older (Table 3). Fifty-nine percent have been in women (Table 4).

Mortality Data

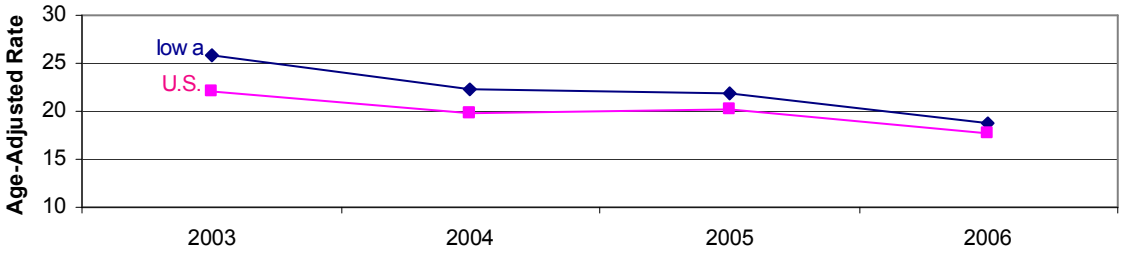
Table 1: Number of Deaths at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths
Johnson Co.	11	2.1%	15	2.8%	16	2.9%	16	3.1%	17	3.3%
Iowa	748	2.8%	765	2.8%	893	3.2%	884	3.3%	1,032	3.7%
U.S.	52,847	2.2%	56,326	2.3%	56,326	2.3%	59,664	2.5%	65,163	2.7%

Table 2: Death Rates at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate
Johnson Co.	8.8	¤	12.7	17.9*	13.7	19.2*	13.8	21.2*	14.7	22.1*
Iowa	25.0	¤	25.7	18.8	30.1	21.8	29.9	22.3	35.1	25.8
U.S.	17.5	¤	18.8	17.8	19.0	20.3	20.3	19.8	22.4	22.0

Figure 1: Death Rates at the State and National Level, 2003-2006



¤ age-adjusted rates have not yet been calculated for 2007

Johnson County Flu and Pneumonia Deaths, 2002-2006, Detailed

Table 3: Johnson Co. Deaths by Age

Age Group	Number	Pop.	Crude Rate
25-44 years	2	180,469	1.1*
45-64 years	3	119,078	2.5*
65-84 years	6	23,773	25.2*
75-84 years	17	15,568	109.2*
85+ years	50	6,548	763.6

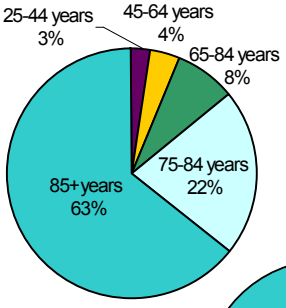


Table 4: Johnson Co. Deaths by Gender

Gender	#	Pop.	Crude Rate	Age-Adj Rate
Female	46	300,888	15.3	17.6
Male	32	297,382	10.8	22.5

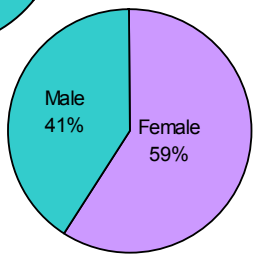
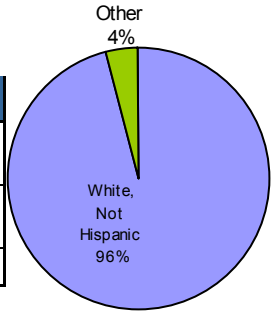


Table 5: Johnson Co. Deaths by Race/Ethnicity

Race/Ethnicity	#	Pop.	Crude Rate	Age-Adj Rate
Asian/Pacific Islander, Not Hispanic/Latino	1	28,601	3.5*	44.3*
Black/African American, Not Hispanic/Latino	2	22,763	8.8*	36.3*
White, Not Hispanic/Latino	75	527,257	14.2	19.1

*rate is not reliable



Sources

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http://www.cdc.gov/brfss/
http://www.idph.state.ia.us/apl/vital_stats.asp

Diabetes

Diabetes Mellitus is the eighth leading cause of death in Johnson County. State death rates from diabetes have been consistently lower than the national rate, although they have risen in recent years (Table 1). Sixty-three

percent of diabetes deaths in Johnson County have been in residents over the age of 74 (Table 3), and 58% of deaths have been in women (Table 4). Prevalence estimates indicate that Johnson County has lower diabetes rates than the state or national levels, with 5.3% of the adult population having been diagnosed with diabetes in 2007 (Figure 2).

Mortality Data

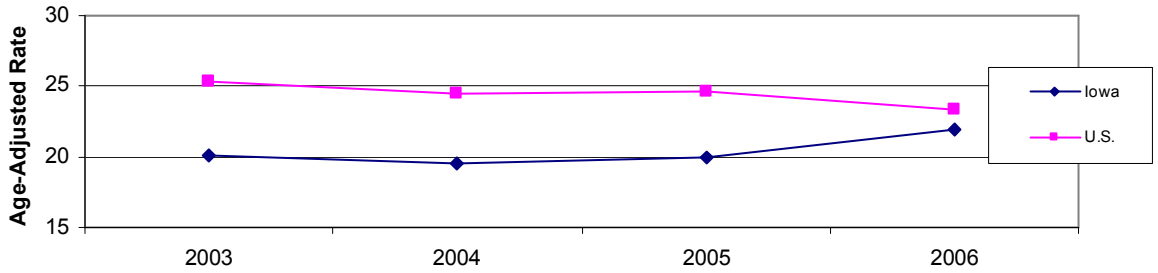
Table 1: Number of Deaths at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths
Johnson Co.	12	2.3%	12	2.2%	17	3.1%	8	1.5%	10	1.9%
Iowa	765	2.8%	803	2.9%	722	2.6%	694	2.6%	728	2.6%
U.S.	70,905	2.9%	72,449	3.0%	75,119	3.1%	73,138	3.1%	74,219	3.0%

Table 2: Death Rates at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate
Johnson Co.	9.5	¤	10.2	15.5*	14.5	22.0*	6.9	10.4*	8.7	13.1*
Iowa	25.6	¤	26.9	21.9	24.3	20.0	23.5	19.5	24.7	20.1
U.S.	23.5	¤	24.2	23.3	25.3	24.6	24.9	24.5	25.5	25.3

Figure 1: Death Rates at the State and National Level, 2003-2006



¤ age-adjusted rates have not yet been calculated for 2007

Johnson County Diabetes Deaths, 2002-2006, Detailed

Table 3: Johnson Co. Deaths by Age

Age Group	Number	Pop.	Crude Rate
24-34 years	1	101,135	1.0*
35-44 years	3	79,334	3.8*
45-54 years	5	74,584	6.7*
55-64 years	7	44,494	15.7*
65-74 years	7	23,773	29.4*
75-84 years	24	15,568	154.2
85+ years	17	6,548	259.6*

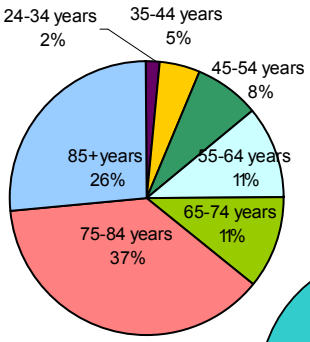


Table 4: Johnson Co. Deaths by Gender

Gender	#	Pop.	Crude Rate	Age-Adj Rate
Female	37	300,888	12.3	15.6
Male	27	297,382	9.1	16

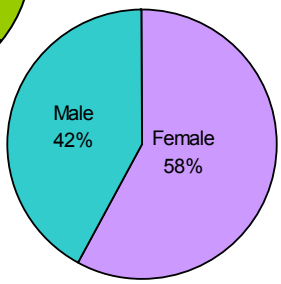


Table 5: Johnson Co. Deaths by Race/Ethnicity

Race/Ethnicity	#	Pop.	Crude Rate	Age-Adj Rate
White, Not Hispanic/Latino	64	527,257	12.1	16.5
Other	0	71,013	0.0*	0.0*

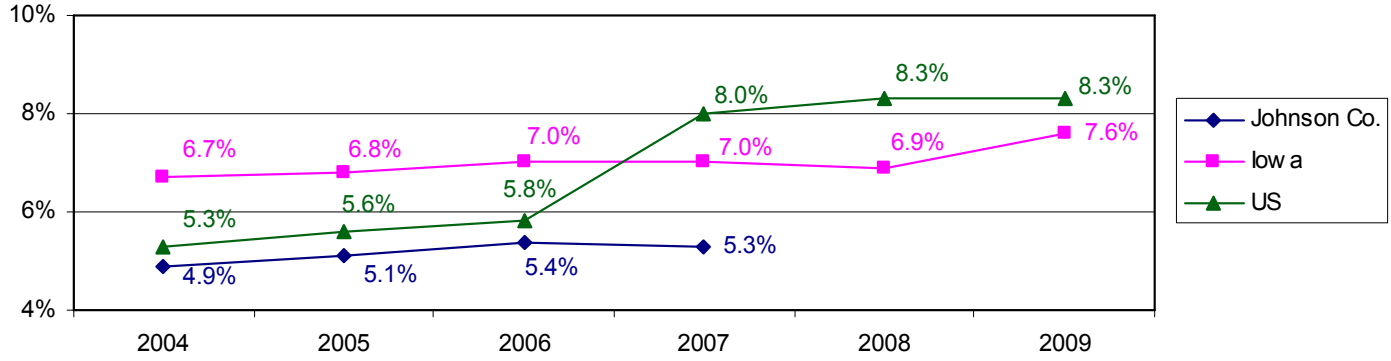
*rate is not reliable

Diabetes Mortality Data

Table 6: Prevalence Estimates (% With Diagnosed Diabetes)

	2008	2007	2006	2005	2004
Johnson Co.	x	5.3%	5.4%	5.1%	4.9%
Iowa	6.9%	7.0%	7.0%	6.8%	6.7%
US	8.3%	8.0%	5.8%	5.6%	5.3%

Figure 2: Prevalence Estimates (Percent With Diagnosed Diabetes)



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http://www.americanheart.org
http://apps.nccd.cdc.gov/DDT_STRS2/CountyPrevalenceData.aspx?StateId=19

Suicide

Suicide rates in Johnson County have varied in the past five years (Table 1). There are not enough deaths to calculate reliable age-adjusted rates. Iowa's suicide deaths have declined slightly over the past five years, although they are still consistently higher than the national level (Figure 1). Almost half of suicides in Johnson County have been in the 45-64 age group, while over one-third of those who have died were aged 25-44 (Table 3). In Johnson County, 77% of suicide deaths in five years have been in males (Table 4). State and national data reveals that men are more likely to have successful suicide attempts, although women have more suicide attempts overall (Table 7).

Mortality

Table 1: Number of Deaths at County, State, and National Level, 2003-2007

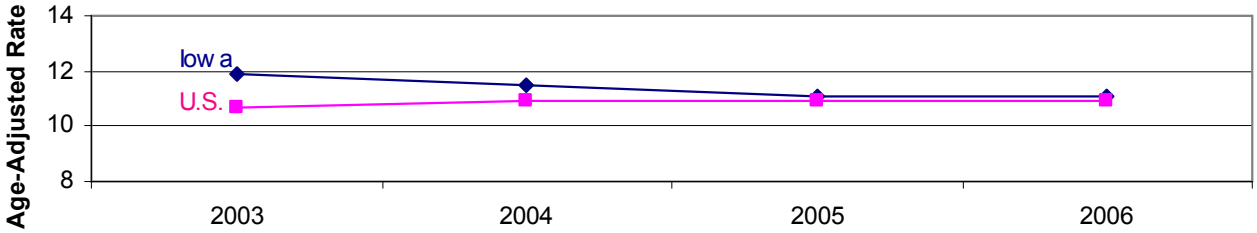
	2007		2006		2005		2004		2003	
Level	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths	Number	% of Deaths
Johnson Co.	6	1.2%	12	2.2%	7	1.3%	14	2.7%	6	1.2%
Iowa	322	1.2%	330	1.2%	331	1.2%	339	1.3%	350	1.3%
U.S.	33,185	1.4%	33,300	1.4%	32,637	1.3%	32,439	1.4%	31,484	1.3%

Table 2: Death Rates at County, State, and National Level, 2003-2007

	2007		2006		2005		2004		2003	
Level	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate	Crude Rate	Age-Adj Rate
Johnson Co.	4.8	¤	10.2	9.8*	6.0	7.4*	12.1	13.6*	5.2	5.9*
Iowa	10.8	¤	11.1	11.1	11.2	11.1	11.5	11.5	11.9	11.9
U.S.	11.0	¤	11.1	10.9	11.0	10.9	11.0	10.9	10.8	10.7

* unreliable rate

Figure 1: Death Rates at the State and National Level, 2003-2006



¤ age-adjusted rates have not yet been calculated for 2007

Johnson County Suicide Deaths, 2002-2006, Detailed

Table 3: Johnson Co. Deaths by Age

Age Group	Number	Pop.	Crude Rate
15-19 years	2	56,014	3.6*
20-24 years	1	94,413	1.1*
25-34 years	7	101,135	6.9*
35-44 years	9	79,334	11.3*
45-54 years	17	74,584	22.8*
55-64 years	5	44,494	11.2*
65-74 years	2	23,773	8.4*
75-84 years	4	15,568	25.7*

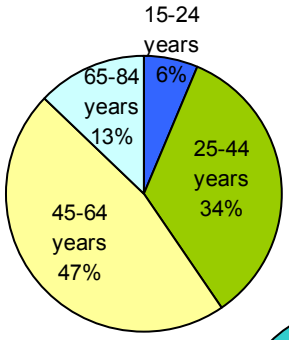


Table 4: Johnson Co. Deaths by Gender

Gender	#	Pop.	Crude Rate	Age-Adj Rate
Female	11	300,888	3.7*	4.2*
Male	36	297,382	12.1	13.8

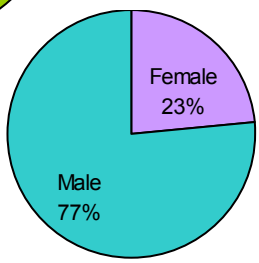
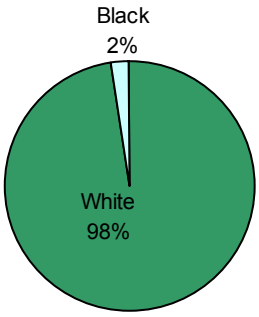


Table 5: Johnson Co. Deaths by Race/Ethnicity

Race/Ethnicity	#	Pop.	Crude Rate	Age-Adj Rate
Black/African American, Not Hispanic/Latino	1	22,763	4.4*	2.6*
White, Not Hispanic/Latino	46	527,257	8.7	9.6

*rate is not reliable



Suicide Attempts

Table 6: Percent of High School Students Who Have Attempted Suicide in the Past 12 Months

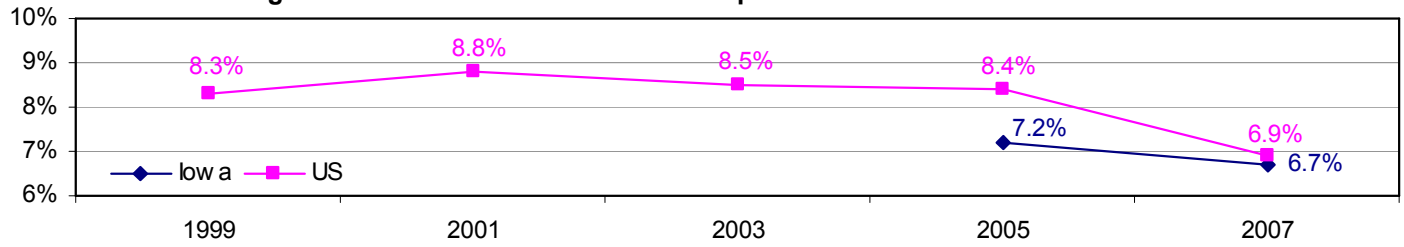
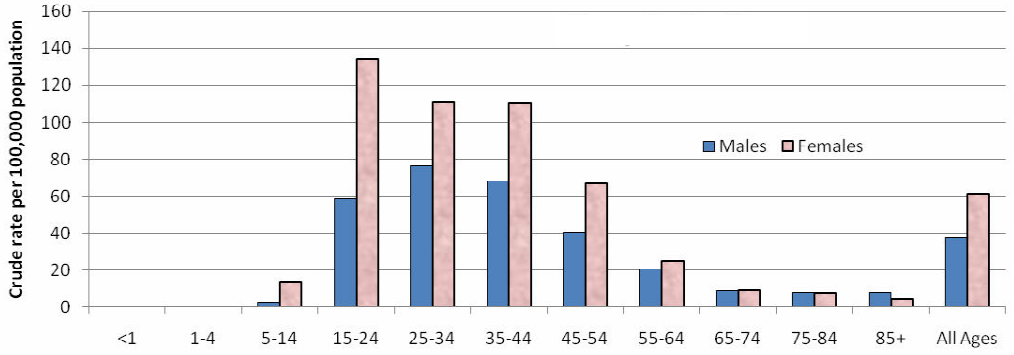


Table 7: Suicide Attempt Hospitalization Rates in Iowa, by Age Group, 2002-2006



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http://www.idph.state.ia.us/bh/common/pdf/injury_prevention/Suicide.pdf

Immunizations

Maintenance of high immunization levels provide the foundation for controlling vaccine preventable diseases (VPD) in the child, adolescent, and adult populations. Immunization coverage levels of 90 percent are, in general, sufficient to prevent circulation of viruses and bacteria-causing VPD.

Children

Determining whether a population is protected against a VPD is best evaluated by examining the coverage level of individual immunizations. Children 19-35 months old in Iowa and the United States (US) from 2004-2007 were above the 90 percent immunization coverage level for ≥3 polio, ≥3+ Haemophilus Influenza (Hib) vaccines, and >1+ MMR (measles, mumps, and rubella). Immunization coverage levels of ≥4+ DTaP (diphtheria, tetanus, and acellular pertussis) and ≥3+ PCV (pneumonococcal conjugate vaccine) are very close to the 90 percent coverage level (Table 1). Johnson County Public Health immunization data for children 24 months of age show coverage levels above the 90 percent level for 2005 and 2006 and slightly below for 2007-2009. Iowa's public health sector clinics level for children 24 months of age shows a slight decline in 2008 and a more significant decline in 2009 (Table 2). The JCPH and state public health sector decline in coverage levels of children 24 months of age may be due to waning funding available for immunization campaigns to promote immunizations for the general public and health care providers. Immunization entry requirements for child care and school age children are one of the most effective interventions that the states and counties have at their disposal to ensure that children are appropriately vaccinated.

Table 1: Vaccination Rates for Children 19-35 Months: US and Iowa

	2008	2007	2006	2005	2004
≥ 4+DTaP	*4+ doses of any diphtheria and tetanus toxoids and pertussis vaccines including diphtheria and tetanus toxoids, & any acellular pertussis vaccine (DTaP/DTP/DT)*				
	% (95% CI)	**% (95% CI)**	**% (95% CI)**	**% (95% CI)**	**% (95% CI)**
US National	84.6 (83.6-85.6)	84.5 (83.6-85.4)	85.2 (84.3-86.1)	85.7 (84.8-86.6)	85.5 (84.7-86.3)
Iowa	84.2 (78.9-89.5)	83.0 (77.1-88.9)	88.3 (834.-93.2)	87.2 (81.8-92.6)	88.6 (82.8-94.4)
≥ 3+Polio	*3+ doses of any poliovirus vaccine*				
US National	93.6 (93.0-94.2)	92.6 (91.9-93.3)	92.8 (92.2-93.4)	91.7 (91.0-92.4)	91.6 (90.9-92.3)
Iowa	92.3 (88.5-96.1)	93.5 (89.8-97.2)	94.9 (91.3-98.5)	92.3 (88.0-96.6)	93.7 (90.1-97.3)
≥ 3+Hib	*3+ doses of Haemophilus influenzae type b (Hib) vaccine.*				
US National	90.9 (90.2-91.6)	92.6 (91.9-93.3)	93.4 (92.8-94.0)	93.9 (93.3-94.5)	93.5 (92.9-94.1)
Iowa	88.4 (83.9-92.9)	92.5 (88.7-96.3)	92.4 (88.2-96.6)	93.4 (89.4-97.4)	93.9 (90.0-97.8)
≥ 3+PCV	*3+ doses of pneumococcal conjugate vaccine (PCV7)*				
US National	Not Available	90.0 (89.2-90.8)	86.9 (86.1-87.7)	82.8 (81.8-83.8)	73.2 (72.2-74.2)
Iowa	Not Available	89.7 (85.5-93.9)	87.5 (82.5-92.5)	86.8 (81.6-92.0)	67.7 (60.2-75.2)
≥ 1+MMR	*1+ doses of measles-mumps-rubella vaccine*				
US National	92.1 (91.4-92.8)	92.3 (91.6-93.0)	92.3 (91.7-92.9)	91.5 (90.8-92.2)	93.0 (92.4-93.6)
Iowa	91.4 (87.0-95.8)	93.0 (89.2-96.8)	90.3 (85.5-95.1)	91.7 (87.5-95.9)	92.9 (87.5-98.3)

Estimates presented as point estimate (%) ± 95% Confidence Interval

Table 2: Children 2-24 Months Public Sector Immunization Clinics: Percent Fully Immunized = 4DTaP, 3 Polio, 1 MMR, 3 Hib, 3 Hep B, Varicella by 24 months of Age

	2009	2008	2007	2006	2005
Johnson County Public Health	89%	86%	88%	97%	90%
State of Iowa Public Sector Clinics	74%	88%	95%	94%	94%

Adolescents

Illnesses caused by VPD's continue among adolescents. Primary health care providers are vital to ensuring adolescents receive comprehensive immunization service. An estimated 79 percent of adolescents visit a health care provider annually (National Health Interview Survey, 1995). Strategies to increase adolescent immunization levels should target these providers. A partnership between schools and the local health department should also be developed to encourage school participation in an adolescent immunization program.

According the National Immunization Survey (NIS), the US adolescent immunization coverage levels for Td (tetanus, diphtheria), Tdap (tetanus, diphtheria, and acellular pertussis), MCV4 (meningococcal conjugate), and HPV (human papillomavirus) increased every year from 2006-2008 (Table 3). Iowa immunization coverage for adolescents is available only for 2008 and shows Iowa ahead of the national coverage with Tdap and HPV and behind in coverage with Td and MCV4. Johnson County data on adolescent vaccine coverage is not collected. Health care providers, schools, and families have a long way to go to reach the protective immunization coverage level of 90 percent for adolescents.

Table 3: Immunization Rates for Adolescents 13-17 Years

	2008	2007	2006
	% (95% CI)	% (95% CI)	% (95% CI)
≥ 1 Td or Tdap (Tetanus & diphtheria or Tetanus, diptheria, & acellular pertussis)			
US National	72.2 (70.8-73.4)	72.3 (70.3-74.3	60.1 (57.8-62.4)
Iowa	65.9 (59.4-71.8)	Not Available	Not Available
≥ 1 Tdap (tetanus, diptheria, & acellular pertussis)			
US National	40.8 (39.3-42.3)	30.4 (28.2-32.7)	10.8 (9.4-12.3)
Iowa	43.5 (37.4-49.9)	Not Available	Not Available
≥ 1 MCV4 (meningococcal conjugate)			
US National	41.8 (40.3-43.2)	32..4 (30.2-34.7)	11.7 (10.3-13.2)
Iowa	31.9 (26.4-38.0)	Not Available	Not Available
≥ 1 HPV4 (Human Papillomavirus; for females only)			
US National	37.2 (35.2-39.3)	25.1 (22.3-26.1)	Not Surveyed
Iowa	41.9 (32.6-51.9)	Not Available	Not Available
≥ 3 doses HPV4 (Human Papillomavirus; for females only)			
US National	17.9 (16.3-19.6)	Not Surveyed	Not Surveyed
Iowa	26.8 (18.7-36.7)	Not Available	Not Available

Adults

Current levels of immunization coverage among US adults vary widely among age, race, and ethnicity (Table 4). The 65+ age group has a lower percentage of coverage for Tetanus than the 18-64 group. This may be due to adult immunization services not being emphasized in community and health care provider education. Strategies such as standing orders for immunization, provider and patient reminders, and medical practice audits have been effective in increasing adult immunization levels. The 65+ age group had the highest percent of influenza and pneumonia coverage. This is probably due to the fact that Medicare insurance covers influenza and pneumonia immunizations for the 65+ age group. Racial and ethnic disparities were noted in immunization coverage. Blacks in the 50-64+ age group had a lower rate of influenza coverage than other races. Blacks in the 18-65+ age groups had lower rates of pneumonia coverage than other races. Blacks in the 50-64+ group had the lowest percent of coverage for Tetanus. Hispanics 18-49 years of age had lower percent of coverage for Hepatitis A and Hepatitis B than other races. Since there are racial and ethnic disparities in immunization coverage, special strategies to immunize these populations will needed to be developed around the cause for the disparities in each locality. Adult immunization coverage data is not available at the state or county level.

Table 4: Adult Vaccine Coverage, 2007, US Population

Vaccination	Population		Number	Percent Covered	95% CI
Influenza, 2006-07 season	18-49	High Risk	309	37.3%	29.6, 45.7
		Whites	123	40.9%	30.0, 51.7
		Blacks	87	40.9%	17.8, 47.2
		Hispanics	76	40.9%	15.1, 40.1
	50-64	All	2073	42.2%	39.0, 45.5
		Whites	714	43.1%	38.7, 47.6
		Blacks	688	37.2%	32.2, 42.5
		Hispanics	501	36.1%	30.5, 42.1
	65+	All	3087	68.8%	65.9, 71.6
		Whites	793	69.4%	65.5, 73.0
		Blacks	1320	54.6%	5135, 57.9
		Hispanics	785	67.2%	62.5, 71.6
Pneumoncoccal, ever	18-64	High Risk	710	32.8%	27.1, 39.0
		Whites	231	34.0%	26.7, 42.0
		Blacks	244	26.6%	18.7, 36.2
		Hispanics	174	18.8%	12.7, 27.0
	65+	All	3009	65.6%	62.6, 68.6
		Whites	781	67.8%	63.8, 71.5
		Blacks	1274	52.5%	49.0, 55.9
		Hispanics	766	51.3%	46.6, 55.9
Tetanus in past 10 years	18-49	All	1738	57.2%	54.0, 60.5
		Whites	686	60.0%	55.5, 64.2
		Blacks	344	52.9%	44.8, 60.7
		Hispanics	588	51.5%	45.4, 57.6
	50-64	All	1957	57.2%	53.8, 60.5
		Whites	681	59.1%	54.6, 63.5
		Blacks	648	48.1%	42.6, 53.6
		Hispanics	467	54.6%	47.7, 61.4
	65+	All	2802	44.1%	40.7, 47.6
		Whites	737	44.7%	40.3, 49.4
		Blacks	1176	34.3%	31.3, 37.6
		Hispanics	722	43.0%	37.9, 48.3
Hepatitis A, 2+doses, ever	18-49	All	1629	12.1%	9.8, 14.7
		Whites	651	12.5%	9.5, 16.2
		Blacks	331	10.6%	6.1, 17.7
		Hispanics	506	7.1%	4.3, 11.6
Hepatitis B, 3+doses, ever	18-49	All	1646	23.4%	20.5, 26.5
		Whites	660	24.7%	20.8, 29.1
		Blacks	333	21.9%	15.6, 29.8
		Hispanics	510	15.7%	11.7, 20.8

Sources

National Immunization Survey, 2004-2008, Table 1
http://www.cdc.gov/nis/data_files.htm
Iowa Department of Public Health, Public Health Sector Clinics Immunization Assessment
Morbidity and Mortality Report, Vol.59, No.1, Notifiable Diseases
http://www.cdc.gov/brfss/

Selected Reportable Infectious Diseases

Infectious Diseases

Certain disease conditions are reportable to the Iowa Department of Public Health per The Iowa Administrative Code 641, Chapter 1. The reasons these diseases are reportable are to monitor disease incidence and prevalence, detect and manage outbreaks, and develop prevention methods to reduce illness at the county and state level.

Cryptosporidiosis

Disease outbreaks of cryptosporidiosis occurred at the state and national level in 2007 (Table 1). An outbreak of disease occurred in Johnson County in 2008. Cases in the county and state outbreaks reported recreational or child care exposures.

Table 1: Number and Crude Rate of Cryptosporidiosis at County, State, and National Level, 2005-2008

	2008		2007		2006		2005	
Level	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Johnson County	17	13.6	9	7.3	1	0.8	1	0.8
Iowa	284	9.5	610	20.3	230	7.8	122	4.1
U.S.	7391	2.4	10818	3.6	4995	1.7	7506	2.5

E.Coli and Other Shiga-toxin Producing Bacteria

The incidence of E.Coli and other shiga-toxin producing bacteria nearly tripled in 2007 and 2008 in Johnson County, although the actual number of cases were low (14-16 cases) (Table 2). The state rate of E.coli increased in 2006 (due to a child care center outbreak) and increased slightly in 2007 (rate of 5.8) and 2008 (rate of 6.9). Nationally, E.coli increased slightly from a rate of 1.0 in 2006 to 1.5 in 2007 and 1.6 in 2008.

Table 2: Number and Crude Rate of E.Coli & Other Shiga-toxin Producing Bacteria at County, State, and National Level, 2005-2008

	2008		2007		2006		2005	
Level	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Johnson County	16	12.8	14	11.4	5	4.1	5	4.1
Iowa	208	6.9	175	5.8	161	5.5	100	3.4
U.S.	4938	1.6	4653	1.5	3026	1.0	3156	1.0

Hepatitis A

Johnson County experienced an outbreak of Hepatitis A in 2008 in an extended family group (Table 3). Iowa also had an outbreak of Hepatitis A in 2008 that was associated with a restaurant worker. US rates of Hepatitis A slightly decreased in 2007 and 2008. This decrease in rate is probably due to increased Hepatitis A vaccination of children.

Table 3: Number and Crude Rate of Hepatitis A at County, State, and National Level, 2005-2008

	2008		2007		2006		2005	
Level	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Johnson County	11	8.8	0	0.0	1	0.8	1	0.8
Iowa	109	3.6	48	1.6	13	0.4	22	0.8
U.S.	2,365	0.8	2,755	0.9	3,170	1.1	4,137	1.4

Hepatitis B, Acute

A low number of cases of acute Hepatitis B occur in Johnson County (0-4) (Table 4). Iowa also has a low incidence of Hepatitis B while the US has a slightly higher rate of Hepatitis B. Low incidence of Hepatitis B is likely

due to the universal recommendation of Hepatitis B vaccination at birth and requirement of Hepatitis B for school entry. Hepatitis B is also required for adults in health care professions.

Table 4: Number and Crude Rate of Hepatitis B, Acute at County, State, and National Level, 2005-2008

	2008		2007		2006		2005	
Level	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**
Johnson County	0	0.0	4	3.3	1	0.8	3	2.5
Iowa	25	0.8	27	0.9	21	0.7	33	1.1
U.S.	3,273	1.1	4,194	1.4	3,960	1.3	4,647	1.6

Legionellosis

The number of Legionellosis cases was elevated in 2008 in Johnson County (3 cases) and in Iowa (21 cases) (Table 5). The increased numbers were not outbreak related. The rate of US cases of Legionellosis has remained stable. Legionellosis bacteria are often found in water systems, such as hot and cold-water taps and showers, creeks, ponds, whirlpool spas, and cooling towers and evaporative condensers of large air-conditioning systems.

Table 5: Number and Crude Rate of Legionellosis at County, State, and National Level, 2005-2008

	2008		2007		2006		2005	
Level	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**
Johnson County	3	2.4	0	0.0	0	0.0	0	0.0
Iowa	21	0.7	12	0.4	13	0.4	8	0.3
U.S.	2,644	0.9	2,542	0.8	2,307	0.8	2,141	0.7

Lyme Disease

Lyme Disease rose significantly in Johnson County in 2007 and 2008 (Table 6). Iowa's rate of Lyme Disease is significantly lower than Johnson County's rate and approximately ½ of the US rate. Rates of Lyme Disease have risen at all levels since a standardized case definition was adopted in 1991 and increased surveillance for the disease was initiated. In Iowa Lyme Disease is acquired from a deer tick bite. The ticks are typically found in grasses and brush in the northeast corner of Iowa, which includes Johnson County.

Table 6: Number and Crude Rate of Lyme Disease at County, State, and National Level, 2005-2008

	2008		2007		2006		2005	
Level	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**
Johnson County	37	29.6	35	28.5	17	14.0	14	11.7
Iowa	109	3.6	124	4.1	97	3.3	91	3.1
U.S.	25,450	8.4	25,932	8.6	16,651	5.6	20,985	7.1

Meningococcal Invasive Disease

Johnson County had 3 non-outbreak-related cases of meningococcal disease in 2007 (rate of 2.4) (Table 7). In 2005, 2006, and 2008 Johnson County had a rate of 0. Iowa had a range of .5-.7 cases per 100,000 people in 2005-2008. The US rate for meningococcal disease occurred at a rate of .3-.4 per 100,000. Meningicoccal disease rate is low at all 3 geographic levels which is good because the case-fatality rate for meningococcal meningitis and meningococcemia is about 5%-15% even with appropriate antibiotic treatment. Approximately 5 to 10% of the population may carry this bacteria in the nasopharynx at any given time. Sporadic cases of meningococcal disease account for more than 98% of cases.

Table 7: Number and Crude Rate of Menningococcal Invasive Disease at County, State, and National Level, 2005-2008

	2008		2007		2006		2005	
Level	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**
Johnson County	0	0.0	3	2.4	0	0.0	0	0.0
Iowa	19	0.6	15	0.5	20	0.7	19	0.6
U.S.	1006	0.3	1005	0.3	1022	0.3	1162	0.4

Mumps

In 2006 Johnson County experienced a large outbreak of mumps (161.2 rate), and Iowa and the US experienced outbreaks with lower rates (Iowa 66.5, US 2.1) (Table 8). The outbreaks occurred primarily among college-aged

students with a high rate of mumps immunization. Mumps outbreaks in highly vaccinated populations still occur, probably due to vaccine failure. College students are also at higher risk for disease because of the crowded living conditions and the exposure they have to large number of students in classrooms and at social events.

Table 8: Number and Crude Rate of Mumps at County, State, and National Level, 2005-2008

	2008		2007		2006		2005	
Level	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Johnson County	5	4.0	4	3.3	195	161.2	0	0.0
Iowa	24	0.8	27	0.9	1,963	66.5	6	0.2
U.S.	376	0.1	715	0.2	6,339	2.1	265	0.1

Pertussis

In 2005 Johnson County and Iowa had outbreaks of Pertussis while the US had a significantly elevated rate of Pertussis (Table 9). Johnson County experienced higher rates of Pertussis than state and US rates in 2006-2008. Pertussis is endemic, with peaks occurring every two to five years. People are most efficient at spreading disease once the cough begins. Pertussis is highly infectious, with secondary attack rates of 80 to 90% among susceptible household contacts. Persons can become infected and remain asymptomatic. Adolescents and adults are often the source of infection for infants. The pertussis vaccine is 70 to 90% effective. Immunity wanes five to ten years after the last dose of pertussis vaccine is given. Most vaccinated children of approximately 10 - 12 years and older will be susceptible. As of May 2005, pertussis-containing vaccines are now available for adolescents and adults.

Table 9: Number and Crude Rate of Pertussis at County, State, and National Level, 2005-2008

	2008		2007		2006		2005	
Level	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Johnson County	27	21.6	9	7.3	22	18.1	47	39.2
Iowa	257	8.6	150	5.0	342	11.6	968	32.8
U.S.	8,839	2.9	9,416	3.1	12,536	4.2	22,339	7.6

Salmonellosis

Salmonellosis has remained at a low rate with slight fluctuations in Johnson County (10.7-12.0), Iowa (13.9-16.1), and the US (13.6-15.0) from 2005-2008 (Table 10). The most common mode of transmission of Salmonellosis is ingestion of food or water that has been contaminated with animal feces. This includes raw or undercooked poultry, meats, and raw milk or milk products. Person-to-person spread can occur when an infected food handler contaminates food. Disease prevention measures including proper hand washing and thoroughly cooking foods.

Table 10: Number and Crude Rate of Salmonellosis at County, State, and National Level, 2005-2008

	2008		2007		2006		2005	
Level	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Johnson County	15	12.0	13	10.6	13	10.7	14	11.7
Iowa	425	14.2	477	15.9	475	16.1	410	13.9
U.S.	43,013	14.1	45,182	15.0	40,483	13.6	42,429	14.3

Shigellosis

Johnson County had an elevated rate of shigellosis in 2007 (6.5, representing 8 cases) (Table 11). There was not an outbreak of disease. One person in each of 2 families did contract shigellosis by household contact. Iowa experienced an outbreak of Shigellosis in 2008 involving mostly children and their caretakers. Shigellosis increased in the US in 2007 and 2008. A very small dose of Shigella bacteria is needed to cause illness (probably 10 – 200 organisms). People shedding bacteria may contaminate food by failing to properly wash their hands before food handling.

Table 11: Number and Crude Rate of Shigellosis at County, State, and National Level, 2005-2008

	2008		2007		2006		2005	
Level	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Johnson County	3	2.4	8	6.5	0	0.0	4	3.3
Iowa	214	6.3	109	3.6	134	4.5	103	3.5
U.S.	19,235	6.3	18,005	6.0	13,075	4.4	14,847	5.0

Tuberculosis

Johnson County has a high rate of tuberculosis (1.6-4.1) 2005-2008 in comparison to the state (1.4-1.9) (Table 12). A large population of foreign born and homeless people contribute to the increased tuberculosis rate in Johnson County. Iowa has a low rate of tuberculosis (1.4-1.9) 2005-2008 due in large part to the excellent tuberculosis program at IDPH which guides counties' tuberculosis treatment and follow up of tuberculosis cases. US tuberculosis rates are higher than Johnson County and Iowa rates, but still have been declining every year since 2008 due to tuberculosis program efforts throughout the country.

Table 12: Number and Crude Rate of Tuberculosis at County, State, and National Level, 2005-2008

	2008		2007		2006		2005	
Level	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**
Johnson County	5	4.0	2	1.6	5	4.1	4	3.3
Iowa	46	1.5	43	1.4	40	1.4	55	1.9
U.S.	12,904	4.2	13,299	4.4	13,754	4.6	14,093	4.8

Sources

Iowa Surveillance of Notifiable and Other Diseases, IDPH Annual Report 2008.
http://www.idph.state.ia.us/ADPER/common/pdf/cade/cade_annual_report_2008.pdf
MMWR December 22, 2006 http://www.cdc.gov/MMWR/index2006.htm
MMWR December 19, 2008 http://www.cdc.gov/MMWR/index2008.htm
Johnson County Public Health Communicable Disease Logs 2008-2005
Tuberculosis Morbidity Table http://www.cdc.gov/nchhstp

Family Planning

Family planning services help individuals determine the number and spacing of their children. This promotes positive birth outcomes and healthy families.

Pregnancy

Births

Birth rates for Johnson County are consistent with state birth rates; both are slightly lower than national birth rates (Table 1). Local data is not available for teenage mothers (Figure 2).

Table 1: Live Birth Rates (Crude): Local, State and National Level (2003-2008)

	2008	2007	2006	2005	2004	2003
Johnson County	13.4	13.1	13.7	12.4	13.4	13.1
Iowa	13.4	13.7	13.6	13.2	13.0	13.0
U.S.	14.2	14.3	14.1	14.0	14.0	14.1

*Rates per 100,000

Figure 1: Live Birth Rates: Local, State and National Level (2003-2008)

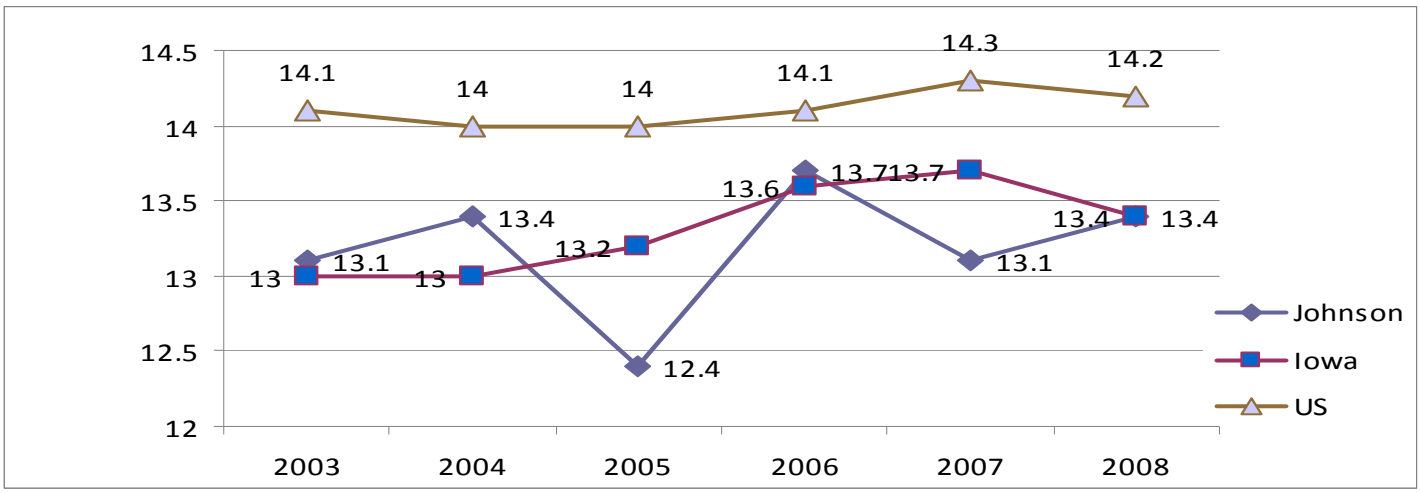
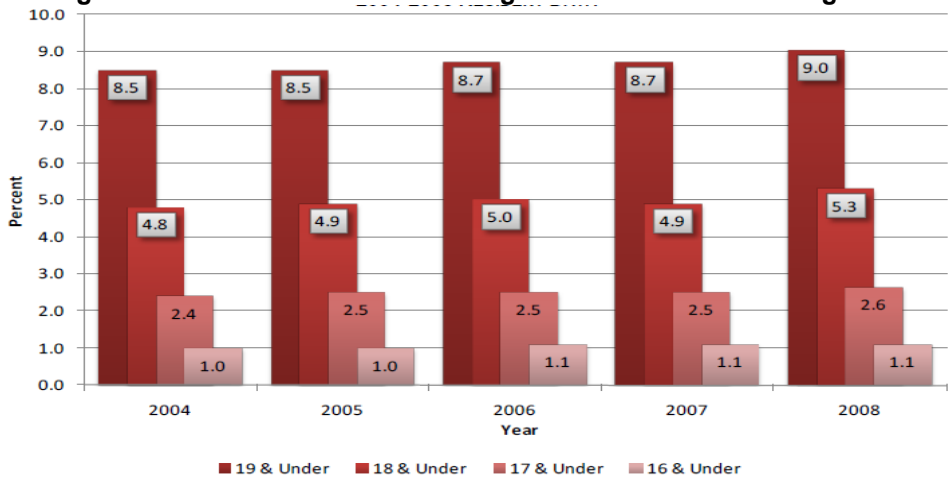


Figure 2: State Live Births to Teenage Mothers as a Percentage of Total Births (2004-2008)



Pregnancy Termination

Local data regarding pregnancy termination is not available; 2.0% of University of Iowa students reported that they or their partner experienced an unplanned or unintended pregnancy in the last year. In Iowa, surgically induced pregnancy terminations decreased between 2007 and 2008 and medically induced terminations increased. Spontaneous terminations increased during the same time period (Table 2). More data and rate information is needed to determine trends in pregnancy termination.

Table 2: Number of Pregnancy Terminations (Surgically, Medically Induced and Spontaneous) for Iowa

	2008			2007		
Level	Surgically Induced**	Medically Induced***	Spontaneous	Surgically Induced	Medically Induced	Spontaneous
TOTAL	**3,719**	**2,767**	**665**	**4,443**	**2,206**	**519**
Age						
<16	74	31.0	5	86	18	0
16-17	202	114	21	260	93	17
18-19	428	313	46	481	253	61
20-24	1,242	1,018	147	1,514	754	165
25-29	834	676	182	1,006	549	251
30-34	469	333	140	576	293	147
35-39	347	211	85	380	179	118
40-44	110	67	30	125	58	55
45+	9	2	3	8	7	3
Unknown	4	2	6	7	2	2
Race						
White	2,826	2,309	550	3,319	1,855	695
Black	506	244	35	593	160	48
American Indian	38	29	5	60	25	7
Asian	75	49	13	101	52	10
Other	274	136	62	1	0	2
Unknown	0	0	0	369	114	59
Education Level						
< 8 years	700	402	67	112	22	821
9-12 years	1,379	997	195	2,286	1,069	9
Some college or higher	1,620	1,352	357	2,006	1,092	259
Unknown	20	16	46	39	23	436
Marital Status						
Married	686	437	400	800	405	519
Un-married	3,020	2,317	259	3,630	1,785	299
Unknown	13	13	6	13	16	3

**Surgically Induced: using a vacuum or surgical method for termination.
***Medically Induced: using pharmaceutical or hormone therapy to induce termination.

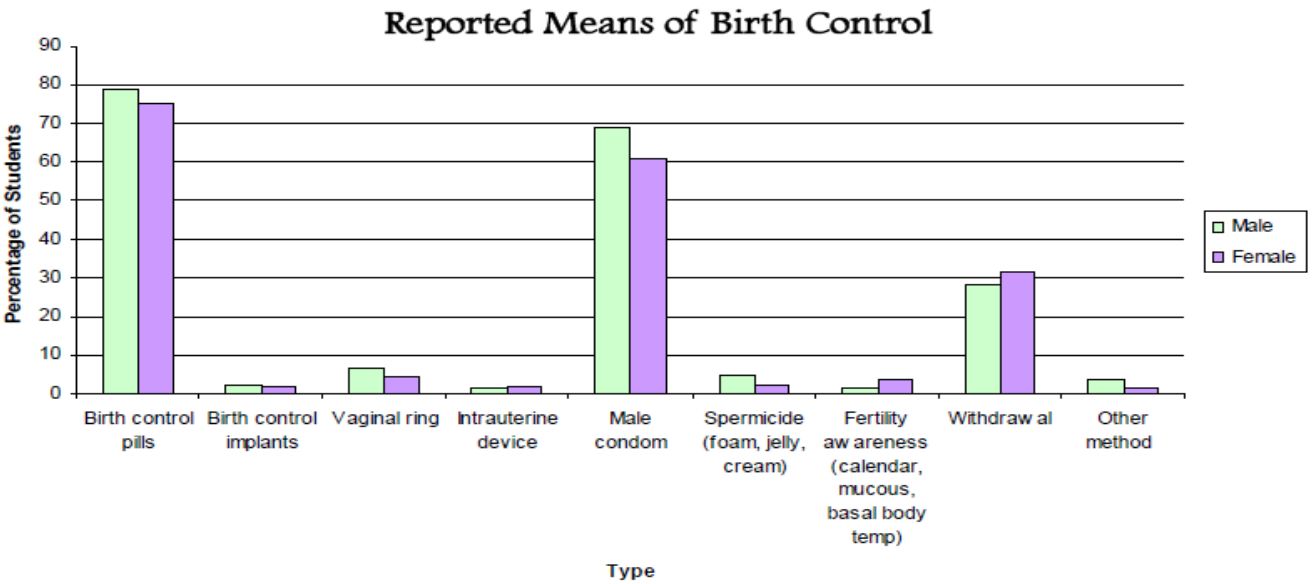
Contraception

Local data regarding contraceptive methods and usage is not available; University of Iowa data indicate that the most used method for college-aged students attending the University is birth control pills (Graph 3). National data from 2002 indicate that the most used method for women under 35 is birth control pills, while the majority of women over 35 use female sterilization as their method for birth control (Table 3). More data is needed to determine trends and needs for contraceptive services in Johnson County.

Table 3: Contraceptive Methods: National (2002)

	Ages						
Surveyed Women:	**15-44**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40-44**
Using Contraception	**61.90%**	**31.50%**	**60.70%**	**68.00%**	**69.20%**	**70.80%**	**69.10%**
Pill	19.20%	16.90%	31.90%	25.70%	22.30%	13.60%	7.60%
Female Sterilization	16.70%	NA	2.20%	10.30%	19.00%	29.20%	34.70%
Condom	14.70%	14.10%	21.80%	17.40%	14.50%	12.60%	9.30%
Not Using Contraception	38.10%	68.50%	39.30%	32.00%	30.80%	29.20%	30.90%

Figure 3: University of Iowa Student Birth Control Methods (2009)



Emergency Contraception 20% of sexually active UI students reported using the "morning after pill" within the last school year.
Condom Use 53% of students having vaginal sex, 28% having anal sex and 4.2% having oral sex used a condom.

Youth Sexual Risk Behaviors

Local data regarding premarital sex is not available. Iowa's Youth Risk Behavior Survey (YRBS) results from 2007 indicate lower sexual risks for Iowa youth compared to U.S. youth at the same time (Table 4). More data is needed to determine trends and needs in regards to premarital sexual relationships and risk behaviors.

Table 4: Iowa Youth Sexual Risk Behaviors

Sexual Risk Behaviors	Iowa	US
Ever had sexual intercourse	43%	48%
Had sexual intercourse >4 people	13%	15%
Currently sexually active	34%	35%
Did not use a condom during last encounter	34%	38%
Did not use birth control pills before intercourse	N/A	84%

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Sexually Transmitted Diseases and Human Immunodeficiency Viru

Sexually Transmitted Diseases (STDs)

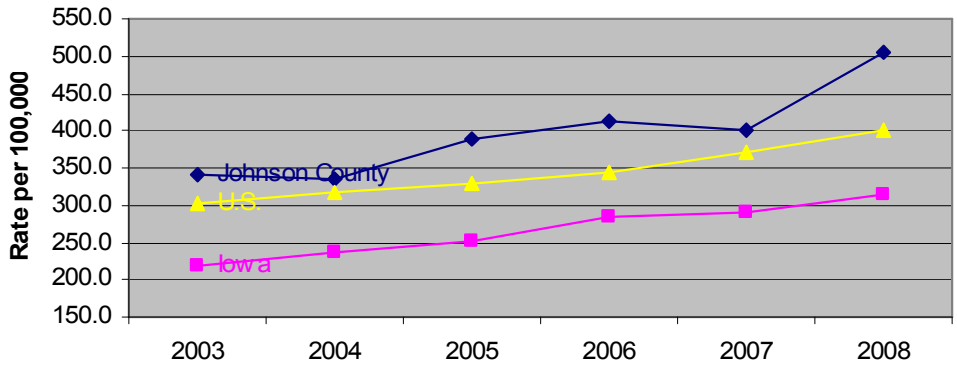
STDs are infections that can be transferred from one person to another through sexual contact. Reportable STDs in the state of Iowa include Chlamydia, Gonorrhea, and Syphilis.

Chlamydia

Johnson County has seen an increase in Chlamydia rates for the last four years, and both the state and nation have seen increases in the last five years. Johnson County rates are continuously higher than both state and national rates (Table 1). The increase in infection rate is attributed to improved testing reliability, consistent screening in the populations most in need, enhanced partner services, and increased presence of infection. Chlamydia can be treated and cured with the proper medication.

Table 1: Chlamydia Crude Incidence Rates at County, State, and National Level, 2003-2008

	2008	2007	2006	2005	2004	2003
Johnson County	506.0	400.1	412.4	390.0	334.9	341.5
Iowa	314.0	291.0	284.0	251.0	237.0	220.0
U.S.	401.3	370.2	344.3	329.4	316.5	301.7



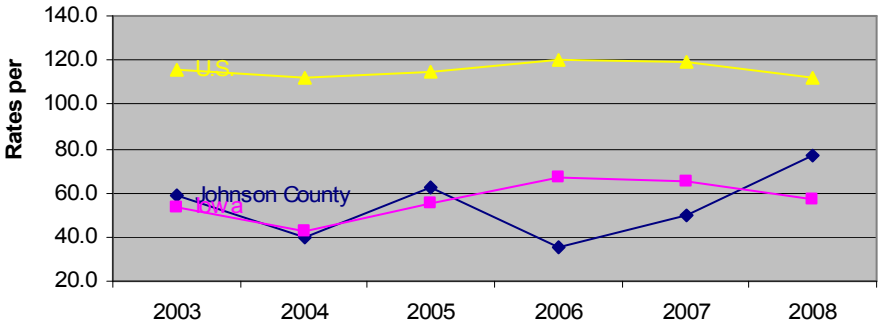
Gonorrhea

Johnson County has seen an increase in Gonorrhea rates in the last two years, as state and national rates are declining (Table 2). The increase is attributed to improved testing reliability, consistent screening in the populations most in need, enhanced partner services, and increased presence of infection. Gonorrhea can be treated and cured with the proper medication.

Table 2: Gonorrhea Crude Incidence Rates at County, State, and National Level, 2003-2008

	2008	2007	2006	2005	2004	2003
Johnson County	77.2	50.2	35.4	62.5	39.9	58.8
Iowa	57.0	65.0	67.0	55.0	43.0	53.0
U.S.	111.6	118.9	119.7	114.6	112.4	115.2

**Rate per 100,000 population*

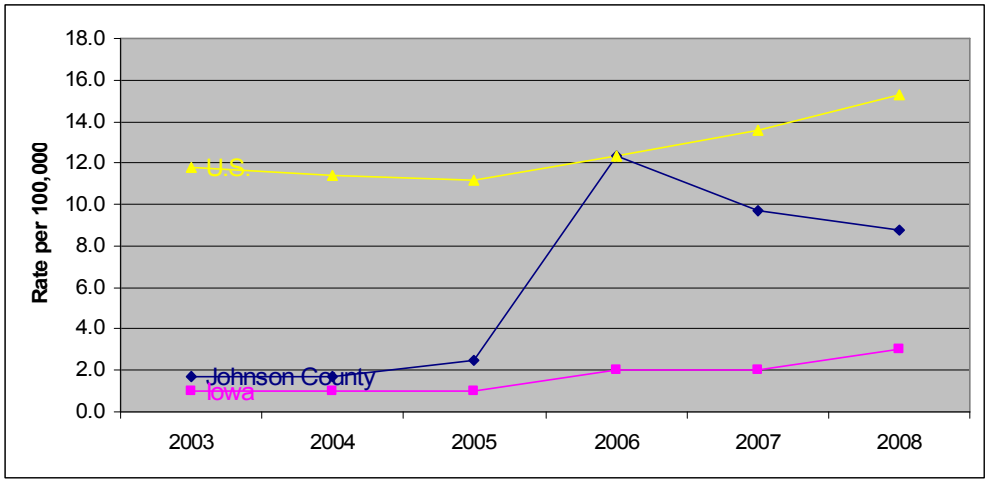


Syphilis

Syphilis in any stage can be treated and cured with the proper medication. With a peak in 2006, Johnson County has seen decreasing rates of syphilis in the last two years (Table 3). US rates have increased over the last three years, and Iowa rates began to climb in 2006 (Table 3).

Table 3: Syphilis Crude Incidence Rates at County, State, and National Level, 2003-2008

	2008	2007	2006	2005	2004	2003
Johnson County	8.8	9.7	12.3	2.5	1.7	1.7
Iowa	3.0	2.0	2.0	1.0	1.0	1.0
U.S.	15.3	13.6	12.3	11.2	11.4	11.8



Human Immunodeficiency Virus (HIV)

HIV is a virus that attacks an infected person's immune cells and makes them vulnerable to other infections. If left untreated, the virus can lead to acquired immunodeficiency syndrome (AIDS). HIV is transmitted by infected blood, breast milk, semen, or vaginal fluid. There is no cure for HIV.

HIV prevalence rates in Johnson County and Iowa are significantly lower than national rates but follow the national trend of a steady increase (Table 4). Johnson County's prevalence rate for HIV infection is higher than the state rate (Table 4). This may be attributed to the location of the University of Iowa Hospitals and Clinics and individuals moving here to be closer to their care provider.

Aggregate data from 1998-2008 demonstrate populations most at-risk in Johnson County (Tables 5-8). Johnson County, Iowa and the United States all see a disproportionate number of Black/African American HIV diagnoses (Figure 1). Research attributes this disparity to the early years of labeling AIDS as a "Gay disease" when many black men did not identify as Gay. African Americans also see higher rates of STD diagnosis and account for a larger number of those infected with HIV through injection drug use. Black men who have sex with men (MSM) are often associated with smaller groups of sexual partners and the spread of the disease can be quicker.

Table 4: HIV Crude Prevalence Rates at County, State, and National Level, 2006-2009

	2009	2008	2007	2006
Johnson County	Not Available	152.0	125.5	Not Available
Iowa	58.2	53.8	52.1	Not Available
U.S.	Not Available	Not Available	393.3	311.2

Johnson County HIV Incidence, 1998-2008, Detailed

Table 5: Johnson County HIV Incidence by Age

Age Group	#	%
under 13	1	1
13-14 years	0	0
15-24 years	13	18
25-34 years	28	38
35-44 years	15	21
45-54 years	15	21
55-64 years	1	1
65 and over	0	0

Table 6: Johnson County HIV Incidence by Mode of Exposure - Adult

Mode of Exposure	#	%
Men who have sex with men (MSM)	40	56
Injecting drug user (IDU)	1	1
MSM and inject drugs	5	7
Heterosexual contact	11	15
Hemophilia/coagulation disorder	0	0
Receipt of blood or tissue	0	0
Risk not reported/other	15	21

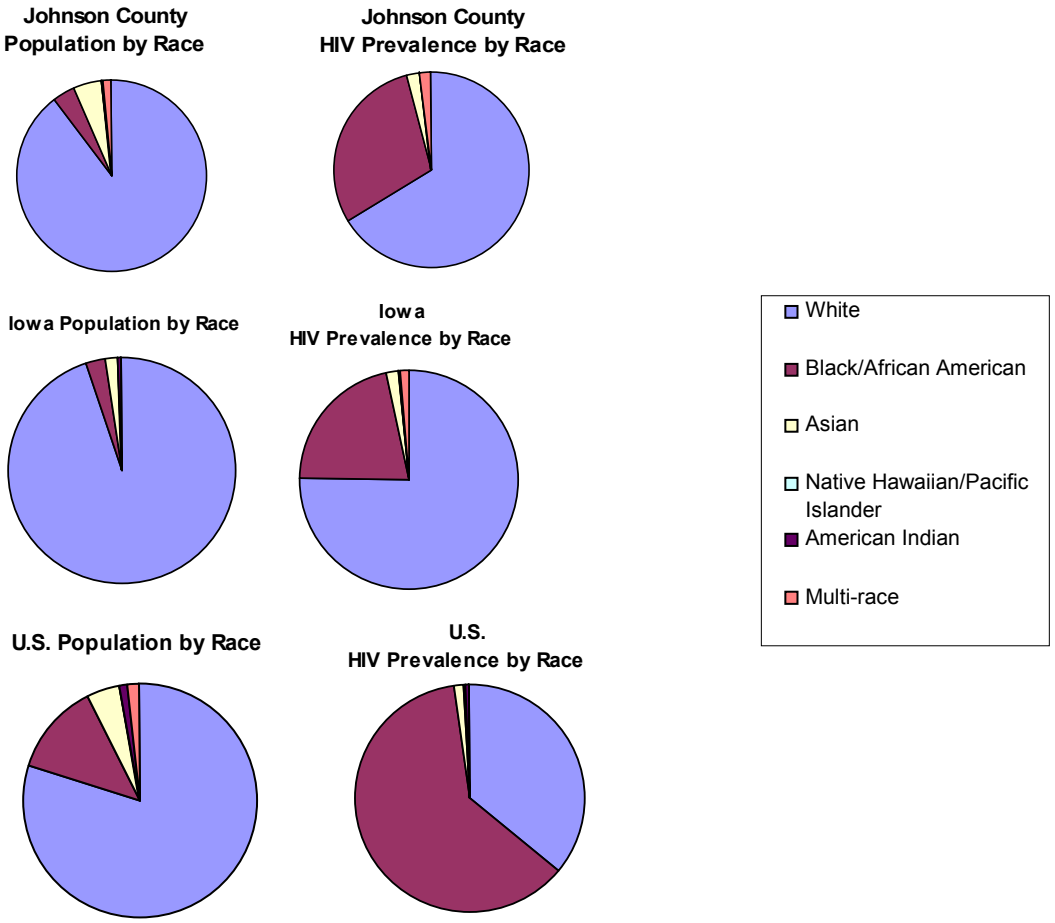
Table 7: Johnson County HIV Incidence by Race/Ethnicity

Race/Ethnicity	#	%
Hispanic/Latino - All Races	7	10
White	37	51
Black/African American	24	33
Asian	3	4
Native Hawaiian/Pacific Islander	0	0
American Indian	0	0
Multi-race	2	3

Table 8: Johnson County HIV Incidence by Gender

Gender	#	%
Female	16	22
Male	75	78

Figure 1: Population and HIV Prevalence by Race at County, State and National Level, 2008



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Disability

There are many different definitions of disability, but many of them agree that disability involves an interaction between a person's body and his or her environment. In other words, a disability is not just impairment, but a decreased ability to perform expected activities (e.g., employment) in a given environment. Even with general agreement on a definition of disability, the reason a particular group is collecting disability data also affects the definition and target population measured. For example, the Current Population Survey is meant to provide labor market data, so it narrowly defines disability in terms of work limitation and restricts the population to 18-64 years of age.

There are multiple sources of disability data that cover similar information. Sources of information were selected based on newness of the data, availability of local or state levels, and the availability of multiple years, when possible. Even when new, local or multiple year data was available, it may not have been selected due to problems with comparisons. For example, the American Community Survey has multiple years available, but comparisons may not be accurate due to changes in the target population and the questionnaire.

Prevalence

According to the 2005-2007 American Community Surveys, the percent of Johnson County residents over five years old that report any type of disability is at least four percent lower than the percent in Iowa or the United States (Table 1).

Table 1: Disability Status by Location (2005-2007 average) - 5 Years and Older

Location	Any Disability	
	% of Group	+/- pct.
Johnson County	8.8%	.7
Iowa	14.4%	.2
U.S.	15.1%	.1

+/- pct. = The 90% confidential interval can be created by adding or subtracting this percentage

Age and Type

The percentage of individuals reporting at least one type of disability goes up with age at the county, state, and national levels. This increase is seen in the 16-64 year age group at the state and national level, but not until the 65 and over group at the county level. The most frequently reported types of disability also changes with age. Mental disability is the most commonly reported among 5-15 year olds for all three areas, while physical disability is the most commonly reported among adults over 65 (Table 2).

Table 2: Disability Type by Location and Age Group (2005-7 average) *

Disability	Johnson County		Iowa		United States	
	% of Group	+/- pct.	% of Group	+/- pct.	% of Group	+/- pct.
5-15 Years Old						
Any	6.4%	1.7	6.6%	0.3	6.3%	0.1
Sensory	0.8%	0.5	1.2%	0.1	1.2%	0.1
Physical	0.7%	0.6	0.9%	0.1	1.1%	0.1
Mental	5.7%	1.5	5.5%	0.3	5.1%	0.1
Self-care	0.8%	0.5	0.7%	0.1	0.9%	0.1
16-64 Years Old						
Any	6.9%	0.7	11.4%	0.2	12.3%	0.1
Sensory	1.5%	0.3	2.6%	0.1	2.8%	0.1
Physical	2.8%	0.5	6.3%	0.1	7.3%	0.1
Mental	3.2%	0.6	4.8%	0.2	4.7%	0.1
Self-care	0.9%	0.3	1.7%	0.1	2.2%	0.1
Go-outside	1.2%	0.3	2.7%	0.1	3.2%	0.1
Employment	3.2%	0.5	6.2%	0.2	7.1%	0.1
65 Years and Older						
Any	31.2%	3.7	36.5%	0.6	40.9%	0.1
Sensory	13.2%	2.6	15.1%	0.4	16.5%	0.1
Physical	23.2%	3.3	26.7%	0.5	31.3%	0.1
Mental	6.4%	1.8	8.8%	0.4	12.3%	0.1
Self-care	5.6%	1.9	7.3%	0.3	10.4%	0.1
Go-outside	11.7%	2.4	12.9%	0.3	17.6%	0.1

+/- pct. = The 90% confidential interval can be created by adding or subtracting this percentage
* Disability types are not mutually exclusive

Gender

The percentage of individuals reporting at least one type of disability is lower in Johnson County compared to Iowa and the United States among both males and females. Females have slightly higher rates of reported disability for all three locations, but the confidence intervals between males and females overlap at the Johnson County level, so this may not be an actual difference (see Table 3).

Table 3: Disability Status by Gender and Location (2005-7 average)

Location	Male		Female	
	% of Group	+/- pct.	% of Group	+/- pct.
Johnson Co.	8.6%	0.8	9.1%	1.0
Iowa	14.1%	0.2	14.7%	0.2
U.S.	14.5%	0.1	15.6%	0.1

+/- pct. = The 90% confidential interval can be created by adding or subtracting this percentage

Race/Ethnicity

The percentage of persons in a given racial/ethnic group who report at least one disability is highest among African Americans in Johnson County. American Indian/Alaskan Natives report the highest percentages in Iowa and the United States, but the confidence intervals of Blacks and American Indians overlap in Iowa so it is unclear which group has the highest percentage. The number of American Indian/Alaska Natives and Native Hawaiian/Pacific Islanders surveyed was not large enough to get reliable numbers at the county level (Table 4).

Table 4: Disability Status by Race/Ethnicity - 16 to 64 years

Location	White		Black		Am. Ind./ Alaska Nat.		Asian		Nat. Hawaii/ Pacific Islander		Hispanic/ Latino	
	% of Group	+/- pct.	% of Group	+/- pct.	% of Group	+/- pct.	% of Group	+/- pct.	% of Group	+/- pct.	% of Group	+/- pct.
Johnson Co.	6.6%	0.8	18.1%	8.2			2.0%	1.5			5.5%	4.1
Iowa	11.1%	0.2	20.9%	1.8	23.9%	5.8	6.4%	1.5	10.7%	7.0	9.7%	0.9
U.S.	12.1%	0.0	16.1%	0.1	20.9%	0.3	6.2%	0.1	11.6%	0.6	9.7%	0.1

+/- pct. = The 90% confidential interval can be created by adding or subtracting this percentage

Trends

According to the Behavioral Risk Factor Surveillance System (BRFSS), the percentage of Iowans reporting a limitation in any activities due to a health problem rose slightly from 2001 to 2003 but has reminded fairly stable from 2003 to 2008. Iowa has consistently had a lower percentage than over half of the United States. Both the percentage of Iowans that reported having a health problem that limited activity and the percentage of Iowans reporting a health problem that required the use of special equipment rose from 2001 to 2008. The confidence intervals overlap from year to year for both measures, so the changes observed may be an artifact of sampling (Tables 5 and 6).

Table 5: Adults who are limited in any activities due to physical, mental, or emotional problems

	Iowa		U.S. and DC
Year	%	CI	Median %
2001	14.3	(13.1-15.5)	16.6
2003	17.1	(15.9-18.3)	18.3
2005	16.9	(15.7-18.1)	18.6
2007	17.4	(16.2-18.6)	18.9
2008	17.0	(15.9-18.1)	20.6

% = Weighted Percentage, CI = Confidence Interval

Table 6: Adults with Health Problem(s) that Requires the Use of Special Equipment

	Iowa		U.S. and DC
Year	%	CI	Median %
2001	5.2	(4.4-6.0)	5.4
2003	5.3	(4.6-6.0)	6.0
2005	5.9	(5.2-6.6)	6.2
2007	5.9	(5.3-6.5)	7.1
2008	6.2	(5.6-6.9)	7.2

% = Weighted Percentage, CI = Confidence Interval

Emotional Health

According to the Behavioral Risk Factor Surveillance Surveys in 2005 and 2006, Iowans with disabilities reported a higher percentage of sufficient emotional support and life satisfaction than did people with disabilities in the United States in general (Tables 7 and 8).

Table 7: Sufficient Emotional Support among Adults with Disabilities

Year	Iowa %	US %
2005	71	67
2006	75	69

Table 8: Satisfaction with Life Among Adults with Disabilities

Year	Iowa %	US %
2005	81	84
2006	88	86

Socioeconomic Status

Table 9: Economic Characteristics by Disability Status and Location

Location	Disabled		Not Disabled	
	% of Group	+/- pct.	% of Group	+/- pct.
Employment Status (16-64)				
Johnson County	52.3	5.4	77.5	1.3
Iowa	45.1	0.9	81.3	0.2
United States	36.7	0.1	74.6	0.1
Below Poverty Level (5 and older)				
Johnson County	19.9	3.8	17.5	1.4
Iowa	19.9	0.5	9.0	0.2
United States	21.4	0.1	11.2	0.1
Less than High School Degree (25 and over)				
Iowa	22.2	0.5	7.9	0.2
United States	29.4	0.1	12.4	0.1
Bachelor's Degree or Higher (25 and over)				
Iowa	10.8	0.3	27.3	0.3
United States	12..9	0.1	30.7	0.1

Risk Factors

Chronic physical, mental, and emotional health conditions can limit a person's ability to perform important age-appropriate activities such as working, attending school, and doing everyday household chores. A speech problem was identified by parents as the leading cause of activity limitation among children up to age 11. Learning disability and attention-deficit/hyperactivity disorder (ADHD) were mentioned as important causes of activity limitation among children age 5-17.

Arthritis and other musculoskeletal conditions were the most common conditions causing limitation among adults ages 18-64. Among adults 18–44 years of age, mental illness was the second leading cause of activity limitation. Among adults 45 years and older, heart and circulatory conditions were the second leading cause of limitation. Among adults 85 years and over, senility or dementia, vision conditions, and hearing problems were frequently mentioned causes of activity limitation.

Table 10: Limitation of Activity Caused by Selected Chronic Health Conditions by Age: U.S., 2005–2006

Type of Chronic Health Condition	Rate	SE	Rate	SE	Rate	SE
Age 0-17	**0-5**		**5-11**		**12-17**	
Speech problem	15.0	1.3	22.7	1.4	6.1	0.8
Asthma or breathing problem	7.3	0.9	5.4	0.6	6.5	0.8
Mental retardation / other developmental	7.6	0.9	9.7	0.9	10.9	0.9
Other mental, emotional, or behavioral	3.8	0.7	12.2	1.0	13.3	1.0
Attention-deficit/ hyperactivity disorder	*	*	17.8	1.2	22.2	1.4
Learning disability	*2.2	0.5	19.1	1.3	30.3	1.7
Age 18-64	**18-44**		**45-54**		**55-64**	
Mental illness	12.7	0.5	22.8	1.1	25.4	1.4
Fractures or joint injury	5.2	0.4	12.9	0.8	19.2	1.1
Lung	4.3	0.3	11.2	0.8	20.8	1.3
Diabetes	2.8	0.3	13.7	0.9	31.1	1.6
Heart or other circulatory	5.7	0.4	26.1	1.2	63.4	2.2
Arthritis or other musculoskeletal	18.4	0.7	55.5	1.8	98.6	2.6
Mental retardation	5.5	0.4	3.4	0.4	2.7	0.4
Age 65 and Over	**65-74**		**75-84**		**85+**	
Senility or dementia	8.7	1.0	30.1	2.4	77.0	6.7
Lung	33.2	2.3	39.7	2.6	42.4	4.8
Diabetes	38.5	2.1	46.1	2.8	45.0	5.5
Vision	18.1	1.6	36.4	2.6	87.7	7.7
Hearing	10.3	1.2	23.7	2.3	77.6	7.4
Heart or other circulatory	93.3	3.3	144.9	5.1	210.7	10.9
Arthritis or other musculoskeletal	119.9	4.0	172.3	5.3	271.9	11.4

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Behavioral Risk Factor Survey (as cited by Data 2010)

Mental Health

Prevalence of Mental Illness or Distress

Statistics for specific mental illness prevalence were available at the national level only. Over 30 percent of people reported having a mental illness in the last 12 months. Anxiety disorders were the most commonly reported category of mental illness (19.1%), with specific phobias being the most frequently reported anxiety disorder. Impulse-control disorders and mood disorders were both reported by approximately 10 percent of people. Women reported most commonly specific phobias and major depressive disorder while men reported social and specific phobias most commonly. In a 12 month period, women are more likely to be diagnosed with an anxiety or mood disorder, while men are more likely to report an impulse-control disorder. Specific and social phobia was the most commonly reported illnesses among all age groups (Table 1).

Table 1: 12-Month Prevalence of Mental Disorders by Sex and Age Group

		Sex		Age			
12-month	Total	Female	Male	18-29	30-44	45-59	60+
	%	%	%	%	%	%	%
Anxiety Disorders							
Panic disorder	2.7	3.8	1.6	2.8	3.7	3.1	0.8
Generalized Anxiety disorder	2.7	3.4	1.9	2	3.5	3.4	1.5
Specific phobia	9.1	12.2	5.8	10.3	9.7	10.3	5.6
Social phobia	7.1	8	6.1	9.1	8.7	6.8	3.1
PTSD	3.6	5.2	1.8	4	3.5	5.3	1
OCD	1.2	1.8	0.5	1.5	1.4	1.1	0.5
Any anxiety disorder	19.1	23.4	14.3	22.3	22.7	20.6	9
Mood Disorders							
Major depressive disorder	6.8	8.6	4.9	8.3	8.4	7	2.9
Dysthymia	1.5	1.9	1	1.1	1.7	2.3	0.5
Bipolar I - II	2.8	2.8	2.9	4.7	3.5	2.2	0.7
Any mood disorder	9.7	11.6	7.7	12.9	11.9	9.4	3.6
Impulse-Control Disorders							
Oppositional-defiant disorder	1	1.1	0.9	1.2	0.8	-	-
Conduct disorder	1	0.4	1.7	1.4	0.8	-	-
ADD/ADHD	4.1	3.9	4.3	3.9	4.2	-	-
Any impulse control disorder	10.5	9.3	11.7	11.9	9.2	-	-
Any Disorder							
Any	32.4	34.7	29.9	43.8	36.9	31.1	15.5

A higher percentage of 18-25 year olds reported serious psychological distress in the last year than persons 26 or older at the national, regional, and state levels. Eighteen to 25 year olds also reported the highest percentage of major depressive episodes in the past year when compared with 12-17 year olds and those 26 and older (Tables 2 and 3).

Table 2: Percent Having Serious Psychological Distress in Past Year: 2004-2006

	18 or older		18 - 25		26 or older	
Region	**2004 - 5**	**2005 - 6**	**2004 - 5**	**2005 - 6**	**2004 - 5**	**2005 - 6**
U.S.	11.63	11.29	19.39	18.14	10.27	10.1
Midwest	12	11.8	19.74	18.66	10.61	10.57
Iowa	11.75	11.3	17.41	17.2	10.71	10.27

Table 3: Percent Having at Least One Major Depressive Episode in Past Year: 2004-2006

	18 or older		12-17		18-25		26 or older	
Region	**2004 - 05**	**2005 - 06**	**2004 - 05**	**2005 - 06**	**2004 - 05**	**2005 - 06**	**2004 - 05**	**2005 - 06**
U.S.	7.65	7.25	8.88	8.36	9.93	9.36	7.25	6.88
Midwest	7.98	7.77	8.69	8.3	10.21	9.75	7.58	7.41
Iowa	7.35	6.99	8.01	8.29	9.01	9.08	7.05	6.61

Suicide is not always caused by an underlying mental illness, but many persons who attempt suicide also have a mental illness. The percent of youth who considered suicide or made a plan to commit suicide went down both in Iowa and the United States from 1997 to 2007. The percent of Iowa youth who reported attempting suicide went down from 1997 to 2007, while the percent of persons in the United States attempting suicide went up and down during that time (Table 4).

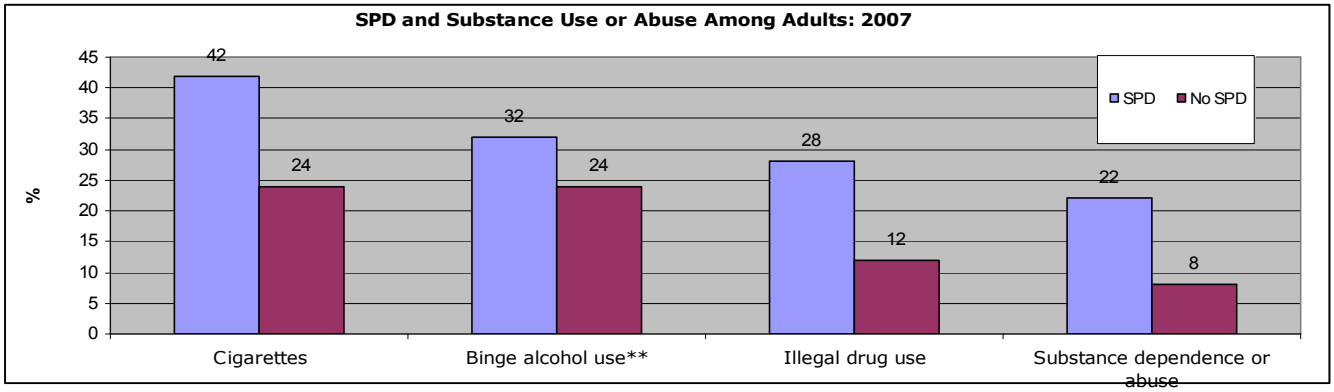
Table 4: The Number of Youth Considering, Planning, or Attempting Suicide by Location, 1997 to 2007

Year	Site	Considered Suicide %	Made a Plan %	Attempted Suicide %
1997	**IA**	23.0 (20.1–26.0)	18.6 (16.2–21.3)	9.0 (7.7–10.5)
1999		—	—	—
2001		—	—	—
2003		—	—	—
2005		16.2 (13.9–18.9)	13.0 (10.4–16.1)	7.2 (5.6–9.1)
2007		12.3 (10.4–14.5)	9.6 (8.0–11.5)	6.7 (5.0–8.9)
1997	**US**	20.5 (18.3–22.9)	15.7 (14.4–17.0)	7.7 (6.8–8.7)
1999		19.3 (18.0–20.6)	14.5 (13.1–16.1)	8.3 (7.3–9.4)
2001		19.0 (17.7–20.5)	14.8 (13.7–16.0)	8.8 (8.0–9.7)
2003		16.9 (16.2–17.6)	16.5 (13.2–20.5)	8.5 (7.4–9.6)
2005		16.9 (15.9–17.8)	13.0 (12.1–13.9)	8.4 (7.6–9.3)
2007		14.5 (13.4–15.6)	11.3 (10.4–12.3)	6.9 (6.3–7.6)

Legend: '—'=No data available

Adults who reported having serious psychological distress in the last year reported higher rates of cigarette smoking, binge alcohol use, illegal drug use, and substance abuse than those who did not report psychological distress (Figure 1).

Figure 1: Serious Psychological Distress and Substance Use or Abuse Among Adults: 2007



Race and Ethnicity

Black, Hispanic, and those who identified as an "other" race/ethnicity had the highest percentage of students who felt so hopeless every day for two or more weeks that they stopped doing usual activities. This data was available only for the United States, but not for Iowa due to the small number of Iowa respondents that were not white (Table 5).

Table 5: Percentage of Students Who Felt so Hopeless Almost Every Day for 2 or More Weeks in a Row That They Stopped Doing Some Usual Activities During the 12 Months Before the Survey, by Race and Location

Year	Site	Total	White	Black	Hispanic	Other
1999	**IA**	—	—	—	—	—
2001		—	—	—	—	—
2003		—	—	—	—	—
2005		25.3 (21.7–29.2)	23.9 (20.2–27.9)	N/A	N/A	N/A
2007		22.1 (19.4–25.1)	21.0 (18.2–24.2)	N/A	N/A	N/A
1999	**US**	28.3 (27.1–29.5)	24.9 (23.8–26.1)	28.9 (26.7–31.2)	37.0 (33.3–40.9)	33.8 (30.0–37.8)
2001		28.3 (26.9–29.7)	26.5 (24.7–28.5)	28.8 (26.6–31.2)	34.0 (31.7–36.5)	32.0 (28.1–36.2)
2003		28.6 (26.9–30.3)	26.2 (24.1–28.4)	26.3 (23.8–28.9)	35.4 (32.2–38.6)	35.2 (29.2–41.6)
2005		28.5 (27.2–29.7)	25.8 (24.1–27.6)	28.4 (25.9–31.0)	36.2 (33.8–38.8)	33.4 (28.8–38.3)
2007		28.5 (27.1–29.8)	26.2 (24.5–28.0)	29.2 (27.4–31.1)	36.3 (33.8–38.8)	27.2 (23.0–31.7)

Legend: '—'=No data available

Mental Health Treatment

The Midwest region had the highest rates of persons reporting an unmet need for mental health treatment as did persons with an annual income under $20,000 and persons receiving government assistance. Non-metro areas had the highest rate of unmet need in 2006, and small metro areas had the highest in 2007.

Table 6: Unmet Need for Mental Health Treatment/Counseling in the Past Year among Persons Aged 18 or Older

Characteristic	2006	2007
Total	4.8	4.9
Geographic Region		
Northeast	4.9	4.4
Midwest	5.2	5.1
South	4.7	4.9
West	4.3	5.1
County Type		
Large Metro	4.4	4.8
Small Metro	5.0	5.3
Nonmetro	5.5	4.7
Family Income		
Less Than $20,000	7.0	7.2
$20,000 - $49,999	4.8	4.8
$50,000 - $74,999	3.5	4.7
$75,000 or More	4.0	3.8
Government Assistance		
Yes	8.0	9.1
No	4.2	4.2

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use.

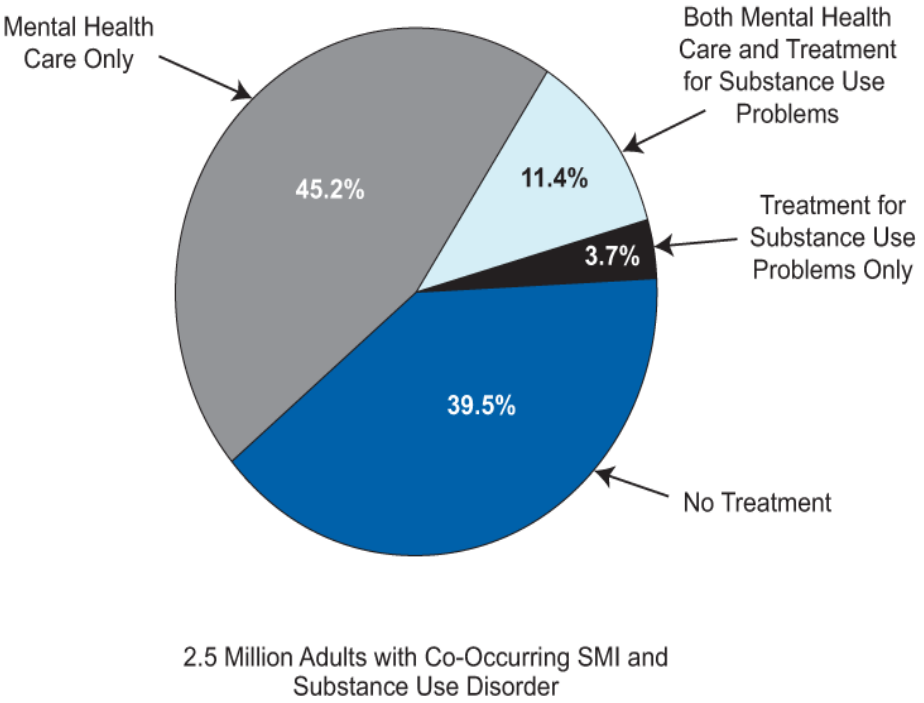
Johnson County Mental Health and Disability Services reports the number of persons served with mental illness each year. The number has gone up and down since 2000, but has most often been around 1200 persons served, or about 1 percent of the population. These rates do not necessarily represent the actual prevalence of mental illness in the general population as they are affected by eligibility and mental health funding (Table 8).

Table 7: Number and Rate of Children and Adults with Mental Illness Served in Johnson County, 2000-2008

	2008		2006		2004		2002		2000	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Johnson County	1214	0.9	1062	0.8	1250	1.0	1221	1.1	1232	1.1

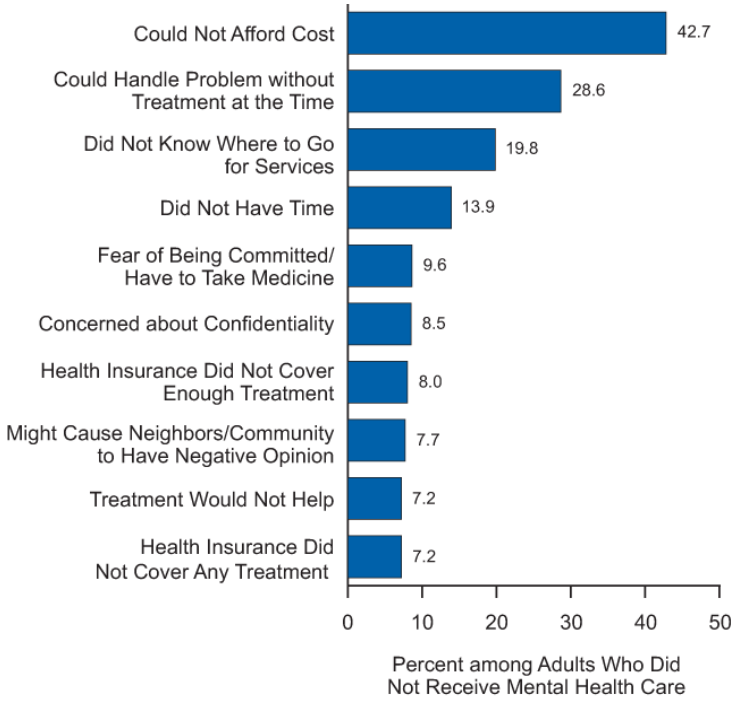
Of the 2.5 million adults in the United States with a co-occurring serious mental illness and substance use disorder, only 11.4 percent received treatment for both in the last year. Almost 40% received no treatment at all (Figure 2).

Figure 2: Past Year Mental Health Care and Treatment for Substance Use Problems among Adults Aged 18 or Older with Both Serious Mental Illness and a Substance Use Disorder: 2008



Mental health care is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Treatment for substance use problems refers to treatment at a hospital (inpatient), rehabilitation facility (inpatient or outpatient), or mental health center in order to reduce or stop drug or alcohol use, or for medical problems associated with drug or alcohol use.
Adults aged 18 or older with an unmet need for mental health care identified several reasons for not receiving mental health services. The top reasons were because they could not afford the cost (42.7%), because they felt they could handle the problem without treatment at the time (28.6%), because they did not know where to go for services (19.8), and because they did not have the time (13.9%) (Figure 3).

Figure 3: Reasons for Not Receiving Mental Health Services in the Past Year among Adults Aged 18 or Older with an Unmet Need for Mental Health Care Who Did Not Receive Mental Health Services: 2008



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SAMHSA National Survey on Drug Use and Health, 2006 and 2007

Substance Use

Drug-Related Mortality

Iowans have consistently had lower rates of alcohol related motor vehicle deaths, drug-induced deaths, and cirrhosis deaths compared to the United States population. The Johnson County rate of alcohol-related vehicle deaths is smaller than the state or the U.S., but the rates may not be very reliable due to the small numbers. The number of drug-induced deaths reported has increased consistently from 1999 to 2006 at both the state and national levels. Males have higher rates for drug-induced and cirrhosis deaths compared to women. This gender difference is present at the state and national level (Tables 1, 2, and 3).

Table 1: Number and Rate of Alcohol-Related Motor Vehicle Deaths at County, State, and National Level, 2004-2008

	2008		2007		2006		2005		2004	
Level	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**
Johnson County	4	3.1	1	0.8	2	1.6	2	1.6	2	1.7
Iowa	113	3.8	139	4.7	139	4.7	112	3.8	105	3.6
U.S.	13,846	4.6	15,534	5.2	15,970	5.4	15,985	5.4	15,311	5.2

Table 2: Drug-Induced Death Rates (Age Adjusted Per 100,000 Persons)

Level	Subpopulation	2006	2005	2004	2003	2002	2001	2000	1999
Iowa	Female	5.6	4.9	4.4	3.1	3.3	2.7	2.2	1.6
	Male	8.1	5.4	4.6	4.6	3.5	3.5	3.3	2.5
	TOTAL	6.9	5.1	4.5	3.8	3.4	3.1	2.7	2.0
United States	Female	9.0	8.1	7.6	7	6.3	5.1	4.6	4.4
	Male	16.4	14.4	13.3	12.8	11.7	10.1	9.5	9.4
	TOTAL	12.7	11.3	10.4	9.9	9	7.6	7	6.8

Table 3. Cirrhosis Death Rates (Age Adjusted Per 100,000 Persons)

Level	Subpopulation	2005	2004	2003	2002	2001	2000	1999	1998
Iowa	Female	3.5	4.7	4.2	4.1	4.3	4.7	3.8	3.8
	Male	6.6	8.3	7.4	8.6	9.6	9.1	8.6	10
	TOTAL	5	6.5	5.7	6.3	6.8	6.8	6.1	6.7
United States	Female	5.8	5.8	5.8	6	6.3	6.2	6.2	6.1
	Male	12.1	12.4	12.5	13	12.9	13.2	13.4	13.5
	TOTAL	8.8	9	9	9.3	9.4	9.5	9.5	9.6

Prevalence

Alcohol is the most commonly used substance among Iowans and United States, followed by tobacco and then marijuana. Substance use is consistently highest among 18-25 year olds in both Iowa and the United States. Iowa has slightly higher rates of alcohol use, abuse, and dependence as well as tobacco use compared to the United States. Iowans also reported needing but not receiving treatment for alcohol more frequently than persons in the United States in general. The United States had higher rates of marijuana and other illicit substances compared to Iowa (Table 4).

Table 4: Percent of Substance Use, Abuse, and Dependence by Age and Location, 2006-2007

	12-17 Iowa	18-25 Iowa	26+ Iowa	Total Iowa	Total US
Illicit Drug Use in Past Month	8.0	12.4	3.5	5.2	8.1
Marijuana Use in Past Month	5.6	10.5	2.4	3.8	5.9
Other Illicit Drug Use in Past Month	3.8	6.1	1.8	2.6	3.8
Alcohol use in past month	17.1	65.9	54.9	52.6	51.0
Binge alcohol use in past month	10.7	49.4	25.7	27.5	23.2
Tobacco use in past month	14.5	43.4	30.2	30.5	29.1
Cigarette use in past month	11.7	37.4	24.7	25.1	24.6
Marijuana Use in Past Year	10.7	19.8	4.6	7.3	10.2
Cocaine Use in Past Year	1.4	5.7	1.1	1.8	2.4
Nonmedical Use of Pain Relievers in Past year	5.7	10.2	2.5	3.9	5.1
Alcohol dependence or abuse in past year	7.2	20.4	7.5	9.2	7.6
Alcohol dependence in past year	2.6	8.4	3.3	3.9	3.4
Illicit drug dependence or abuse in past year	3.9	5.9	1.1	2.1	2.8
Illicit drug dependence in past year	2.3	4.2	0.9	1.5	1.9
Dependence or abuse of alcohol or other drugs in past year	9.2	22.1	8.2	10.2	9.1
Needing but not receiving treatment for illicit drugs in past year	3.6	5.6	1.0	1.9	2.5
Needing but not receiving treatment for alcohol in past year	6.9	19.7	7.1	8.8	7.2

Iowans in grades 9-12 did not report a lower percentage on multiple measures related to substance use and related consequences. Iowans did report a higher percentage of driving after drinking in the last month (12.6%) but the difference was not statistically significant. Over a quarter of Iowan high school students reported that they rode with a driver who had been drinking alcohol. Eighteen percent of Iowans grade 9-12 reported using alcohol or drugs before the last time they had sex.

Table 5: Substance Use and Related Consequences among Youth (Grades 9-12) by Location, 2007

Measure	Iowa	US	Iowa Students Are At*
Unintentional Injuries and Violence			
In the last 30 days, rode with a driver who had been drinking alcohol	26.5	29.1	Equal risk
In the last month drove after drinking	12.6	10.5	Equal risk
Alcohol and Other Drug Use			
Ever used cocaine	5.2	7.2	Less risk
Used cocaine in past month	1.7	3.3	Less risk
Ever used inhalants	9.8	13.3	Less risk
Ever used heroin	1.4	2.3	Equal risk
Ever used meth	3.6	4.4	Equal risk
Ever used ecstasy	3	5.8	Less risk
Ever used steroids	1.8	3.9	Less risk
Ever inject drugs	1.1	2	Equal risk
Sexual Behaviors			
Alcohol or drugs before last sex	18	22.5	Equal risk

*Equal or less risk is determined by statistically significant differences between groups.

Trends

The percentage of Iowans reporting rates of alcohol use, binge drinking, heavy drinking, and daily smoking was the same or higher than half of the United States from 2006 to 2009.

Table 6: Percent of Adults Using Alcohol and Tobacco by Year and Location, 2001-2008

	Alcohol Last Month		Heavy Drinkers*		Binge Drinking		Smoke Everyday		Current Smokers	
Year	Iowa	US Median	Iowa	US Median	Iowa	US Median	Iowa	US Median	Iowa	US Median
2001	57.8%	55.8%	4.7%	5.1%			17%	17.4%	22.1%	23.2%
2002	58.3%	58.1%	6.2%	5.9%			18.8%	17.8%	23.2%	23.2%
2003	60%	59.4%	6%	5.8%			16.2%	16.9%	21.7%	22%
2004	56.9%	57.1%	5.6%	4.9%			16.3%	15.8%	20.8%	20.9%
2005	55.5%	56.2%	5.6%	4.9%			16.1%	15.3%	20.4%	20.6%
2006	56.4%	55.4%	5.6%	4.9%	20.6%	15.4%	17.1%	14.9%	21.4%	20.1%
2007	56.7%	54.8%	5.5%	5.2%	19.9%	15.8%	14.5%	14.5%	19.8%	19.8%
2008	58%	54.5%	5.4%	5.1%	20.2%	15.6%	14.1%	13.4%	18.8%	18.4%
2009	57.3%	54.3%	5.3%	5.1%	18.4%	15.7%	13.4%	12.9%	17.1%	17.9%

The number of youth in the United States who rode with a driver that was drinking, drove when drinking, smoked cigarettes, drank alcohol, drank heavily, smoke marijuana, and used substances before last time having sex all went down from 1997-2007 (Table 7). Johnson County and Iowa youth tend to be less likely to use substances than youth in the nation. Johnson County statistics show that Johnson County youth were lower or equal risk to state youth in most substance use behaviors in 2008 (Table 8). The exceptions were marijuana use in grade 11, amphetamine use in grade 11 and cocaine use in grade 6.

Table 7: Substance Use among United States Youth, by Percent (Grades 9-12), 1997-2007

Measure	2007	2005	2003	2001	1999	1997
Rode with driver that was drinking	29.1	28.5	30.2	30.7	33.1	36.6
Drove when drinking	10.5	9.9	12.1	13.3	13.1	16.9
Current cigarette use	20.0	23.0	21.9	28.5	34.8	36.4
Current alcohol use	44.7	43.3	44.9	47.1	50.0	50.8
Episodic heavy drinking	26.0	25.5	28.3	29.9	31.5	33.4
Current marijuana use	19.7	20.2	22.4	23.9	26.7	26.2
Used substances before last sex	22.5	23.3	25.4	25.6	24.8	24.7

Table 8: Current Substance Use Behaviors (Past 30 Days) in Johnson County and Iowa Youth, 2008

	Johnson County			Iowa		
Measure	Grade 6	Grade 8	Grade 11	Grade 6	Grade 8	Grade 11
Drove after drinking or using drugs	0%	1%	7%	1%	2%	10%
Tobacco use	1%	3%	19%	2%	7%	24%
Alcohol use	4%	9%	32%	5%	16%	36%
Marijuana use	0%	2%	16%	1%	3%	13%
Amphetamine use	0%	1%	3%	0%	1%	2%
Cocaine use	1%	1%	2%	0%	1%	2%
Inhalant use	1%	3%	2%	3%	4%	2%
Methamphetamines	0%	1%	1%	0%	1%	1%
Over the Counter Medications (Taken Differently than Directions)	2%	3%	7%	2%	4%	7%
Prescription Medication (Without a Doctor's Prescription)	1%	3%	7%	2%	4%	7%
Steroid Use	0%	1%	1%	0%	1%	1%

Sources

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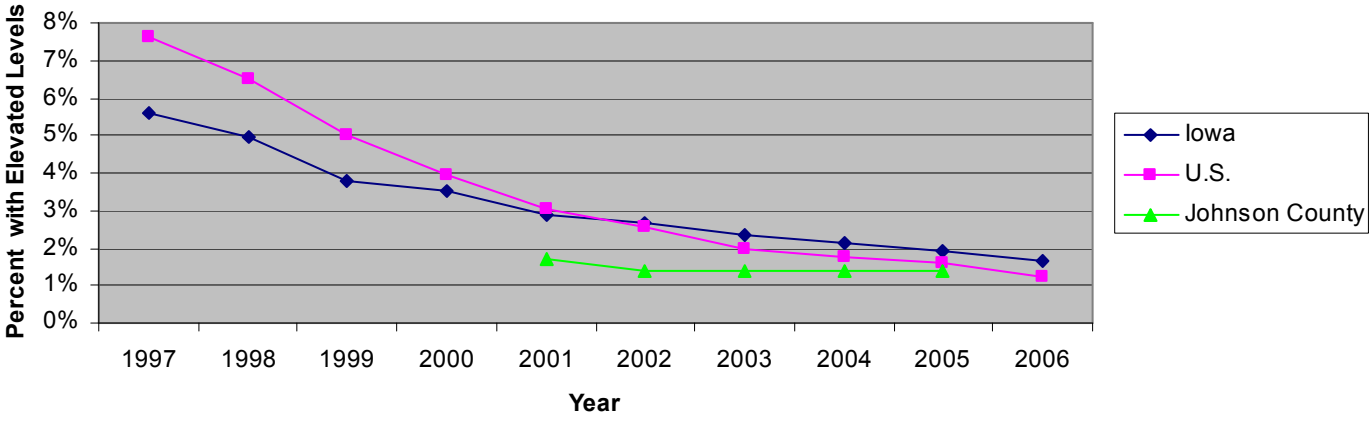
Environmental Health

Child Blood Lead Levels

Elevated child blood lead levels in children under the age of three have been on the decline in Johnson County, Iowa, and the United States between 2001 and 2006 (Figure 1). Statewide, the prevalence of lead poisoning among children under the age of six years is 7 percent. This is more than four times the national average of 1.6 percent. Most of Iowa's pre-1950 homes contain lead-based paint. Young children who live in pre-1950 homes can become lead-poisoned when they put paint chips or exterior soil in their mouths or when they get house dust and soil on their hands and put their hands in their mouths. In addition, adults who remodel or repaint these homes may be lead-poisoned if they disturb the lead-based paint. Lead poisoning testing procedures must be kept to the standard that exists now in order to continue the decline in elevated lead levels.

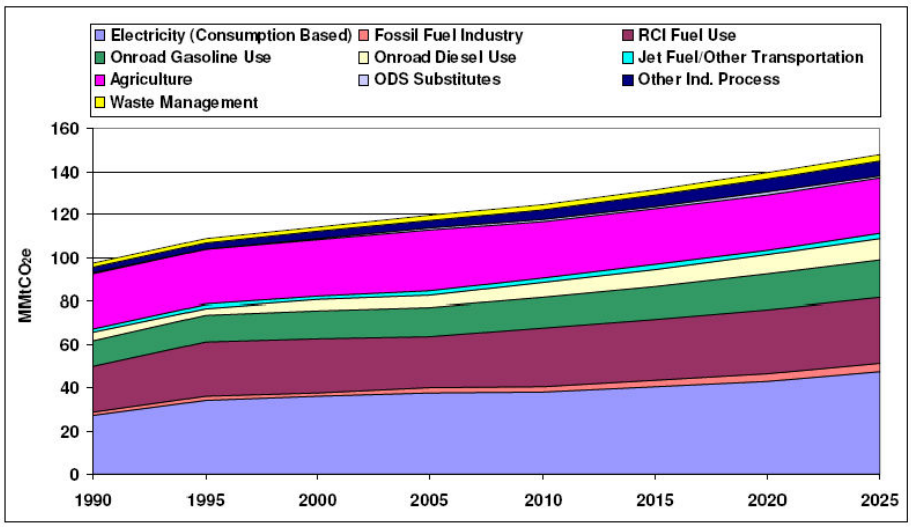
Figure 1: Percent of Children (<72 Months Old) Who Are Tested Who Have Elevated Blood Lead Levels



Air Quality

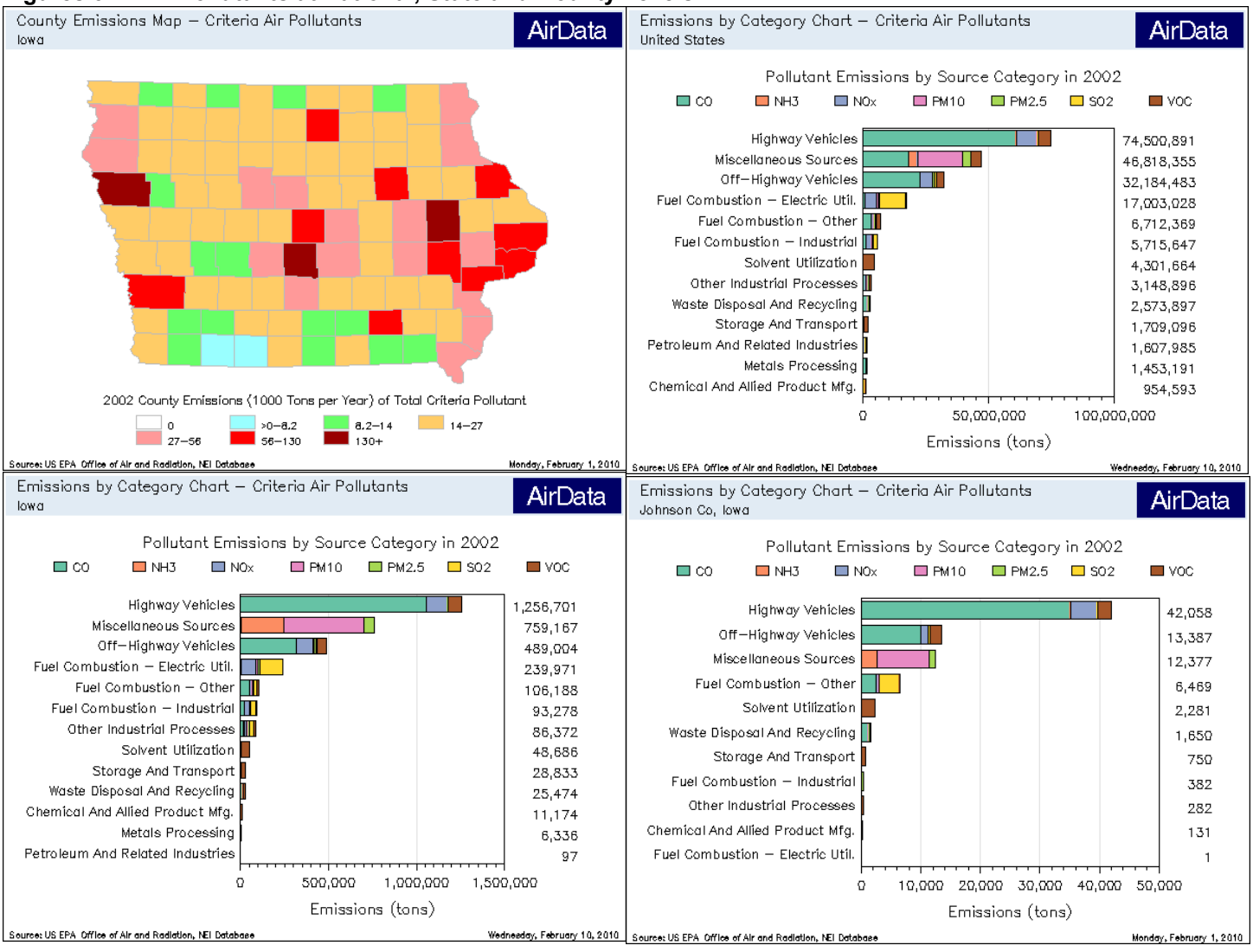
Air quality is an important indicator of environmental health and greatly affects the health of citizens. It is important that air quality is measured and monitored. Figure 2 illustrates the types of industries that are responsible for greenhouse gas emissions in Iowa. These emissions will continue unless electricity consumption, fuel consumption, and agricultural greenhouse gases are reduced.

Figure 2: Iowa Gross Greenhouse Gas Emissions by Sector, 1990-2025: Historical and Projected



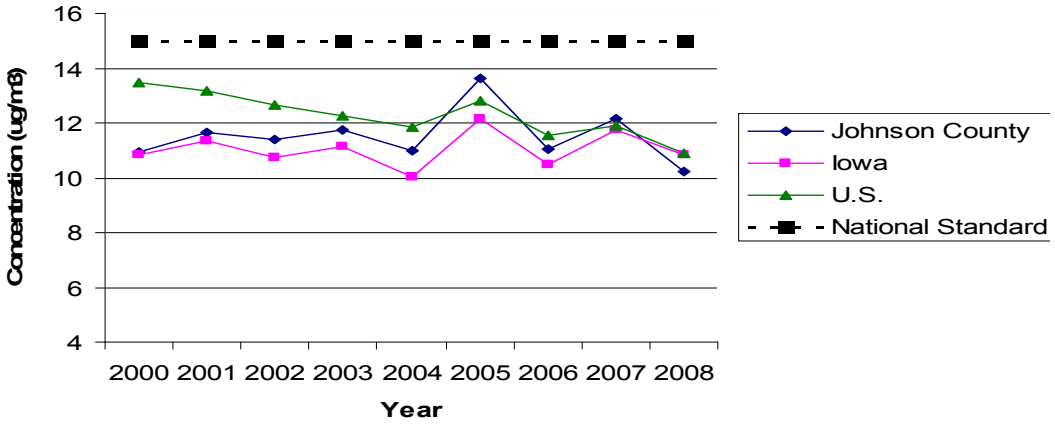
Johnson County emitted 56 to 130 thousand tons of greenhouse gases in 2002 compared to Iowa's emissions of 800 thousand tons in 2005 (Figure 3). Nationally, Iowa is one of the lower greenhouse gas-producing states. The top three pollutants for the Johnson County, Iowa, and the United States are carbon monoxide, particulate matter, and ammonia which are caused nearly exclusively by highway vehicles, miscellaneous, and off-highway vehicles.

Figures 3-7: Air Pollutants at National, State and County Levels.



The majority of exceedances of National Ambient Air Quality in Iowa were due to particulate matter 2.5, while the majority of minor source emissions in Iowa are from particulate matter 10. Particulate matter (PM) 2.5 is an environmental pollutant, which is 2.5 micrometers or smaller in diameter. This pollutant can lead to increased respiratory symptoms such as coughing or difficulty breathing, as well as decreased lung function, aggravated asthma, development of chronic bronchitis, and an irregular heartbeat. Most PM 2.5 form complicated reactions in the atmosphere with chemicals like sulfur dioxides and nitrogen oxides that are emitted from power plants, industries, and automobiles. Figure 8 illustrates the importance of PM 2.5. Although lower than the National Standard, Johnson County has a high amount of PM 2.5 (even exceeding the State of Iowa in some years), and it accounts for most of the pollution.

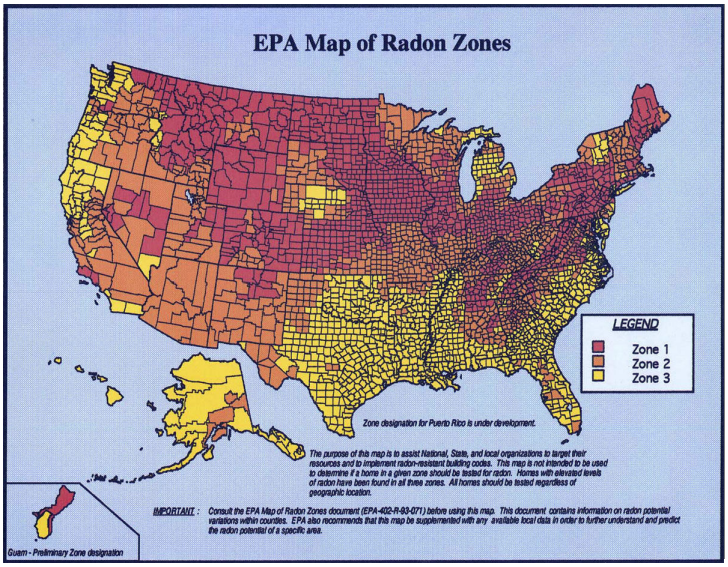
Figure 8: PM 2.5 Air Quality, 2000-2008 (Based on Seasonally-Weighted Annual Average)

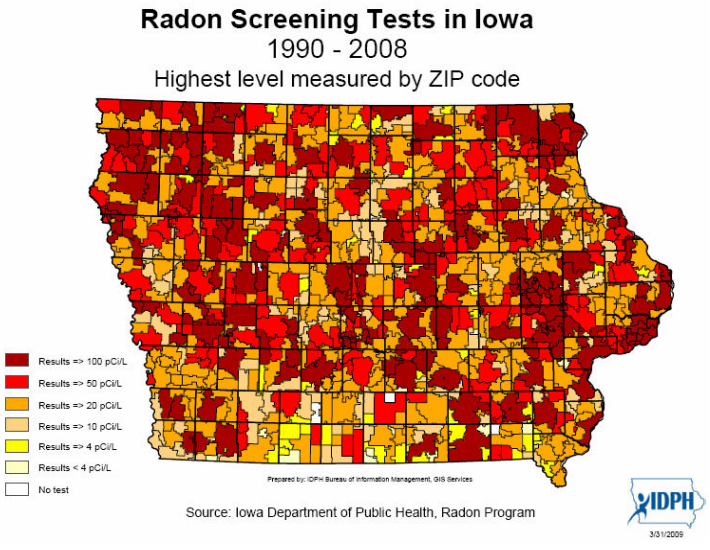


Radon

According to the Environmental Protection Agency (EPA), radon is the top cause of lung cancer among non-smokers and the second leading cause of lung cancer overall. It is an invisible, odorless, and tasteless gas. Radon is a decay product from uranium, which is present in nearly all soil, rock, and water. The amount of radon depends on the soil chemistry, which can vary from house to house. The Midwest has a higher radon concentration due to glacial movement, as it redistributes uranium-rich rock (Figure 9). As the glaciers grind the rock, more surface area is created, thus releasing more radon. Residents of Johnson County are encouraged to use radon test kits which are available at Johnson County Public Health to see if their home has a higher than acceptable amount of radon. Between 1990 and 2008, Johnson County had a 4.5pCi/L level of radon in the soil compared to Iowa's level of 6.8 pCi/L (Figure 10).

Figures 9 and 10: Radon Levels in the United States and Iowa

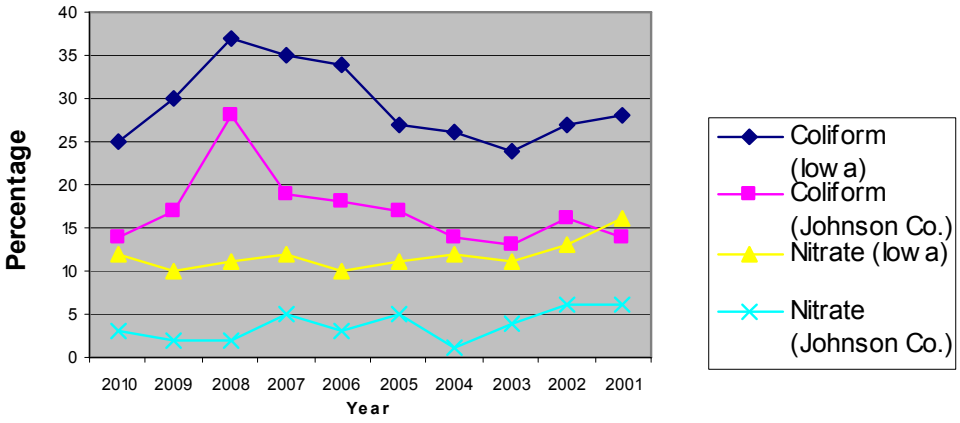




Water Quality

Water quality is yet another important indicator of environmental health and the health of citizens. Water violations in Iowa are declining. Well water in Johnson County has had significantly less positive samples of coliform bacteria and nitrates compared to the state of Iowa (Figure 11). A positive nitrate test is indicated by >45mg/L; it poses a health risk to infants <6 months because it causes respiratory problems. The presence of nitrates indicates contamination from a sewage disposal system, animal manure, or nitrogen fertilizer. A positive coliform test is indicated with a reading ≥ 1, which signifies the water may not be safe for human consumption. The presence of total coliform indicates a possible structural defect in the well or distribution system. As new wells are constructed to current standards, the percentage of positive samples should decline. Continued maintenance and monitoring of wells in addition to improving surface water quality should also prove to be beneficial.

Figure 11: Percentage of Positive Samples for Iowa and Johnson County Wells by Year – All Depths



Hills, IA has a significant issue with perchlorate contamination in the water supply (Table 1). Perchlorate is a compound made of chlorine and oxygen; it is either found in nature or man-made. It is widely used in fertilizers, fireworks, road flares, etc. High doses of perchlorate interfere with iodide uptake into the thyroid gland and can lead to hypothyroidism in humans.

Table 1: Hills, IA Perchlorate Sampling, –2001-2004

Sampling Event	# Drinking Water Wells Sampled:	Range of Perchlorate Conc. in wells (ppb)
Feb & Mar 2004	65	4.10 - 18.5
May & Sep 2003	191	0.45-66.0
May 2002	8	9.20 - 28.8
June 2001	4	29.7

Sources

http://www.idph.state.ia.us/eh/common/pdf/lead/testplan.pdf
http://www.iowadnr.gov/air/prof/tech/tech.html#GHG
http://www.iowadnr.gov/air/prof/ghg/files/2008_Greenhouse_Gas_Inventory.pdf
http://www.epa.gov/airtrends/pm.html
http://www.epa.gov/air/data/geosel.html
http://www.idph.state.ia.us/eh/radon.asp
http://www.epa.gov/radon/zonemap.html
http://www.uhl.uiowa.edu/services/wellwater/results.xml
http://www.idph.state.ia.us/eh/hazardous_waste.asp
http://www.iowadnr.gov/water/drinking/reports.html
http://www.idph.state.ia.us/eh/lead_poisoning_prevention.asp

Occupational Health

Iowa has higher adult blood lead levels compared to other states (Figure 1). There are a variety of possible explanations for this observation including: 1. Adult exposure occurs from hobbies or individual jobs (e.g., working with stained glass with lead solder, making lead bullets, and making scale model metal toys) 2. Many manufacturing firms have plants located in Iowa that perform work that exposes the workers to lead, 3. Occupational Safety and Health regulations may not be enforced as rigidly in Iowa as compared to other states, 4. Some states have chosen to apply more protective safety regulations for lead exposure than those currently listed by OSHA, and 5. Iowa may be doing a better job of getting workers at risk tested and reported to the health department (IDPH). Johnson County has seen a slight increase in adult blood lead levels (Table 1).

Figure 1: State Prevalence Rate Categories for Resident Adults with Elevated Blood Lead Levels (>= 25 ug/dL)

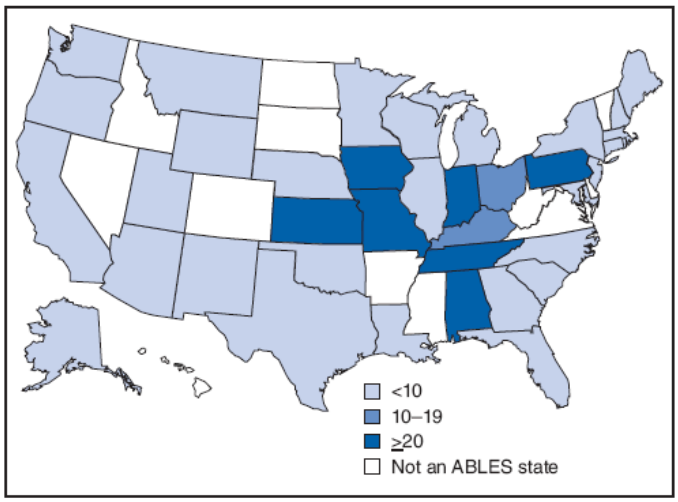


Table 1: Rates of Adults per 100,000 Employed Age 16 & Older: Prevalence Rate of Blood Lead Levels ≥ 25 ug/dL

Level	2008	2007	2006	2005
Johnson County	0	2.3	0	1.47
Iowa	17.8	20.3	15.5	16.3
U.S.	N/A	7.4	7.4	7.2

Pesticide Exposure

Pesticide exposure in Johnson County and Iowa has increased between 2002 and 2005 (Table 2). However, this could be due to increased reporting. Johnson County had a small proportion of the reported pesticide exposures in Iowa. The majority of exposures come from insecticides and herbicides (Table 3).

Table 2: Number of Reported Pesticide Exposures, Iowa & Johnson County, 2002 to 2005

Level	2005	2004	2003	2002
Johnson County	17	5	3	5
Iowa	443	257	204	155

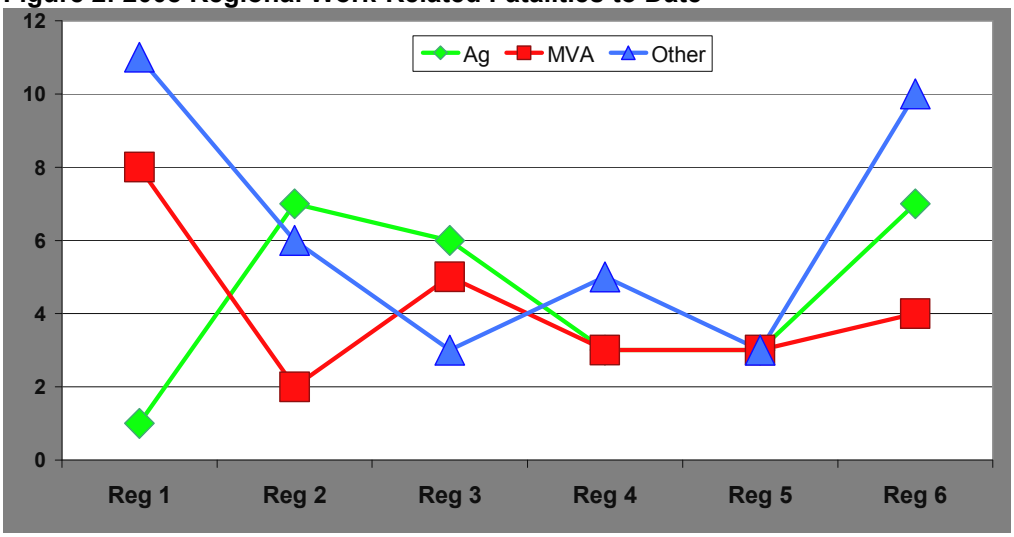
Table 3: Class of Pesticide Exposures in Iowa, 2002 to 2005

	2005	2004	2003	2002
Insecticide	202 (42.90%)	202 (78.6%)	162 (79.4%)	93 (60%)
Herbicide	64 (13.60%)	41 (15.9%)	31 (15.2%)	46 (30%)
Fungicide	8 (1.7%)	5(1.9%)	2 (1%)	5 (3%)
Rodenticide	34 (7.20%)	1 (0.4%)	1 (0.5%)	1 (1%)
Repellant	64 (13.60%)	3 (1.2%)	NA	NA
Disinfectant	99 (21.0%)	NA	NA	NA
Other	NA	5 (1.9%)	8 (3.9%)	10 (6%)
Total	471 (100%)	257 (100%)	204 (100%)	155 (100%)

Occupational Injuries, Illness, and Fatalities

The graph below demonstrates that region 6 in Iowa (which includes Johnson County) had a significantly high amount of "other" work-related and agricultural deaths in 2008 (Figure 2). The "other" constitutes falls, shootings, stabbings, construction accidents, explosions, etc.

Figure 2: 2008 Regional Work-Related Fatalities to Date



Further, Iowa had a relatively small proportion of occupational fatalities, illness, and injury compared with the United States between 2005 and 2008 (Tables 4 & 5).

Table 4: Number of Occupational Fatalities in Iowa and the United States

	2008	2007	2006	2005
Iowa	93	89	71	90
United States	5071	5657	5840	5734

Table 5: Number of Occupational Injury and Illness Cases (in thousands) in Iowa and the United States

	2008	2007	2006	2005
Iowa	62.4	72.6	70.7	73.9
United States	3696.1	4002.7	4085.4	4214.2

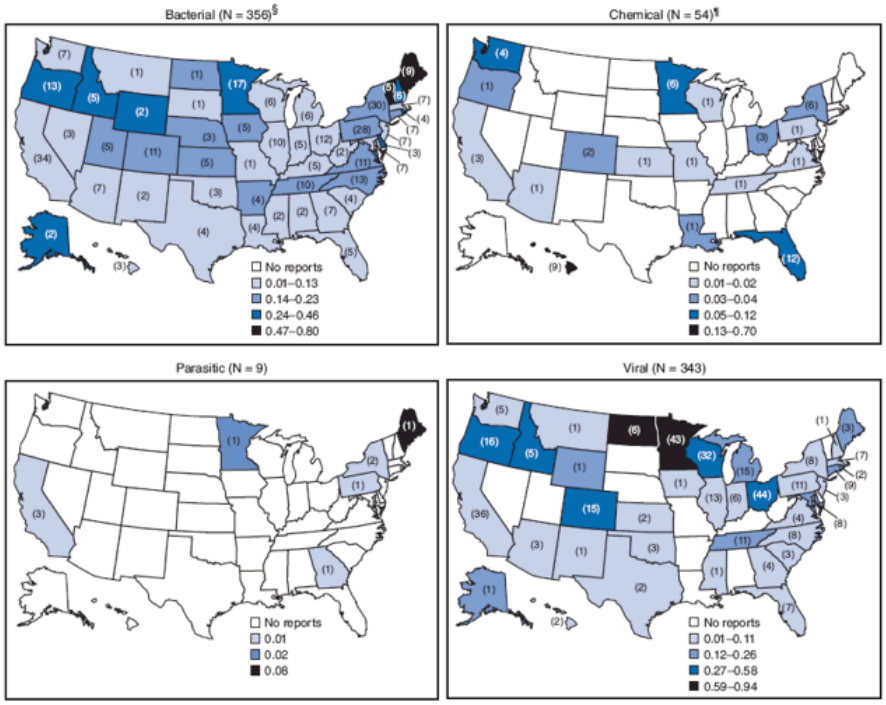
Sources

http://www.idph.state.ia.us/eh/pesticide_exposure.asp
http://www.public-health.uiowa.edu/face/
http://www.bls.gov/data/
Adult Blood Lead Epidemiology and Surveillance (ABLES) program, United States, 2007

Food Safety

In 2006, Iowa did not have any chemical or parasitic-caused food-related illnesses. In fact, Iowa was one of the states with lower rates of food-borne illness caused by bacteria (Figure 1). The top causes of food-borne illness reported in Iowa and the United States were norovirus, clostridium perfringens, and salmonella, which mainly occurred at private parties (Table 2). In Johnson County, a confirmed outbreak of gastrointestinal illness occurred in 2007 among attendees of a wedding reception. A confirmed outbreak of salmonella occurred in 2006 among attendees of a birthday party. Neither of these confirmed outbreaks is included in Table 2.

Figure 1: Rate of reported food-borne disease outbreaks per 100,000 standard population and number of outbreaks,* by state and major etiology group, United States, 2006



Bacterial includes: *Salmonella, Clostridium perfringens, E. Coli, Campylobacter,* etc.
Chemical includes: Ciquatoxin, mushroom toxins, cleaning agents, plant toxins, etc.
Parasitic includes: *Cryptosporidium, Cyclospora, Giardia, Trichinella, etc.*
Viral includes: Hepatitis A, Astrovirus, Rotavirus, etc.

Table 1: Number of Persons Ill Due to Food-Borne Outbreaks: Confirmed Cases, Iowa & U.S., 2007 to 2004

Iowa					U.S.				
Type	**2007**	**2006**	**2005**	**2004**	**Type**	**2007**	**2006**	**2005**	**2004**
Norovirus	141	32	82	271	**Norovirus**	6,112	11,834	4,783	10,278
Clostridium Perfringens	61	0	56	200	**Clostridium Perfringens**	1,334	732	416	1,276
Salmonella (all types)	561	24	44	157	**Salmonella (all types)**	3,478	2,654	2,933	2,990
E.Coli, Shiga-toxin Prod.	21	124	0	59	**E.Coli, Shiga-toxin Prod.**	736	592	331	410
Campylobacter Jejuni	0	0	33	32	**Campylobacter Jejuni**	294	1,814	421	102
Total	784	180	215	719	**Total**	11,954	17,626	8,884	15,056

Table 2: Self-Reported Food-Related Illness: Unconfirmed, Johnson County, 2008 to 2004

	2008	**2007**	**2006**	**2005**	**2004**
Number of Self-Reported Cases	34	70	43	25	47

Sources

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5822a1.htm
http://wwwn.cdc.gov/foodborneoutbreaks/Default.aspx

Maternal Health Indicators

The CDC's Pregnancy Nutrition Surveillance System and Pediatric Nutrition Surveillance System both draw their data from federally funded public health programs serving low income families. The majority of this data comes from the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). Nineteen percent of Johnson County children age birth to 4 years were enrolled in WIC during 2008.

Health Indicators

Underweight and Overweight

Pregnancy underweight is defined as body mass index (BMI) less than 19.8. Pregnancy overweight is defined as BMI greater than or equal to 26.0. Incidence of pregnancy underweight decreased for Johnson County WIC participants for the period 2006 – 2008, particularly by 3.3% between the years 2006 and 2008 (Table 1). Conversely, incidence of pregnancy overweight increased for Johnson County WIC participants by 5.7% between the years 2006 and 2008. However, Johnson County WIC participants were consistently less than the state average for each year 2006 – 2008 (Table 2) for overweight during pregnancy. Underweight pregnant women have an increased risk of premature birth and low birth weight infant. Overweight pregnant women have an increased risk of premature birth, cesarean delivery, gestational diabetes, hypertension and preeclampsia (a condition of high blood pressure and blood in the urine during the second half of pregnancy).

Table 1: Pregnancy Underweight (BMI < 19.8) – WIC Population

	2008	2007	2006
Johnson County	7.3%	9.6%	10.6%
Iowa	7.9%	8.0%	8.1%
United States	NA	10.9%	11.2%

Table 2: Pregnancy Overweight (BMI ≥ 26.0) – WIC Population

	2008	2007	2006
Johnson County	48.5%	44.5%	42.8%
Iowa	50.6%	49.6%	48.1%
United States	NA	44.5%	43.7%

Ideal Pregnancy Weight Gain

Less than ideal pregnancy weight gain was fairly consistent for Johnson County WIC participants between 2007 and 2008 (Table 3), while greater than ideal pregnancy weight gain decreased by 2.5% (Table 4). Women who have less than ideal weight gain during pregnancy have an increased risk of premature birth and a low birth weight infant. Women who have greater than ideal weight gain during pregnancy are at risk for cesarean delivery and being overweight postpartum.

Table 3: Less Than Ideal Pregnancy Weight Gain – WIC Population

	2008	2007	2006
Johnson County	16.1%	15.5%	19.3%
Iowa	19.4%	19.4%	20.1%
United States	NA	25.0%	24.8%

Table 4: Greater Than Ideal Pregnancy Weight Gain – WIC Population

	2008	2007	2006
Johnson County	43.0%	45.5%	45.0%
Iowa	46.7%	45.6%	45.8%
United States	NA	42.8%	43.1%

Anemia

Anemia occurs when hemoglobin in the blood decreases below the normal level of 12 to 16 g/dL for an adult female. Over one-fifth of Johnson County WIC postpartum participants (22.8%) were anemic in 2008. This percentage decreased by 2.6% between 2007 and 2008, but was higher than the state average in 2008 (Table 5). Anemic mothers often feel tired and can become nauseous or forgetful which may impact their ability to concentrate on infant care.

Table 5: Postpartum Anemia – WIC Population

	2008	2007	2006
Johnson County	22.8%	25.4%	16.7%
Iowa	21.9%	24.2%	23.8%
United States	NA	29.8%	29.2%

Gestational Diabetes

Gestational diabetes increased for Johnson County WIC participants between 2007 and 2008 (Table 6) by 2.2%, but was comparable to the state average in 2008. Uncontrolled gestational diabetes can result in a high birth weight infant, possible need for cesarean delivery and greater risk for preeclampsia.

Table 6: Gestational Diabetes – WIC Population

	2008	2007	2006
Johnson County	7.3%	5.1%	NA%
Iowa	6.4%	6.5%	NA%
United States	NA	3.9%	3.6%

Hypertension during Pregnancy

Hypertension during pregnancy increased by 2.1% for Johnson County WIC participants between 2007 and 2008 (Tables 6 and 7). Johnson County was higher than the state average for hypertension by 2.3% and higher than the national average by 9.7% in 2007. Hypertension can lead to premature labor, maternal kidney failure and stroke.

Table 7: Hypertension During Pregnancy – WIC Population

	2008	2007	2006
Johnson County	16.1%	14.0%	NA
Iowa	11.4%	11.7%	NA
United States	NA	4.3%	3.0%

Demographic Indicators

Teen Births

The incidence of teen pregnancy (age of mother 15 – 19 years) was lower for the general population of Johnson County (1.3%) compared to the state average (3.4%) in 2008 (Table 8). However, 4.2% of births in 2008 were to unmarried teens (Table 9). Both the percentages of teen births and teen unmarried births for the general population were consistent between 2000 and 2008, suggesting that more intervention is necessary in this area to acquire positive change. Teen mothers have an increased risk of premature birth, low birth weight infant, and hypertension, and often access prenatal care later in their pregnancy. Unmarried teen mothers may have the additional burdens of a single or no income household and lack of emotional support.

Table 8: Teen Births in the General Population

	2000			2008		
	Age 15-19 Female Population	Live Births	Percent	Age 15-19 Female Population	Live Births	Percent
Johnson County	5,796	70	1.2%	6,103	77	1.3%
Iowa	110,664	3,783	3.4%	106,081	3,591	3.4%
US	9,828,886	470,506	4.8%	10,487,094	445,045	4.2%

Table 9: Teen Unmarried Births – General Population

	2000			2008		
	Live Births	Unmarried Teen Births	Percentage	Live Births	Unmarried Teen Births	Percentage
Johnson County	1,382	55	4.0%	1,719	72	4.2%
Iowa	38,250	3,201	8.4%	40,221	3,243	8.1%
US	4,055,207	377,675	9.3%	4,317,119	386,702	9.0%

Behavioral Indicators

Smoking

In 2008, over a quarter of Johnson County women enrolled in WIC (29.7%) smoked 3 months prior to conception, and almost one-fifth (18.0%) reported smoking in their household during pregnancy. According to the United States Department of Health and Human Services, smoking during pregnancy can result in spontaneous abortions, low birth weight babies, and sudden infant death syndrome. Secondhand smoke can result in increased lower respiratory tract infections and asthma in children. Between 2007 and 2008 incidences of smoking three months prior to pregnancy decreased by 4.0% (Table 10), and smoking in the household during the postpartum period decreased by 2.9% (Table 13). Almost 17% of Johnson County WIC participants smoked during the last three months of pregnancy, and 18.0% had smoking in their households during pregnancy in 2008, which was little change from 2007 (Tables 11 and 12). It is interesting to note that a decrease in smoking behavior only occurred outside of the period of pregnancy for both the mother and household. It would be anticipated that smoking should decrease during pregnancy since typically this is a period of heightened awareness of prenatal

health. Maternal stress and lack of education may be contributing factors to maternal smoking. Additional efforts should be made to provide education and support to pregnant women for successful smoking cessation.

Table 10: Smoking 3 Months Prior to Conception – WIC Population

	2008	2007	2006
Johnson County	29.7%	33.7%	30.3%
Iowa	40.8%	42.8%	41.1%
United States	NA	26.6%	27.2%

Table 11: Smoking Last 3 Months of Pregnancy – WIC Population

	2008	2007	2006
Johnson County	16.7%	17.8%	16.4%
Iowa	25.1%	25.6%	25.7%
United States	NA	15.8%	16.8%

Table 12: Smoking in Household During Pregnancy – WIC Population

	2008	2007	2006
Johnson County	18.0%	18.7%	NA
Iowa	24.4%	26.3%	NA
United States	NA	20.9%	22.5%

Table 13: Smoking in Household During Postpartum Period – WIC Population

	2008	2007	2006
Johnson County	7.7%	10.6%	9.0%
Iowa	15.4%	16.8%	16.5%
United States	NA	22.6%	24.1%

Prenatal Care

In 2006, 78.1% of pregnant women enrolled in the WIC program received prenatal care within their first trimester of pregnancy (Table 14), compared to 91.5% of the general population (Table 15). While improvement in this behavior occurred among WIC participants in 2008 with 89.1% receiving prenatal care within the first trimester, this data emphasizes that low-income women are less likely to obtain early prenatal care than the general population. Prenatal care in the first trimester leads to a healthier pregnancy outcome. It also provides an opportunity to educate mothers about the nutritional and health aspects of their pregnancy, screen for medical risks, discuss benefits of breastfeeding and counsel on appropriate behaviors during pregnancy.

Table 14: Medical Care by 1st Trimester – WIC Population

	2008	2007	2006
Johnson County	89.1%	89.6%	78.1%
Iowa	87.9%	86.5%	86.7%
United States	NA	79.4%	78.5%

Table 15: Prenatal Care – General Population

	2000			2006		
	Live Births	Prenatal Care	Percentage	Live Births	Prenatal Care	Percentage
Johnson County	1,382	1,279	92.5%	1,615	1,478	91.5%
Iowa	38,250	33,314	87.1%	40,592	34,889	86.0%
US	4,055,507	3,374,182	83.2%	4,265,555	3,548,942	83.2%

Maternal Indicators Related to Infant

Low Birth Weight

Low birth weight is defined as less than 5 pounds 8 ounces or 2,500 grams. Nine percent of infants enrolled in the WIC program were low birth weight (Table 16), compared to 6.4% of infants in the general population (Table 17) in 2008. This data suggests that mothers with low incomes are more likely to have a low birth weight infant. Low birth weight percentages increased between 2000 and 2008 for national, state and Johnson County general populations. Infants with low birth weight are at risk for developmental disabilities, respiratory problems and death. Contributing factors to low birth weight include maternal smoking and drug/alcohol use, gestational diabetes, hypertension during pregnancy, less than ideal pregnancy weight gain, teenage pregnancy and low socioeconomic status.

Table 16: Low Birth Weight (<2,500 grams) – WIC Population

	2008	2007	2006
Johnson County	9.1%	11.5%	7.5%
Iowa	8.5%	8.1%	8.8%
United States	NA	9.1%	9.2%

Table 17: Low Birth Weight (<5.5 pounds) – General Population

	2000			2008		
	Live Births	Low Birth Weight	Percentage	Live Births	Low Birth Weight	Percentage
Johnson County	1,382	74	5.4%	1,719	110	6.4%
Iowa	38,250	2,346	6.1%	40,221	2,683	6.7%
US	4,055,507	308,219	7.6%	4,317,119	354,004	8.2%

Breastfeeding

Johnson County infants enrolled in the WIC program had excellent breastfeeding percentages, exceeding the 2008 state averages for infants who did any breastfeeding, did any breastfeeding for 6 months, did any breastfeeding for 12 months, exclusively breastfed for 3 months and exclusively breastfed for 6 months. Johnson County also exceeded both state and national averages for all of these categories in 2007 (Tables 18 – 22). However, all of the Johnson County percentages in these categories for WIC enrolled infants decreased between 2007 and 2008, most notably with a 7.3% decrease for infants who did any breastfeeding for 6 months. This indicates the need to provide additional education and support to mothers for breastfeeding longevity. Breastmilk is the optimal food for infants and should be the sole source of nutrition for the first 6 months of life before supplementing with other foods. The benefits of breastfeeding for infants include a decreased risk of the following: infections, SIDS (Sudden Infant Death Syndrome), diarrhea, childhood diseases and childhood obesity. The benefits of increasing the duration of breastfeeding for mothers include the shrinkage of the uterus to pre-pregnancy size (which lessens postpartum bleeding); more relaxed feelings and calmness; promotion of postpartum weight loss; risk reduction of anemia; risk reduction of breast, uterine and ovarian cancers; risk reduction of osteoporosis; savings of household expenses; and nurturing of a healthier infant which results in fewer physician visits and less time taken off work due to infant illnesses.

Table 18: Infants Who Did Any Breastfeeding – WIC Population

	2008	2007	2006
Johnson County	71.0%	71.8%	NA
Iowa	61.2%	59.1%	NA
United States	NA	59.8%	60.1%

Table 19: Infants Who Did Any Breastfeeding at Least 6 Months – WIC Population

	2008	2007	2006
Johnson County	31.8%	39.1%	NA
Iowa	20.0%	20.1%	NA
United States	NA	25.4%	25.2%

Table 20: Infants Who Did Any Breastfeeding at Least 12 Months – WIC Population

	2008	2007	2006
Johnson County	18.8%	20.1%	NA
Iowa	11.7%	11.0%	NA
United States	NA	17.5%	18.1%

Table 21: Infants Who Exclusively Breastfed at Least 3 Months – WIC Population

	2008	2007	2006
Johnson County	14.2%	16.9%	NA
Iowa	6.2%	7.1%	NA
United States	NA	10.2%	10.3%

Table 22: Infants Who Exclusively Breastfed at Least 6 Months – WIC Population

	2008	2007	2006
Johnson County	5.1%	7.4%	NA
Iowa	2.7%	3.1%	NA
United States	NA	5.2%	5.6%

Sources

Pediatric Nutrition Surveillance System; CDC
Iowa Kids Count; Iowa Dept of Public Health

Child Health Indicators

Abuse & Neglect

Each state separately defines by law what constitutes child abuse and neglect; there is no federal law or standard that applies throughout the country. Iowa defines child abuse as harm suffered as the result of the acts or omissions of someone who is responsible for the care of a child. Iowa defines neglect as depriving a child of their basic needs (e.g. food, clothing, warmth and shelter, emotional and physical security and protection, medical and dental care, cleanliness, education and supervision). According to *Prevent Child Abuse America 2007,* child abuse and neglect have pervasive and long lasting effects on children, their families and society. Children who have been abused or neglected are more likely to experience adverse outcomes throughout their life span. These include poor physical health, poor emotional and mental health, social difficulties, cognitive dysfunctions, high risk health behaviors and behavioral problems.

When comparing the rate of confirmed abused children in 2000 and 2008, Johnson County and the US rates decreased, while the state of Iowa rate increased (Table 1). In 2009, Johnson County had a higher confirmation rate of abused children compared to the state. None of these comparisons were significant changes. The highest percentage of these cases was due to denial of critical care (Table 3). When reviewing the trend in child abuse over the last decade, the number of children abused in Iowa in 2009 was more than 67% higher than in 1999 (Table 4).

According to the *Annual Condition of Education Report 2009,* 9.1 of every 1000 youth in the population under age 18 in the Midwest were the victim of abuse or neglect in 2007. The highest rate was in Iowa at 19.8. Within the US, Iowa had the third highest rate. The rate in Iowa is higher than that national rate each year between 2000 and 2007. In 2005-2008, Iowa was ranked number 20 for the presence of illegal drugs. The *Iowa Substance Abuse Statistics 2006,* showed that 26,817 people in Iowa were admitted for drug rehab and substance abuse treatment, and 24% of these were children aged 12-20 years. The estimated annual cost of child abuse and neglect in the US was $103.8 billion in 2007. A large number of child victims require medical examinations or outpatient treatment for injuries not serious enough to require hospitalization; maltreated children are at greater risk of engaging in substance abuse and require alcohol and drug treatment services; and youth with histories of child abuse and neglect may be at greater risk of engaging in risky behaviors such as unprotected sexual activities as well as greater risk of teen pregnancy.

Table 1: Children 0-17 Confirmed to Have Been Abused or Neglected

	2000			2008		
	Child Population	Confirmed Children	Rate	Child Population	Confirmed Children	Rate
Johnson County	22,312	250	11.2	26,882	290	10.8
Iowa	733,638	9,489	12.9	712,613	11,003	15.4
US	72,293,812	883,000	12.2	74,904,677	794,000	10.6

Rate per 1000 children

Table 2: Abused Children in Iowa, 2009

	Accepted Reports	Confirmed Reports	Confirmation Rate	Number of Abused Children	Rate of Confirmed Children Abused (per 1,000 children)	Rank in Rate of Abuse
Johnson County	604	225	37.3%	329	14.76	56
Iowa	25,814	8,867	34.3%	12,442	17.94	-

Table 3: Confirmed Types of Abuse in Iowa, 2009

Types	Number	Percent
Denial of critical care	15,282	81.1%
Physical injury	1,753	9.3%
Sexual abuse	719	3.8%
Presence of illegal drugs in a child's body	689	3.7%
Knowingly allowing a sex offender to have custody of a child	244	1.3%
Manufacturing a dangerous drug in a child's presence	86	0.5%
Mental injury	20	0.1%

Table 4: Iowa's Trend in Child Abuse in the Last Decade

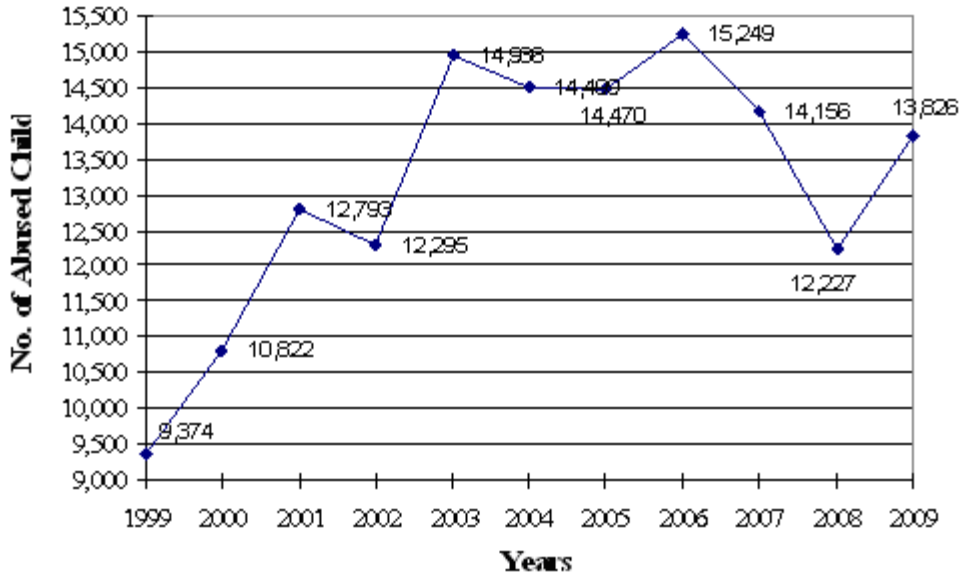


Table 5: Types of Child Abuse, Average By Iowa County, 2005-2008

	Denial of Critical Care			Physical Injury			Sexual Abuse			Presence of Illegal Drugs		
	Cases	Rate*	Rank	Cases	Rate*	Rank	Cases	Rate*	Rank	Cases	Rate*	Rank
Johnson Co	385	17.28	70	41.8	1.87	84	11.5	0.52	94	56.0	2.51	20
Iowa Co	54	13.81	88	9.5	2.45	61	3.8	.97	69	2.3	.58	60
Washington Co.	73	13.74	89	12.5	2.35	67	2.5	.47	96	29.5	5.55	8
Iowa	15,281	22.04		1,959	2.82		799	1.15		1,390	2.00	

*Rate is an average from 2005-2008, per 1,000 children

Behaviors/Mental Health

The Iowa City Community School District (ICCSD) staff identified 741 students with potential social problems, emotional problems, attention problems or substance abuse problems during the 2009-2010 school year. Of these, 275 students have been provided school-based mental health services including skill building services and individual counseling, and 464 students and their families have received some level of case management support to respond to a student's potential or diagnosed mental health concern.

The *School Safety and Climate Annual Report ICCSD 2009* is an annual comprehensive review of the safety security and learning climate of ICCSD School. Information is collected from student and staff surveys, discipline data, attendance, drop out and graduation rates and facility and security planning. These surveys include the Iowa Youth Survey (IYS), the Positive Behavior Supports School Safety survey and the School Climate survey. Both staff and students state that school is a safe place and students have at least one adult at school they could go to for one-on-one help with a problem. These results mirror those for school districts of the same size. The district revised its policies on bullying and harassment in 2007 and focused on enforcing rules, training staff and

offering new educational programs. Students strongly agree that bullying has decreased compared to 2007 and more students have reported that "students treat each other with respect". This is higher at the 6th and 8th grades, compared to school districts the same size. On the other hand, staff perceives "lack of respect for school staff by students" and "harassment and bullying among students" as concerns that continue to need to be addressed. Students report that disruptions in class where teachers were required to stop teaching three or more times in the last three weeks have decreased, but teachers perceive disruptive student behavior more of a problem that continues to require attention.

Ninety-seven percent of ICCSD students were not involved in serious discipline or suspension and there was a 15% decrease in number of children involved in fights. Fewer students in 6th and 8th grades reported being involved in fights, which is similar to other districts of the same size. The number of fights at the junior high and high schools remain unchanged. Principals reported fights being less intense, less disruptive and involving fewer students. There is a definite decrease with weapons, alcohol, drug and sexual assault. The use of marijuana among students has decreased by 1.5%, and use of alcohol has decreased by 8% from 2007. The percentage of students who reported on the IYS having things stolen or damaged increased 29% at the junior high level and is equal to that of high school. This is higher at ICSSD than other districts the same size. The four highest problems areas include disruptive student behavior, harassment or bullying among students, student depression or other mental health problems and lack of respect for school staff (Table 9). The one area where Iowa was higher risk than the US in 2007 was for not attending physical education classes daily (Table 10). In all other areas Iowa was at less or equal risk.

Table 6: Risk Factors for School Safety

High Risk Factors	Low Risk Factors
Poverty	Parents withdrawing kids due to safety
High Student mobility	Illegal Weapons
Truancy	Trespassing on school grounds
Incidence of bullying and harassment	Gang Activity

Table 7: Protective Factors for School Safety

High Protective Factors	Low Protective Factors
Acceptance of diversity	Suicide prevention & response plans
High expectations for student learning & productivity	
Effective student-teacher relationships	
Positive school climate for learning	
Appropriate responsiveness to conflict by school employees	
Student support services in school	
Student participation & involvement in academic activities	
Collaboration with community resources	

Table 8: 2008-2009 Administrative and Employee Survey Results

Areas of Strength	Areas of Growth
Acceptance of diversity	Lack of suicide prevention/response plans
High expectations for student learning and productivity	High numbers of student of poverty
Effective student-teacher relationships	High rate of student mobility
Appropriate responses to conflict by school employees	
Positive school climate	
Access for students to support services	
High student participation in academic activities	
A high level of collaboration with community resources	
Few illegal weapons	
Little gang activity	

Table 9: Safe Schools/Healthy Students Climate Survey

Four Problem Areas
Disruptive student behavior
Harassment or bullying among students
Student depression or other mental health problems
Lack of respect for school staff

Table 10: 9th -12th Graders in Public and Private Schools. 2007 Comparison Between Iowa and US

Iowa is at LESS Risk	Iowa is at EQUAL Risk	Iowa is HIGHER Risk
Seat belt	Ride with driver drinking alcohol	Did not attend PE classes daily
Weapons	Feel unsafe at school	
Physical fight	Seriously considered attempting suicide	
Lifetime cigarette use	Attempted suicide	
Lifetime marijuana use	Current cigarette use	
Lifetime cocaine use	Current smokeless tobacco use	
Lifetime inhalant use	Lifetime alcohol use	
Drugs on school property	Current alcohol use	
Watching TV 3 or more hours/day	Lifetime meth use	
	Ever had sex	
	Currently sexual active	
	Had sexual intercourse with ≥4 people in life	
	Did not use condoms	
	Were obese	
	Ate fruits and vegetables less than 5 times/day	
	Drank soda at least one time per day	

Safety/Death

There are five types of death as defined by the *Iowa Child Death Review Team Annual Report for 2007.*Natural deaths are the result of some natural process and are non-preventable. An accidental death results from an unintentional act. Homicides are deaths caused at the hands of another individual but not necessarily with the intent to kill. Suicide is when evidence exists that the child intentionally caused his or her own death. Finally undetermined deaths have autopsies failing to pinpoint a specific cause, most of these are SIDS.

The rate of deaths of children age 1-14 increased in Johnson County from 2000 to 2008, while the state and nation had a slight decrease (Table 11). The deaths of infants have decreased in all areas (Table 12). The highest number of deaths in Iowa for 0-17 year olds was from natural causes, with the highest being prematurity (Tables 15 & 16). The second highest type of death was from accidental deaths, with the highest being from motor vehicle crashes (Tables 15 & 17). Next were the undetermined deaths which result from factors including bed sharing, second hand smoke, position, room temperature, and parents being under the influence of alcohol or abused substances (Table 20). The number of suicides and homicides are low (Tables 18 & 19), but all deaths are concerns. There is an increase of hanging as the choice for suicide attempts (Table 19).

Table 11: Deaths of Children Aged 1-14

	2000			2008		
	Age 1-14 Population	Deaths	Rate	Age 1-14 Population	Deaths	Rate
Johnson County	17,329	3	17	21,052	6	29
Iowa	564,225	121	21	546,528	105	19
US	56,447,727	12,350	22	56,585,515	10,817 (2007)	19

Rate is presented per 100,000 children aged 1-14

Table 12: Deaths of Infants Before Age One

	2000			2008		
	Live Births	Infant Deaths	Rate	Live Births	Infant Deaths	Rate
Johnson County	1,382	7	5.1	1,719	8	4.7
Iowa	38,250	241	6.3	40,221	226	5.6
US	4,055,507	27,983	6.9	4,317,119	29,241 (2007)	6.8

Rate is presented per 1,000 live births

Table 13: Deaths of Teens Aged 15-19

	2000			2008		
	Age 15-19 Population	Deaths	Rate	Age 15-19 Population	Deaths	Rate
Johnson County	10,933	3	27	11,734	N/A	N/A
Iowa	226,420	107	47	216,795	102	47
US	20,219,890	13,563	67	21,445,610	13,631 (2007)	64

Rate is presented per 100,000 aged 15-19

Table 14: Number of Deaths in Iowa Children Aged 0-17, 2007

	Number
Johnson County	12
Iowa	412

Table 15: Deaths of Children Aged 0-17 in Iowa by Type, 2007

Type	Number of Deaths
Accident	99
Homicide	9
Natural	243
Suicide	13
Undetermined	48

Table 16: Natural Deaths in Children in Iowa, 2007

Type of Natural Deaths	Number
Cancer	17
Cardiovascular	31
Congenital	52
Pneumonia	10
Prematurity	94
Other Infection	12
Other Perinatal Condition	4
Other Medical Cause	23

Table 17: Accidental Deaths in Children in Iowa, 2007

Type of Accidental Death	Number
ATV Accident	3
Crush	7
Drowning	8
Farm Accidents	1
Gunshot	1
House Fire	3
Motorcycle	2
MVC	56
MVC/Pedestrian	6
Overheating	2
Overlying	4
Poisoning	1
Strangulation/Wedging	5

Table 18: Homicide Deaths in Children in Iowa, 2007

Type of Homicide Death	Number
Beaten/Battered	3
Knife	1
Malnutrition	1
Shaken	2
Vehicular	2

Table 19: Suicide Deaths in Children in Iowa, 2007

Type of Suicide Death	Number
Firearms	4
Hanging	8
Poisoning	1

Table 20: Undetermined Deaths in Children in Iowa, 2007

Undetermined Risk Factor	From 48 Deaths, Number of Risks Listed
Bed Sharing	26
Second Hand Smoke	27
Position	16
Room Temperature	19
Parents Abused Substances	18
Parents Under the Influence	12

Sources

ICCSD School Safety and Climate Annual Report
Iowa Child Death Review Team Annual Report for 2007
Iowa Kids Count: Trends in the Well Being of Iowa Children-2008
Iowa Substance Abuse Statistics 2006
Kerry Wiersema from the ICCSD
Prevent Child Abuse America 2007
Prevent Child Abuse Iowa - 2010
The Annual Condition of Education Report 2009
Youth Risk Behavior Survey – 2008
Iowa Dept of Human Services

Oral Health

Early Childhood Caries (ECC) is one of the costliest diseases in children averaging $375 per child per year in the United States. This disease is also 100% preventable. The Centers for Disease Control and Prevention considers ECC to be the leading infectious and chronic disease in children. Routine dental supervision of the oral health of children is the first line of defense in preventing ECC. Educating caregivers on proper oral hygiene, appropriate dietary habits, and regular dental care for children can lead to better general health. Data on oral health status indicators are difficult to compile since there is no central database capturing dental treatment needs or services on the population as a whole. In Johnson County, information on dental services is limited to the Medicaid population.

Fluoridated Water

Fluoridated water is a mainstay of Public Health's approach to caries prevention. Fluoride, like calcium, is a mineral that can be used by the human body to build and fortify tooth structure. Fluoridated water is one way to ensure a population's dentition is exposed to the fluoride mineral through consuming water. The majority of water sources in Iowa are fluoridated, while some water sources contain optimal levels of fluoride naturally, which is the case in parts of Johnson County. Ninety-two percent of Iowans have fluoridated water, which is much higher than the national rate (Table 1).

Table 1: Percent of Population Receiving Fluoridated Water in 2006

	Percent
USA	69
Iowa	92

Professional Prophylaxis (Cleaning)

Professional cleaning of teeth is a way to guard against or prevent oral diseases, including caries, gingivitis and periodontal disease. Prophylaxis is required routinely to maintain oral health. In 2004, 76% of surveyed Iowans reported receiving a professional cleaning in the past year either by a dentist or an oral hygienist (Table 2).

Table 2: Percent of Population Receiving Prophylaxis in the Past Year (2004)

	Percent
USA	69
Iowa	76

Visit to Dentist

One measure of oral health is to determine how many people are seen by a dentist at least on a yearly basis. Information on dental visits is extremely limited and more limited as to what that visit entails. In 2008, 73.4% of surveyed Iowans reported visiting a dentist in the past year, compared to 71.3% at the national level.

Dentists per 10,000

Having access to dental care is an issue faced by many people for different reasons. Rural areas often lack dental providers. Johnson County is mostly urban but finding a dental provider that accepts Medicaid insurance still poses a barrier to obtaining dental care. The number of dentists willing to accept Medicaid covered clients is decreasing as reimbursement rates for services decrease. Many Johnson County dentists are employed by the College of Dentistry at the University of Iowa. In 2009, Johnson had a rate of 17.3 dentists per 10, 000 people.

Table 3: Crude Rates of Dentists per 10,000 People (2009)

	Percent
Iowa	4.75
Johnson County	17.3

Complete Tooth Loss

One of the few indicators of oral health status currently available is complete tooth loss (Table 4). In 2008, 18.5% of Iowans over the age of 65 reported that all of their natural teeth were extracted, which is the same as the national level. This has gone down over time at both levels.

Table 4: Percent of Population with Complete Tooth Loss (2008)

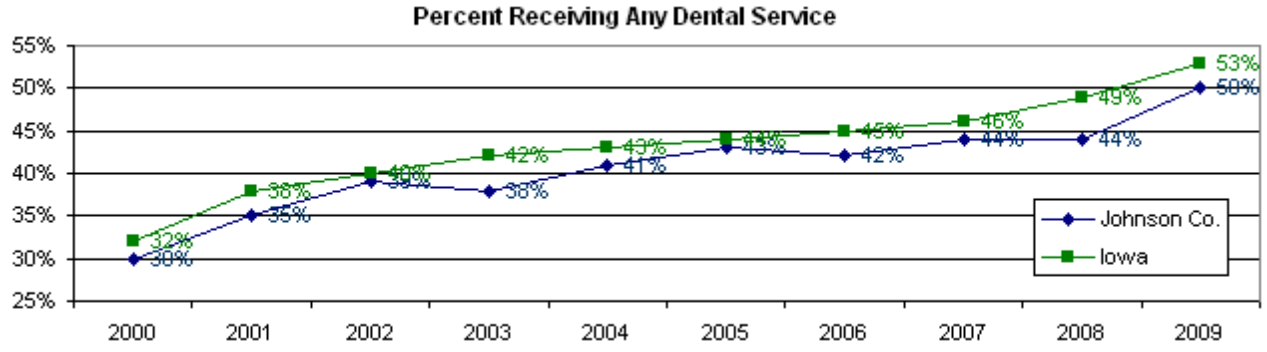
	Percent
USA	18.5
Iowa	18.5

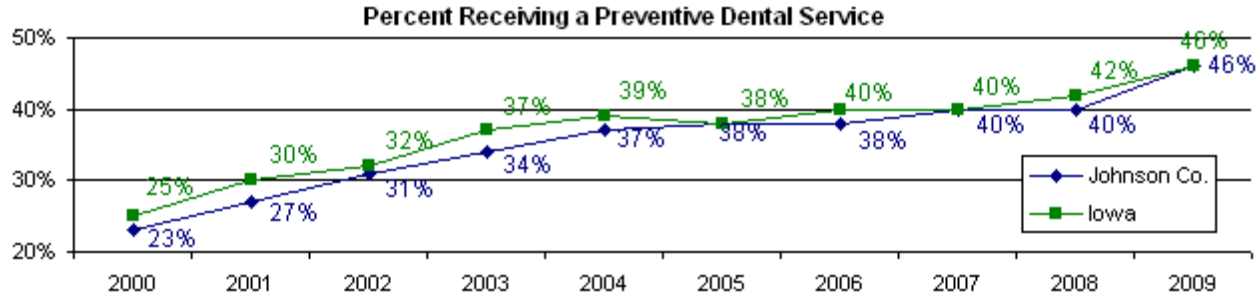
Selected Populations

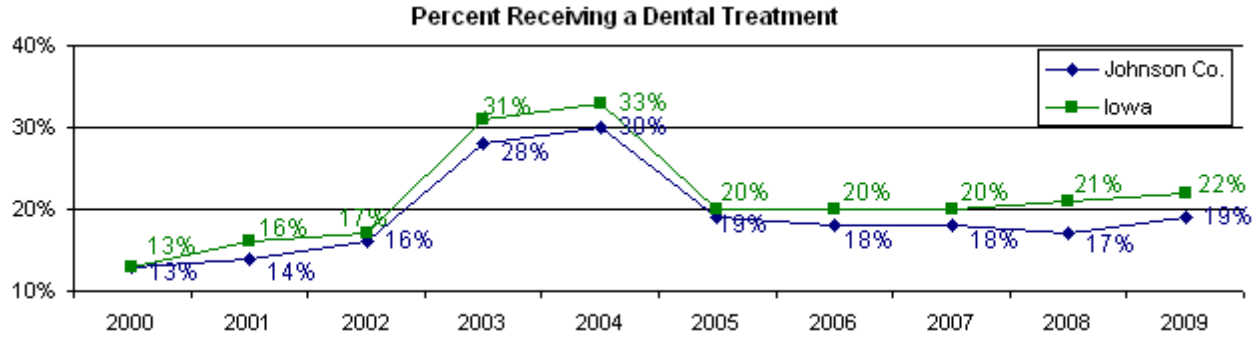
Medicaid Recipients

Families in Johnson County benefit from receiving care from the College of Dentistry and University of Iowa Hospitals and Clinics. Despite this proximity of care, children on Medicaid, who are at greater risk for dental caries, show lower rates for
receiving any dental service or treatment in Johnson County than the same population statewide (Figures 1-3).
2008-

Figures 1-3: Percent of Medicaid Population (Age 1-20) Receiving Dental Services







Children

A collaborative effort undertaken in October 2009 between the College of Dentistry and Johnson County Public Health surveyed Head Start children in Johnson County and found an 11% higher need for dental care (33% of the children) than Head Start children statewide (Table 5). Similar dental care rates were found among school-aged children at the county and state level in 2009.

Table 5: Children Requiring Dental Care

2009	Head Start	Kindergarten	9th Grade
Iowa	22%	15%	15%
Johnson County	33%	16%	15%

Pregnant Women

Gum disease during pregnancy adversely affects birth outcomes. Nearly 1 in 5 women do not visit the dentist during the year before they become pregnant. During pregnancy, 35-44% does not receive professional oral health care. Gingivitis is common in pregnant women. Of the pregnant women with a known dental problem, only half will seek dental care.

Sources

Pregnancy Risk Assessment Monitoring System (PRAMS) 2004
Iowa Department of Public Health Oral Health Bureau School Dental Screening Audit Report - State Summary
2008-2009 School Year 2009 Head Start Oral Health Survey Report
BRFSS (2008)
http://www.cdc.gov
CMS 416 Dental Services Reports
THE 2009 IOWA HEALTH FACTBOOK

Prepare for, Respond to, and Recover from Public Health Emergen

Iowa has faced many natural and manmade disasters over the years including floods, tornadoes, windstorms, blizzards, the Terra Chemical plant explosion and the crash of United Flight 232. Johnson County has been challenged with major floods in 1993 and 2008 as well as the tornado in 2006 and the straight line wind storm in 1998.

H1N1

In response to H1N1, businesses noted timeliness of communication was an important internal organizational issue. Webcasts are recommended as an effective communication tool. Safeguard Iowa partners suggested more information be given on legal concepts like quarantine and the intent of governmental declarations because government actions such as, opening emergency centers and issuing declarations are used as situational measures by some private –sector organizations.

Information sharing from local public health agencies was vital to small community organizations. Many organizations noted that the best, most tailored information came from their local public health agency. The communication between private and non profit organizations and their local public health agency is an area where response operations can be continuously improved.

In a pandemic tabletop exercise, concern was expressed for promotion of region-wide cooperation and mutual aid. Additionally, participants noted that delayed and infrequent communications impaired decision making abilities.

Marshall County, Iowa noted that staffing shortages, changing testing criteria, changing school closure criteria, and changing guidance from CDC caused confusion and negatively impacted the response and credibility of local officials in response to H1N1. Johnson County, Iowa noted timely health and safety information regarding target population needs to be disseminated, and public information needs to be accurate and distributed by several methods.

Flood

During the flood of 2008, the Safeguard Iowa Partnership (SIP) determined that information sharing by email was very successful. However, dependency on solely one communication technology can create problems. There is no available state wide communication systems operating on a non-internet based system. Information sharing by internet systems could be cut in the event of a terrorist attack or server damage, as was the case at one SIP partner who lost email capability for an extended period of time due to water damage.

Confusion over public health announcements and private sector actions indicates a need for continued dialogue, which will be vital in managing a pandemic or bio-terrorist attack. Mixed media messages from separate county health departments led to confusion during the 2008 floods. When traditional medical resources are stressed by disaster and hospital evacuation, local public health organizations can assist by organizing mobile health clinics.

There is a need to identify routes for emergency vehicles to access healthcare facilities and provide better communications from within EOC as some radios and cell phones could not be used during the flood. It is also necessary to research the possibility of using CERT members for traffic control and other positions to enhance human resources. Flooding resulted in a tremendous amount of potentially infectious debris. Additionally, mold growth in flooded buildings was a major concern. Hot and humid summer weather exacerbates these problems.

Hazard Mitigation

Individuals who are likely to need assistance during a disaster consist of individuals less than 18 years of age, individuals 65 and older, and individuals with physical and/or mental disabilities. In 2006, 20.6% of the Johnson County population was under 18 years, and 8.0% was over age 65. No data identifies how many individuals are living in Johnson County with a physical or mental disability, but 354 people have signed up on the JC EMA's special needs registry. Sheltering issues for special needs individuals did, in fact, become a concern during the 2008 Flood.

Priority 1 Hazards in Johnson County are those that are high risk hazards and include severe winter storm, windstorm or tornado, flood, energy disruption, fixed hazardous materials incident, human disease epidemic, wildfire and thunderstorm and lightning.

Sources

After Action Report - Safeguard Iowa Partnership: Iowa Responds to H1N1 across the Public and Private Sectors April – May 2003

After Action Report - Safeguard Iowa Partnership: Iowa Disasters: Tornadoes, Flooding, and Other Severe Weather May – Jul 2008

Johnson County Emergency Management Agency. Executive Summary – Preparing for the future by learning form the past: An After Action Review of the Historic Johnson County Floods of 08. Nov, 2008.

The University of Iowa and the Upper Midwest Center for Public Health Preparedness. University of Iowa Pandemic Influenza Tabletop Exercise 4-19-07
The Iowa Department of Public Health. Novel Influenza A (H1N1) July 2009 After Action Report & Improvement Plan.
Johnson County Hazard Mitigation Plan 2009. Emergency Management Johnson County
June 2008 Floods, State of Iowa Exercise Reporting Form, Johnson County Public Health.
Fall 2008/ Winter 2009 H1N1 Response, State of Iowa Exercise Reporting Form, Johnson County Public Health.
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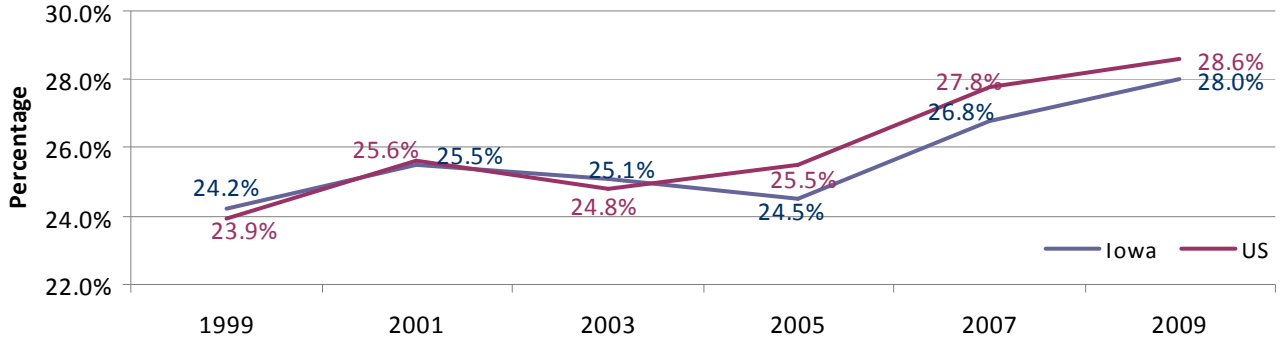
COMMUNITY ASSESSMENT DATA: HEALTH RISK AND PROTECTIVE FACTORS

Blood Pressure

No estimates are available on blood pressure at the county level. However, state rates indicate that the number of adults who have been told that they had high blood pressure, or hypertension, increased from 2005 to 2009 (Figure 1). State rates have been lower than the national rates since 2005, but 28% of Iowan adults have high blood pressure, which increases the risk for serious health problems including heart attack and stroke. Other data indicates that of those Iowans who have been told that they have high blood pressure, 81.1% report taking medication for the condition. This is higher than the national level of 79.6% of US adults who take medication for their condition.

Figure 1: Adults Who Have Been Told That They Have High Blood Pressure



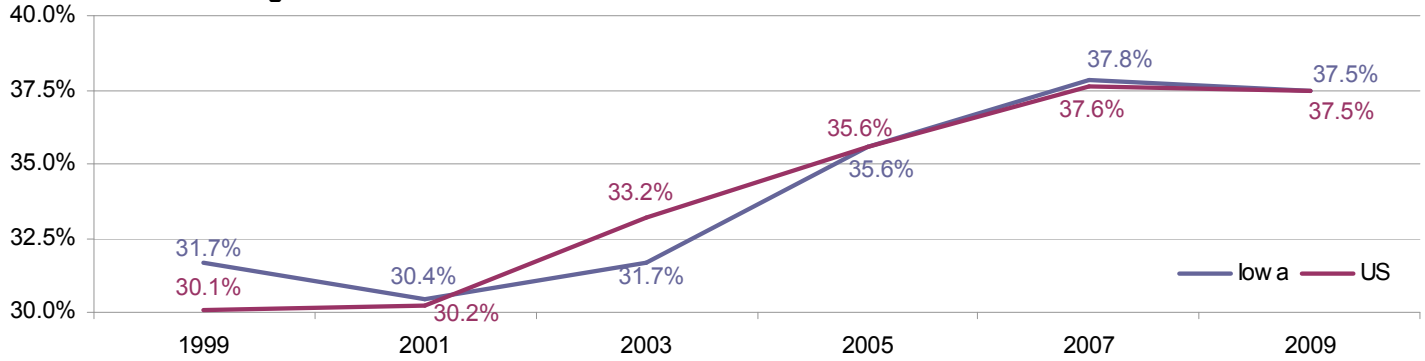
Source

http://www.cdc.gov/brfss/

Cholesterol

Having high blood cholesterol levels, or hypercholesterolemia, increases the risk for heart attack and stroke. The percentage of adults who have high cholesterol has been increasing at the state and national levels, although there was a slight decline in 2009. Of adults who have had their cholesterol measured in the past 5 years, 37.5% of adults in Iowa and the US have been told that theirs is high (Figure 1).

Figure 1: Percent of Adults Who Have Had Their Cholesterol Checked in the Past 5 Years and Who Have Been Told that it is High



Source

http://www.cdc.gov/brfss/

Nutrition

Our dietary behaviors can influence our risk of many diseases including diabetes, stroke and some types of cancer. Despite the fact that most people know that they should eat healthy, most people don't meet the recommendations.

Youth

Data from the Iowa Youth survey indicate that more Johnson County youth eat 3 or more fruits and vegetables a day than Iowa youth (Table 1). Still, only 36% of youth surveyed ate at least 3 servings a day. In Johnson County, the younger grades surveyed ate more servings of fruits than eleventh graders (Table 1). Vegetable consumption is even lower than fruit consumption. Just 26% of Johnson County youth surveyed ate an average of 3 or more servings of vegetables a day, although this percent was higher than the state rate (Table 2). Like with fruit consumption, vegetable consumption was highest for 6th graders, and lowest for 11th graders.

State and national data on high school youth indicate that the percentage of youth who drink three or more glasses of milk per day is decreasing over time (Table 3). Nearly one-third of Iowa and US high school students drink at least one soda per day.

Table 1. Average Daily Fruit Consumption by Johnson County and Iowa Youth, 2008

	Johnson County				Iowa			
Average Servings of Fruit	**Grade 6**	**Grade 8**	**Grade 11**	**All Grades**	**Grade 6**	**Grade 8**	**Grade 11**	**All Grades**
I do not usually eat fruits every day	13%	12%	14%	13%	18%	19%	22%	20%
1-2	45%	49%	52%	48%	48%	52%	54%	51%
3-4	31%	31%	29%	30%	26%	23%	20%	23%
5 or more	10%	8%	5%	6%	8%	6%	4%	6%

Table 2. Average Daily Vegetable Consumption by Johnson County and Iowa Youth, 2008

	Johnson County				Iowa			
Average Servings of Vegetables	**Grade 6**	**Grade 8**	**Grade 11**	**All Grades**	**Grade 6**	**Grade 8**	**Grade 11**	**All Grades**
I do not usually eat vegetables every day	22%	20%	22%	21%	27%	27%	27%	27
1-2	52%	54%	53%	53%	52%	54%	56%	54
3-4	20%	22%	22%	21%	17%	15%	15%	16
5 or more	6%	4%	3%	5%	5%	3%	3%	4

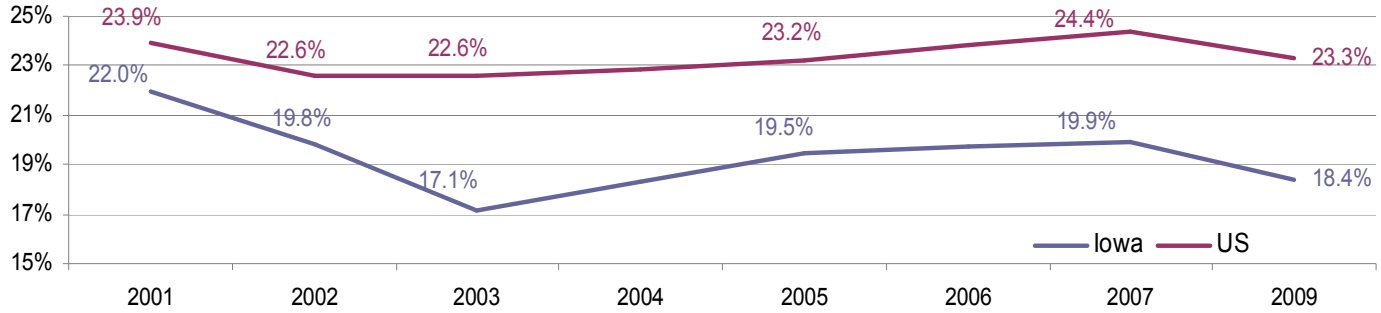
Table 3: Percent of Youth Who Drink Three or More Glasses of Milk per Day (Grades 9-12)

	Iowa	US
1999	NA	18.0%
2001	NA	16.4%
2003	NA	17.1%
2005	28.6%	16.2%
2007	24.9%	14.1%

Adults

Adult statistics are just as alarming. Less than one-fifth of Iowans eat at least five servings of fruits and vegetables per day. This number is much lower than the 23.3% national rate (Figure 1).

Figure 1: Percent of Adults Who Consume at Least Five Servings of Fruits and Vegetables per Day



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http://www.cdc.gov/brfss/
http://www.cdc.gov/HealthyYouth/yrbs/trends.htm
http://www.iowayouthsurvey.org/images/2008_County_reports/52.Johnson.pdf

Physical Activity

Youth

Fifty-two percent of Johnson County youth (grades 6, 8, and 11) participated in physical activity for at least 60 minutes on at least 5 days of the last week (Table 1). This is higher than the 48% of youth at the state level. When looking at high school students in grades 9-12, nearly 50% met the recommendation for health in 2007, which was up sharply from 2005 levels and above national rates (Table 2). Unfortunately, however, Iowa youth are much less likely to attend daily physical education classes (20%) compared to youth in the nation (30%) (Table 3).

Table 1: Johnson County Students' Days of Physical Activity for One Hour or More (Past Week)

Days	Grade 6	Grade 8	Grade 11	All Grades
0	6%	4%	9%	6%
1	9%	5%	8%	7%
2	11%	7%	11%	10%
3	14%	12%	15%	14%
4	14%	9%	11%	12%
5	13%	17%	14%	15%
6	8%	12%	12%	11%
7	25%	35%	20%	26%

Table 2: Percent of High School Youth Meeting the Recommendation for Physical Activity

	Iowa	US
2005	34.1%	35.8%
2007	49.9%	34.7%

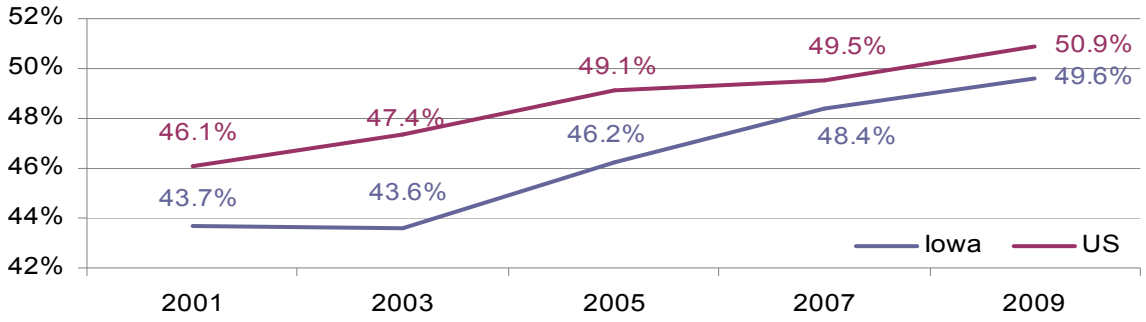
Table 3: Percent of High School Youth Who Attend Daily PE Classes

	Iowa	US
2005	10.3%	33.0%
2007	20.0%	30.3%

Adults

Less than half of adults in Iowa and slightly over half of adults in the US meet the physical activity recommendation for health, which is defined as getting at least 30 minutes of moderate intensity activity on at least 5 days per week or getting at least 20 minutes of vigorous intensity activity at least 3 days per week (Figure 1). Iowa's physical activity rates have consistently been lower than national figures.

Figure 1: Percent of Adults Meeting the Physical Activity Recommendation for Health



Sources

http://www.cdc.gov/brfss/
http://www.iowayouthsurvey.org/images/2008_County_reports/52.Johnson.pdf

Obesity/Overweight

Youth

Overweight and obesity is defined differently for people of varying age. At the national level, both youth overweight and obesity levels have risen gradually over time (Figures 1 & 2). Overweight youth are greater than or equal to the 85th percentile for body mass index (BMI) by age and gender. Iowa's overweight percentage in high school students is lower than the nation, although data has only been collected for two years (Figure 1). The rate was 13.5% in 2007. Obese youth are those who have BMIs greater than or equal to the 95th percentile. Obesity rates in Iowa are also lower than the national rates and declined from 2005 to 2007. The rate in 2007 was 11.3%.

Figure 1: Percent of Youth Who Are Overweight

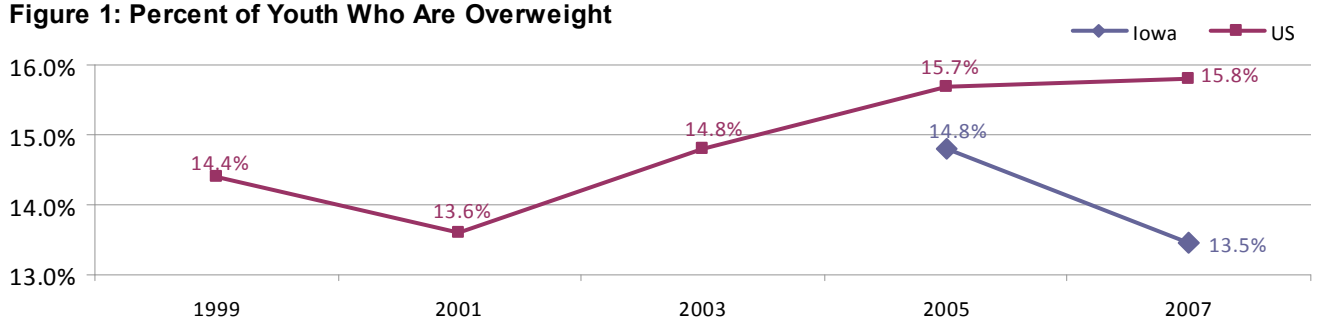
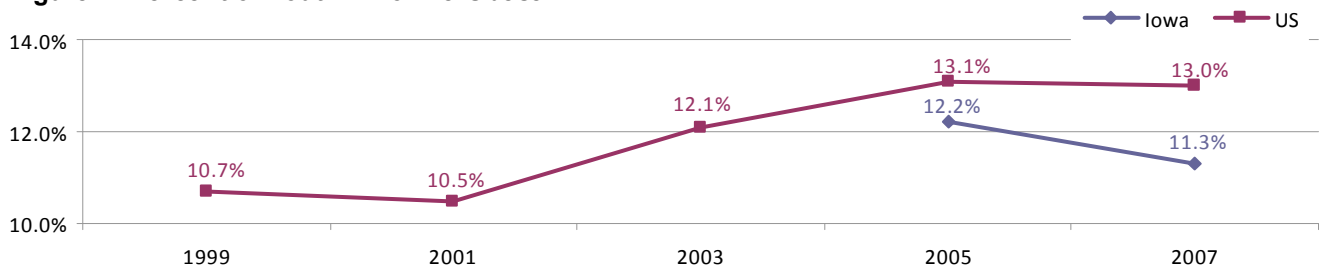


Figure 2: Percent of Youth Who Are Obese



Adults

For adults, overweight is defined as having a BMI between 25.0 and 29.9, while obesity is having a BMI equal to or greater than 30.0. Unlike for youth, Iowa adults have higher overweight and obesity rates than the national levels, with over two-thirds of Iowans being either overweight or obese (Figures 3 & 4). The percent of adults who are overweight gradually declined in Iowa until 2007, with increases in 2008 and 2009 to levels of 38.7% (Figure 3). Obesity rates have continued to increase over time at the state and national levels, reaching 28.4% for Iowa

adults in 2009 (Figure 4). Johnson County estimates are lower than both the state and national levels, although data more recent than 2007 is not available.

Figure 3: Percent of Adults Who Are Overweight

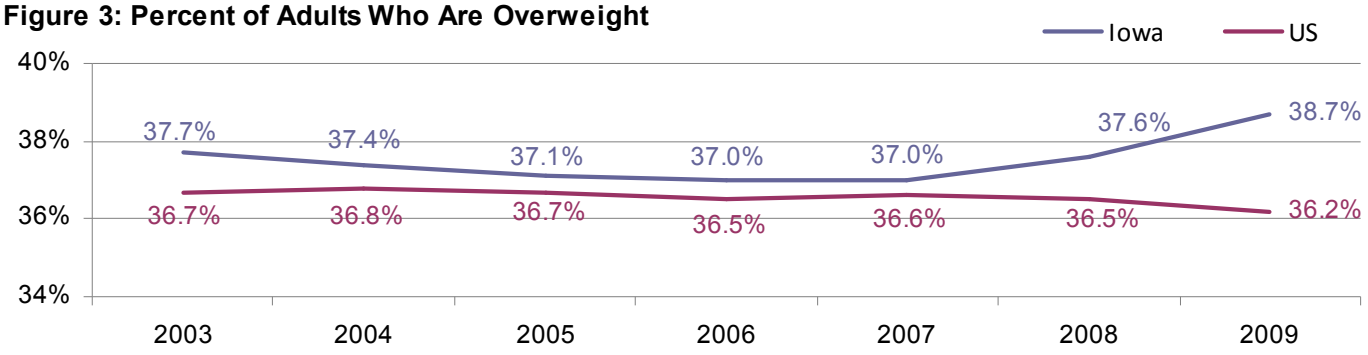
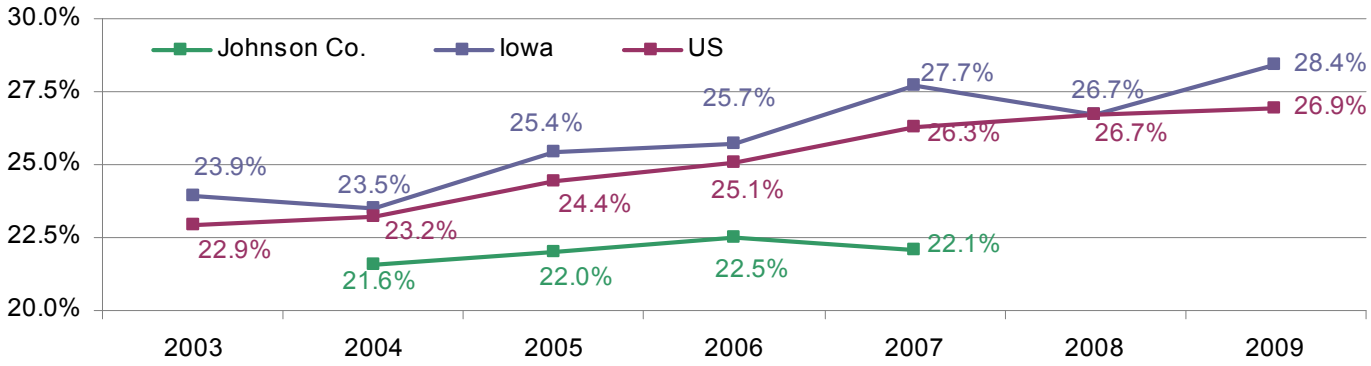


Figure 4: Percent of Adults Who Are Obese



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Safety

Youth

A variety of safety behaviors can impact the risk of certain injuries and even death. Data on high school students indicate that Iowa students are more likely than all students in the US to avoid wearing a bike helmet and drive after drinking (Table 1). However, the Iowa students were more likely to wear their seatbelt and avoid riding with a driver who had been drinking. In the 30 days before the survey, 26.5% of Iowa high school students rode with a driver who had been drinking, and 12.6% of them drove when they had been drinking (Table 1).

Table 1: 2007 State and National Data on Risk Behaviors in Students Grades 9-12

Risk Behavior	Iowa	US
Rarely/Never Wore a Seatbelt	6.8%	11.1%
Rarely/Never Wore a Bicycle Helmet	90.1%	85.1%
Rode with a Driver Who Had Been Drinking*	26.5%	29.1%
Drove When Had Been Drinking*	12.6%	10.5%

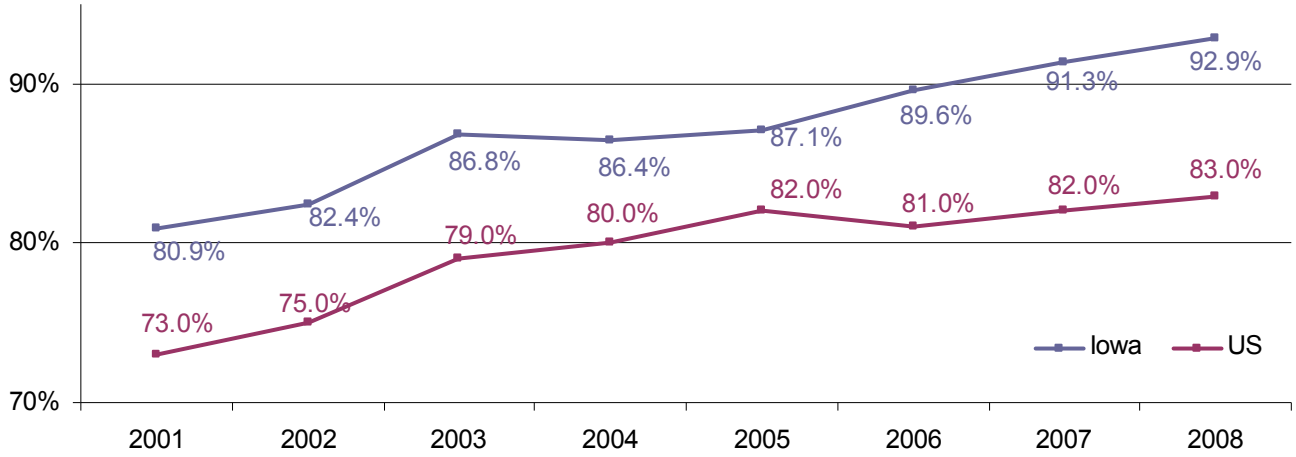
**Past 30 days*

Adults

Large surveys of University of Iowa students also report on select safe or unsafe behaviors. Ninety-three percent of UI students almost always use a seatbelt when in a car. Twenty-six percent reported never wearing a helmet when biking. Seven percent reported driving in the past month after having more than 5 drinks.

Though no Johnson County adult safety data exists for safety behaviors, some Iowa data is promising. Seatbelt use among Iowa adults is much higher than the national level, at 92.9% and 83% respectively (Figure 1). Seat belt use has increased 6 out of 7 of the past years.

Figure 1: Percent of Drivers Wearing a Seatbelt



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Screenings

Screenings can help detect a variety of health conditions, which can lead to earlier treatment and better outcomes. Over 75% of Iowans have had their cholesterol checked in the past 5 years, which is lower than the national level (Figure 1). This percent has gradually increased over time at both the state and national levels. Of women aged 50 or greater in Iowa and the US, 79.5% have had a mammogram in the past two years (Figure 2). The number has increased and decreased in the past five years at both levels. However, it has consistently been between 78 and 80%. Eight-four percent of adult females in Iowa have had a pap test in the past three years (Figure 3). This percentage has unfortunately been decreasing at both the state and national levels, although Iowa has higher rates of pap tests than the US.

Fifty-two percent of Iowan men aged 40 and above have had a Prostate-Specific Antigen (PSA) test in the past two years (Figure 4). In 2008, Iowa's rate of screening in this population was over 2% lower than the national levels, although it has remained relatively stable in the past six years. Colonoscopies, sigmoidoscopies and blood stool tests can all detect colon cancer. Almost 64% of Iowans aged 50 and above have ever had a colonoscopy or sigmoidoscopy (Figure 5). This percent is higher than the national level, and has increased 15% in just six years. Blood stool tests, however, have been on the decline. Just 23.2% of Iowa adults aged 50 and above have had a blood stool test in the past two years (Figure 6). This may be due to an increase in the colonoscopy and sigmoidoscopy tests.

Figure 1: Percent of Adults Who Have Had Cholesterol Checked in Past 5 Years

Figure 2: Women Aged 50+ Who Have Had a Mammogram in the Past 2 Years

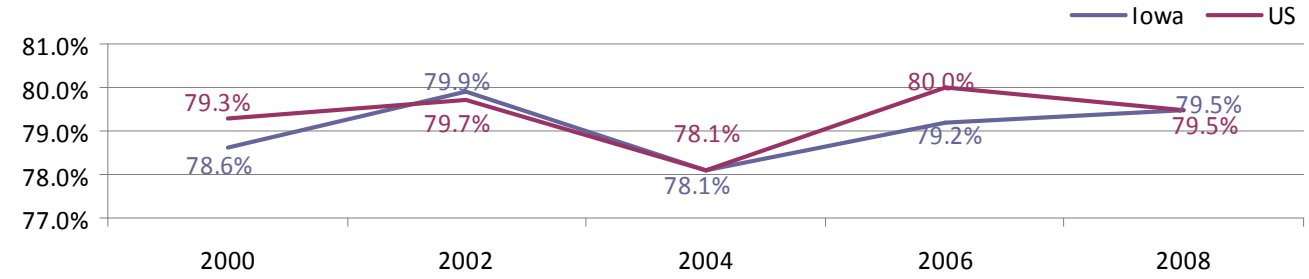


Figure 3: Women Age 18+ Who Have Had a Pap Test in the Past 3 Years

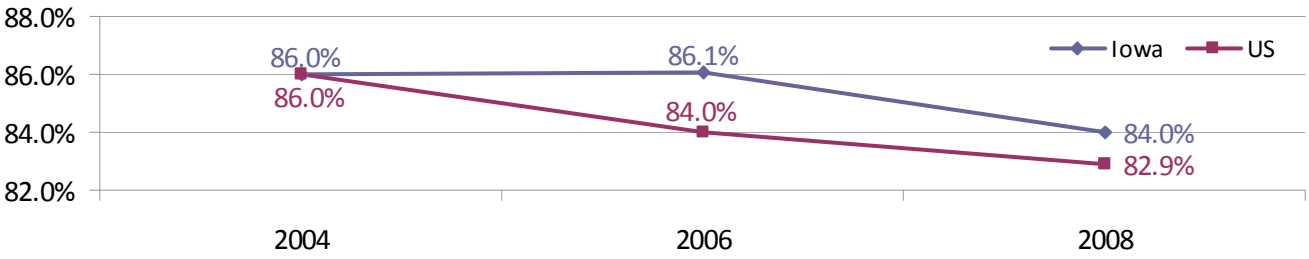


Figure 4: Men Age 40+ Who Have Had a PSA Test in the Past 2 Years

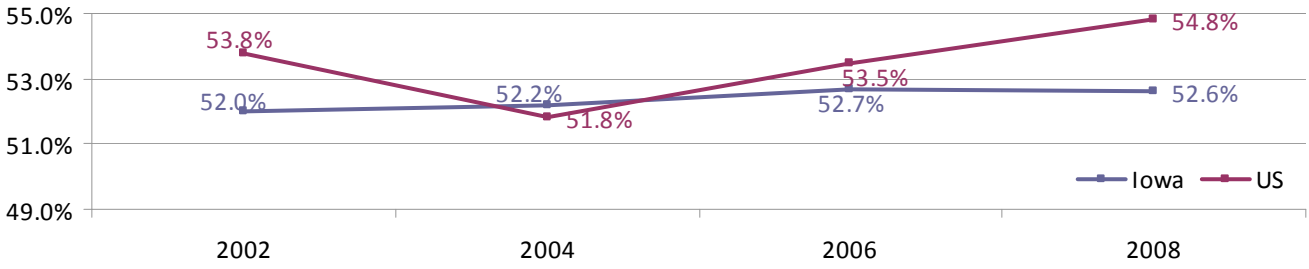


Figure 5: Adults Age 50+ Who Have Ever Had a Colonoscopy or Sigmoidoscopy

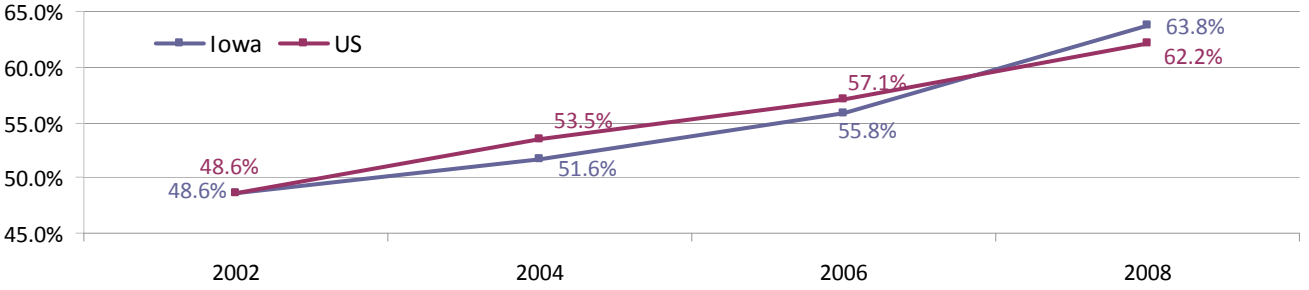
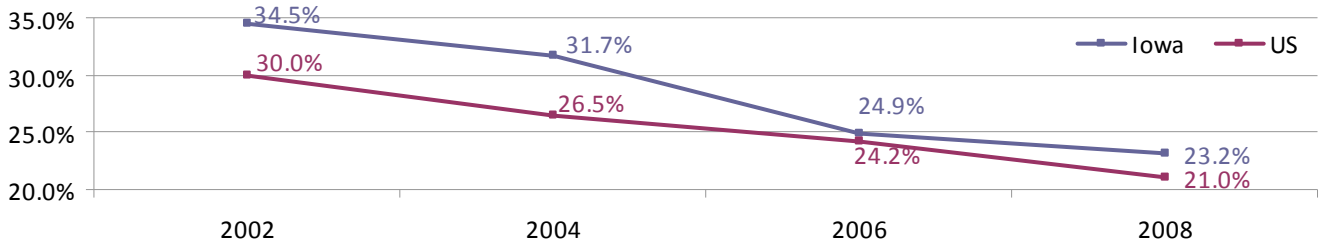


Figure 6: Adults Aged 50+ Who Have Had a Blood Stool Test in Past 2 Years



Source

http://www.cdc.gov/brfss/

COMMUNITY OPINION SURVEY

In March 2010, a community opinion survey was developed to get preliminary community input on the health needs of Johnson County. Links to the survey could be found on the Johnson County and Johnson County Public Health websites. The survey was active from April 1, 2010 to April 18, 2010, and it was completed by 143 people.

Over 90 percent of those surveyed agreed that there is a good healthcare system in Johnson County, that it is a good place to raise children and grow old, and that it is a safe place to live (Table 1). Over 30 percent of respondents did not think that there is plenty of economic opportunity in Johnson County or that there is plenty of help for individuals and families during times of need (Table 1). When asked what the top health problems were in the county, the most common responses were mental health, obesity/overweight, heart disease/attacks, cancer and diabetes (Table 2). The top unhealthy behaviors that were noted by respondents included alcohol abuse, poor eating habits, lack of exercise, drug abuse and having unsafe sex (Table 3). When asked about the community issues that most affect quality of life in the county, the most common responses included affordability of health services, inadequate/unaffordable housing, low income/poverty, lack of/inadequate health insurance, and racism (Table 4).

Demographic questions on the survey indicated that almost 80% of respondents were between age 25 and 64. Seventy-three percent were female, and 94% were white. Participants were also well-educated. Eighty-six percent had at least a bachelor's degree, and 47% had a graduate or professional degree.

Table 1. Results to Question Asking, "How do you feel about this statement?"

	Strongly Disagree	Disagree	Agree	Strongly Agree
There is a good healthcare system in Johnson County.	2.1%	4.3%	52.1%	41.4%
Johnson County is a good place to raise children.	1.4%	1.4%	45.3%	51.8%
Johnson County is a good place to grow old.	1.4%	5.0%	49.3%	44.3%
There is plenty of economic opportunity in Johnson County.	3.6%	28.1%	52.5%	15.8%
Johnson County is a safe place to live.	.7%	7.9%	66.9%	24.5%
There is plenty of help for individuals and families during times of need in Johnson County.	5.0%	25.5%	51.1%	18.4%

Table 2. Most Common Answers to Question Asking About the Most Important Problems in Johnson County (respondents could choose up to five)

	Number	Percent
Mental health	110	76.9%
Obesity/overweight	102	71.3%
Heart disease/heart attacks	77	53.8%
Cancer	65	45.5%
Diabetes	46	32.2%
Sexually transmitted diseases	41	28.7%
Teenage pregnancy	25	17.5%
Alzheimer's	21	14.7%
Dental health	19	13.3%
Infectious/contagious diseases	16	11.2%
Stroke	14	9.8%
Motor vehicle accidents	11	7.7%
Asthma	10	7.0%
Lung disease	10	7.0%

Table 3. Most Common Answers to Question Asking About the Top Unhealthy Behaviors in Johnson County (respondents could choose up to five)

	Number	Percent
Alcohol abuse	125	89.3%
Poor eating habits	87	62.1%
Lack of exercise	77	55.0%
Drug abuse	65	46.4%
Having unsafe sex	54	38.6%
Smoking/tobacco use	53	37.9%
Not going to doctor for yearly check-ups & screenings	39	27.9%
Reckless/drunk driving	38	27.1%
Violent behavior	38	27.1%
Not going to a dentist for preventive check-ups/care	25	17.9%
Suicide	19	13.6%

Table 4. Most Common Answers to Question Asking About the Community Issues that Most Affect Quality of Life in Johnson County (respondents could choose up to five)

	Number	Percent
Affordability of health services	74	52.5%
Inadequate/unaffordable housing	67	47.5%
Low income/poverty	60	42.6%
Lack of/inadequate health insurance	47	33.3%
Racism	41	29.1%
Availability of positive teen activities	40	28.4%
Homelessness	39	27.7%
Availability of child care	36	25.5%
Availability of healthy food choices	28	19.9%
Unemployment	27	19.1%
Rape/sexual assault	22	15.6%
Lack of culturally appropriate health services	15	10.6%

NEXT STEPS

Now that the community assessment is complete, the data needs to be utilized to improve the health of Johnson County. The first step will be to bring community together. Partners from a variety of fields will be invited. Community input will be vital in determining the priorities for the next Health Improvement Planning process. Once priorities are set, these same community partners will form workgroups in the chosen health improvement priorities. They will determine goals, and for the next five years, they will work to implement the Health Improvement Plan.