A vibrant sunset scene with a sky of orange, red, and yellow. A silhouette of a windmill is visible in the lower center of the image.

# **The 2001 Iowa Health Fact Book**

**The University of Iowa College of Public Health  
Iowa Department of Public Health**

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# The 2001 Iowa Health Fact Book

## **Center for Public Health Statistics**

**College of Public Health**

**The University of Iowa**

Jane Pendergast, Director

Martha F. Jones, Deputy Director

James A. Merchant, Dean

Robert F. Woolson, Associate Dean for Research

James C. Torner, Head, Department of Epidemiology

Daniel McMillan, Director of Communications

Michael Mueller, Systems Analyst

## **Iowa Cancer Registry**

**College of Public Health**

**The University of Iowa**

Charles F. Lynch, Medical Director

Daniel B. Olson, Programmer Analyst

Carla J. Van Hoesen, Programmer Analyst

## **Office of Statewide Clinical Education Programs**

**The University of Iowa**

Roger Tracy, Director

Theresa Dunkin, Director of Division of Information Systems/Research

## **Iowa Department of Public Health**

Hayley L. Harvey, Public Health Dental Director

Jessica A. Davila, BRFSS Coordinator/Epidemiologist

Ron Eckoff, Medical Director, HPP&AB Division

Mary Weaver, FCH Division Director/IDPH Deputy Director

Cathy Callaway, TUPAC Division Director

Richard Harmon, Injury Registry Coordinator, Bureau of EMS

Steve Quirk, Environmental Health Division Director

Jude E. Igbokwe, Director, State Center for Health Statistics

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*Or link from the Iowa Department of Public Health Website:*

[www.idph.state.ia.us](http://www.idph.state.ia.us)

Questions and/or comments regarding the 2001 Iowa Health Fact Book may be directed to:

Martha F. Jones  
Deputy Director  
Center for Public Health Statistics  
College of Public Health  
2214 Westlawn  
The University of Iowa  
Iowa City, IA 52242

Telephone: 319.335.7005

E-Mail:  
[factbook@mail.public-health.uiowa.edu](mailto:factbook@mail.public-health.uiowa.edu)

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## ***Welcome to the 2001 Iowa Health Factbook!***

*This book has been produced as a collaborative effort between the University of Iowa College of Public Health and the Iowa Department of Public Health. This joint effort produces a useful tool for Iowa health care providers, health policy makers, and public health practitioners throughout the state. The information provided herein is designed to address the needs of those who are concerned with health outcomes, behaviors, and resources.*

*This version of the Iowa Health Fact Book was preceded by Iowa Health Fact Books in 1997 and 1999 which were distributed as printed books and on the World Wide Web. Instead of printed books, the 2001 version of the Iowa Health Fact Book is being distributed in PDF format on CD-ROMs and also on the World Wide Web. All participants of the Barn Raising III, held in June 2001, will receive a CD copy compliments of the University of Iowa College of Public Health. The College is also providing a pre-printed notebook cover and spine insert for those interested in creating their own printed version of the publication.*

*Also new this year to the Fact Book is inclusion of the Healthy People 2010 Leading Health Indicators included at the end of this introductory section, as well as an expanded section on Health and Social Behaviors. The Health and Social Behaviors section now includes a variety of surveys conducted within the state that, along with the other Fact Book data, can be used to track important Leading Health Indicators. Like the previous editions, this publication makes no attempt to conduct sophisticated statistical analyses of the data presented. The data are instead presented in a descriptive format, and any formal comparisons need to be done with the usual care associated with technical concerns such as sample size, validity, and the reliability of statistics based on relatively small numbers. These limitations notwithstanding, the 2001 Iowa Health Fact Book should provide a rich source of information for describing the health and demographics of the state of Iowa.*

*We are pleased to make this important health information available to the public. The data included in this book were obtained from a number of statewide databases maintained by the The University of Iowa and Iowa Department of Public Health. Appended to the book are lists of many additional Iowa health information resources and a glossary of terms used throughout the text. We hope that this edition of the Iowa Health Fact Book will be useful to public health practitioners, researchers and policy makers within the state of Iowa.*

*Sincerely,*

*James A. Merchant, M.D., Dr. P.H.  
Dean, College of Public Health*

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### Steering Committee for the 2001 Iowa Health Fact Book

#### The University of Iowa

Martha F. Jones  
Charles F. Lynch  
James A. Merchant  
Jane Pendergast  
James C. Torner  
Robert F. Woolson

#### Iowa Department of Public Health

Cathy Callaway  
Jessica Davila  
Ron Eckoff  
Dick Harmon  
Haley Harvey  
Jude Igbokwe  
Steve Quirk  
Mary Weaver

#### Wellmark/BCBS

Jane Schadle

### Other Individuals Contributing Data, Resource Information, or Management, Technical or Clerical Support

#### The University of Iowa College of Public Health

Bill Budelier, Birth Defects Registry  
Theresa Dunkin, Office of Statewide Clinical Education Programs  
Daniel McMillan, College of Public Health  
William Nedved, Center for Public Health Statistics  
Daniel B. Olson, Iowa Cancer Registry  
Tim Shie, College of Public Health  
Roger Tracy, Office of Statewide Clinical Education Programs  
Carla J. Van Hoesen, Iowa Cancer Registry  
Xingun Yang, Center for Public Health Statistics

#### Iowa Department of Public Health

Stephen C. Gleason, IDPH Director  
David Fries, ARA Division Director/IDPH Deputy Director of Operations  
Mark Schoeberl, Executive Staff Director  
Janet Zwick, HPP&AB Division Director  
Adam Coppock, Temporary Administrative Assistant  
Rita Gergely, Chief - Bureau of Lead Poisoning Prevention  
Mike Dare, Statistical Research Analyst  
Donald Shepherd, Statistical Research Analyst  
Rose Mary Hicks, Information Technology Specialist  
Diane Boden, Information Technology Specialist  
Tom Newton, Environmental Health Consultant  
Judy Goddard, Nurse Epidemiologist, Center for Acute Disease Epidemiology  
John Katz, Sexually Transmitted Disease Prevention Program Manager  
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# Fact Book Conventions

## Layout

In the 2001 Iowa Health Fact Book data are presented from various time periods and data sources. The reader must use care in comparing data that was collected using differing methodologies, was collected at different time points, or which may represent unequal time intervals. To facilitate meaningful and valid comparisons of county groups, counties have been grouped into population groups based on their average annual county population size between 1990 and 1998.

## Small Numbers

We do not report the number of events in the disease and injuries tables if the number is less than three. These actual numbers are used in the graphical presentations of the crude and adjusted rates found in the associated figures.

## Population Standard

The Year 2000 US Standard Million Population from the US Census Bureau has been used for adjustment purposes.

## Adjustment Calculations

Both crude and direct age-adjusted rates have been calculated for much of the data presented. Crude rates for an entity, e.g. county, are the number of events of a health outcome divided by the overall population size in the county. Age-adjusted rates, however, take the Year 2000 US population and apply it to the comparable age-specific rates in a county, thereby adjusting the county's rates to the hypothetical standard within the Year 2000 US population. If a county has a greater proportion of elderly in contrast to the Year 2000 US population, then the age-adjusted rates will tend to be lower than its crude rate. Conversely, a county with a lower fraction of elderly would have a higher adjusted rate compared to its crude rate.

There is no general rule in regards to the use of either the crude or adjusted rate. A few guidelines can, however, be noted. A crude rate for a county reflects the disease or mortality burden for a county and may be useful to the health policy makers in the county. The age-adjusted rate is more useful as a county comparison index, as counties being compared have had these rates adjusted to the same population. Hence, both are useful descriptive indices of diseases, but with differences in interpretation.

# Healthy People 2010 Leading Health Indicators

The Healthy People 2010 Leading Health Indicators have been included in the 2001 Iowa Health FactBook to help correlate important indicators of health with available data sources and results.

Healthy People 2010 includes 467 objectives that will be tracked to measure progress throughout the decade. However, to help everyone more easily understand the importance of health promotion and disease prevention and to encourage wide participation in improving health, a small set of Leading Health Indicators was selected. These Leading Health Indicators reflect the major public health concerns in the United States and were chosen based on their ability to motivate action, the availability of data to measure their progress, and their relevance as broad public health issues.

Specific Healthy People 2010 objectives will be used to track progress on each of the Leading Health Indicators. The following table lists the specific objectives for each indicator, the national baseline figure and the source of the national rate. It also lists the state baseline figure and source for all except five of the objectives. We are still seeking state level information that is comparable for those five.

One objective of Healthy People 2000 was the development of consensus set of health status indicators for use at the national, state, and local level. Iowa has been tracking this set of health status indicators for the past decade and will continue in the current decade. Each Vital Statistics Annual Report lists these indicators with the baseline and the current status. Most also have a Healthy People 2000 objective that is listed. Priority in selecting these Health Status Indicators was given to measures for which data was readily available at the local, state, and national level. The Health Status Indicators predominantly reflect outcomes, while many of the Leading Health Indicators reflect behaviors.

## *HEALTHY PEOPLE 2010 LEADING HEALTH INDICATORS*

- Physical Activity
- Overweight and Obesity
- Tobacco Use
- Substance Abuse
- Responsible Sexual Behavior
- Mental Health
- Injury and Violence
- Environmental Health
- Immunization
- Access to Health Care

# Healthy People 2010

## Leading Health Indicators

National Indicator (Chapter-Section)	State Definition	National Target	National Baseline/ Data Source	State Prevalence Estimate/ Data Source
<b><u>Physical Activity</u></b>				
Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 minutes or more per occasion. (22-7)	YRBS <sup>1</sup> respondents who reported engaging in physical activity 3 or more days per week for 20 minutes per occasion.	85%	65% 1999 YRBS	67% 1999 YRBS
Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day. (22-2)	BRFSS <sup>2</sup> respondents who reported engaging in physical activity for more than 30 minutes, 5 or more times per week.	30%	15% 1997 NHIS	20% 1999 BRFSS
<b><u>Overweight and Obesity</u></b>				
Reduce the proportion of children and adolescents who are overweight or obese. (19-3c)	YRBS respondents who are overweight based on weight and height.	5%	11% 1999 NHANES	8% 1999 YRBS
Reduce the proportion of adults who are obese. (19-2)	Female BRFSS respondents with BMI equal to or greater than 27.3; Male BRFSS respondents with BMI greater than or equal to 27.8.	15%	23% 1999 NHANES	36% 1999 BRFSS
<b><u>Tobacco Use</u></b>				
Reduce cigarette smoking by adolescents. (27-2b)	YRBS respondents who reported smoking cigarettes on one or more of the past 30 days.	16%	35% 1999 YRBS	36% 1999 YRBS
Reduce cigarette smoking by adults. (27-1a)	BRFSS respondents who reported having smoked 100 cigarettes in a lifetime and currently smoke.	12%	24% 1999 NIHS	23% 1999 BRFSS
<b><u>Substance Abuse</u></b>				
Increase the proportion of adolescents not using alcohol or any illicit drugs during the past 30 days. (26-10a)	Two separate measures: YRBS respondents who reported not using any alcohol during the past 30 days; YRBS respondents who reported not using marijuana during the past 30 days.	89%	79% 1998 National Household Survey	45% 82% 1999 YRBS
<sup>1</sup> Youth Risk Behavior Survey				
<sup>2</sup> Behavioral Risk Factor Surveillance System				

# Healthy People 2010

## Leading Health Indicators *(continued)*

National Indicator (Chapter-Section)	State Definition	National Target	National Baseline/ Data Source	State Prevalence Estimate/ Data Source
<b><u>Substance Abuse (continued)</u></b>				
Reduce the proportion of adults using any illicit drugs during the past 30 days. (26-10c)	Respondents from the National Household Survey who reported using any illicit drug use during the past month including marijuana/hashish, cocaine, inhalants, hallucinogens, heroin, or any prescription-type psychotherapeutic used non-medically.	2%	6% 1998 National Household Survey	ages 18-25:14% ages 26+: 4% 1999 National Household Survey
Reduce the proportion of adults engaging in binge drinking of alcoholic beverages during the past month. (26-11c)	BRFSS respondents who reported having 5 or more alcoholic beverages on 1 or more occasions during the past month.	6%	17% 1998 National Household Survey	15% 1999 BRFSS
<b><u>Responsible Sexual Behavior</u></b>				
Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active. (25-11)	Two separate measures: YRBS respondents who reported not ever having sexual intercourse; YRBS respondents who reported using a condom during their last sexual intercourse, among students who had sexual intercourse during the past 3 months.	95%	85% 1999 YRBS	58% 56% 1999 YRBS
Increase the proportion of sexually active persons who use condoms. (13-6a)	Not available	50%	23%	Not available
<b><u>Mental Health</u></b>				
Increase the proportion of adults with recognized depression who receive treatment. (18-9b)	Not available	50%	23% 1997 National Household Survey of Drug Abuse	Not available
<b><u>Injury and Violence</u></b>				
Reduce deaths caused by motor vehicle crashes. (15-15a)	Vital Records - V02-V04, VO9.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0, V82.1m V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2	9.2/ 100,000	15.6/100,000 1998 Vital Statistics	17.3/100,000 1999 Vital Statistics
Reduce homicides. (15-32)	Vital Records - V85-Y09, Y35, Y87.1, Y89.0	3.0/100,000	6.5/100,000 1998 Vital Statistics	2.0/100,000 1999 Vital Statistics

# Healthy People 2010

## Leading Health Indicators *(continued)*

National Indicator (Chapter-Section)	State Definition	National Target	National Baseline/ Data Source	State Prevalence Estimate/ Data Source
<b><u>Environmental Quality</u></b>				
Reduce the proportion of persons exposed to air that does not meet U.S. Environmental Protection Agency's health based standards for ozone. (8-1a)	Not available	0%	43% 1997 Aerometric Information Retrieval System	Not available
Reduce the proportion of nonsmokers exposed to environmental tobacco smoke. (27-10)	Not available	45%	65% 1988-94 NHANES	Not available
<b><u>Immunization</u></b>				
Increase the proportion of young children who receive all vaccines that have been recommended for universal administration for at least 5 years. (14-24a)	Not available	80%	73% 1997 National Immunization Survey	Not available
Increase the proportion of noninstitutionalized adults over age 65 who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease. (14-27a,b)	Two separate measures: BRFSS respondents 65 and older who received a flu shot during the past 12 months; BRFSS respondents 65 and older who ever received a pneumonia vaccination.	90% 90%	64% 46% 1997 NHIS	70% 61% 1999 BRFSS
<b><u>Access to Health Care</u></b>				
Increase the proportion of persons under age 65 with health insurance. (1-1)	BRFSS respondents under age 65 who report having any type of health insurance	100%	83% 1997 NHIS	89% 1999 BRFSS
Increase the proportion of persons who have a specified source of ongoing care. (1-4a)	BRFSS respondents who report having a particular clinic, health center, doctors office, or other place where they usually go if they are sick or need advice about their health.	96%	87% 1997 NHIS	Available in 2002
Increase the proportion of pregnant women who begin prenatal care in the first trimester of pregnancy. (16-6a)	Birth certificate data file - women who report receiving prenatal care during the first three months of pregnancy.	90%	83% 1998 Vital Statistics	87% 1999 Vital Statistics

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## Demographics

Many of the health indicators in the 2001 Iowa Health Fact Book are presented with rates calculated using the population of the county and state. These rates are also stratified into population subgroups based on the average annual size of the county from 1990 to 1998. This not only contrasts the rural and urban aspects of the state but also includes trends in age and ethnic distribution of the population. The Year 2000 US standard population age distribution is used for calculating age-adjusted rates. Population estimates have been obtained from the US Census. Estimates are used for each year and year groupings where appropriate.

Using the average annual population from 1990-1998 there were 18 counties with less than 10,000 population, 48 counties with 10,000 to 20,000 residents, 23 counties with 20,000 to 50,000 residents, and 10 Metropolitan Statistical Area (MSA) counties. The distribution of the population by age is different between the county groupings. The larger size counties have a greater percentage of their population as young adults (15-44 years) compared to the small counties. The small counties have a larger percentage of persons 65 years of age or older. These differences in age distribution are standardized through age-adjustment so risk factors other than age can be compared. As shown, the population of the state is also becoming older and the percentage is increasing in the larger counties. Overall, the population of the state has shown a 5.4% increase over the 10-year period between the 1990 and recently completed 2000 census.

### *KEY CHANGES IN IOWA DEMOGRAPHICS...*

- Increasing age of the population
- Increasing urbanization
- Growing ethnic populations

## State Population Distributions

	County	Average Annual Population 1990-1998			Average Annual Population	Census Population Data			
		Male	Female	Total	1997-1999	April 1 1990	April 1 2000	Percent Change	
<b>Counties with 1990-1998 Average Annual Population &lt;10,000</b>	Adair	4,007	4,280	8,287	8,105	8,409	8,243	-2.0	
	Adams	2,244	2,325	4,569	4,399	4,866	4,482	-7.9	
	Audubon	3,367	3,633	7,000	6,812	7,334	6,830	-6.9	
	Clarke	3,947	4,313	8,260	8,268	8,287	9,133	10.2	
	Davis	4,111	4,284	8,396	8,480	8,312	8,541	2.8	
	Decatur	3,963	4,219	8,182	8,237	8,338	8,689	4.2	
	Fremont	3,822	4,221	8,043	7,761	8,226	8,010	-2.6	
	Howard	4,783	5,004	9,787	9,649	9,809	9,932	1.3	
	Ida	3,972	4,224	8,196	7,954	8,365	7,837	-6.3	
	Lucas	4,324	4,736	9,060	9,113	9,070	9,422	3.9	
	Monroe	3,929	4,201	8,130	8,044	8,114	8,016	-1.2	
	Osceola	3,478	3,657	7,135	6,974	7,267	7,003	-3.6	
	Pocahontas	4,428	4,701	9,129	8,807	9,525	8,662	-9.1	
	Ringgold	2,553	2,812	5,366	5,362	5,420	5,469	0.9	
	Taylor	3,383	3,727	7,110	7,098	7,114	6,958	-2.2	
	<b>Group Totals 1990-98</b>	Van Buren	3,840	3,920	7,760	7,853	7,676	7,809	1.7
	Male 67,253	Wayne	3,283	3,612	6,896	6,678	7,067	6,730	-4.8
Female 71,913	Worth	3,818	4,041	7,860	7,724	7,991	7,909	-1.0	
All 139,166									
<b>1997-99</b>									
All 137,318									
<b>Counties with 1990-1998 Average Annual Population 10,000 to 20,000</b>	Allamakee	6,890	7,104	13,993	14,042	13,855	14,675	5.9	
	Appanoose	6,536	7,132	13,668	13,508	13,743	13,721	-0.2	
	Buena Vista	9,684	10,209	19,893	19,484	19,965	20,411	2.2	
	Butler	7,711	8,014	15,725	15,618	15,731	15,305	-2.7	
	Calhoun	5,596	5,910	11,506	11,380	11,508	11,115	-3.4	
	Cass	7,137	7,806	14,943	14,633	15,128	14,684	-2.9	
	Cedar	8,634	9,030	17,663	18,001	17,381	18,187	4.6	
	Cherokee	6,622	7,102	13,724	13,204	14,098	13,035	-7.5	
	Chickasaw	6,645	6,705	13,350	13,425	13,295	13,095	-1.5	
	Clay	8,412	9,198	17,611	17,438	17,585	17,372	-1.2	
	Clayton	9,274	9,543	18,817	18,695	19,054	18,678	-2.0	
	Crawford	8,086	8,455	16,541	16,452	16,775	16,942	1.0	
	Delaware	9,024	9,299	18,323	18,489	18,035	18,404	2.0	
	Dickinson	7,463	8,062	15,525	16,181	14,909	16,424	10.2	
	Emmet	5,439	5,838	11,277	10,816	11,569	11,027	-4.7	
	Floyd	7,957	8,750	16,707	16,373	17,058	16,900	-0.9	
	Franklin	5,372	5,729	11,101	10,852	11,364	10,704	-5.8	
	Greene	4,819	5,246	10,066	10,059	10,045	10,366	3.2	
	Grundy	5,847	6,291	12,139	12,272	12,029	12,369	2.8	
	Guthrie	5,421	5,844	11,266	11,524	10,935	11,353	3.8	
	Hamilton	7,803	8,267	16,070	15,985	16,071	16,438	2.3	
	Hancock	5,973	6,249	12,221	12,030	12,638	12,100	-4.3	
	Hardin	9,070	9,630	18,700	18,334	19,094	18,812	-1.5	
	Harrison	7,230	7,737	14,967	15,280	14,730	15,666	6.4	
	Henry	9,947	9,736	19,683	20,000	19,226	20,336	5.8	
	Humboldt	5,098	5,381	10,479	10,304	10,756	10,381	-3.5	
	Iowa	7,311	7,738	15,049	15,545	14,630	15,671	7.1	
	Jefferson	8,176	8,545	16,721	16,956	16,310	16,181	-0.8	
	Jones	10,381	9,591	19,972	20,189	19,444	20,221	4.0	
Keokuk	5,645	5,924	11,569	11,435	11,624	11,400	-1.9		
Kossuth	8,838	9,279	18,117	17,753	18,591	17,163	-7.7		
Louisa	5,906	5,843	11,750	11,925	11,592	12,183	5.1		

## State Population Distributions *(continued)*

	County	Average Annual Population 1990-1998			Average Annual Population 1997-1999	Census Population Data		
		Male	Female	Total		April 1 1990	April 1 2000	Percent Change
<b>Counties with 1990-1998 Average Annual Population 10,000 to 20,000</b> <i>(continued)</i>	Lyon	5,863	6,083	11,946	12,011	11,952	11,763	-1.6
	Madison	6,444	6,718	13,162	13,911	12,483	14,019	12.3
	Mills	6,787	6,915	13,702	14,509	13,202	14,547	10.2
	Mitchell	5,350	5,652	11,002	11,073	10,928	10,874	-0.5
	Monona	4,796	5,268	10,064	10,098	10,034	10,020	-0.1
	Montgomery	5,661	6,278	11,939	11,802	12,076	11,771	-2.5
	O'Brien	7,356	7,889	15,245	14,830	15,444	15,102	-2.2
	Page	8,379	8,549	16,928	17,245	16,870	16,976	0.6
	Palo Alto	5,004	5,323	10,327	10,019	10,669	10,147	-4.9
	Poweshiek	9,116	9,801	18,917	18,795	19,033	18,815	-1.1
	Sac	5,898	6,172	12,070	11,857	12,324	11,529	-6.5
	Shelby	6,423	6,702	13,125	12,929	13,230	13,173	-0.4
	Tama	8,542	9,064	17,606	17,745	17,419	18,103	3.9
	Union	5,936	6,622	12,558	12,544	12,750	12,309	-3.5
Winnebago	5,812	6,153	11,965	11,990	12,122	11,723	-3.3	
Wright	6,787	7,420	14,207	14,022	14,269	14,334	0.5	
<b>Counties with 1990-1998 Average Annual Population &gt;20,000</b>	Benton	11,731	12,120	23,851	25,394	22,429	25,308	12.8
	Boone	12,254	13,308	25,562	26,197	25,186	26,224	4.1
	Bremer	11,269	11,868	23,137	23,362	22,813	23,325	2.2
	Buchanan	10,373	10,720	21,093	21,158	20,844	21,093	1.2
	Carroll	10,417	11,116	21,533	21,586	21,423	21,421	0.0
	Cerro Gordo	22,050	24,517	46,567	46,019	46,733	46,447	-0.6
	Clinton	24,406	26,342	50,748	49,879	51,040	50,149	-1.7
	Des Moines	20,363	22,192	42,554	42,040	42,614	42,351	-0.6
	Fayette	10,697	11,230	21,927	21,756	21,843	22,008	0.8
	Jackson	9,887	10,195	20,082	20,125	19,950	20,296	1.7
	Jasper	17,356	17,923	35,279	36,327	34,795	37,213	6.9
	Lee	19,109	19,708	38,816	38,487	38,687	38,052	-1.6
	Mahaska	10,589	11,101	21,689	21,888	21,522	22,335	3.8
	Marion	15,253	15,413	30,667	31,323	30,001	32,052	6.8
	Marshall	18,797	19,563	38,360	38,766	38,276	39,311	2.7
	Muscatine	20,034	20,765	40,799	41,029	39,907	41,722	4.5
	Plymouth	11,860	12,269	24,129	24,707	23,388	24,849	6.2
	Sioux	15,000	15,833	30,833	31,357	29,903	31,589	5.6
	Story	38,470	35,957	74,427	75,057	74,252	79,981	7.7
Wapello	17,113	18,607	35,720	35,443	35,687	36,051	1.0	
Washington	9,849	10,508	20,358	20,990	19,612	20,670	5.4	
Webster	18,908	20,630	39,538	38,832	40,342	40,235	-0.3	
Winnesiek	10,257	10,682	20,940	20,902	20,847	21,310	2.2	
<b>MSA Counties</b>	Black Hawk	58,711	64,387	123,098	120,742	123,798	128,012	3.4
	Dallas	16,160	16,738	32,898	36,953	29,755	40,750	37.0
	Dubuque	42,513	45,217	87,730	88,059	86,403	89,143	3.2
	Johnson	49,587	50,124	99,711	102,763	96,119	111,006	15.5
	Linn	85,841	90,624	176,465	183,071	168,767	191,701	13.6
	Polk	165,026	180,492	345,518	360,210	327,140	374,601	14.5
	Pottawattamie	40,395	43,568	83,963	85,978	82,628	87,704	6.1
	Scott	75,553	80,142	155,695	158,512	150,979	158,668	5.1
	Warren	18,696	19,582	38,278	40,202	36,033	40,671	12.9
	Woodbury	48,809	52,011	100,820	101,615	98,276	103,877	5.7
	<b>State of Iowa</b>		<b>1,372,689</b>	<b>1,453,157</b>	<b>2,825,847</b>	<b>2,861,611</b>	<b>2,776,755</b>	<b>2,926,324</b>

## Average Annual Population Distribution by Age 1990 - 1998

		% <5 years	% 5-14 years	% 15-24 years	% 25-44 years	% 45-64 years	% 65-84 years	% 85+ years
<b>Counties with 1990-1998 Average Annual Population &lt;10,000</b>	Adair	6.2	14.4	10.4	24.6	21.6	19.2	3.6
	Adams	6.5	12.9	10.4	25.0	23.1	18.9	3.3
	Audubon	6.4	14.1	9.7	23.7	22.5	19.7	3.8
	Clarke	6.4	14.7	11.3	27.3	21.5	15.8	3.0
	Davis	6.9	15.2	12.0	26.3	21.4	15.2	2.9
	Decatur	5.8	12.7	18.8	22.9	19.8	16.5	3.4
	Fremont	5.9	15.2	10.9	25.5	21.6	18.2	2.8
	Howard	6.5	15.5	10.3	25.1	21.2	18.0	3.4
	Ida	7.0	15.7	10.3	26.2	20.1	17.4	3.3
	Lucas	5.9	13.9	11.0	25.5	23.1	17.5	3.0
	Monroe	5.9	15.0	11.4	26.1	21.8	16.6	3.1
	Osceola	6.8	15.2	11.7	26.0	21.0	15.8	3.4
	Pocahontas	6.5	14.7	9.1	25.1	22.6	18.5	3.5
	Ringgold	5.2	13.8	9.6	23.7	23.1	20.9	3.7
	Taylor	5.7	15.1	10.5	24.3	21.6	19.5	3.4
	Van Buren	6.8	14.8	10.9	25.7	21.9	17.3	2.6
	Wayne	6.0	13.2	9.7	23.7	21.8	21.2	4.5
Worth	6.0	14.3	10.8	26.4	22.0	16.9	3.5	
<b>Counties with 1990-1998 Average Annual Population 10,000 to 20,000</b>	Allamakee	6.7	15.3	11.4	26.5	20.9	16.2	3.0
	Appanoose	6.0	14.3	12.0	25.9	21.0	17.9	2.9
	Buena Vista	6.7	14.5	15.5	26.6	18.5	15.6	2.7
	Butler	5.9	15.1	11.1	26.3	20.9	17.8	2.9
	Calhoun	5.8	14.3	9.8	25.9	21.4	19.3	3.6
	Cass	6.1	14.7	10.3	26.4	21.6	17.9	3.0
	Cedar	6.1	15.6	11.0	28.9	21.1	14.8	2.5
	Cherokee	6.4	15.2	10.7	26.5	22.0	16.3	2.8
	Chickasaw	6.5	16.1	11.6	26.9	21.2	15.3	2.4
	Clay	6.8	15.8	11.4	28.8	20.3	14.5	2.5
	Clayton	6.6	15.8	11.5	26.6	21.2	15.8	2.5
	Crawford	6.7	15.0	12.9	26.6	21.3	15.0	2.6
	Delaware	7.3	17.9	12.2	27.7	20.2	12.8	2.0
	Dickinson	5.3	13.6	10.0	27.1	23.2	18.3	2.5
	Emmet	5.7	15.3	13.8	25.3	20.3	16.7	2.9
	Floyd	6.1	14.6	11.8	25.3	22.5	16.9	2.9
	Franklin	6.1	14.8	10.3	26.9	21.8	17.1	3.0
	Greene	5.9	14.3	10.0	25.5	21.9	19.2	3.2
	Grundy	6.1	14.5	10.3	26.5	22.7	17.5	2.4
	Guthrie	5.4	14.7	10.2	25.4	23.9	17.4	3.1
	Hamilton	6.2	14.3	11.1	28.0	22.0	16.0	2.5
	Hancock	6.7	16.0	11.0	27.7	20.1	16.1	2.5
	Hardin	5.6	14.0	12.4	25.6	21.0	18.1	3.4
	Harrison	6.6	15.2	11.6	26.5	21.4	15.7	3.0
	Henry	6.3	14.1	14.2	29.9	19.6	13.4	2.5
	Humboldt	6.1	14.6	10.1	25.8	22.2	18.6	2.7
	Iowa	6.9	14.4	10.6	28.6	21.4	15.3	2.7
Jefferson	6.2	14.0	10.8	35.7	19.4	12.0	2.0	
Jones	6.1	14.4	13.2	29.7	20.5	13.9	2.1	
Keokuk	6.1	15.2	10.8	26.2	21.4	17.2	3.1	
Kossuth	6.5	16.0	10.5	26.2	21.6	16.2	2.9	
Louisa	6.6	15.6	13.4	28.9	20.7	12.6	2.2	

## Average Annual Population Distribution by Age *(continued)*

### 1990 - 1998

		%	%	%	%	%	%	%
County		<5	5-14	15-24	25-44	45-64	65-84	85+
		years						
<b>Counties with 1990-1998 Average Annual Population 10,000 to 20,000</b> <i>(continued)</i>	Lyon	7.5	17.3	11.6	25.5	20.2	15.2	2.7
	Madison	6.5	15.9	12.0	28.1	21.0	13.9	2.6
	Mills	6.1	15.9	12.4	31.3	21.0	11.6	1.7
	Mitchell	6.2	14.5	11.2	24.5	21.9	17.8	3.8
	Monona	5.5	14.2	9.9	24.1	22.6	19.9	3.8
	Montgomery	5.8	14.1	11.0	26.9	20.8	17.8	3.5
	O'Brien	6.2	15.5	11.1	25.7	20.7	17.4	3.4
	Page	5.5	14.1	11.8	27.1	21.0	17.3	3.2
	Palo Alto	6.0	15.5	11.9	23.8	21.8	17.6	3.6
	Poweshiek	5.8	13.7	16.7	26.4	20.2	14.7	2.6
	Sac	6.4	15.5	9.9	25.1	21.0	18.4	3.7
	Shelby	6.3	15.4	10.9	25.5	21.2	17.6	3.1
	Tama	6.2	14.8	11.6	25.7	22.4	16.2	3.1
	Union	6.0	14.8	13.1	27.3	20.2	15.6	3.0
Winnebago	6.3	14.3	13.3	26.9	19.7	16.6	2.9	
Wright	6.3	13.6	10.4	26.1	21.4	18.6	3.5	
<b>Counties with 1990-1998 Average Annual Population &gt;20,000</b>	Benton	7.1	15.8	11.9	28.5	20.9	14.0	1.9
	Boone	6.3	14.0	11.4	29.7	21.2	14.3	3.0
	Bremer	5.6	14.4	16.2	26.1	21.2	13.9	2.4
	Buchanan	7.4	17.6	12.4	27.5	19.8	13.6	1.7
	Carroll	7.5	17.0	11.5	26.3	19.6	15.3	2.8
	Cerro Gordo	6.4	13.7	12.6	29.2	20.5	15.1	2.4
	Clinton	6.6	14.9	12.6	28.7	21.1	14.1	2.0
	Des Moines	6.3	14.5	12.5	28.9	21.4	14.1	2.2
	Fayette	6.5	14.8	12.8	26.1	21.1	16.2	2.6
	Jackson	6.7	15.8	12.3	26.7	21.8	14.5	2.1
	Jasper	6.0	14.3	12.0	29.0	22.4	14.3	2.0
	Lee	6.3	14.6	12.1	29.3	21.3	14.3	2.1
	Mahaska	6.9	14.8	13.4	28.1	19.7	14.8	2.3
	Marion	6.3	14.6	15.2	27.5	20.2	14.0	2.1
	Marshall	6.2	14.0	12.2	28.8	21.6	14.8	2.4
	Muscatine	7.2	15.8	13.6	30.5	19.6	11.5	1.9
	Plymouth	7.0	16.9	12.9	26.6	20.4	13.9	2.4
	Sioux	7.3	17.3	17.4	25.0	18.1	12.9	2.0
	Story	5.7	10.9	30.5	28.1	14.7	8.6	1.5
	Wapello	6.2	13.3	13.0	27.7	21.6	15.9	2.4
Washington	7.0	15.0	11.5	28.4	20.1	15.1	2.9	
Webster	6.9	14.5	12.6	27.5	20.9	15.0	2.7	
Winneshiek	6.3	13.6	20.5	25.4	18.7	13.3	2.3	
<b>MSA Counties</b>	Black Hawk	6.3	14.4	17.2	28.4	19.7	12.3	1.7
	Dallas	6.8	16.2	11.5	31.3	20.5	11.8	1.9
	Dubuque	6.6	15.2	15.2	28.7	19.9	12.5	1.9
	Johnson	6.2	10.8	26.9	34.4	14.0	6.7	1.0
	Linn	6.7	13.7	14.9	31.9	20.4	10.8	1.5
	Polk	7.3	13.5	14.6	33.7	19.5	10.0	1.4
	Pottawattamie	7.2	15.0	13.3	29.7	21.2	12.1	1.6
	Scott	7.4	15.5	14.2	31.7	19.6	10.3	1.3
	Warren	6.8	15.8	15.1	30.4	20.8	9.6	1.6
	Woodbury	7.4	15.9	14.0	29.5	18.9	12.3	1.9

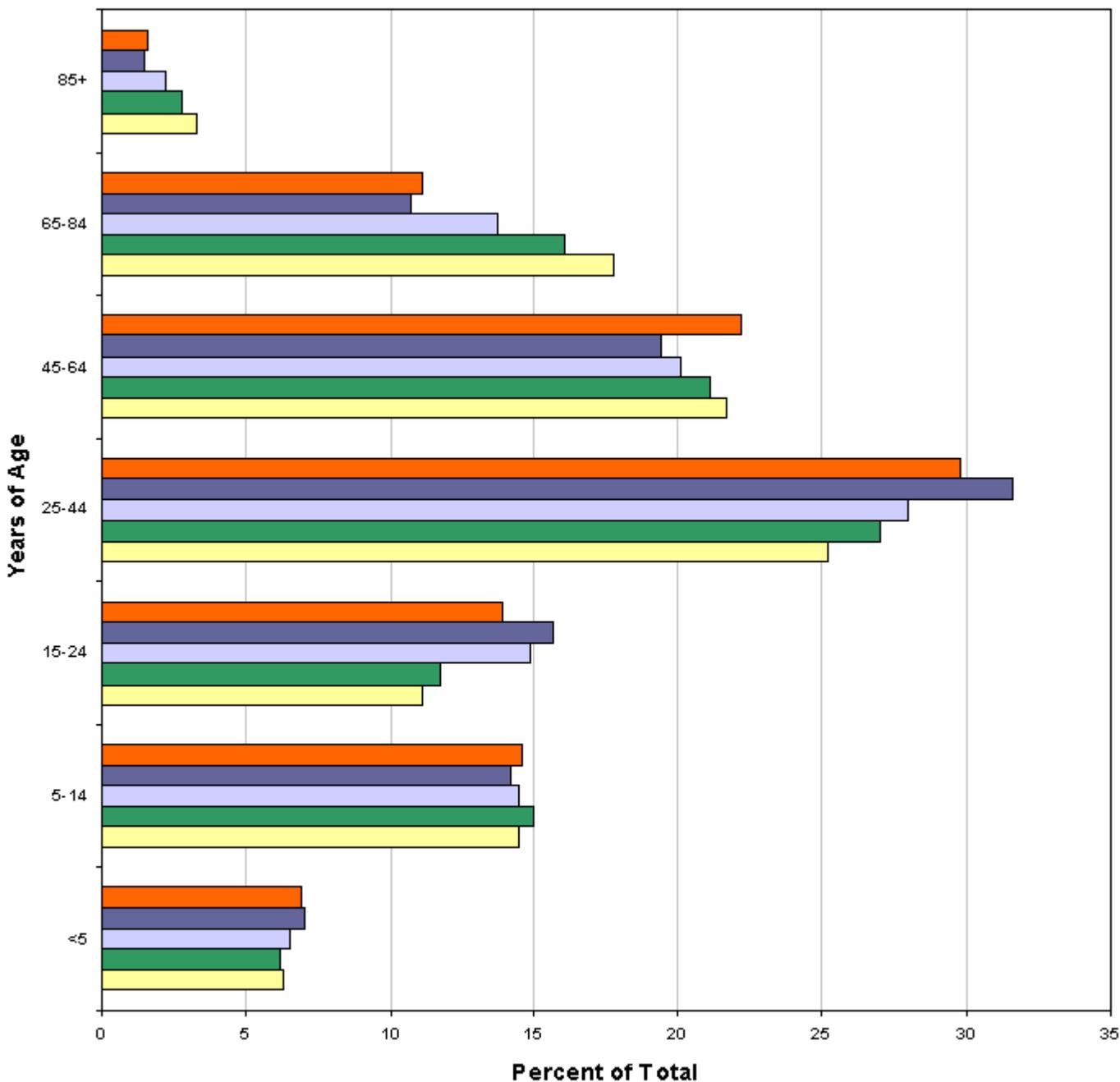
### Average Annual Population by County Group 1990 - 1998

County Population Group	Average Annual Population	% <5 years	% 5-14 years	% 15-24 years	% 25-44 years	% 45-64 years	% 65-84 years	% 85+ years
<10,000	139,166	6.3	14.5	11.1	25.2	21.7	17.8	3.3
10,000-20,000	693,896	6.2	15.0	11.7	27.0	21.1	16.1	2.8
>20,000	748,609	6.5	14.5	14.9	28.0	20.1	13.7	2.2
MSA	1,244,176	7.0	14.2	15.7	31.6	19.4	10.7	1.5

### Estimated Year 2000 US Standard Million Population

Age Range (years)	Population	Percent of Total
00-04	69,136	6.9
05-09	72,533	7.3
10-14	73,032	7.3
15-19	72,169	7.2
20-24	66,477	6.6
25-29	64,529	6.5
30-34	71,044	7.1
35-39	80,762	8.1
40-44	81,854	8.2
45-49	72,118	7.2
50-54	62,716	6.3
55-59	48,454	4.8
60-64	38,793	3.9
65-69	34,264	3.4
70-74	31,773	3.2
75-79	26,999	2.7
80-84	17,842	1.8
85+	15,508	1.6
<b>TOTAL</b>	<b>1,000,000</b>	<b>100.0</b>

## Distribution of Estimated Year 2000 Standard Million Population Compared to 1990-1998 Annual Average Population by County Groups



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## Health and Social Behaviors

The health of individuals and their communities is determined by a variety of factors including biologic, environmental, social, and behavioral influences. This section provides an overview of selected surveys and statistics collected in Iowa to track the effects of these various influences on the health of Iowans. Introductions are provided individually for each of the surveys with links to more detailed information on survey methodology and additional data where available. Information on marriage, dissolutions, and crime statistics is included at the end of this section because it characterizes and contrasts the population dynamics that can affect health.

### *QUESTIONS TO CONSIDER WHEN USING SURVEY RESULTS...*

- What was the method used to conduct the survey, i.e., telephone, mail, personal interview?
- What is the response rate of those surveyed and what factors might influence who responds and who doesn't?
- Are the survey respondents representative of and thus generalizable to a particular population?
- Because a survey provides only estimates based on the sampled population, what is the possible variability of these estimates?
- Were the survey questions cross-sectional in that they represent attitudes, behaviors or disease status at one point in time?

## Behavioral Risk Factor Surveillance System (BRFSS)

The Behavioral Risk Factor Surveillance System (BRFSS) survey is conducted each year in Iowa, and in every other state, the District of Columbia, and Puerto Rico.

The Iowa BRFSS is an ongoing monthly telephone survey which is financially and technically supported by the Centers for Disease Control and Prevention (CDC). The statewide survey is a scientifically designed and validated method of collecting information. BRFSS collects health risk behavior information from 3,600 household telephone surveys, and is designed to collect information on nationally agreed upon topics and on additional areas of special interest to Iowa. Because the BRFSS is conducted annually the prevalence of these behaviors may be followed longitudinally. The risk behaviors surveyed (Iowa residents age 18 and over) are major contributors to illness, disability, and premature death.

The goal of the Iowa BRFSS is to provide data to initiate and guide health promotion and disease prevention programs. The BRFSS program achieves this goal by:

- 1) determining state specific prevalence of personal health behaviors related to the leading causes of premature death,
- 2) developing the capacity of the state health department to conduct credible telephone surveys, and
- 3) advancing the understanding that health-related behaviors are critical indices of health.

The BRFSS results tell health professionals what is really going on, and can be used as a measure of the effectiveness of various public health strategies.

### BRFSS KEY AREAS...

- Health Status
- Health Care Coverage
- Physical Inactivity
- Body Weight
- Smoking
- Alcohol Consumption
- Hypertension
- Cholesterol Awareness
- Colorectal Cancer Screening
- Diabetes
- Adult Immunizations
- Injury Control
- Women's Health
- HIV/AIDS

## Iowa Behavioral Risk Factor Surveillance Survey (BRFSS) 1997-1999

Item	Definition	Iowa			US Median <sup>1</sup>		
		1997 %	1998 %	1999 %	1997 %	1998 %	1999 %
Binge drinking	All respondents who reported having 5 or more alcoholic beverages in the past month on one or more occasions.	17.9	18.3	18.3	14.5	*	14.9
Chronic drinking	All respondents who reported an average of 2 or more drinks per day.	3.5	4.0	4.4	3.0	*	3.6
Current smoker	All respondents who reported smoking 100 cigarettes in their lifetime and currently smoking every day or some days.	23.1	23.4	23.5	23.2	22.9	22.6
Diabetes	All respondents who reported ever being diagnosed with diabetes (excluding gestational diabetes).	4.6	5.2	5.2	4.8	5.4	5.6
Blood pressure	All respondents who reported having their blood pressure checked within the past 2 years.	92.6	95.4	94.6	94.0	*	94.6
High blood pressure	All respondents who reported being told by a doctor, nurse, or other health professional they had high blood pressure.	23.4	24.8	24.2	23.0	*	23.9
Cholesterol	All respondents who reported having their cholesterol checked within the past 5 years.	66.1	67.5	67.3	69.1	*	69.1
High cholesterol	All respondents who reported being told by a doctor or other health professional that they had high cholesterol.	28.1	30.1	31.7	28.8	*	30.0
No insurance coverage	All respondents who reported currently not having any kind of health care coverage.	9.6	8.7	8.8	12.0	13.0	12.4
Mammogram	Female respondents ages 40 and older who reported having a mammogram within the past 2 years.	66.4	70.6	72.1	70.3	72.3	72.8
Pap Smear	All female respondents with a uterine cervix who reported having a Pap Smear within the past 3 years.	80.5	84.5	85.3	84.6	84.8	85.5
Obesity	All respondents who had a calculated body mass index greater than or equal to 30.0.	19.4	19.8	21.5	16.6	18.3	19.7
Overweight	All respondents who had a calculated body mass index between 25.0 and 29.0.	35.7	36.9	36.9	36.3	36.3	36.8
Sigmoidoscopy/ Colonoscopy	All respondents who reported ever having a sigmoidoscopy or colonoscopy.	32.7	32.0	36.2	32.4	*	33.7
Tested for HIV	Respondents between the ages of 18 and 65 who reported ever being tested for HIV.	30.8	27.7	33.9	42.6	40.0	42.8

<sup>1</sup>In the US, half of the 50 states fall above this point and half fall below.

\*Questions not asked at the national level during this year.

Source: Iowa Department of Public Health, BRFSS website: <http://www.cdc.gov/nccdphp/brfss/> **27**

# Iowa Adult Household Survey of Substance Use and Treatment Needs

*Center for Social and Behavioral Research*

*University of Northern Iowa*

The Iowa Adult Household Survey of Substance Use and Treatment Needs is based on a stratified random sampling of all Iowa households that could be reached by telephone. Interviewers at the University of Northern Iowa's Center for Social and Behavioral Research completed 1,891 interviews for the 1992-93 survey and 6,163 interviews for the 1997-98 survey. The main goals of the surveys were to develop estimates of the substance use and treatment needs of adult Iowans. Findings were weighted according to sampling strata to provide estimates reflecting the total adult population of Iowa. These estimates were calculated using the 1990 Census for the 1992-93 survey, and the 1997 Census estimates for the 1997-98 survey. The content of the questionnaire was based on the National Technical Center's standard treatment needs assessment instrument, prior question

## **IOWA RATES EXCEEDED REGIONAL AND NATIONAL RATES FOR...**

- Alcohol (Ever and recent use)
- Sedatives (Recent use)
- Stimulants (Ever using)

series utilized in the National Household Survey of Drug Abuse, and various single state surveys. The content areas of the questionnaire consisted of demographics, general health assessment, tobacco use, alcohol use, drug use, substance dependence and abuse assessment, substance use treatment, barriers to treatment, and physical and sexual abuse victimization.

## **COMPARED TO 5 YEARS AGO IN IOWA...**

- Rates of ever and current tobacco use were mostly unchanged.
- Rates for recent alcohol use declined slightly.
- Rates of ever and recent substance use in Iowa were largely unchanged.
- Rates for ever using stimulants declined slightly.

## Adult Household Survey of Substance Use & Treatment Needs

Item	Weighted Estimates of Total Iowa Adult Population					
	% Ever Used (At least once in lifetime)		% Recent Use (In 18 months prior to interview)		% Current Use (In 30 days prior to interview)	
	1992-93	1997-98	1992-93	1997-98	1992-93	1997-98
Tobacco	50.1	49.4	*	29.4	25.7	26.9
Smoked at least one cigarette	*	*	*	*	*	23.5
Used smokeless tobacco	*	*	*	*	*	2.8
Smoked cigars	*	*	*	*	*	2.2
Alcohol	94.2	92.2	77.1	70.9	*	54.1
<i>Frequency: Recent Users</i>			<i>% of Recent Users</i>			
Daily	*	*	5.9	4.9	*	*
Weekly	*	*	27.3	28.4	*	*
Monthly (1-3 days a month or less)	*	*	66.8	66.7	*	*
<i>Number of Drinks per Drinking Day: Recent Users</i>			<i>% of Recent Users</i>			
One	*	*	39.3	18.8	*	*
Two	*	*	27.8	22.8	*	*
Three-Four	*	*	21.0	30.0	*	*
Five or More	*	*	11.9	28.5	*	*
Marijuana	27.7	24.9	4.5	5.2	1.5	1.6
Hallucinogens	6.2	6.1	0.7	0.6	<0.1	0.1
Cocaine & Crack	6.5	6.4	0.5	0.9	0.3	0.1
Heroin & Other Opiates	2.1	2.0	0.2	0.4	0.1	0.0
Sedatives	6.0	3.1	0.5	0.7	0.3	0.2
Stimulants (includes methamphetamine and over-the-counter)	12.1	9.3	1.7	2.5	0.5	0.7

\*Data not available for this time period

Source: Center for Social and Behavioral Research,  
University of Northern Iowa

# Iowa Youth Tobacco Survey - 2000

The Iowa Youth Tobacco Survey (IYTS) supplies vital information that guides tobacco-use prevention programs. The survey results stand as a signpost to help evaluate current efforts to reduce tobacco use among younger Iowans. The Iowa Department of Public Health and the Centers for Disease Control and Prevention in Atlanta, along with many other organizations and school districts, implemented this survey in the spring of 2000. The IYTS used a random sample of classrooms from both public and private Iowa middle schools (with grades 6, 7, and 8) and high schools (with grades 9 through 12). The survey used a two-stage sampling method that selected schools and then classrooms within schools. All students in selected classrooms were eligible to take the survey. The survey was provided to 30 middle schools and 30 high schools. Twenty-six of the middle schools and 27 of the high schools participated. Within these schools, all second period classrooms were eligible for selection. Of the 2,108 eligible students in middle school classrooms, 1,834 (87%) completed usable questionnaires. Of the 1,934 sampled high school students, 1,445 (75%) completed usable questionnaires. The overall response rates, considering schools and students, were 75.4% for middle schools and 67.2% for high schools. The weighted data account for the number of students in the classrooms and schools and reduce nonresponse bias.

## LEVEL OF PARTICIPATION IN RANDOM SAMPLE OF 30 MIDDLE SCHOOLS AND 30 HIGH SCHOOLS IN IOWA ...

	School Level	Second-Period Students
Middle School	86%	87%
High School	90%	75%

### SELECTED RESULTS...

		Weighted Estimates		
		Males	Females	Total
Respondents who reported using any tobacco products during the past 30 days.	Middle School	18%	15%	16%
	High School	46%	32%	39%
Respondents who reported smoking cigarettes during the past 30 days.	Middle School	11%	12%	12%
	High School	34%	31%	33%
Respondent who reported smoking cigarettes during the past 30 days who indicated they want to stop smoking cigarettes.	Middle School			46%
	High School			51%
<b>Weighted Estimates by Grade Level</b>				
Respondents who reported using any tobacco products during the past 30 days.	<b>6th</b>	10%	17%	22%
	<b>9th</b>	27%	41%	43%
	<b>10th</b>		43%	48%
	<b>11th</b>			
	<b>12th</b>			

Since the sample was chosen to represent schools in Iowa, the weighted results estimate Iowa students' tobacco use in grades 6 through 12.

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## Iowa Youth Survey - 1999 (IYS)

The 1999 Iowa Youth Survey (IYS) was conducted by the Iowa Consortium for Substance Abuse Research and Evaluation, and was a joint project of the Iowa Department of Public Health's Division of Health promotion, Prevention, and Addictive Behaviors, The Iowa Department of Education, the Governor's Alliance on Substance Abuse (now the Office of Drug Control Policy), the Iowa Department of Human Rights, Criminal and Juvenile Justice Planning and Statistical Analysis Center, and the Higher Plain, Inc. (with funds from the Federal Department of Education).

The 1999 IYS was the ninth in a series of youth surveys that have been completed every three years since 1975. This survey was different from previous years in both the procedures that were used to implement the survey and the students that were asked to participate. The 1999 IYS sought participation from all school districts and all students in grades 6, 8 and 11, as well as those age 14-18 enrolled in alternative programs. Participation was voluntary and the schools varied in the extent to which they participated. At least some survey questionnaires were completed in 329 of Iowa's 375 school districts. A total of 85,552 students completed the survey.

The 1999 IYS questionnaire included questions about the students' behaviors and attitudes/beliefs, as well as their perceptions of their peer, family, school, and neighborhood/community environments. The survey is a self-administered questionnaire that relies on each student's ability to read and honestly respond to each question. Each questionnaire was reviewed for inconsistent responses. A total of 27 validity checks were made. There were 85,426 useable questionnaires.

We have provided selected data from this survey. Much more detailed information by county is available for all 172 survey questions at:

[www.state.ia.us/dhr/cjip/ythsurvey.html](http://www.state.ia.us/dhr/cjip/ythsurvey.html) or through the websites of the Iowa Department of Public Health, Iowa Department of Education, Office of Drug Control Policy, or Criminal and Juvenile Justice Planning.

### LEVEL OF PARTICIPATION...

Grade	Number Enrolled	Number Completed IYS	Percent Completed IYS
6	35,856	27,171	76%
8	38,003	30,248	80%
11	37,886	26,082	69%

## Iowa Youth Survey - 1999

Item	Definition	Unweighted % 6th Grade	Unweighted % 8th Grade	Unweighted % 11th Grade	Weighted % State
Substance Use Behaviors					
Tobacco	Percentage of students who reported smoking <b>cigarettes</b> during the past 30 days.	3	12	33	18
	Percentage of students who reported smoking <b>cigars</b> during the past 30 days.	1	4	13	7
	Percentage of students who reported using <b>smokeless tobacco</b> during the past 30 days.	0	2	10	4
Alcohol	Percentage of students who reported having 1 or more alcoholic drinks during the past 30 days.	6	22	48	26
	Percentage of students who reported having 5 or more alcoholic drinks in a row, within a couple of hours, during the past 30 days.	3	14	41	21
Marijuana	Percentage of students who reported using marijuana during the past 30 days	1	6	17	8
Inhalants	Percentage of students who reported sniffing glue, breathing the contents of gases or sprays in order to get high during the past 30 days.	1	3	2	2
Methamphetamines	Percentage of students who reported using methamphetamines during the past 30 days.	0	1	2	1
Cocaine	Percentage of students who reported using cocaine during the past 30 days.	0	1	2	1
Amphetamines	Percentage of students who reported using amphetamines (other than methamphetamines) during the past 30 days.	0	1	4	1
Steroid Pills/Shots	Percentage of students who reported taking steroid pills or shots without a doctor's prescription during the past 30 days.	0	1	1	1
Other Illegal Drugs	Percentage of students who reported using any other illegal drug during the past 30 days.	0	1	5	1

## Iowa Youth Survey - 1999 (continued)

Item	Definition		Unweighted %	Unweighted %	Unweighted %	Weighted %
			6th Grade	8th Grade	11th Grade	State
Other Behaviors	Percentage of students who spent money gambling in the past 12 months.		22	36	40	31
	Percentage of students who have ever tried to kill themselves.		7	12	14	11
	Percentage of students who have ever been involved in any sexually related behavior that they wish would not have happened.		6	12	30	17
Attitudes about self	I am accepting of those different than me (racially, culturally, socio-economically).	Strongly Agree	54	50	47	50
		Agree	39	43	45	42
		Disagree	5	5	6	5
		Strongly Disagree	2	2	2	2
	I can say "no" when someone wants me to do things I know are wrong or dangerous.	Strongly Agree	74	58	49	60
		Agree	21	34	42	33
		Disagree	3	6	7	6
		Strongly Disagree	2	2	2	2
	Violence is the worst way to solve problems.	Strongly Agree	63	43	34	46
		Agree	25	38	41	35
		Disagree	6	14	19	13
		Strongly Disagree	5	6	6	6
	It is against my values to have sex as a teenager.	Strongly Agree	65	43	18	41
		Agree	20	28	21	23
		Disagree	8	18	36	21
Strongly Disagree		7	11	25	15	
It is against my values to use alcohol and drugs as a teenager.	Strongly Agree	77	52	23	49	
	Agree	16	28	25	23	
	Disagree	4	14	35	19	
	Strongly Disagree	3	6	17	9	
Attitudes about alcohol	People feel more caring and giving after a few drinks of alcohol.	True/mostly true	12	20	40	25
		False/mostly false	88	81	60	76
	Drinking alcohol makes people more friendly.	True/mostly true	6	16	48	24
		False/mostly false	94	84	52	76
It's fun to watch others act silly when they are drinking alcohol.	True/mostly true	20	43	72	46	
	False/mostly false	81	57	28	54	
Alcoholic beverages make parties more fun.	True/mostly true	11	27	55	32	
	False/mostly false	89	73	45	68	

## Iowa Youth Survey - 1999 (continued)

Item	Definition		Unweighted %	Unweighted %	Unweighted %	Weighted %
			6th Grade	8th Grade	11th Grade	State
Attitudes about school	There are clear rules about what students can and cannot do.	Strongly Agree	60	41	27	42
		Agree	34	47	56	46
		Disagree	4	8	13	9
		Strongly Disagree	2	3	4	3
	Students caught drinking, smoking, or using an illegal drug are not allowed to participate in any extracurricular activity for some time period.	Strongly Agree	79	63	45	61
		Agree	16	28	40	28
		Disagree	3	6	11	7
		Strongly Disagree	3	4	5	4
	If I skipped school at least one of my parents/guardians would be notified.	Strongly Agree	66	50	32	48
		Agree	25	39	49	38
		Disagree	5	8	14	10
		Strongly Disagree	4	4	4	4
	Students in my school treat each other with respect.	Strongly Agree	26	11	5	14
		Agree	43	38	36	39
		Disagree	24	36	44	35
		Strongly Disagree	7	15	15	13
	I feel safe at school.	Strongly Agree	44	22	15	27
		Agree	42	54	64	54
		Disagree	10	16	15	14
		Strongly Disagree	4	7	5	6
	There is at least one adult at school who I could go to for help with a problem.	Strongly Agree	66	45	31	47
		Agree	27	42	50	40
		Disagree	4	8	13	8
		Strongly Disagree	3	5	6	5
Attitudes about family	In my home there are clear rules about what I can and cannot do.	Strongly Agree	62	45	32	46
		Agree	32	44	52	43
		Disagree	5	8	13	9
		Strongly Disagree	2	2	3	2
	I have a happy home.	Strongly Agree	60	44	34	45
		Agree	32	43	50	42
		Disagree	6	10	12	9
		Strongly Disagree	2	3	4	3
	There are people living in my home who have a serious alcohol or drug problem.	Strongly Agree	10	8	6	8
		Agree	8	9	10	9
		Disagree	17	22	26	22
		Strongly Disagree	65	61	59	61
I can get help and support when I need it from someone in my home.	Strongly Agree	68	48	34	49	
	Agree	26	40	49	39	
	Disagree	4	8	12	8	
	Strongly Disagree	3	5	6	4	
A parent/guardian knows where I am and who I am with, especially in the evening and on weekends.	Never	11	8	8	9	
	Sometimes	12	19	29	21	
	Often	14	23	31	23	
	Always	63	50	32	47	

## Iowa Youth Survey - 1999 (continued)

Item	Definition		Unweighted %	Unweighted %	Unweighted %	Weighted %	
			6th Grade	8th Grade	11th Grade	State	
Attitudes about community	My neighborhood is a safe place to live.	Strongly Agree	57	47	43	49	
		Agree	34	44	50	43	
		Disagree	6	7	5	6	
		Strongly Disagree	3	3	2	2	
	Adults in my neighborhood or community help me when I need help.	Strongly Agree	44	24	11	25	
		Agree	39	44	47	44	
		Disagree	12	22	30	22	
		Strongly Disagree	5	9	12	9	
	In your neighborhood or community how difficult do you think it would be for a kid your age to get...	...cigarettes.	Very hard	45	20	5	22
			Hard	23	24	8	18
			Easy	13	30	37	27
			Very easy	6	16	46	24
			Don't know	14	11	5	9
		...alcoholic beverages (beer, wine, liquor).	Very hard	45	19	5	22
			Hard	23	23	11	18
			Easy	14	31	43	30
			Very easy	6	17	38	21
			Don't know	13	10	4	9
		...marijuana (pot, grass, hash, bud, weed).	Very hard	65	40	11	37
			Hard	13	22	18	18
			Easy	5	15	35	19
			Very easy	3	9	23	12
			Don't know	14	15	13	14
		...methamphetamines (crack, ice).	Very hard	68	47	21	44
			Hard	12	22	28	21
			Easy	4	8	19	11
			Very easy	2	5	9	6
Don't know			15	18	23	19	
...amphetamines other than methamphetamines (like stimulants, uppers, speed).		Very hard	67	47	22	44	
		Hard	12	21	27	21	
		Easy	4	9	18	11	
		Very easy	2	5	9	6	
		Don't know	15	18	24	19	
...any other illegal drug (cocaine, etc.).		Very hard	67	47	23	44	
		Hard	12	21	27	20	
	Easy	4	9	19	11		
	Very easy	3	5	9	6		
	Don't know	14	18	23	18		
...a handgun.	Very hard	56	36	22	37		
	Hard	17	25	28	24		
	Easy	8	14	18	14		
	Very easy	5	8	9	7		
	Don't know	14	17	23	18		

## Substance Abuse Treatment

Substance abuse treatment is provided to all 99 counties in Iowa using funding from the Alcohol and Drug Abuse and Mental Health Services block grant, state substance abuse appropriations, and Medicaid. Iowa operates under a managed care system which is currently administered by Merit Behavioral Care of Iowa (MBCI). MBCI contracts with a total of 67 service providers in 22 service areas as represented on the map and listing on the next page. The 67 service providers include 34 who receive funding from both IDPH and Medicaid, and 33 who are funded through Medicaid only. Services are available to all Iowans regardless of their ability to pay or financial status through a sliding-fee schedule.

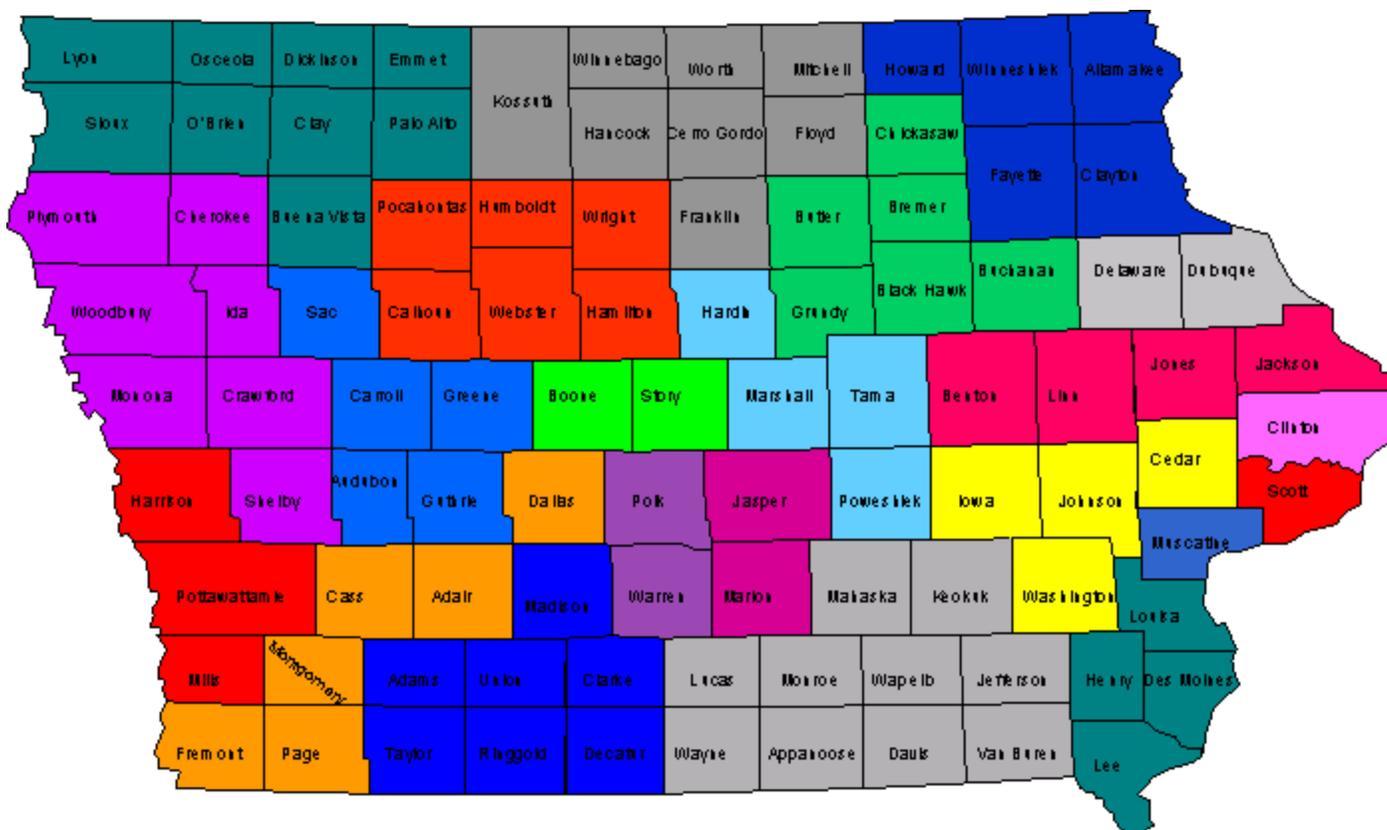
The tables on the following pages represent all admissions to substance abuse treatment programs regardless of source of funding for that specific client. The data for each county is divided by adult (18 and over) and adolescent (17 and under), and by primary substance of abuse.

The reporting period was for calendar years 1998, 1999, and 2000. The numbers reflect those identifying a county of residence in Iowa. Those identifying their residence outside of Iowa were not counted. The count is unduplicated with the following exceptions: a client was counted twice if their primary substance of abuse changed between admissions or if the client's age changed between admissions.

### STATE OF IOWA ADMISSIONS TOTALS FOR SUBSTANCE ABUSE TREATMENT...

	Alcohol	Marijuana	Other
1998	12,994	5,159	5,175
1999	14,102	5,433	5,129
2000	14,192	6,149	5,690

## Iowa's 22 Substance Abuse Treatment Areas



## Local Sites for Substance Abuse Treatment Areas

Adel	Council Bluffs	Hull	Monticello	Sibley
Albia	Cresco	Humboldt	Mt. Ayr	Sidney
Algona	Creston	Ida Grove	Mt. Pleasant	Sigorney
Ames	Davenport	Independence	Muscatine	Sioux City
Anamosa	Decorah	Indianola	New Hampton	Spencer
Atlantic	Denison	Iowa City	Newton	Spirit Lake
Audubon	Des Moines	Iowa Falls	Oelwein	Storm Lake
Bedford	DeWitt	Jefferson	Orient	Tama
Belle Plaine	Dubuque	Keokuk	Osceola	Tipton
Bettendorf	Eagle Grove	Keosauqua	Oskaloosa	Toledo
Bloomfield	Elkader	Knoxville	Ottumwa	Vinton
Burlington	Emmetsburg	Lamoni	Pella	Wapello
Carroll	Estherville	LeMars	Perry	Washington
Cedar Rapids	Fairfield	Lenox	Pocahontas	Waterloo
Centerville	Forest City	Leon	Postville	Waukon
Chariton	Fort Dodge	Logan	Red Oak	Waverly
Charles City	Ft. Madison	Manning	Rock Rapids	Webster City
Cherokee	Glenwood	Mapleton	Rockwell City	West Union
Clarinda	Greenfield	Maquoketa	Sac City	Winterset
Clinton	Grinnell	Marengo	Sergeant Bluff	
Corning	Guthrie Center	Marshalltown	Sheldon	
Corydon	Harlan	Mason City	Shenandoah	

## Substance Abuse Admissions by County 1998

County	Alcohol		Marijuana		Other	
	Adult	Adolescent	Adult	Adolescent	Adult	Adolescent
Adair	25	9	11	0	13	1
Adams	23	0	6	0	2	0
Allamakee	65	3	8	2	5	1
Appanoose	82	2	35	9	22	1
Audubon	17	0	2	0	5	0
Benton	99	5	17	10	6	0
Black Hawk	786	33	259	98	360	17
Boone	89	38	18	26	18	4
Bremer	91	7	14	32	13	2
Buchanan	78	3	22	7	8	1
Buena Vista	66	15	13	2	11	2
Butler	37	7	17	4	6	1
Calhoun	35	0	4	0	6	0
Carroll	86	8	14	7	18	1
Cass	73	7	18	6	19	2
Cedar	59	5	11	7	7	1
Cerro Gordo	265	15	107	45	112	11
Cherokee	42	4	8	3	19	1
Chickasaw	45	1	6	3	7	0
Clarke	44	1	11	3	34	1
Clay	56	12	11	7	16	2
Clayton	47	6	6	0	3	1
Clinton	283	14	67	40	59	0
Crawford	50	8	15	1	27	3
Dallas	104	15	24	17	46	7
Davis	22	1	2	2	3	0
Decatur	18	1	6	2	14	0
Delaware	64	16	16	5	2	3
Des Moines	91	9	31	19	72	4
Dickinson	76	6	13	10	5	1
Dubuque	490	41	154	71	65	4
Emmett	38	0	10	7	2	1
Fayette	190	10	23	2	15	0
Floyd	54	9	13	2	11	0
Franklin	23	0	3	5	3	2
Fremont	19	0	10	1	0	0
Greene	34	6	11	11	13	0
Grundy	18	4	2	1	3	1
Guthrie	51	5	21	4	24	0
Hamilton	60	4	7	3	10	0
Hancock	30	2	13	5	10	0
Hardin	49	2	9	3	7	0
Harrison	20	1	7	10	15	2
Henry	65	4	31	7	11	0
Howard	54	8	2	1	1	0
Humboldt	23	2	6	3	2	0
Ida	29	1	2	0	5	1
Iowa	54	17	16	7	14	0
Jackson	63	4	11	10	18	0
Jasper	115	11	52	30	60	15
Jefferson	75	9	11	13	8	4

**Substance Abuse Admissions by County (continued)  
1998**

County	Alcohol		Marijuana		Other	
	Adult	Adolescent	Adult	Adolescent	Adult	Adolescent
Johnson	671	24	125	70	109	5
Jones	65	5	23	7	13	0
Keokuk	43	6	2	3	7	0
Kossuth	50	4	18	3	9	1
Lee	146	10	63	17	25	1
Linn	970	52	265	116	281	15
Louisa	29	1	5	2	9	0
Lucas	23	4	13	4	29	2
Lyon	36	13	4	4	4	0
Madison	44	7	22	9	24	0
Mahaska	83	6	29	11	35	2
Marion	74	7	19	9	49	3
Marshall	132	5	37	14	78	3
Mills	29	5	10	1	10	0
Mitchell	17	1	4	4	0	0
Monona	40	3	8	1	22	1
Monroe	42	0	11	1	7	0
Montgomery	43	3	20	11	8	1
Muscatine	221	13	44	29	63	5
O'Brien	32	5	6	7	10	2
Osceola	14	9	1	7	3	1
Page	68	7	27	1	14	0
Palo Alto	49	3	5	0	8	0
Plymouth	77	3	16	4	13	1
Pocahontas	36	2	4	2	4	0
Polk	1,392	75	585	315	1,393	49
Pottawattamie	228	16	104	32	162	9
Poweshiek	56	4	20	3	21	2
Ringgold	8	1	0	0	1	0
Sac	26	2	7	1	7	2
Scott	1,089	52	236	182	530	11
Shelby	29	3	14	2	19	0
Sioux	56	12	35	2	14	1
Story	235	36	50	70	62	10
Tama	101	11	15	7	11	1
Taylor	16	4	5	1	1	1
Union	64	10	13	8	25	1
Van Buren	33	0	3	3	3	1
Wapello	235	17	102	35	85	4
Warren	59	12	22	26	54	8
Washington	45	3	15	8	6	0
Wayne	16	1	3	0	12	0
Webster	242	26	66	8	87	3
Winnebago	40	1	9	2	13	3
Winneshiek	88	11	13	4	4	2
Woodbury	436	24	146	87	301	13
Worth	38	2	2	1	9	0
Wright	41	3	8	2	22	2
<b>STATE</b>	<b>12,079</b>	<b>915</b>	<b>3,460</b>	<b>1,699</b>	<b>4,911</b>	<b>264</b>

Source: Iowa Department of Public Health

## Substance Abuse Admissions by County 1999

County	Alcohol		Marijuana		Other	
	Adult	Adolescent	Adult	Adolescent	Adult	Adolescent
Adair	27	4	7	1	20	2
Adams	15	0	0	0	1	0
Allamakee	94	13	4	1	3	0
Appanoose	96	14	35	9	18	2
Audubon	30	2	6	0	4	0
Benton	77	8	27	3	12	2
Black Hawk	798	54	190	124	365	8
Boone	97	55	25	39	30	2
Bremer	94	15	23	23	19	1
Buchanan	95	8	13	8	21	1
Buena Vista	101	12	22	12	10	2
Butler	29	8	22	9	16	0
Calhoun	33	0	7	2	5	0
Carroll	66	3	15	0	20	2
Cass	70	11	18	3	22	1
Cedar	52	9	9	7	1	1
Cerro Gordo	344	28	115	76	129	8
Cherokee	46	2	16	6	21	1
Chickasaw	36	5	14	7	11	0
Clarke	37	3	15	5	15	1
Clay	77	8	15	9	18	1
Clayton	55	6	7	4	6	1
Clinton	311	18	45	37	72	3
Crawford	66	5	9	3	21	1
Dallas	106	9	27	26	51	1
Davis	27	3	7	0	0	0
Decatur	19	2	11	3	22	1
Delaware	75	18	14	12	7	0
Des Moines	82	13	53	29	64	1
Dickinson	63	11	5	16	13	0
Dubuque	661	43	167	84	89	7
Emmett	31	4	11	5	0	2
Fayette	187	13	25	5	27	1
Floyd	59	13	10	6	17	0
Franklin	27	6	8	6	8	1
Fremont	6	0	6	1	13	0
Greene	28	6	14	10	16	0
Grundy	22	8	5	4	3	0
Guthrie	48	6	7	6	25	7
Hamilton	64	6	11	5	8	0
Hancock	35	4	2	6	1	3
Hardin	78	9	14	7	9	0
Harrison	36	2	13	6	12	1
Henry	42	9	15	11	9	0
Howard	55	18	6	5	0	0
Humboldt	32	2	0	1	2	0
Ida	30	0	0	1	7	0
Iowa	76	8	14	12	15	1
Jackson	84	11	13	9	4	0
Jasper	103	21	58	32	76	2
Jefferson	82	8	17	17	29	0

**Substance Abuse Admissions by County (continued)**  
**1999**

County	Alcohol		Marijuana		Other	
	Adult	Adolescent	Adult	Adolescent	Adult	Adolescent
Johnson	697	35	144	51	98	5
Jones	87	16	14	15	11	6
Keokuk	43	7	14	5	5	0
Kossuth	35	6	24	5	7	1
Lee	128	12	57	13	39	1
Linn	1,060	63	324	153	246	13
Louisa	29	0	5	3	8	1
Lucas	33	4	9	5	19	0
Lyon	45	13	4	2	0	0
Madison	40	4	11	13	21	3
Mahaska	90	4	34	10	22	5
Marion	85	4	27	14	50	2
Marshall	126	8	44	19	53	4
Mills	22	4	7	4	14	1
Mitchell	21	1	2	1	1	0
Monona	37	2	9	1	7	0
Monroe	33	2	4	3	10	0
Montgomery	57	2	4	4	10	0
Muscatine	249	13	36	45	49	1
O'Brien	28	10	5	7	8	1
Osceola	17	8	0	5	3	1
Page	68	1	19	6	41	0
Palo Alto	42	2	6	1	5	3
Plymouth	101	10	10	3	10	0
Pocahontas	26	1	2	1	2	0
Polk	1,221	98	553	353	1,393	43
Pottawattamie	271	22	86	32	166	2
Poweshiek	67	4	17	3	26	0
Ringgold	18	1	1	2	5	1
Sac	33	1	10	1	5	0
Scott	1,282	72	240	166	451	8
Shelby	33	4	11	0	13	0
Sioux	79	17	23	6	18	2
Story	230	28	69	72	41	8
Tama	118	10	10	6	12	0
Taylor	22	1	5	0	12	1
Union	69	14	16	8	22	2
Van Buren	23	2	5	1	0	0
Wapello	319	20	144	37	127	6
Warren	56	7	30	21	49	5
Washington	56	9	21	14	16	2
Wayne	22	2	6	3	9	0
Webster	239	21	61	9	96	4
Winnebago	34	3	7	3	4	0
Winneshiek	100	10	10	5	3	0
Woodbury	481	24	167	69	303	8
Worth	31	4	6	2	11	1
Wright	39	6	10	3	12	0
<b>STATE</b>	<b>12,946</b>	<b>1,156</b>	<b>3,515</b>	<b>1,918</b>	<b>4,920</b>	<b>209</b>

Source: Iowa Department of Public Health

## Substance Abuse Admissions by County 2000

County	Alcohol		Marijuana		Other	
	Adult	Adolescent	Adult	Adolescent	Adult	Adolescent
Adair	39	6	6	3	18	0
Adams	13	5	5	2	13	0
Allamakee	67	16	6	7	2	0
Appanoose	103	12	34	12	24	5
Audubon	19	3	6	1	3	0
Benton	87	8	33	10	11	1
Black Hawk	778	58	250	156	380	9
Boone	65	60	18	34	44	10
Bremer	99	24	30	46	21	3
Buchanan	104	24	28	19	49	7
Buena Vista	85	14	18	7	10	1
Butler	52	16	13	13	13	1
Calhoun	59	3	9	2	11	0
Carroll	70	23	18	12	18	1
Cass	73	9	18	13	19	3
Cedar	56	9	9	16	9	3
Cerro Gordo	291	28	136	79	148	18
Cherokee	45	4	10	5	11	1
Chickasaw	33	9	16	17	10	0
Clarke	40	4	16	7	26	3
Clay	53	13	21	5	23	1
Clayton	56	11	9	3	4	1
Clinton	347	38	63	62	48	5
Crawford	69	6	16	4	19	2
Dallas	108	17	36	26	38	4
Davis	10	7	4	3	16	2
Decatur	16	4	4	3	23	1
Delaware	93	39	27	7	10	3
Des Moines	107	7	46	37	37	3
Dickinson	68	15	5	11	19	0
Dubuque	667	102	161	139	133	11
Emmett	28	6	9	1	4	1
Fayette	223	30	32	18	30	2
Floyd	61	23	17	9	18	1
Franklin	23	7	7	11	8	0
Fremont	11	0	6	0	8	1
Greene	34	5	5	8	7	2
Grundy	35	5	3	6	3	0
Guthrie	42	7	10	5	25	9
Hamilton	44	2	16	2	16	1
Hancock	38	5	12	13	11	2
Hardin	85	12	11	10	27	0
Harrison	23	3	5	8	13	1
Henry	63	11	18	19	11	1
Howard	58	16	8	4	5	0
Humboldt	28	2	8	2	3	0
Ida	18	2	2	0	2	0
Iowa	83	12	16	5	7	0
Jackson	84	12	16	12	12	3
Jasper	101	13	37	23	98	6
Jefferson	76	12	23	9	27	3

**Substance Abuse Admissions by County (continued)  
2000**

County	Alcohol		Marijuana		Other	
	Adult	Adolescent	Adult	Adolescent	Adult	Adolescent
Johnson	632	56	124	79	124	11
Jones	62	12	15	17	5	2
Keokuk	42	11	5	7	10	1
Kossuth	40	6	16	4	4	0
Lee	128	27	46	24	35	13
Linn	1,132	102	336	215	301	12
Louisa	31	5	12	5	8	2
Lucas	25	6	5	5	25	3
Lyon	33	17	4	9	1	0
Madison	30	6	15	15	21	6
Mahaska	76	8	32	10	37	2
Marion	72	11	18	14	28	1
Marshall	109	12	45	30	99	5
Mills	24	3	7	6	10	0
Mitchell	24	8	4	4	6	0
Monona	33	4	6	2	12	3
Monroe	27	5	12	4	10	1
Montgomery	56	5	16	9	28	3
Muscatine	214	27	64	66	56	3
O'Brien	24	12	5	2	6	1
Osceola	9	7	2	1	0	2
Page	60	14	26	2	50	3
Palo Alto	36	3	4	1	3	0
Plymouth	83	9	11	11	26	1
Pocahontas	27	3	2	3	8	0
Polk	1,091	142	486	476	1,428	65
Pottawattamie	240	27	111	45	274	16
Poweshiek	35	4	7	9	27	1
Ringgold	8	4	2	2	6	0
Sac	28	2	9	3	12	0
Scott	1,271	107	252	213	407	5
Shelby	34	7	8	1	12	1
Sioux	88	29	27	10	16	2
Story	219	59	62	47	62	14
Tama	93	13	14	4	21	1
Taylor	26	10	7	4	7	0
Union	51	8	22	6	38	4
Van Buren	6	4	3	5	1	3
Wapello	247	29	108	47	107	5
Warren	54	9	11	28	52	9
Washington	43	5	11	10	17	0
Wayne	18	5	4	4	18	1
Webster	179	21	72	34	82	10
Winnebago	52	7	5	2	6	2
Winneshiek	111	21	10	8	4	1
Woodbury	542	49	182	109	248	17
Worth	27	3	10	3	7	1
Wright	38	9	12	9	13	2
<b>STATE</b>	<b>12,460</b>	<b>1,732</b>	<b>3,599</b>	<b>2,550</b>	<b>5,323</b>	<b>367</b>

Source: Iowa Department of Public Health

# Childhood Lead Poisoning

*Iowa Department of Public Health  
Bureau of Lead Poisoning Prevention*

Childhood lead poisoning has significant effects on the health of children and on community health. Lead has adverse effects on nearly all organ systems in the body. It is especially harmful to the developing brains and nervous systems of children under the age of 6 years. At very high blood lead levels, children can have severe brain damage or even die. At blood lead levels as low as 10 micrograms per deciliter ( $\mu\text{g}/\text{dL}$ ), children's intelligence, hearing, and growth are affected. In a community, the presence of lead-poisoned children can be associated with an increase in the number of children with developmental deficits and learning disorders. This places an unnecessary and expensive burden on the educational system. The presence of lead-poisoned children also requires substantial community public health resources for medical and environmental case management services.

Most cases of childhood lead poisoning are caused by lead-based paint, which is found in most homes built before 1960. Young children who live in pre-1960 homes 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.

Although lead poisoning can cause serious health problems — including death — most lead-poisoned children demonstrate no visible symptoms. This makes it much more important to have an effective program to prevent childhood lead poisoning.

Since 1992, the Iowa Department of Public Health (IDPH) has *recommended* that all children in Iowa under the age of six years be tested for lead poisoning. In addition, state and federal laws *require* that all children under the age of 6 and covered by Medicaid be tested for lead poisoning. In spite of this, the statewide testing rates among children covered by Medicaid and children who are not covered by Medicaid are virtually identical.

**Since 1992, the Iowa Department of Public Health has recommended that all children in Iowa under age 6 be tested for lead poisoning.**

In Iowa, blood lead testing is conducted by the Title V Child Health Program, by local health departments, and by many private physicians. *Iowa Administrative Code* 641-1.2(1) “e” and 641-3.5(1) “a” requires the results of all blood lead testing done on children and adults to be reported to IDPH. The IDPH childhood blood lead level surveillance system tracks all testing in the state. Thus, blood lead testing results collected as required by Medicaid, as well as those collected from voluntary testing of non-Medicaid children are reported to IDPH.

In the following tables, data are presented for children who were born in calendar year 1992, 1993, and 1994 and who received at least one blood lead test before their sixth birthday. Children followed for blood lead poisoning may be tested multiple times. The test that is presented in the following tables reflects the highest blood lead level for any particular child (excluding blood capillary levels  $\geq 20$   $\mu\text{g/dL}$ ).

For each county, the number of children receiving a blood lead test and the percent of these children who were identified with blood lead levels greater than or equal to 10 micrograms per deciliter ( $\mu\text{g/dL}$ ), 15  $\mu\text{g/dL}$ , 20  $\mu\text{g/dL}$ , and 25  $\mu\text{g/dL}$  are presented. A blood lead level of 10  $\mu\text{g/dL}$  has been identified by the Centers for Disease Control and Prevention as the threshold for lead poisoning in children. Additional data, such as the percent of children in each birth cohort who were tested for lead poisoning, may be found at the web site for the Iowa Department of Public Health Bureau of Lead Poisoning Prevention: <http://www.idph.state.ia.us/eh.htm>

#### **KEY ISSUES IN BLOOD LEAD POISONING...**

- *Lead has adverse effects on nearly all organ systems in the body.*
- *At blood lead levels as low as 10 micrograms per deciliter ( $\mu\text{g/dL}$ ), children’s intelligence, hearing, and growth are affected.*
- *Most cases of childhood lead poisoning are caused by lead-based paint.*

**Blood Lead Poisoning in Children - 1992***Children Born 1/1/92 - 12/31/92 and Tested Before Age Six Years*

COUNTY	Number of Children Tested	Number of Children with Elevated Levels	%>=10 µg/dL	%>=15 µg/dL	%>=20 µg/dL	%>=25 µg/dL
Adair	13	1	7.7	0.0	0.0	0.0
Adams	6	1	16.7	0.0	0.0	0.0
Allamakee	28	5	17.9	10.7	3.6	3.6
Appanoose	69	15	21.7	10.1	0.0	0.0
Audubon	27	3	11.1	3.7	0.0	0.0
Benton	80	5	6.3	2.5	1.3	1.3
Black Hawk	1,052	210	20.0	8.4	3.7	2.7
Boone	108	19	17.6	6.5	2.8	2.8
Bremer	91	9	9.9	5.5	1.1	1.1
Buchanan	56	13	23.2	3.6	0.0	0.0
Buena Vista	46	3	6.5	2.2	0.0	0.0
Butler	41	8	19.5	9.8	2.4	2.4
Calhoun	29	3	10.3	3.4	0.0	0.0
Carroll	79	10	12.7	2.5	0.0	0.0
Cass	73	8	11.0	4.1	1.4	1.4
Cedar	82	20	24.4	6.1	2.4	1.2
Cerro Gordo	133	7	5.3	0.8	0.0	0.0
Cherokee	34	8	23.5	5.9	2.9	2.9
Chickasaw	13	2	15.4	0.0	0.0	0.0
Clarke	20	3	15.0	0.0	0.0	0.0
Clay	23	2	8.7	0.0	0.0	0.0
Clayton	39	5	12.8	2.6	2.6	2.6
Clinton	516	67	13.0	4.7	1.7	0.8
Crawford	31	4	12.9	3.2	0.0	0.0
Dallas	116	11	9.5	3.4	2.6	0.9
Davis	39	5	12.8	2.6	0.0	0.0
Decatur	19	3	15.8	10.5	0.0	0.0
Delaware	26	3	11.5	3.8	0.0	0.0
Des Moines	411	77	18.7	6.1	1.9	0.7
Dickinson	7	1	14.3	0.0	0.0	0.0
Dubuque	968	111	11.5	3.7	1.1	0.7
Emmet	15	4	26.7	20.0	0.0	0.0
Fayette	44	9	20.5	2.3	2.3	0.0
Floyd	36	3	8.3	0.0	0.0	0.0
Franklin	41	10	24.4	12.2	4.9	0.0
Fremont	2	0	0.0	0.0	0.0	0.0
Greene	56	5	8.9	1.8	1.8	1.8
Grundy	45	8	17.8	8.9	0.0	0.0
Guthrie	45	7	15.6	2.2	0.0	0.0
Hamilton	45	1	2.2	0.0	0.0	0.0
Hancock	30	5	16.7	3.3	0.0	0.0
Hardin	130	27	20.8	8.5	1.5	0.8
Harrison	29	2	6.9	3.4	0.0	0.0
Henry	130	18	13.8	3.8	2.3	1.5
Howard	38	7	18.4	2.6	0.0	0.0
Humboldt	29	3	10.3	3.4	0.0	0.0
Ida	23	5	21.7	8.7	0.0	0.0
Iowa	73	10	13.7	4.1	1.4	1.4
Jackson	189	16	8.5	4.2	1.1	0.5
Jasper	81	16	19.8	1.2	0.0	0.0
Jefferson	37	4	10.8	5.4	0.0	0.0

**Blood Lead Poisoning in Children - 1992 (continued)***Children Born 1/1/92 - 12/31/92 and Tested Before Age Six Years*

COUNTY	Number of Children Tested	Number of Children with Elevated Levels	%>=10 µg/dL	%>=15 µg/dL	%>=20 µg/dL	%>=25 µg/dL
Johnson	138	9	6.5	1.4	1.4	1.4
Jones	79	14	17.7	3.8	2.5	1.3
Keokuk	54	12	22.2	9.3	5.6	5.6
Kossuth	41	9	22.0	7.3	0.0	0.0
Lee	341	52	15.2	3.8	1.8	0.9
Linn	1,435	161	11.2	4.8	1.6	1.1
Louisa	43	5	11.6	4.7	2.3	2.3
Lucas	61	25	41.0	24.6	8.2	8.2
Lyon	27	2	7.4	3.7	0.0	0.0
Madison	32	3	9.4	6.3	0.0	0.0
Mahaska	107	22	20.6	9.3	0.9	0.9
Marion	60	6	10.0	3.3	3.3	3.3
Marshall	290	81	27.9	10.7	2.1	1.0
Mills	4	0	0.0	0.0	0.0	0.0
Mitchell	22	3	13.6	0.0	0.0	0.0
Monona	29	6	20.7	6.9	3.4	3.4
Monroe	39	7	17.9	5.1	0.0	0.0
Montgomery	31	3	9.7	0.0	0.0	0.0
Muscatine	117	19	16.2	5.1	1.7	1.7
O'Brien	36	6	16.7	2.8	0.0	0.0
Osceola	5	1	20.0	20.0	0.0	0.0
Page	10	2	20.0	0.0	0.0	0.0
Palo Alto	10	1	10.0	10.0	0.0	0.0
Plymouth	76	14	18.4	6.6	0.0	0.0
Pocahontas	10	1	10.0	10.0	0.0	0.0
Polk	621	34	5.5	1.8	0.6	0.5
Pottawattamie	63	8	12.7	6.3	0.0	0.0
Poweshiek	51	12	23.5	13.7	5.9	2.0
Ringgold	16	3	18.8	6.3	6.3	0.0
Sac	29	5	17.2	3.4	3.4	0.0
Scott	1,227	301	24.5	11.6	5.0	3.4
Shelby	14	2	14.3	7.1	0.0	0.0
Sioux	86	15	17.4	1.2	0.0	0.0
Story	340	13	3.8	0.6	0.0	0.0
Tama	101	31	30.7	7.9	0.0	0.0
Taylor	21	6	28.6	4.8	0.0	0.0
Union	29	5	17.2	0.0	0.0	0.0
Van Buren	25	7	28.0	12.0	4.0	4.0
Wapello	343	59	17.2	5.5	1.7	0.9
Warren	61	0	0.0	0.0	0.0	0.0
Washington	117	22	18.8	10.3	4.3	0.9
Wayne	32	9	28.1	21.9	6.3	3.1
Webster	89	9	10.1	6.7	2.2	2.2
Winnebago	22	1	4.5	0.0	0.0	0.0
Winneshiek	49	10	20.4	4.1	0.0	0.0
Woodbury	444	85	19.1	5.4	1.4	1.1
Worth	16	2	12.5	6.3	0.0	0.0
Wright	39	5	12.8	2.6	0.0	0.0
<b>STATE</b>	<b>12,325</b>	<b>1,910</b>	<b>15.5</b>	<b>5.9</b>	<b>2.1</b>	<b>1.3</b>

Source: Iowa Department of Public Health,  
Bureau of Lead Poisoning Prevention

**Blood Lead Poisoning in Children - 1993***Children Born 1/1/93 - 12/31/93 and Tested Before Age Six Years*

<b>COUNTY</b>	<b>Number of Children Tested</b>	<b>Number of Children with Elevated Levels</b>	<b>%&gt;=10 µg/dL</b>	<b>%&gt;=15 µg/dL</b>	<b>%&gt;=20 µg/dL</b>	<b>%&gt;=25 µg/dL</b>
Adair	33	2	6.1	0.0	0.0	0.0
Adams	16	4	25.0	0.0	0.0	0.0
Allamakee	45	3	6.7	2.2	0.0	0.0
Appanoose	73	15	20.6	2.7	0.0	0.0
Audubon	25	3	12.0	4.0	4.0	4.0
Benton	80	3	3.8	0.0	0.0	0.0
Black Hawk	1,005	190	18.9	6.5	2.2	1.2
Boone	137	21	15.3	5.1	2.2	0.7
Bremer	135	14	10.4	5.2	0.0	0.0
Buchanan	66	7	10.6	4.6	0.0	0.0
Buena Vista	47	8	17.0	4.3	0.0	0.0
Butler	78	8	10.3	2.6	0.0	0.0
Calhoun	23	6	26.1	4.4	0.0	0.0
Carroll	91	7	7.7	4.4	1.1	0.0
Cass	101	10	9.9	1.0	0.0	0.0
Cedar	75	17	22.7	6.7	0.0	0.0
Cerro Gordo	169	13	7.7	1.8	0.6	0.6
Cherokee	63	15	23.8	9.5	0.0	0.0
Chickasaw	21	2	9.5	4.8	0.0	0.0
Clarke	28	4	14.3	7.1	0.0	0.0
Clay	32	4	12.5	3.1	0.0	0.0
Clayton	53	4	7.6	5.7	1.9	0.0
Clinton	511	57	11.2	5.1	3.3	1.8
Crawford	50	2	4.0	2.0	0.0	0.0
Dallas	139	22	15.8	4.3	2.2	1.4
Davis	44	6	13.6	4.6	0.0	0.0
Decatur	25	3	12.0	12.0	4.0	4.0
Delaware	38	6	15.8	7.9	2.6	0.0
Des Moines	408	81	19.9	6.4	1.7	0.7
Dickinson	10	1	10.0	10.0	0.0	0.0
Dubuque	1,062	87	8.2	3.4	1.0	0.5
Emmet	13	2	15.4	7.7	0.0	0.0
Fayette	37	6	16.2	2.7	2.7	0.0
Floyd	57	6	10.5	5.3	1.8	1.8
Franklin	49	10	20.4	4.1	2.0	2.0
Fremont	9	1	11.1	0.0	0.0	0.0
Greene	59	9	15.3	8.5	3.4	0.0
Grundy	89	13	14.6	1.1	1.1	1.1
Guthrie	38	7	18.4	5.3	0.0	0.0
Hamilton	70	8	11.4	1.4	0.0	0.0
Hancock	28	1	3.6	0.0	0.0	0.0
Hardin	136	20	14.7	7.4	0.0	0.0
Harrison	44	3	6.8	2.3	0.0	0.0
Henry	82	10	12.2	3.7	2.4	1.2
Howard	57	12	21.1	8.8	1.8	0.0
Humboldt	51	3	5.9	2.0	0.0	0.0
Ida	32	6	18.8	3.1	0.0	0.0
Iowa	86	13	15.1	4.7	0.0	0.0
Jackson	204	12	5.9	1.0	0.5	0.5
Jasper	93	8	8.6	1.1	0.0	0.0
Jefferson	43	10	23.3	11.6	4.7	0.0

**Blood Lead Poisoning in Children - 1993 (continued)***Children Born 1/1/93 - 12/31/93 and Tested Before Age Six Years*

COUNTY	Number of Children Tested	Number of Children with Elevated Levels	%>=10 µg/dL	%>=15 µg/dL	%>=20 µg/dL	%>=25 µg/dL
Johnson	212	13	6.1	2.4	0.9	0.9
Jones	93	16	17.2	8.6	1.1	1.1
Keokuk	83	17	20.5	9.6	2.4	2.4
Kossuth	81	9	11.1	1.2	1.2	0.0
Lee	288	45	15.6	6.6	0.7	0.7
Linn	1,344	145	10.8	4.5	1.3	0.9
Louisa	49	6	12.2	2.0	2.0	0.0
Lucas	89	26	29.2	12.4	4.5	3.4
Lyon	38	6	15.8	7.9	0.0	0.0
Madison	29	2	6.9	0.0	0.0	0.0
Mahaska	142	24	16.9	2.8	0.7	0.7
Marion	64	6	9.4	4.7	0.0	0.0
Marshall	341	79	23.2	8.8	1.2	0.9
Mills	15	1	6.7	0.0	0.0	0.0
Mitchell	23	5	21.7	4.4	0.0	0.0
Monona	33	1	3.0	3.0	0.0	0.0
Monroe	60	10	16.7	5.0	0.0	0.0
Montgomery	28	4	14.3	3.6	0.0	0.0
Muscatine	129	16	12.4	3.1	0.8	0.0
O'Brien	45	3	6.7	2.2	0.0	0.0
Osceola	8	1	12.5	0.0	0.0	0.0
Page	15	2	13.3	6.7	0.0	0.0
Palo Alto	14	1	7.1	0.0	0.0	0.0
Plymouth	69	7	10.1	0.0	0.0	0.0
Pocahontas	20	2	10.0	0.0	0.0	0.0
Polk	868	61	7.0	2.0	0.8	0.6
Pottawattamie	58	6	10.3	3.5	1.7	0.0
Poweshiek	50	9	18.0	6.0	2.0	2.0
Ringgold	13	2	15.4	15.4	0.0	0.0
Sac	38	6	15.8	5.3	0.0	0.0
Scott	1,537	270	17.6	6.8	1.7	1.2
Shelby	33	2	6.1	0.0	0.0	0.0
Sioux	118	14	11.9	2.5	1.7	1.7
Story	389	21	5.4	1.5	0.0	0.0
Tama	87	24	27.6	8.1	0.0	0.0
Taylor	23	1	4.4	0.0	0.0	0.0
Union	38	10	26.3	2.6	2.6	2.6
Van Buren	34	5	14.7	2.9	0.0	0.0
Wapello	415	70	16.9	5.1	1.2	1.0
Warren	72	4	5.6	1.4	0.0	0.0
Washington	141	24	17.0	5.0	0.7	0.7
Wayne	45	10	22.2	8.9	2.2	0.0
Webster	123	14	11.4	1.6	0.0	0.0
Winnebago	40	3	7.5	0.0	0.0	0.0
Winneshiek	83	13	15.7	2.4	1.2	1.2
Woodbury	507	91	18.0	4.9	1.6	1.2
Worth	25	4	16.0	8.0	4.0	4.0
Wright	42	5	11.9	0.0	0.0	0.0
<b>STATE</b>	<b>14,051</b>	<b>1,901</b>	<b>13.5</b>	<b>4.6</b>	<b>1.2</b>	<b>0.8</b>

Source: Iowa Department of Public Health,  
Bureau of Lead Poisoning Prevention

**Blood Lead Poisoning in Children - 1994***Children Born 1/1/94 - 12/31/94 and Tested Before Age Six Years*

COUNTY	Number of Children Tested	Number of Children with Elevated Levels	%>=10 µg/dL	%>=15 µg/dL	%>=20 µg/dL	%>=25 µg/dL
Adair	67	8	11.9	6.0	3.0	0.0
Adams	15	4	26.7	13.3	6.7	0.0
Allamakee	60	10	16.7	8.3	1.7	1.7
Appanoose	85	13	15.3	2.4	0.0	0.0
Audubon	41	6	14.6	2.4	0.0	0.0
Benton	57	4	7.0	3.5	3.5	3.5
Black Hawk	1,049	161	15.3	6.4	2.5	1.2
Boone	149	20	13.4	3.4	0.0	0.0
Bremer	144	23	16.0	3.5	0.0	0.0
Buchanan	82	7	8.5	3.7	0.0	0.0
Buena Vista	51	6	11.8	3.9	0.0	0.0
Butler	77	6	7.8	2.6	2.6	1.3
Calhoun	30	6	20.0	13.3	3.3	3.3
Carroll	74	11	14.9	5.4	4.1	2.7
Cass	75	14	18.7	8.0	1.3	0.0
Cedar	77	18	23.4	5.2	3.9	3.9
Cerro Gordo	250	19	7.6	0.8	0.0	0.0
Cherokee	55	9	16.4	3.6	0.0	0.0
Chickasaw	35	5	14.3	8.6	0.0	0.0
Clarke	23	2	8.7	0.0	0.0	0.0
Clay	62	8	12.9	3.2	0.0	0.0
Clayton	70	9	12.9	2.9	0.0	0.0
Clinton	501	61	12.2	5.4	1.6	0.8
Crawford	85	4	4.7	1.2	1.2	1.2
Dallas	153	18	11.8	3.3	1.3	0.7
Davis	55	7	12.7	5.5	3.6	1.8
Decatur	33	5	15.2	9.1	3.0	0.0
Delaware	57	4	7.0	3.5	1.8	0.0
Des Moines	352	53	15.1	3.7	0.9	0.0
Dickinson	12	1	8.3	8.3	0.0	0.0
Dubuque	934	78	8.4	4.0	1.8	1.0
Emmet	12	2	16.7	8.3	0.0	0.0
Fayette	65	11	16.9	12.3	3.1	1.5
Floyd	79	8	10.1	2.5	0.0	0.0
Franklin	63	9	14.3	1.6	1.6	1.6
Fremont	4	2	50.0	25.0	0.0	0.0
Greene	70	8	11.4	2.9	0.0	0.0
Grundy	80	7	8.8	2.5	1.3	0.0
Guthrie	36	5	13.9	8.3	2.8	0.0
Hamilton	73	4	5.5	1.4	0.0	0.0
Hancock	54	3	5.6	1.9	0.0	0.0
Hardin	120	26	21.7	8.3	0.8	0.8
Harrison	47	5	10.6	0.0	0.0	0.0
Henry	81	8	9.9	2.5	0.0	0.0
Howard	42	5	11.9	2.4	0.0	0.0
Humboldt	72	10	13.9	6.9	0.0	0.0
Ida	41	12	29.3	9.8	0.0	0.0
Iowa	73	10	13.7	4.1	1.4	1.4
Jackson	212	27	12.7	3.3	0.9	0.5
Jasper	158	16	10.1	3.8	1.3	1.3
Jefferson	54	3	5.6	1.9	0.0	0.0

**Blood Lead Poisoning in Children - 1994 (continued)***Children Born 1/1/94 - 12/31/94 and Tested Before Age Six Years*

COUNTY	Number of Children Tested	Number of Children with Elevated Levels	%>=10 µg/dL	%>=15 µg/dL	%>=20 µg/dL	%>=25 µg/dL
Johnson	226	7	3.1	1.8	0.9	0.4
Jones	94	16	17.0	4.3	0.0	0.0
Keokuk	65	13	20.0	6.2	3.1	3.1
Kossuth	98	7	7.1	1.0	0.0	0.0
Lee	254	38	15.0	4.7	1.6	0.8
Linn	1,052	90	8.6	2.9	1.2	0.7
Louisa	82	13	15.9	1.2	0.0	0.0
Lucas	102	31	30.4	13.7	5.9	1.0
Lyon	48	8	16.7	8.3	2.1	0.0
Madison	30	4	13.3	6.7	3.3	0.0
Mahaska	134	21	15.7	3.7	0.7	0.0
Marion	99	5	5.1	2.0	0.0	0.0
Marshall	351	79	22.5	6.8	1.7	1.4
Mills	11	2	18.2	18.2	18.2	0.0
Mitchell	38	4	10.5	0.0	0.0	0.0
Monona	50	8	16.0	0.0	0.0	0.0
Monroe	53	6	11.3	1.9	0.0	0.0
Montgomery	47	6	12.8	4.3	2.1	2.1
Muscatine	264	36	13.6	6.1	1.5	0.8
O'Brien	29	7	24.1	0.0	0.0	0.0
Osceola	5	0	0.0	0.0	0.0	0.0
Page	27	5	18.5	3.7	0.0	0.0
Palo Alto	18	2	11.1	5.6	0.0	0.0
Plymouth	88	6	6.8	2.3	2.3	1.1
Pocahontas	14	1	7.1	0.0	0.0	0.0
Polk	1,346	79	5.9	2.2	0.5	0.4
Pottawattamie	55	7	12.7	7.3	5.5	0.0
Poweshiek	68	10	14.7	1.5	0.0	0.0
Ringgold	23	3	13.0	8.7	4.3	0.0
Sac	26	6	23.1	11.5	3.8	3.8
Scott	1,525	234	15.3	6.3	1.8	1.0
Shelby	62	0	0.0	0.0	0.0	0.0
Sioux	105	11	10.5	4.8	2.9	1.0
Story	431	24	5.6	1.4	0.2	0.0
Tama	119	30	25.2	11.8	2.5	0.8
Taylor	27	4	14.8	3.7	0.0	0.0
Union	49	7	14.3	4.1	4.1	2.0
Van Buren	30	6	20.0	3.3	0.0	0.0
Wapello	365	64	17.5	4.9	1.6	1.1
Warren	94	3	3.2	0.0	0.0	0.0
Washington	146	15	10.3	3.4	1.4	0.7
Wayne	59	13	22.0	10.2	1.7	1.7
Webster	182	20	11.0	3.8	0.5	0.0
Winnebago	59	3	5.1	0.0	0.0	0.0
Winneshiek	107	10	9.3	2.8	0.0	0.0
Woodbury	468	85	18.2	6.8	1.9	1.5
Worth	46	3	6.5	4.3	2.2	2.2
Wright	70	8	11.4	2.9	0.0	0.0
<b>STATE</b>	<b>14,987</b>	<b>1,841</b>	<b>12.3</b>	<b>4.4</b>	<b>1.3</b>	<b>0.7</b>

Source: Iowa Department of Public Health,  
Bureau of Lead Poisoning Prevention

## Marriages 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	65,547	7.6

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>Counties with Average Population &lt;10,000</b>	Adair	127	5.2	Lucas	187	6.8
	Adams	96	7.3	Monroe	175	7.3
	Audubon	115	5.6	Osceola	156	7.5
	Clarke	169	6.8	Pocahontas	179	6.8
	Davis	205	8.1	Ringgold	107	6.7
	Decatur	179	7.2	Taylor	150	7.0
	Fremont	203	8.7	Van Buren	176	7.5
	Howard	207	7.2	Wayne	162	8.1
	Ida	155	6.5	Worth	132	5.7
	<b>Group Totals</b>					
Number:	2,880					
Crude:	7.0					

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	315	7.5	Henry	423	7.0
	Appanoose	362	8.9	Humboldt	193	6.2
	Buena Vista	429	7.3	Iowa	276	5.9
	Butler	267	5.7	Jefferson	385	7.6
	Calhoun	208	6.1	Jones	403	6.7
	Cass	308	7.0	Keokuk	236	6.9
	Cedar	325	6.0	Kossuth	369	6.9
	Cherokee	283	7.1	Louisa	227	6.3
	Chickasaw	1,787	44.4	Lyon	231	6.4
	Clay	340	6.5	Madison	400	9.6
	Clayton	405	7.2	Mills	246	5.7
	Crawford	338	6.8	Mitchell	195	5.9
	Delaware	353	6.4	Monona	168	5.5
	Dickinson	425	8.8	Montgomery	290	8.2
	Emmet	259	8.0	O'Brien	302	6.8
	Floyd	301	6.1	Page	327	6.3
	Franklin	201	6.2	Palo Alto	215	7.2
	Greene	215	7.1	Poweshiek	333	5.9
	Grundy	216	5.9	Sac	250	7.0
	Guthrie	249	7.2	Shelby	297	7.7
	Hamilton	328	6.8	Tama	412	7.7
	Hancock	228	6.3	Union	316	8.4
	Hardin	377	6.9	Winnebago	274	7.6
	Harrison	306	6.7	Wright	247	5.9
	<b>Group Totals</b>					
	Number:	15,840				
Crude:	7.6					

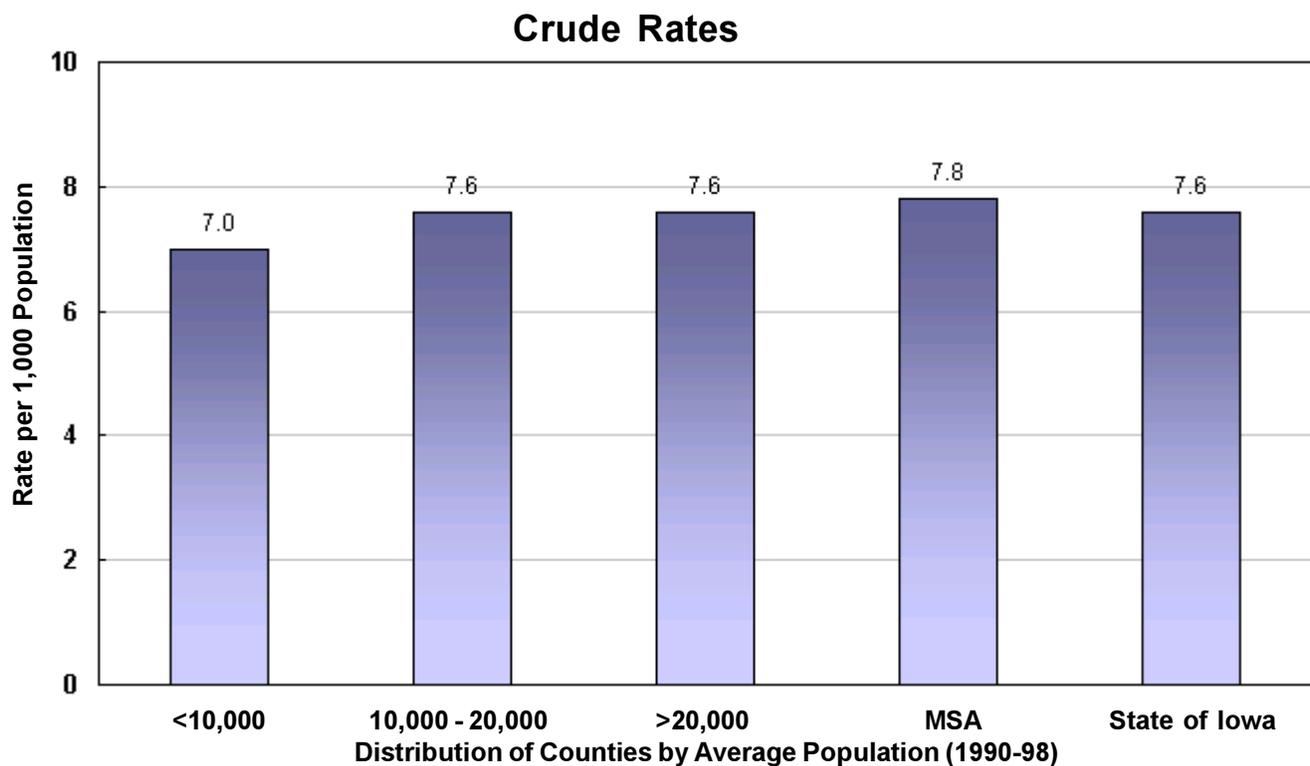
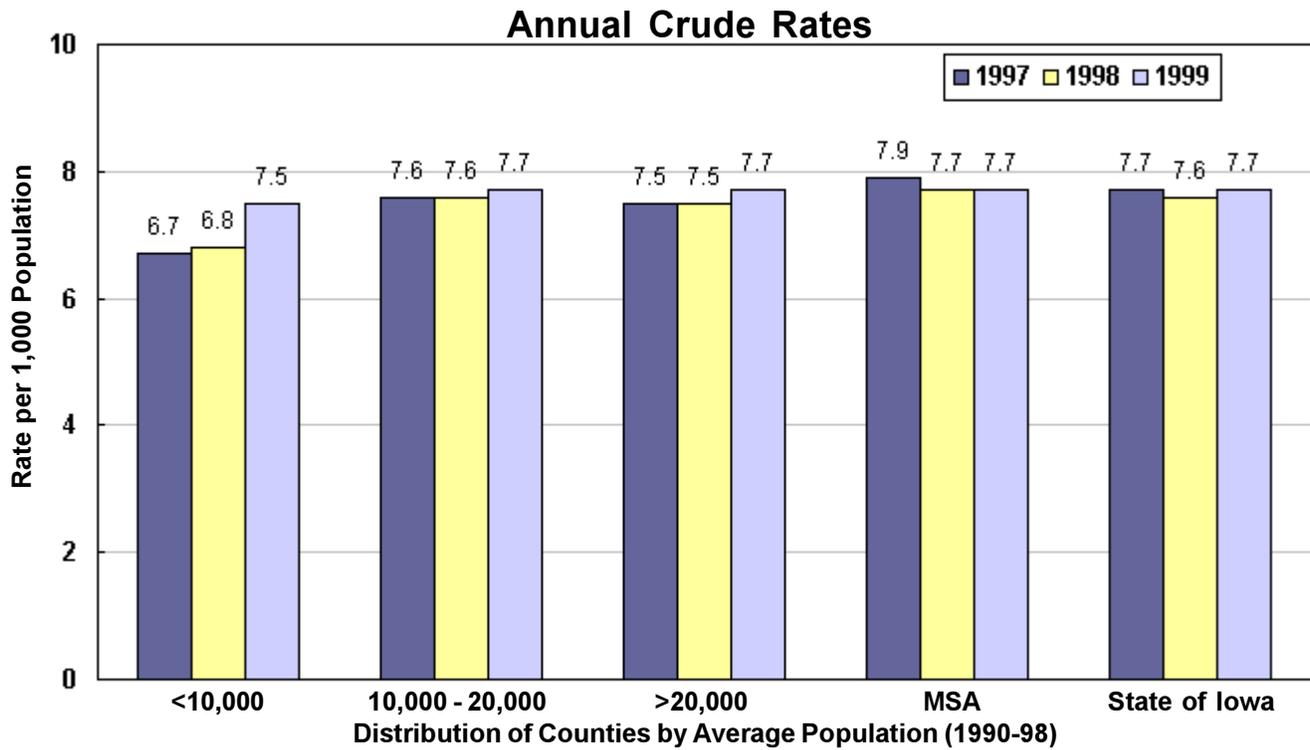
	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>Counties with Average Population &gt;20,000</b>	Benton	438	5.7	Mahaska	542	8.3
	Boone	528	6.7	Marion	740	7.9
	Bremer	527	7.5	Marshall	964	8.3
	Buchanan	484	7.6	Muscatine	1,163	9.4
	Carroll	457	7.1	Plymouth	425	5.7
	Cerro Gordo	1,003	7.3	Sioux	677	7.2
	Clinton	1,243	8.3	Story	1,526	6.8
	Des Moines	1,043	8.3	Wapello	929	8.7
	Fayette	405	6.2	Washington	429	6.8
	Jackson	446	7.4	Webster	929	8.0
	Jasper	750	6.9	Winneshiek	429	6.8
	Lee	1,014	8.8			
	<b>Group Totals</b>					
	Number:	17,091				
Crude:	7.6					

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>MSA Counties</b>	Black Hawk	2,839	7.8	Polk	8,760	8.1
	Dallas	764	6.9	Pottawattamie	2,273	8.8
	Dubuque	2,205	8.3	Scott	3,820	8.0
	Johnson	1,983	6.4	Warren	797	6.6
	Linn	4,101	7.5	Woodbury	2,194	7.2
	<b>Group Totals</b>					
Number:	29,736					
Crude:	7.8					

<sup>1</sup>Rates per 1,000 population

Source: Iowa Department of Public Health, Vital Statistics

## Marriages 1997-1999



## Dissolutions 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	29,329	3.4

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	78	3.2	Lucas	115	4.2
	Adams	34	2.6	Monroe	105	4.4
	Audubon	52	2.5	Osceola	41	2.0
	Clarke	63	2.5	Pocahontas	75	2.8
	Davis	89	3.5	Ringgold	59	3.7
	Decatur	75	3.0	Taylor	63	3.0
	Fremont	74	3.2	Van Buren	93	3.9
	Howard	68	2.3	Wayne	74	3.7
	Ida	71	3.0	Worth	66	2.8
	<b>Group Totals</b>					
Number:	1,295					
Crude:	3.1					

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	85	2.0	Henry	256	4.3
	Appanoose	116	2.9	Humboldt	99	3.2
	Buena Vista	202	3.5	Iowa	132	2.8
	Butler	104	2.2	Jefferson	228	4.5
	Calhoun	79	2.3	Jones	233	3.8
	Cass	170	3.9	Keokuk	42	1.2
	Cedar	144	2.7	Kossuth	111	2.1
	Cherokee	103	2.6	Louisa	127	3.6
	Chickasaw	129	3.2	Lyon	50	1.4
	Clay	182	3.5	Madison	166	4.0
	Clayton	137	2.4	Mills	158	3.6
	Crawford	195	4.0	Mitchell	94	2.8
	Delaware	133	2.4	Monona	89	2.9
	Dickinson	194	4.0	Montgomery	169	4.8
	Emmet	94	2.9	O'Brien	110	2.5
	Floyd	172	3.5	Page	194	3.7
	Franklin	95	2.9	Palo Alto	71	2.4
	Greene	105	3.5	Poweshiek	223	4.0
	Grundy	116	3.2	Sac	106	3.0
	Guthrie	126	3.6	Shelby	122	3.1
Hamilton	183	3.8	Tama	161	3.0	
Hancock	75	2.1	Union	151	4.0	
Hardin	176	3.2	Winnebago	118	3.3	
Harrison	175	3.8	Wright	115	2.7	

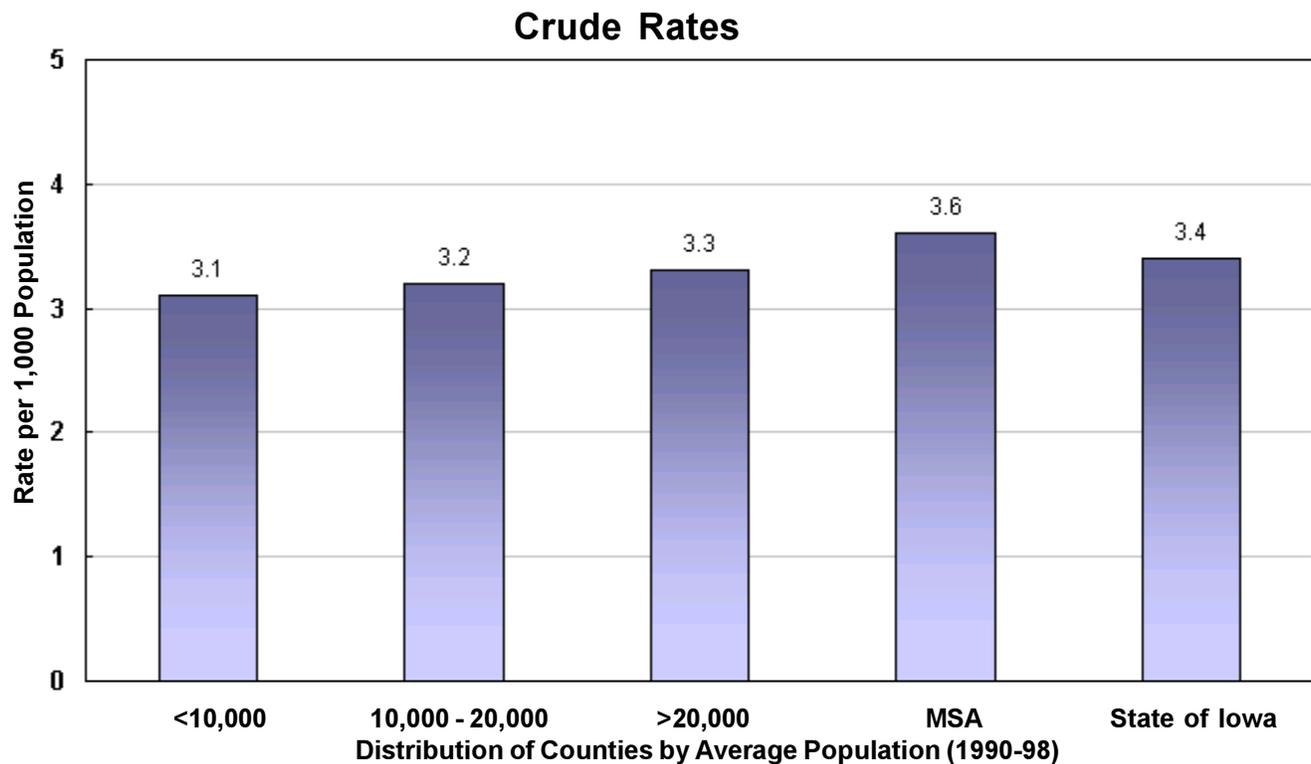
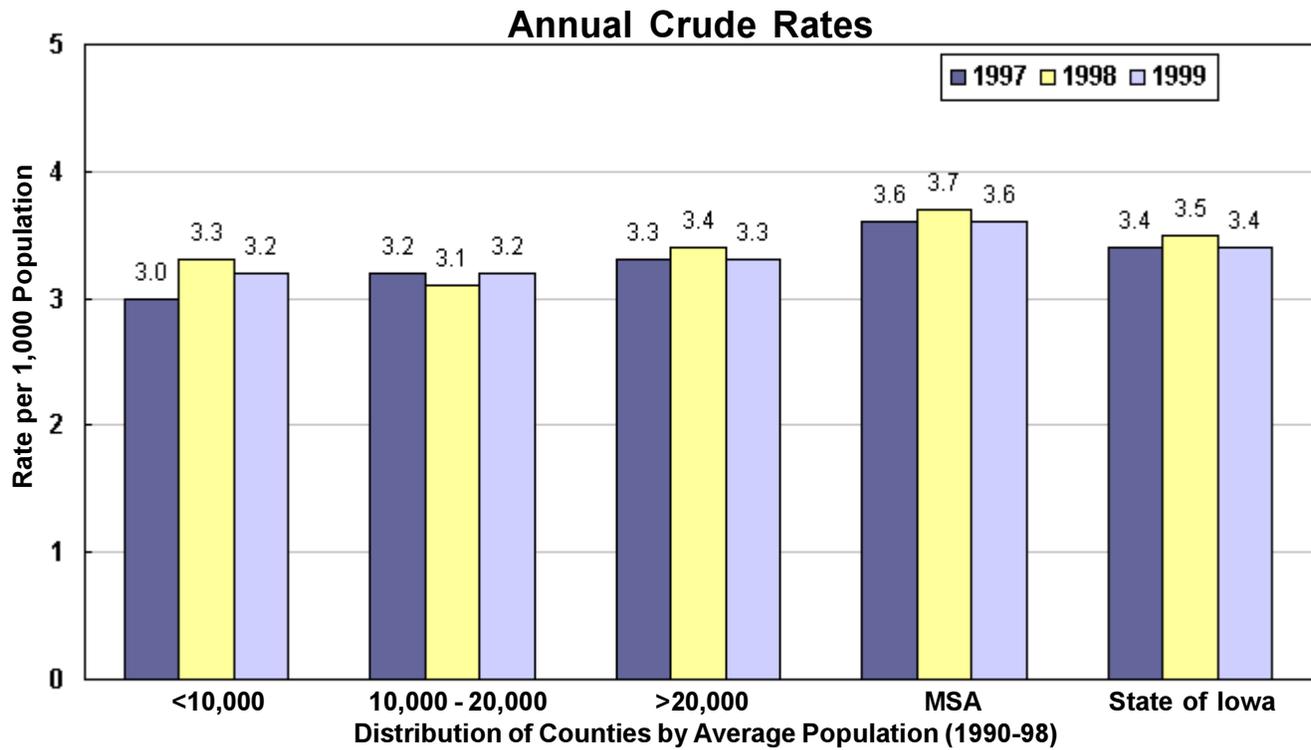
	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>
<b>Counties with Average Population &gt;20,000</b>	Benton	225	3.0	Mahaska	284	4.3
	Boone	332	4.2	Marion	336	3.6
	Bremer	192	2.7	Marshall	470	4.0
	Buchanan	168	2.6	Muscatine	623	5.1
	Carroll	201	3.1	Plymouth	215	2.9
	Cerro Gordo	443	3.2	Sioux	153	1.6
	Clinton	483	3.2	Story	541	2.4
	Des Moines	559	4.4	Wapello	476	4.5
	Fayette	201	3.1	Washington	189	3.0
	Jackson	167	2.8	Webster	531	4.6
	Jasper	202	1.9	Winneshiek	129	2.1
	Lee	378	3.3			

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>
<b>MSA Counties</b>	Black Hawk	842	2.3	Polk	4,412	4.1
	Dallas	230	2.1	Pottawattamie	1,229	4.8
	Dubuque	855	3.2	Scott	1,851	3.9
	Johnson	864	2.8	Warren	334	2.8
	Linn	1,943	3.5	Woodbury	1,361	4.5
<b>Group Totals</b>						
Number:	13,921					
Crude:	3.6					

<sup>1</sup>Rates per 1,000 population

Source: Iowa Department of Public Health, Vital Statistics

## Dissolutions 1997-1999



## Domestic Abuse Cases<sup>2</sup> 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	19,872	2.3

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>Counties with Average Population &lt;10,000</b>	Adair	8	0.3	Lucas	18	0.7
	Adams	12	0.9	Monroe	27	1.1
	Audubon	*	*	Osceola	25	1.2
	Clarke	22	0.9	Pocahontas	22	0.8
	Davis	4	0.2	Ringgold	2	0.1
	Decatur	*	*	Taylor	9	0.4
	Fremont	11	0.5	Van Buren	45	1.9
	Howard	51	1.8	Wayne	32	1.6
	Ida	*	*	Worth	38	1.6
	<b>Group Totals</b>					
Number:	327					
Crude:	0.8					

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	*	*	Henry	107	1.8
	Appanoose	126	3.1	Humboldt	31	1.0
	Buena Vista	188	3.2	Iowa	14	0.3
	Butler	*	*	Jefferson	92	1.8
	Calhoun	58	1.7	Jones	65	1.1
	Cass	43	1.0	Keokuk	25	0.7
	Cedar	51	0.9	Kossuth	44	0.8
	Cherokee	71	1.8	Louisa	71	2.0
	Chickasaw	9	0.2	Lyon	16	0.4
	Clay	95	1.8	Madison	11	0.3
	Clayton	8	0.1	Mills	*	*
	Crawford	110	2.2	Mitchell	31	0.9
	Delaware	6	0.1	Monona	147	4.9
	Dickinson	*	*	Montgomery	147	4.2
	Emmet	50	1.5	O'Brien	60	1.3
	Floyd	52	1.1	Page	120	2.3
	Franklin	14	0.4	Palo Alto	40	1.3
	Greene	18	0.6	Poweshiek	45	0.8
	Grundy	26	0.7	Sac	40	1.1
	Guthrie	5	0.1	Shelby	20	0.5
Hamilton	30	0.6	Tama	92	1.7	
Hancock	29	0.8	Union	13	0.3	
Hardin	73	1.3	Winnebago	22	0.6	
Harrison	75	1.6	Wright	43	1.0	
<b>Group Totals</b>						
Number:	2,436					
Crude:	1.2					

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>Counties with Average Population &gt;20,000</b>	Benton	70	0.9	Mahaska	21	0.3
	Boone	197	2.5	Marion	215	2.3
	Bremer	60	0.9	Marshall	517	4.4
	Buchanan	20	0.3	Muscatine	561	4.6
	Carroll	46	0.7	Plymouth	85	1.1
	Cerro Gordo	407	2.9	Sioux	27	0.3
	Clinton	37	0.2	Story	206	0.9
	Des Moines	537	4.3	Wapello	173	1.6
	Fayette	105	1.6	Washington	29	0.5
	Jackson	13	0.2	Webster	95	0.8
	Jasper	82	0.8	Winneshiek	46	0.7
	Lee	426	3.7			
	<b>Group Totals</b>					
Number:	3,975					
Crude:	1.8					

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>MSA Counties</b>	Black Hawk	1,200	3.3	Polk	3,798	3.5
	Dallas	96	0.9	Pottawattamie	1,038	4.0
	Dubuque	1,117	4.2	Scott	2,224	4.7
	Johnson	665	2.2	Warren	175	1.5
	Linn	874	1.6	Woodbury	1947	6.4
<b>Group Totals</b>						
Number:	13,134					
Crude:	3.4					

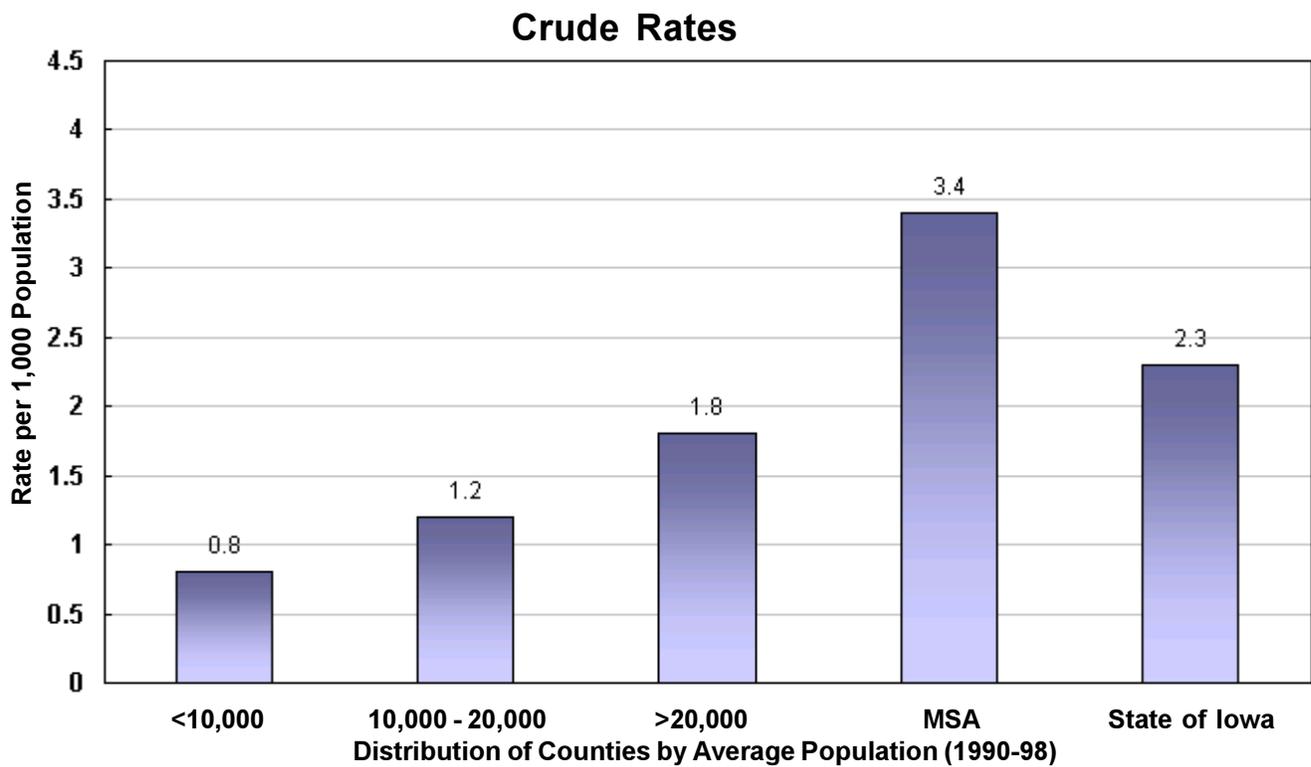
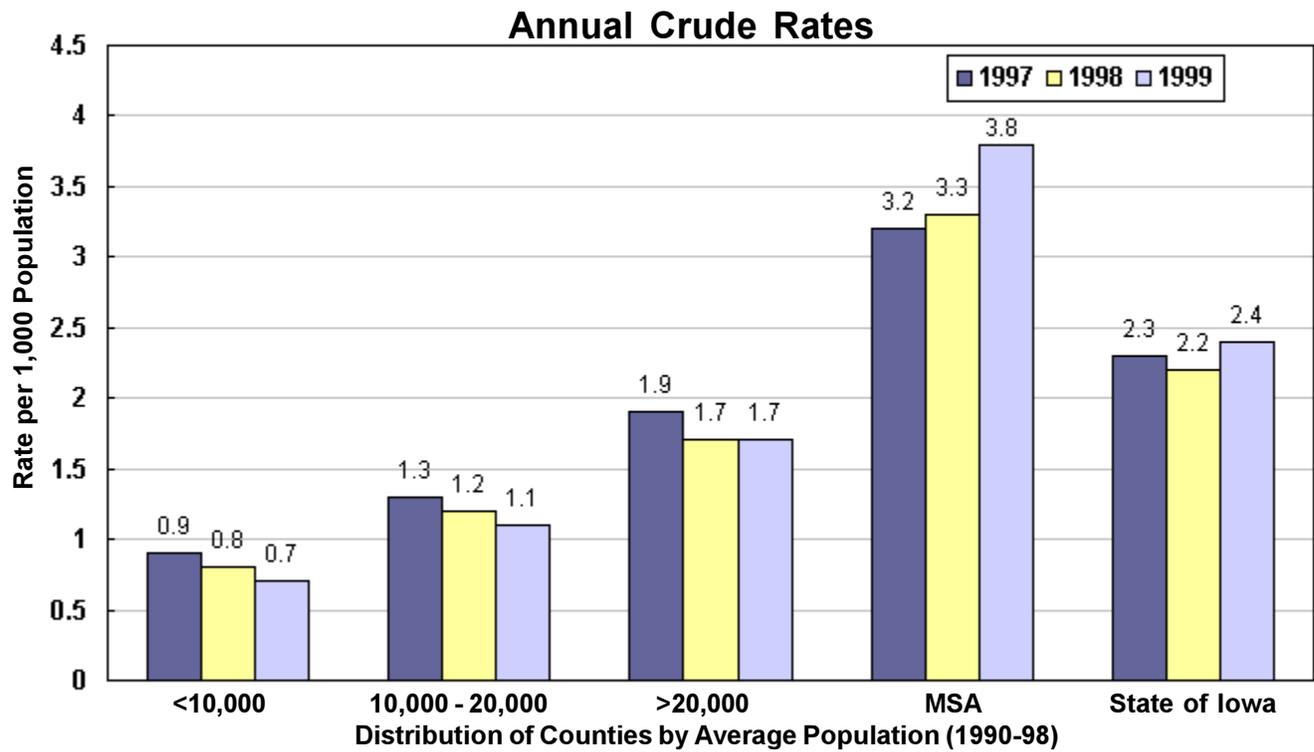
<sup>1</sup>Rates per 1,000 population

\*Number of events is less than 3

<sup>2</sup>Crime data may be incomplete due to selective reporting by counties and jurisdictions.

Source: Department of Public Safety, Uniform Crime Report

## Domestic Abuse Cases 1997-1999



## Driving Under the Influence Arrests<sup>2</sup> 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	39,578	4.6

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>Counties with Average Population &lt;10,000</b>	Adair	93	3.8	Lucas	72	2.6
	Adams	42	3.2	Monroe	74	3.1
	Audubon	22	1.1	Osceola	129	6.2
	Clarke	174	7.0	Pocahontas	91	3.4
	Davis	97	3.8	Ringgold	41	2.5
	Decatur	113	4.6	Taylor	21	1.0
	Fremont	26	1.1	Van Buren	93	3.9
	Howard	181	6.3	Wayne	50	2.5
	Ida	15	0.6	Worth	166	7.2
	<b>Group Totals</b>					
Number:	1,500					
Crude:	3.6					

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	48	1.1	Henry	264	4.4
	Appanoose	167	4.1	Humboldt	105	3.4
	Buena Vista	484	8.3	Iowa	168	3.6
	Butler	27	0.6	Jefferson	234	4.6
	Calhoun	198	5.8	Jones	180	3.0
	Cass	298	6.8	Keokuk	72	2.1
	Cedar	260	4.8	Kossuth	108	2.0
	Cherokee	139	3.5	Louisa	345	9.6
	Chickasaw	26	0.6	Lyon	125	3.5
	Clay	354	6.8	Madison	30	0.7
	Clayton	72	1.3	Mills	41	0.9
	Crawford	284	5.8	Mitchell	109	3.3
	Delaware	155	2.8	Monona	258	8.5
	Dickinson	146	3.0	Montgomery	131	3.7
	Emmet	270	8.3	O'Brien	217	4.9
	Floyd	73	1.5	Page	249	4.8
	Franklin	145	4.5	Palo Alto	144	4.8
	Greene	47	1.6	Poweshiek	149	2.6
	Grundy	190	5.2	Sac	124	3.5
	Guthrie	33	1.0	Shelby	36	0.9
Hamilton	313	6.5	Tama	273	5.1	
Hancock	81	2.2	Union	75	2.0	
Hardin	234	4.3	Winnebago	96	2.7	
Harrison	323	7.0	Wright	211	5.0	

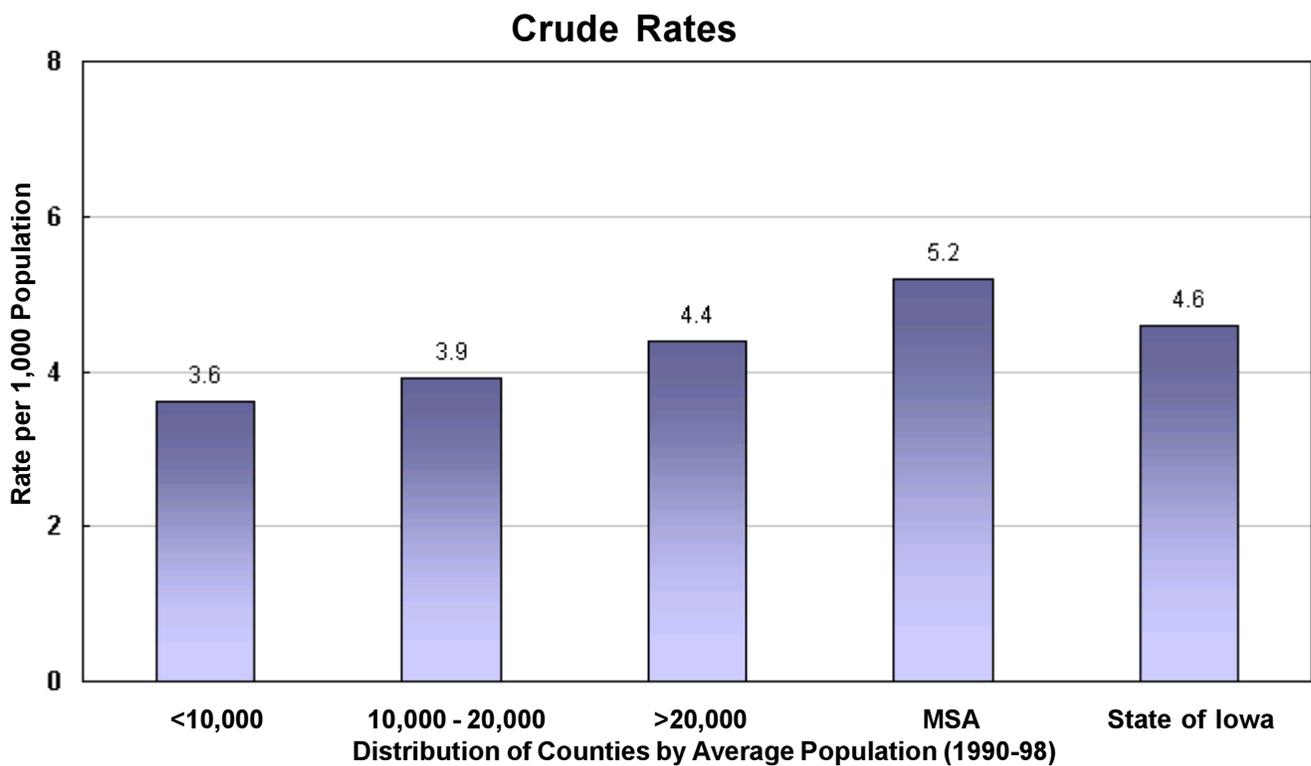
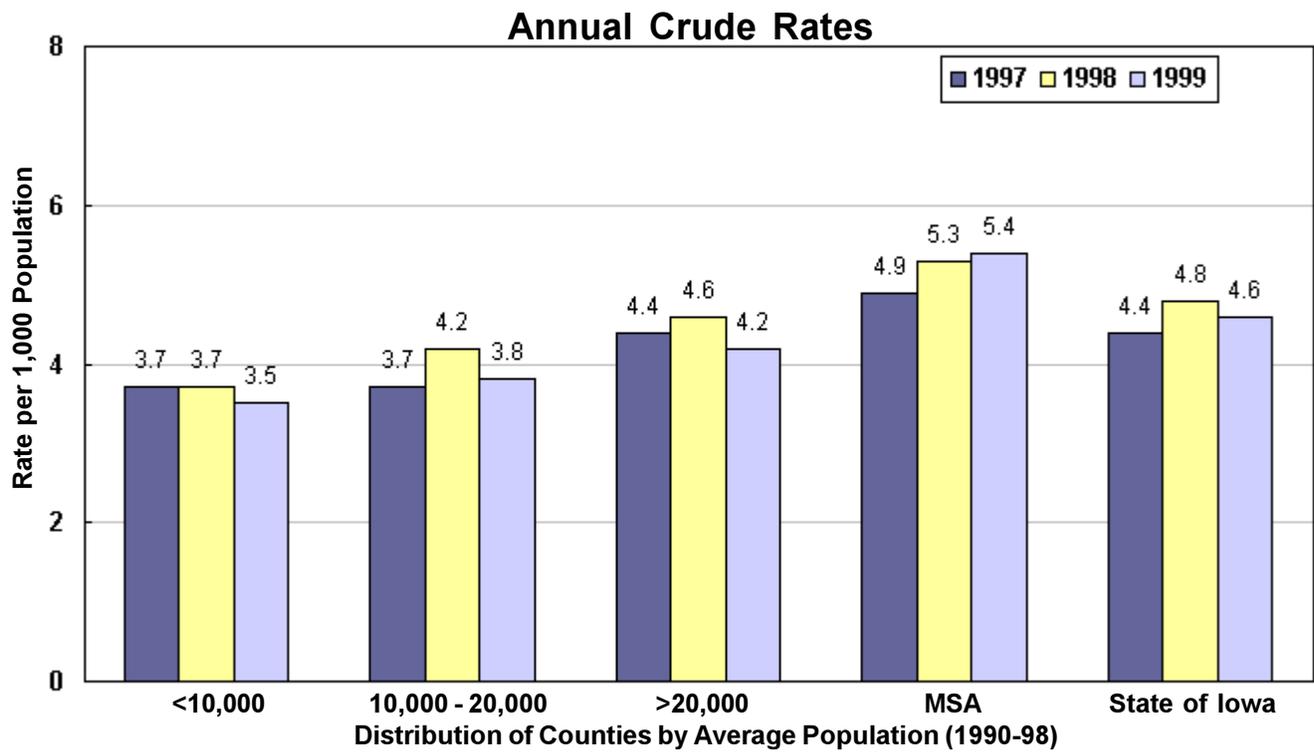
	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>Counties with Average Population &gt;20,000</b>	Benton	236	3.1	Mahaska	360	5.5
	Boone	256	3.3	Marion	447	4.8
	Bremer	262	3.7	Marshall	546	4.7
	Buchanan	389	6.1	Muscatine	830	6.7
	Carroll	293	4.5	Plymouth	222	3.0
	Cerro Gordo	687	5.0	Sioux	169	1.8
	Clinton	173	1.2	Story	1,359	6.0
	Des Moines	769	6.1	Wapello	575	5.4
	Fayette	289	4.4	Washington	144	2.3
	Jackson	177	2.9	Webster	532	4.6
	Jasper	355	3.3	Winneshiek	230	3.7
	Lee	578	5.0			

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>MSA Counties</b>	Black Hawk	1,935	5.3	Polk	5,303	4.9
	Dallas	407	3.7	Pottawattamie	924	3.6
	Dubuque	1,582	6.0	Scott	2,153	4.5
	Johnson	3,090	10.0	Warren	429	3.6
	Linn	1,868	3.4	Woodbury	2,398	7.9
<b>Group Totals</b>						
Number:	20,089					
Crude:	5.2					

<sup>1</sup>Rates per 1,000 population<sup>2</sup>Crime data may be incomplete due to selective reporting by counties and jurisdictions.

Source: Department of Public Safety, Uniform Crime Report

## Driving Under the Influence Arrests 1997-1999



## Juvenile Arrests<sup>2</sup> 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	71,487	8.3

	County	Number	Crude <sup>1</sup>		County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	32	1.3	<b>Counties with Average Population 10,000 to 20,000</b>	Lucas	154	5.6
	Adams	44	3.3		Monroe	53	2.2
	Audubon	26	1.3		Osceola	215	10.3
	Clarke	71	2.9		Pocahontas	9	0.3
	Davis	36	1.4		Ringgold	*	*
	Decatur	3	0.1		Taylor	*	*
	Fremont	*	*		Van Buren	64	2.7
	Howard	299	10.3		Wayne	41	2.0
	Ida	9	0.4		Worth	37	1.6
	<b>Group Totals</b>						
Number: 1,094							
Crude: 2.7							

	County	Number	Crude <sup>1</sup>		County	Number	Crude <sup>1</sup>
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	27	0.6	<b>Counties with Average Population &gt;20,000</b>	Henry	370	6.2
	Appanoose	653	16.1		Humboldt	111	3.6
	Buena Vista	764	13.1		Iowa	58	1.2
	Butler	5	0.1		Jefferson	278	5.5
	Calhoun	51	1.5		Jones	73	1.2
	Cass	298	6.8		Keokuk	3	0.1
	Cedar	221	4.1		Kossuth	474	8.9
	Cherokee	288	7.3		Louisa	125	3.5
	Chickasaw	18	0.4		Lyon	208	5.8
	Clay	620	11.9		Madison	21	0.5
	Clayton	11	0.2		Mills	*	*
	Crawford	161	3.3		Mitchell	212	6.4
	Delaware	395	7.1		Monona	301	9.9
	Dickinson	18	0.4		Montgomery	273	7.7
	Emmet	31	1.0		O'Brien	463	10.4
	Floyd	261	5.3		Page	380	7.3
	Franklin	250	7.7		Palo Alto	118	3.9
	Greene	25	0.8		Poweshiek	162	2.9
	Grundy	102	2.8		Sac	85	2.4
	Guthrie	7	0.2		Shelby	39	1.0
Hamilton	380	7.9	Tama	354	6.6		
Hancock	179	5.0	Union	83	2.2		
Hardin	569	10.3	Winnebago	147	4.1		
Harrison	168	3.7	Wright	201	4.8		

	County	Number	Crude <sup>1</sup>		County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &gt;20,000</b>	Benton	83	1.1	<b>MSA Counties</b>	Mahaska	633	9.6
	Boone	512	6.5		Marion	376	4.0
	Bremer	402	5.7		Marshall	2,208	19.0
	Buchanan	509	8.0		Muscatine	2,324	18.9
	Carroll	438	6.8		Plymouth	422	5.7
	Cerro Gordo	1,799	13.0		Sioux	204	2.2
	Clinton	269	1.8		Story	1,454	6.5
	Des Moines	2,151	17.1		Wapello	1,001	9.4
	Fayette	302	4.6		Washington	4	0.1
	Jackson	495	8.2		Webster	980	8.4
	Jasper	385	3.5		Winneshiek	320	5.1
	Lee	1,678	14.5				

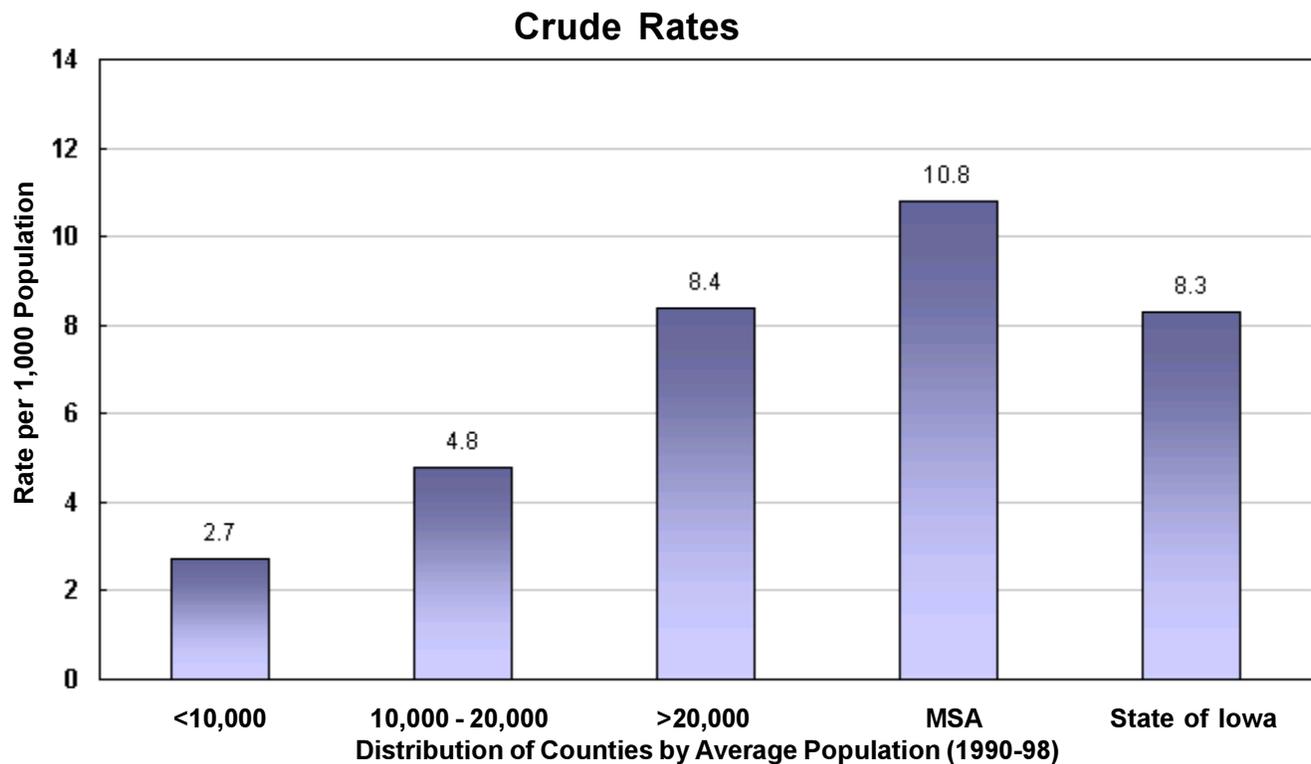
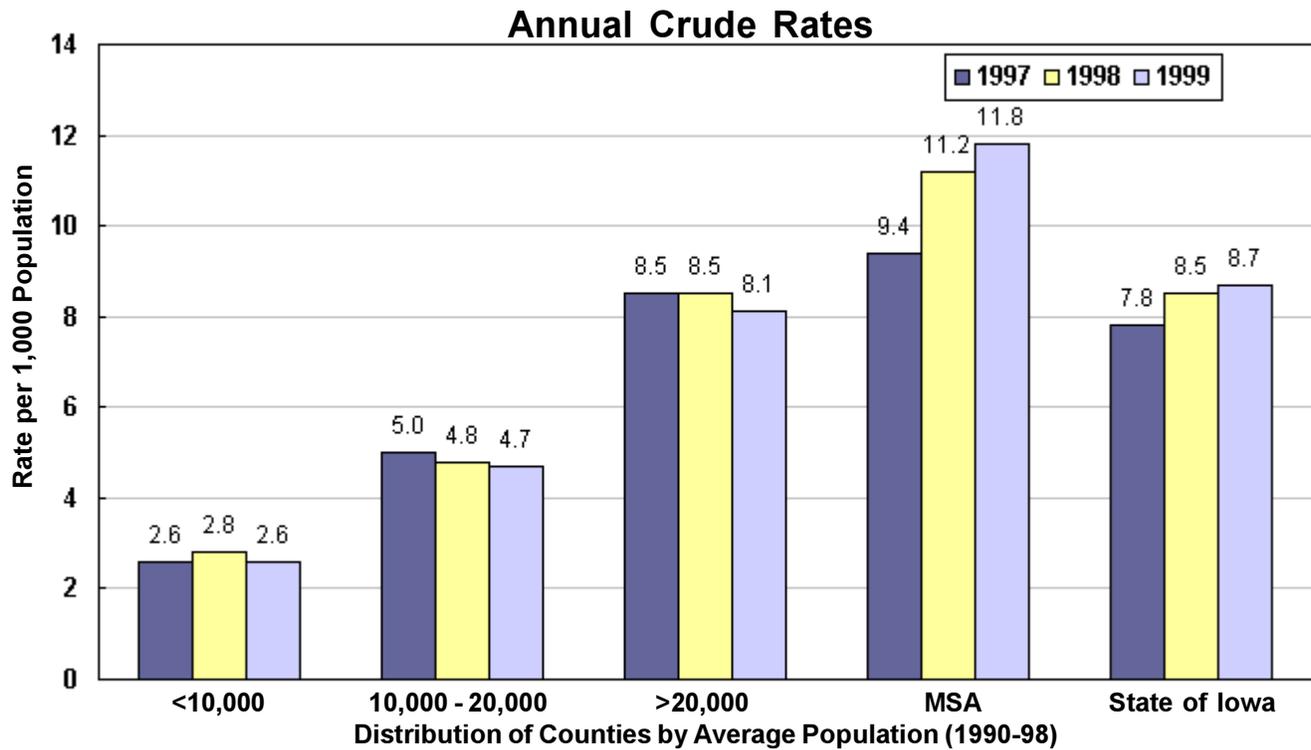
	County	Number	Crude <sup>1</sup>		County	Number	Crude <sup>1</sup>
<b>MSA Counties</b>	Black Hawk	4,606	12.7	<b>Group Totals</b>	Polk	7,896	7.3
	Dallas	412	3.7		Pottawattamie	3,382	13.1
	Dubuque	3,247	12.3		Scott	8,002	16.8
	Johnson	2,847	9.2		Warren	498	4.1
	Linn	2,239	4.1		Woodbury	8,273	27.1
Number: 41,402							
Crude: 10.8							

<sup>1</sup>Rates per 1,000 population  
\*Number of events is less than 3

<sup>2</sup>Crime data may be incomplete due to selective reporting by counties and jurisdictions.

Source: Department of Public Safety, Uniform Crime Report

## Juvenile Arrests 1997-1999



## Juvenile Vandalism<sup>2</sup> 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	4,127	0.5

	County	Number	Crude <sup>1</sup>		County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	5	0.2	<b>Counties with Average Population &gt;20,000</b>	Lucas	17	0.6
	Adams	*	*		Monroe	*	*
	Audubon	*	*		Osceola	5	0.2
	Clarke	4	0.2		Pocahontas	*	*
	Davis	*	*		Ringgold	*	*
	Decatur	*	*		Taylor	*	*
	Fremont	*	*		Van Buren	*	*
	Howard	35	1.2		Wayne	3	0.1
	Ida	*	*		Worth	*	*
	<b>Group Totals</b>					<b>Group Totals</b>	
Number:	77						
Crude:	0.2						

	County	Number	Crude <sup>1</sup>		County	Number	Crude <sup>1</sup>
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	*	*	<b>Counties with Average Population &gt;20,000</b>	Henry	24	0.4
	Appanoose	38	0.9		Humboldt	3	0.1
	Buena Vista	113	1.9		Iowa	3	0.1
	Butler	*	*		Jefferson	19	0.4
	Calhoun	4	0.1		Jones	*	*
	Cass	12	0.3		Keokuk	*	*
	Cedar	28	0.5		Kossuth	90	1.7
	Cherokee	22	0.6		Louisa	*	*
	Chickasaw	*	*		Lyon	6	0.2
	Clay	125	2.4		Madison	*	*
	Clayton	*	*		Mills	*	*
	Crawford	*	*		Mitchell	13	0.4
	Delaware	25	0.5		Monona	6	0.2
	Dickinson	*	*		Montgomery	27	0.8
	Emmet	*	*		O'Brien	27	0.6
	Floyd	16	0.3		Page	23	0.4
	Franklin	6	0.2		Palo Alto	8	0.3
	Greene	6	0.2		Poweshiek	8	0.1
	Grundy	3	0.1		Sac	6	0.2
	Guthrie	*	*		Shelby	*	*
Hamilton	44	0.9	Tama	32	0.6		
Hancock	23	0.6	Union	9	0.2		
Hardin	20	0.4	Winnebago	17	0.5		
Harrison	6	0.1	Wright	10	0.2		
<b>Group Totals</b>				<b>Group Totals</b>			
Number:	825						
Crude:	0.4						

	County	Number	Crude <sup>1</sup>		County	Number	Crude <sup>1</sup>		
<b>Counties with Average Population &gt;20,000</b>	Benton	*	*	<b>MSA Counties</b>	Mahaska	50	0.8		
	Boone	49	0.6		Marion	40	0.4		
	Bremer	10	0.1		Marshall	94	0.8		
	Buchanan	45	0.7		Muscatine	95	0.8		
	Carroll	63	1.0		Plymouth	20	0.3		
	Cerro Gordo	149	1.1		Sioux	34	0.4		
	Clinton	14	0.1		Story	78	0.3		
	Des Moines	83	0.7		Wapello	31	0.3		
	Fayette	4	0.1		Washington	*	*		
	Jackson	28	0.5		Webster	78	0.7		
	Jasper	32	0.3		Winneshiek	13	0.2		
	Lee	161	1.4						
	<b>Group Totals</b>					<b>Group Totals</b>			
	Number:	1,171							
	Crude:	0.5							

	County	Number	Crude <sup>1</sup>		County	Number	Crude <sup>1</sup>
<b>MSA Counties</b>	Black Hawk	267	0.7	<b>MSA Counties</b>	Polk	516	0.5
	Dallas	29	0.3		Pottawattamie	205	0.8
	Dubuque	42	0.2		Scott	357	0.8
	Johnson	172	0.6		Warren	30	0.2
	Linn	131	0.2		Woodbury	305	1.0
	<b>Group Totals</b>					<b>Group Totals</b>	
Number:	2,054						
Crude:	0.5						

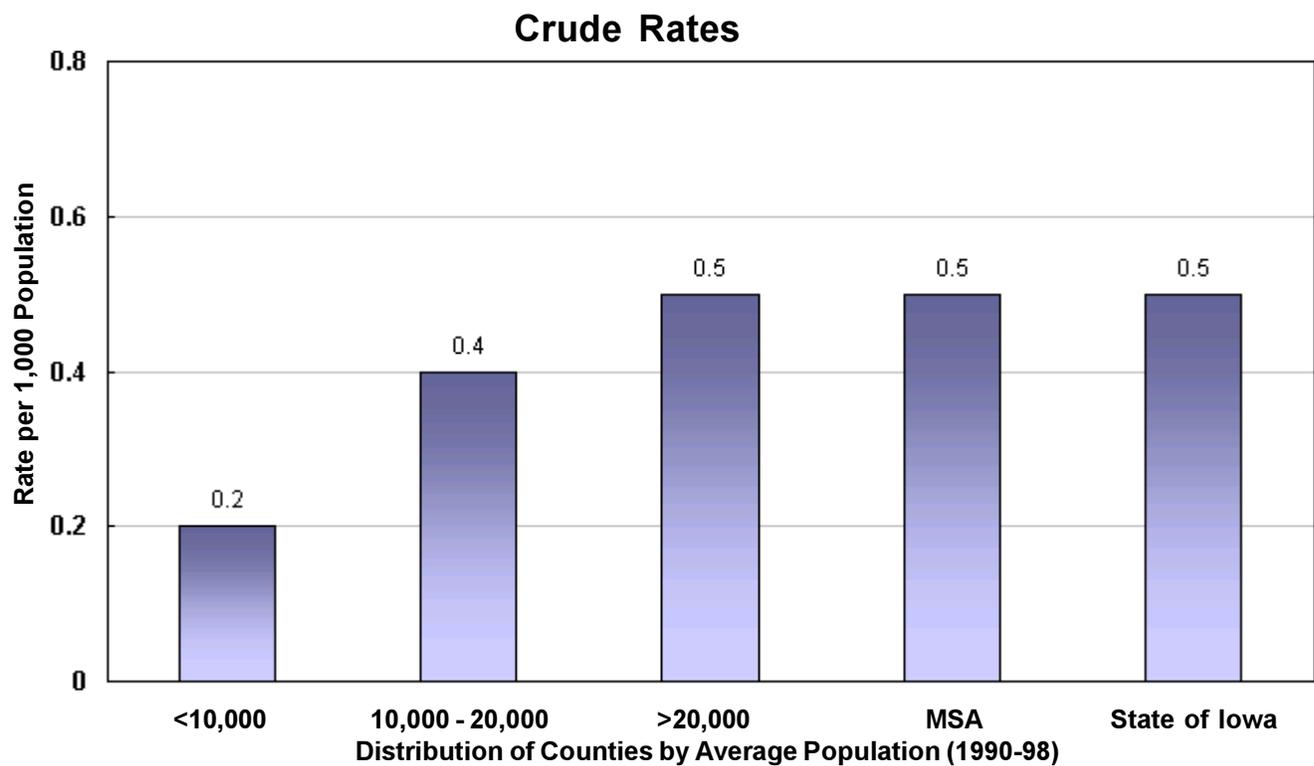
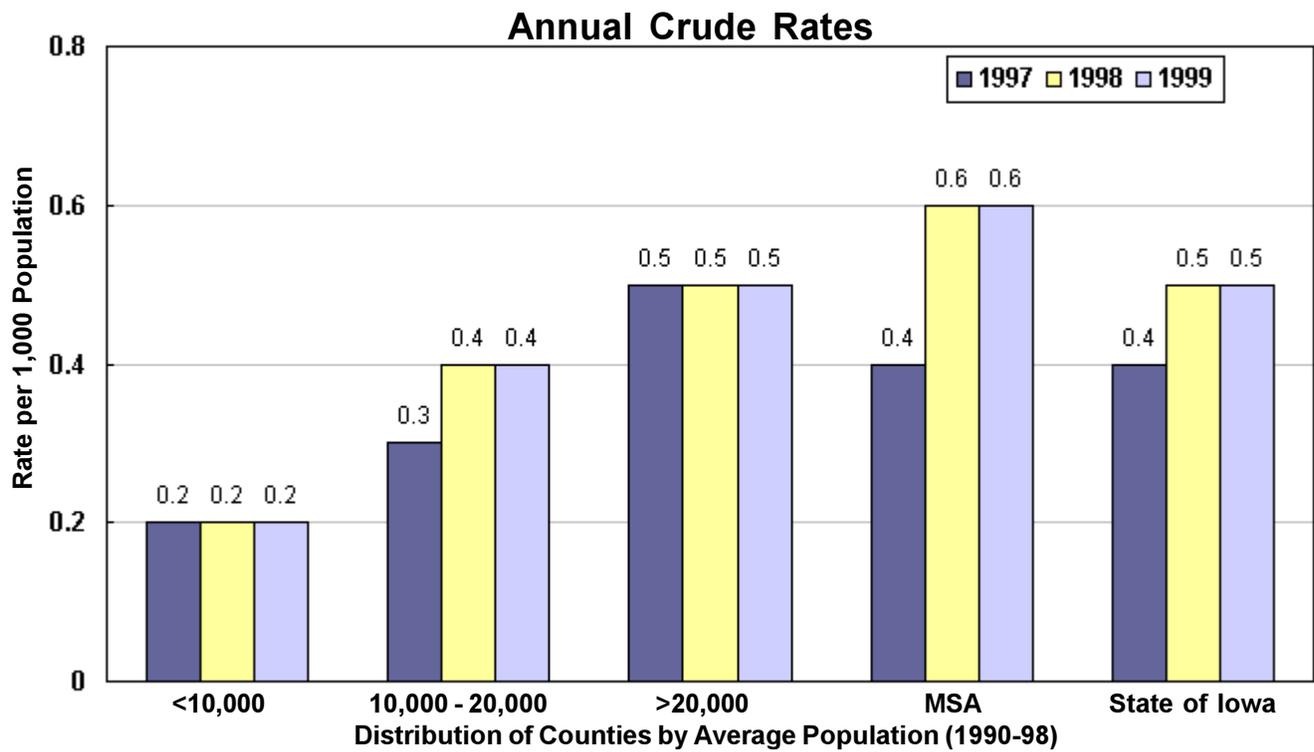
<sup>1</sup>Rates per 1,000 population

\*Number of events is less than 3

<sup>2</sup>Crime data may be incomplete due to selective reporting by counties and jurisdictions.

Source: Department of Public Safety, Uniform Crime Report

## Juvenile Vandalism 1997-1999



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## Prenatal and Infant Health

Each year more than 4 million families in the United States bring home a healthy baby who has all the potential for a full and productive life.

But one family in 100 will suffer the loss of their child soon after birth. Why are some 40,000 babies dying each year, and even more suffering from conditions of morbidity? Babies being born too small or too early cause more than three-quarters of infant deaths. The occurrence of this mortality and morbidity is highly correlated with size at birth and length of gestation. (IA STATS)

Low birth weight results in significant loss of life; surviving infants often sustain residual injuries that involve the central nervous system, and there is a substantial financial cost involved in caring for these infants. Certain factors have proven to increase the likelihood of delivering a low birth weight infant:

1. Cigarette smoking during pregnancy
2. Substance abuse immediately prior to conception and during pregnancy (including alcohol abuse)
3. Teen pregnancies

Birth defects rank as the leading cause of mortality in full-term newborn babies in the US. Iowa's overall birth defect rate is approximately 5%. Currently, Iowa is one of only seven states with an active surveillance program. The Iowa Birth Defects Registry monitors the types and frequency of birth defects within the state of Iowa. Information is collected directly from medical records in hospitals and clinics as compared to passive surveillance where information is collected only from birth and death certificates. The state of Iowa has taken a leadership role in birth defects surveillance and has served as a model to other states as they establish similar programs.

Interventions need to focus on providing perinatal health care to at-risk women. This involves preconceptional counseling, early and consistent prenatal care, and substance abuse treatment that keeps the family unit intact.

### HIGHLIGHTS...

- Babies being born too small or too early cause more than three-quarters of infant deaths.
- Low birth weight results in significant loss of life.
- Birth defects rank as the leading cause of mortality in full-term newborn babies in the United States.

## Live Births 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	111,452	13.0

	County			County		
	Number	Crude <sup>1</sup>		Number	Crude <sup>1</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	215	8.8	Lucas	307	11.2
	Adams	130	9.8	Monroe	272	11.3
	Audubon	222	10.9	Osceola	229	10.9
	Clarke	289	11.7	Pocahontas	230	8.7
	Davis	323	12.7	Ringgold	181	11.3
	Decatur	280	11.3	Taylor	211	9.9
	Fremont	281	12.1	Van Buren	271	11.5
	Howard	353	12.2	Wayne	188	9.4
	Ida	269	11.3	Worth	241	10.4
	<b>Group Totals</b>					
Number:	4,492					
Crude:	10.9					

	County			County		
	Number	Crude		Number	Crude	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	523	12.4	Henry	737	12.3
	Appanoose	452	11.2	Humboldt	365	11.8
	Buena Vista	749	12.8	Iowa	508	10.9
	Butler	481	10.3	Jefferson	491	9.7
	Calhoun	314	9.2	Jones	592	9.8
	Cass	459	10.5	Keokuk	394	11.5
	Cedar	564	10.4	Kossuth	509	9.6
	Cherokee	407	10.3	Louisa	527	14.7
	Chickasaw	421	10.5	Lyon	440	12.2
	Clay	571	10.9	Madison	521	12.5
	Clayton	595	10.6	Mills	509	11.7
	Crawford	609	12.3	Mitchell	389	11.7
	Delaware	651	11.7	Monona	323	10.7
	Dickinson	517	10.7	Montgomery	410	11.6
	Emmet	368	11.3	O'Brien	532	12.0
	Floyd	597	12.2	Page	557	10.8
	Franklin	362	11.1	Palo Alto	333	11.1
	Greene	345	11.4	Poweshiek	563	10.0
	Grundy	368	10.0	Sac	370	10.4
	Guthrie	389	11.3	Shelby	423	10.9
	Hamilton	634	13.2	Tama	710	13.3
	Hancock	389	10.8	Union	432	11.5
	Hardin	630	11.5	Winnebago	383	10.6
	Harrison	524	11.4	Wright	466	11.1

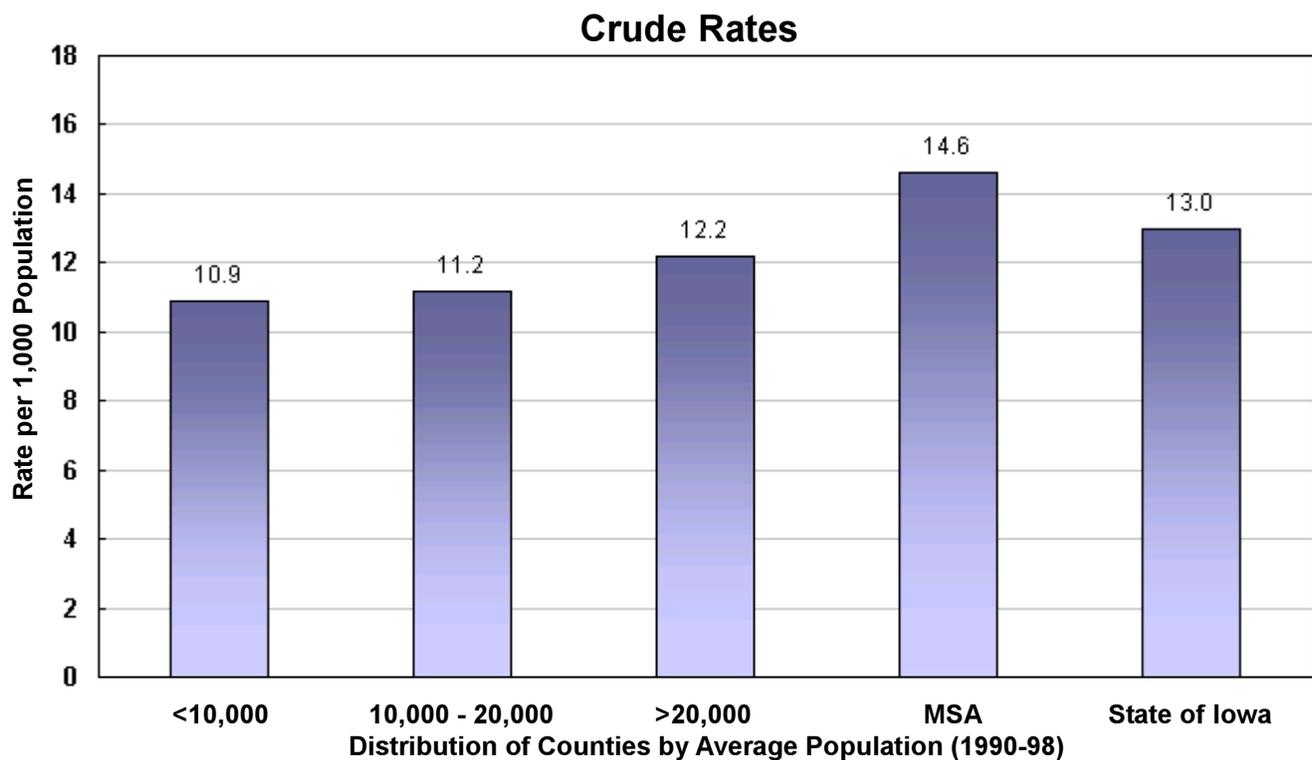
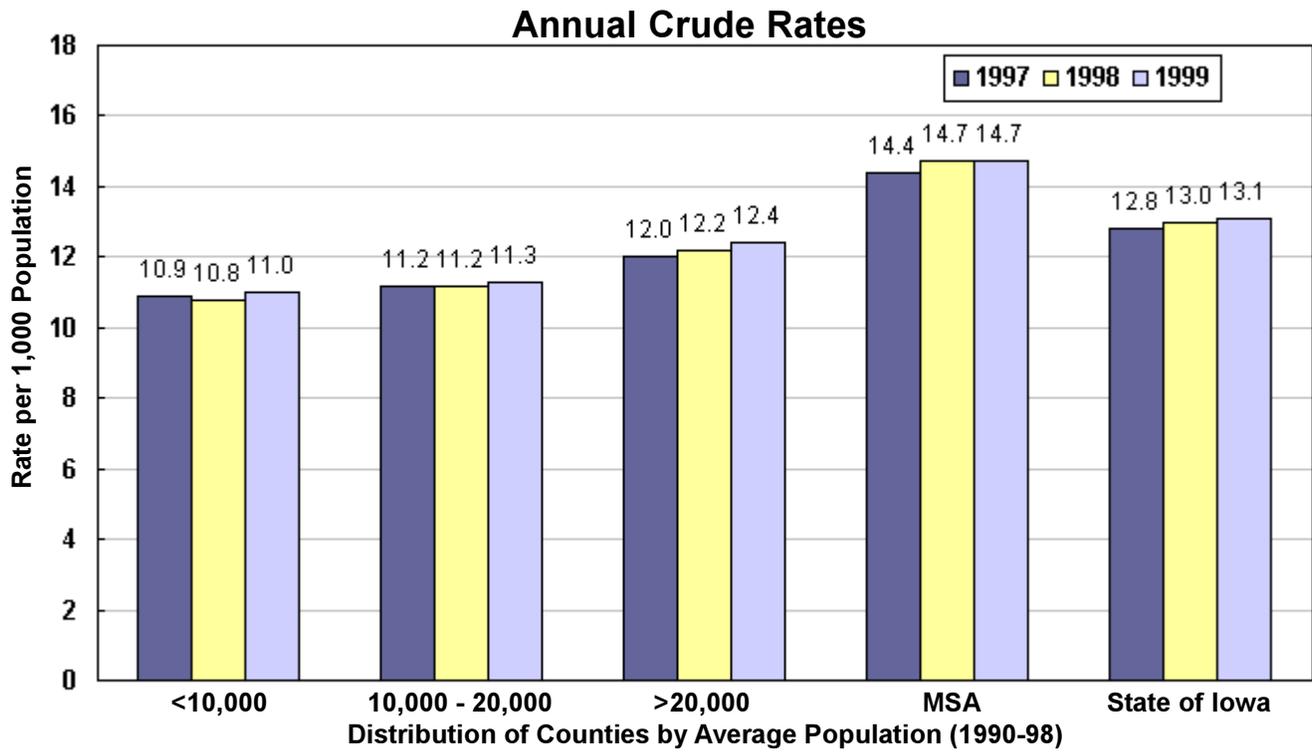
	County			County		
	Number	Crude		Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	871	11.4	Mahaska	844	12.9
	Boone	902	11.5	Marion	1,168	12.4
	Bremer	665	9.5	Marshall	1,556	13.4
	Buchanan	891	14.0	Muscatine	1,803	14.6
	Carroll	736	11.4	Plymouth	923	12.5
	Cerro Gordo	1,601	11.6	Sioux	1,210	12.9
	Clinton	1,935	12.9	Story	2,591	11.5
	Des Moines	1,583	12.6	Wapello	1,211	11.4
	Fayette	725	11.1	Washington	844	13.4
	Jackson	716	11.9	Webster	1,531	13.1
	Jasper	1,313	12.0	Winneshek	594	9.5
	Lee	1,361	11.8			

	County			County		
	Number	Crude		Number	Crude	
<b>MSA Counties</b>	Black Hawk	4,818	13.3	Polk	17,537	16.2
	Dallas	1,513	13.6	Pottawattamie	3,561	13.8
	Dubuque	3,449	13.1	Scott	6,778	14.3
	Johnson	3,881	12.6	Warren	1,500	12.4
	Linn	7,964	14.5	Woodbury	4,982	16.3
	<b>Group Totals</b>					
Number:	55,983					
Crude:	14.6					

<sup>1</sup>Rates per 1,000 population

Source: Iowa Department of Public Health, Vital Statistics

## Live Births 1997-1999



## Out-of-Wedlock Births 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	30,070	269.8

	County			County		
	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	51	237.2	Lucas	77	250.8
	Adams	30	230.8	Monroe	61	224.3
	Audubon	37	166.7	Osceola	45	196.5
	Clarke	85	294.1	Pocahontas	56	243.5
	Davis	39	120.7	Ringgold	35	193.4
	Decatur	96	342.9	Taylor	44	208.5
	Fremont	80	284.7	Van Buren	63	232.5
	Howard	73	206.8	Wayne	40	212.8
	Ida	42	156.1	Worth	55	228.2
	<b>Group Totals</b>					
Number:	1,009					
Crude:	224.6					

	County			County		
	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	120	229.4	Henry	199	270.0
	Appanoose	146	323.0	Humboldt	81	221.9
	Buena Vista	217	289.7	Iowa	90	177.2
	Butler	96	199.6	Jefferson	115	234.2
	Calhoun	71	226.1	Jones	142	239.9
	Cass	124	270.2	Keokuk	77	195.4
	Cedar	94	166.7	Kossuth	97	190.6
	Cherokee	119	292.4	Louisa	150	284.6
	Chickasaw	102	242.3	Lyon	55	125.0
	Clay	149	260.9	Madison	102	195.8
	Clayton	134	225.2	Mills	131	257.4
	Crawford	171	280.8	Mitchell	73	187.7
	Delaware	132	202.8	Monona	85	263.2
	Dickinson	133	257.3	Montgomery	148	361.0
	Emmet	112	304.3	O'Brien	95	178.6
	Floyd	153	256.3	Page	163	292.6
	Franklin	94	259.7	Palo Alto	87	261.3
	Greene	86	249.3	Poweshiek	144	255.8
	Grundy	54	146.7	Sac	93	251.4
	Guthrie	83	213.4	Shelby	84	198.6
Hamilton	176	277.6	Tama	236	332.4	
Hancock	90	231.4	Union	112	259.3	
Hardin	161	255.6	Winnebago	94	245.4	
Harrison	117	223.3	Wright	101	216.7	

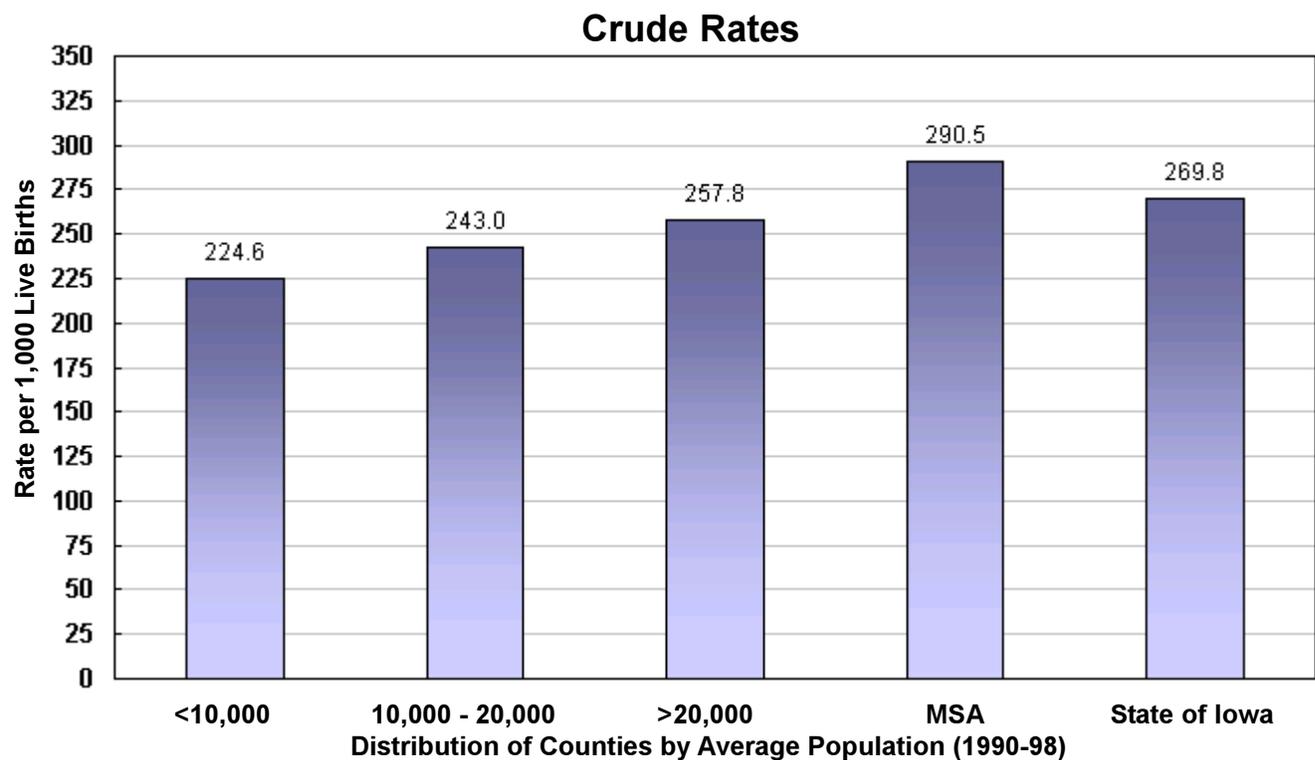
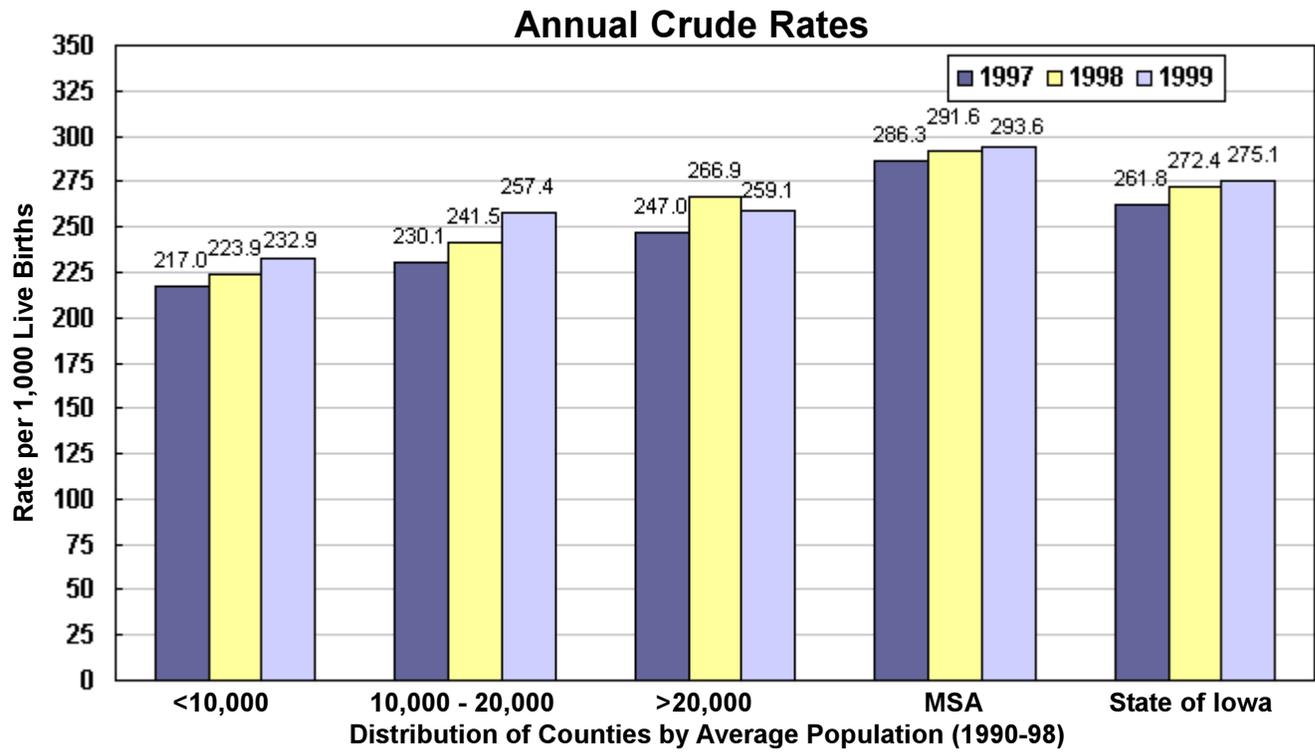
	County			County		
	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	150	172.2	Mahaska	197	233.4
	Boone	201	222.8	Marion	214	183.2
	Bremer	120	180.5	Marshall	469	301.4
	Buchanan	194	217.7	Muscatine	577	320.0
	Carroll	157	213.3	Plymouth	202	218.9
	Cerro Gordo	496	309.8	Sioux	133	109.9
	Clinton	672	347.3	Story	347	133.9
	Des Moines	575	363.2	Wapello	386	318.7
	Fayette	191	263.4	Washington	132	156.4
	Jackson	195	272.3	Webster	563	367.7
	Jasper	303	230.8	Winneshek	106	178.5
	Lee	528	388.0			

	County			County		
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	1,749	363.0	Polk	4,798	273.6
	Dallas	336	222.1	Pottawattamie	1,310	367.9
	Dubuque	833	241.5	Scott	2,447	361.0
	Johnson	666	171.6	Warren	327	218.0
	Linn	1,977	248.2	Woodbury	1,822	365.7
<b>Group Totals</b>						
Number:	16,265					
Crude:	290.5					

<sup>1</sup>Rates per 1,000 live births

Source: Iowa Department of Public Health, Vital Statistics

## Out-of-Wedlock Births 1997-1999



## Mothers Under Age 20 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	11,853	106.4

	County			County		
	Number	Crude <sup>1</sup>		Number	Crude <sup>1</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	23	107.0	Lucas	31	101.0
	Adams	14	107.7	Monroe	31	114.0
	Audubon	17	76.6	Osceola	22	96.1
	Clarke	45	155.7	Pocahontas	25	108.7
	Davis	22	68.1	Ringgold	21	116.0
	Decatur	58	207.1	Taylor	26	123.2
	Fremont	37	131.7	Van Buren	43	158.7
	Howard	37	104.8	Wayne	29	154.3
	Ida	20	74.3	Worth	28	116.2
	<u>Group Totals</u>					
Number:	529					
Crude:	117.8					

	County			County		
	Number	Crude		Number	Crude	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	55	105.2	Henry	83	112.5
	Appanoose	63	139.4	Humboldt	32	87.7
	Buena Vista	99	132.2	Iowa	34	66.9
	Butler	39	81.1	Jefferson	56	114.1
	Calhoun	29	92.4	Jones	67	113.2
	Cass	57	124.2	Keokuk	34	86.3
	Cedar	33	58.5	Kossuth	44	86.4
	Cherokee	46	113.0	Louisa	77	146.1
	Chickasaw	35	83.1	Lyon	36	81.8
	Clay	64	112.1	Madison	36	69.1
	Clayton	42	70.6	Mills	39	76.6
	Crawford	46	75.5	Mitchell	33	84.8
	Delaware	64	98.3	Monona	36	111.5
	Dickinson	49	94.8	Montgomery	50	122.0
	Emmet	60	163.0	O'Brien	52	97.7
	Floyd	64	107.2	Page	74	132.9
	Franklin	55	151.9	Palo Alto	32	96.1
	Greene	44	127.5	Poweshiek	67	119.0
	Grundy	21	57.1	Sac	41	110.8
	Guthrie	28	72.0	Shelby	27	63.8
Hamilton	80	126.2	Tama	106	149.3	
Hancock	37	95.1	Union	45	104.2	
Hardin	93	147.6	Winnebago	41	107.0	
Harrison	52	99.2	Wright	48	103.0	

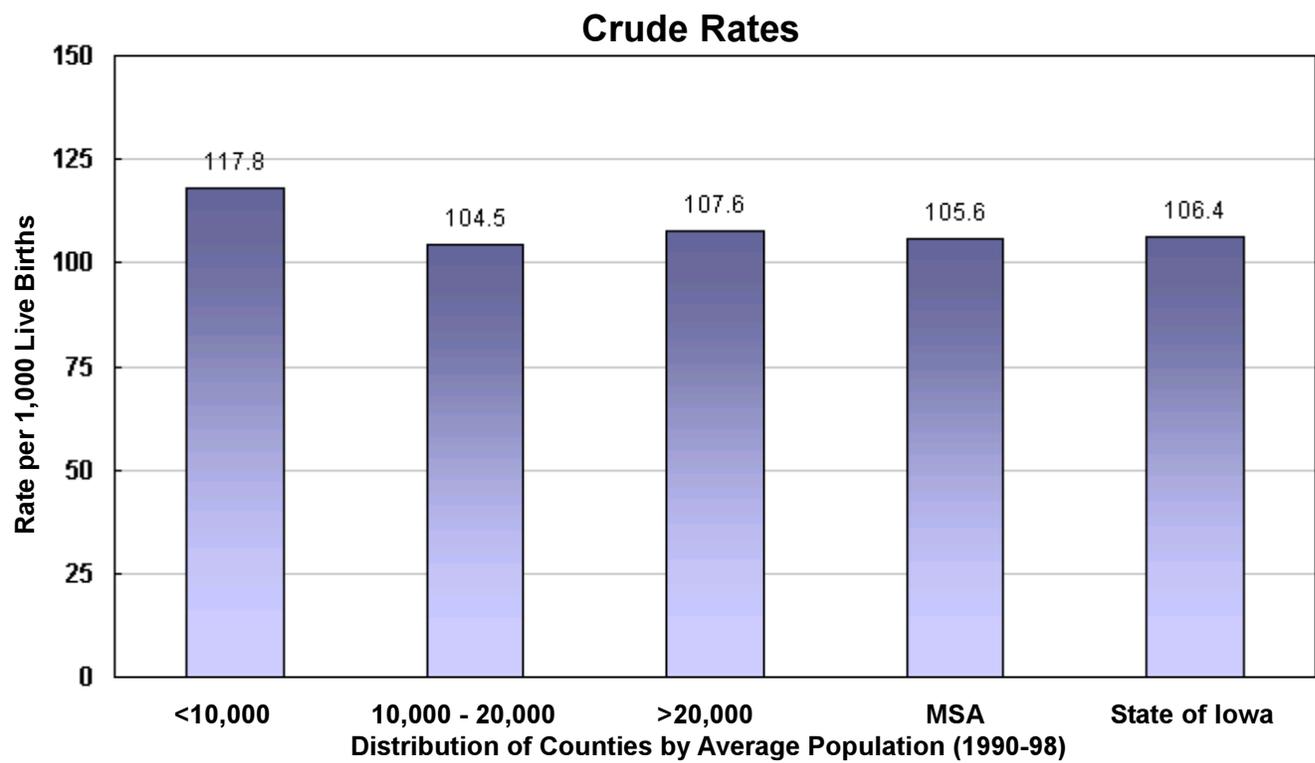
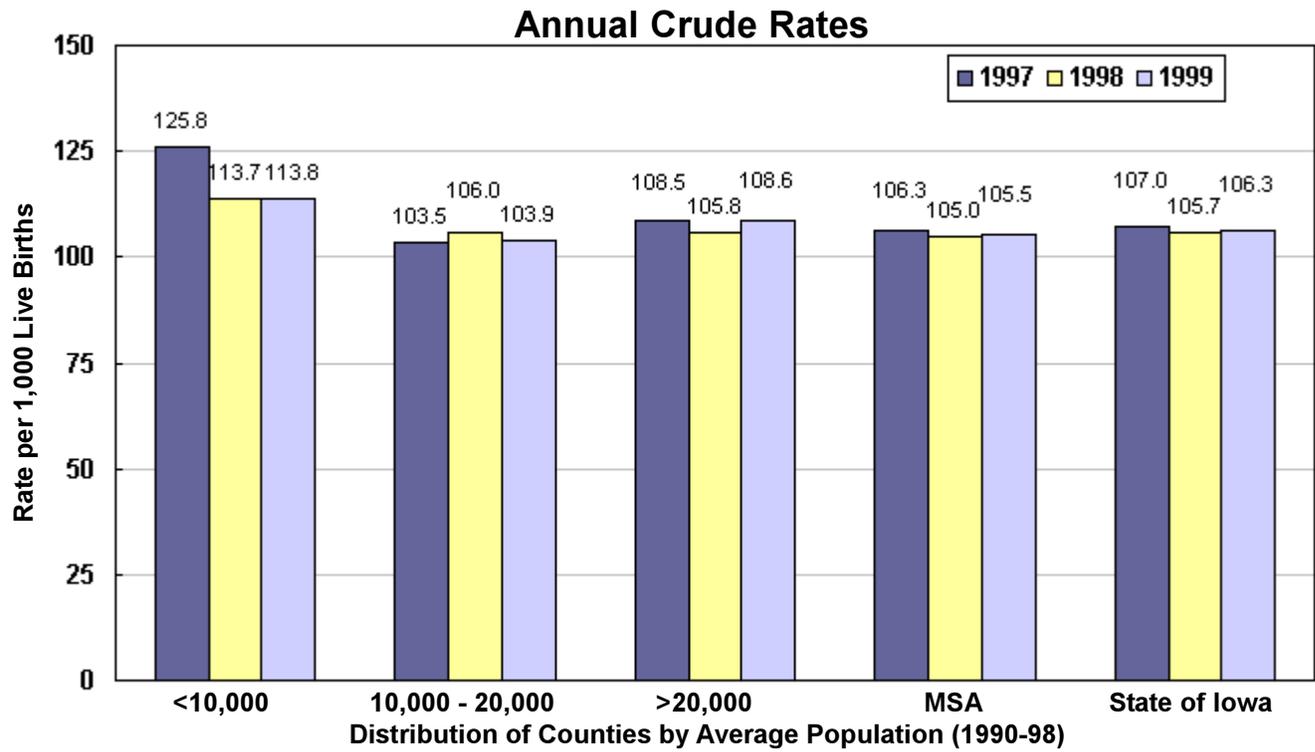
	County			County		
	Number	Crude		Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	51	58.6	Mahaska	95	112.6
	Boone	80	88.7	Marion	116	99.3
	Bremer	60	90.2	Marshall	212	136.2
	Buchanan	71	79.7	Muscatine	308	170.8
	Carroll	46	62.5	Plymouth	81	87.8
	Cerro Gordo	151	94.3	Sioux	85	70.2
	Clinton	273	141.1	Story	141	54.4
	Des Moines	249	157.3	Wapello	163	134.6
	Fayette	79	109.0	Washington	55	65.2
	Jackson	69	96.4	Webster	205	133.9
	Jasper	130	99.0	Winneshek	39	65.7
	Lee	208	152.8			

	County			County		
	Number	Crude		Number	Crude	
<b>MSA Counties</b>	Black Hawk	606	125.8	Polk	1,759	100.3
	Dallas	143	94.5	Pottawattamie	501	140.7
	Dubuque	312	90.5	Scott	907	133.8
	Johnson	176	45.3	Warren	135	90.0
	Linn	653	82.0	Woodbury	720	144.5

<sup>1</sup>Rates per 1,000 live births

Source: Iowa Department of Public Health, Vital Statistics

## Mothers Under Age 20 1997-1999



## Low Birth Weight (< 2500 Grams) 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	7,056	63.3

	County			County		
	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	12	55.8	Lucas	20	65.1
	Adams	8	61.5	Monroe	18	66.2
	Audubon	16	72.1	Osceola	14	61.1
	Clarke	25	86.5	Pocahontas	11	47.8
	Davis	16	49.5	Ringgold	16	88.4
	Decatur	14	50.0	Taylor	12	56.9
	Fremont	16	56.9	Van Buren	15	55.4
	Howard	25	70.8	Wayne	13	69.1
	Ida	18	66.9	Worth	18	74.7
	<b>Group Totals</b>					
Number:	287					
Crude:	63.9					

	County			County		
	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	27	51.6	Henry	48	65.1
	Appanoose	34	75.2	Humboldt	13	35.6
	Buena Vista	49	65.4	Iowa	34	66.9
	Butler	28	58.2	Jefferson	31	63.1
	Calhoun	23	73.2	Jones	38	64.2
	Cass	32	69.7	Keokuk	22	55.8
	Cedar	26	46.1	Kossuth	39	76.6
	Cherokee	19	46.7	Louisa	27	51.2
	Chickasaw	26	61.8	Lyon	29	65.9
	Clay	37	64.8	Madison	34	65.3
	Clayton	34	57.1	Mills	41	80.6
	Crawford	42	69.0	Mitchell	16	41.1
	Delaware	34	52.2	Monona	12	37.2
	Dickinson	34	65.8	Montgomery	35	85.4
	Emmet	20	54.3	O'Brien	18	33.8
	Floyd	35	58.6	Page	36	64.6
	Franklin	21	58.0	Palo Alto	19	57.1
	Greene	20	58.0	Poweshiek	24	42.6
	Grundy	23	62.5	Sac	24	64.9
	Guthrie	22	56.6	Shelby	25	59.1
Hamilton	40	63.1	Tama	40	56.3	
Hancock	27	69.4	Union	36	83.3	
Hardin	45	71.4	Winnebago	27	70.5	
Harrison	33	63.0	Wright	33	70.8	
<b>Group Totals</b>						
Number:	1,432					
Crude:	61.2					

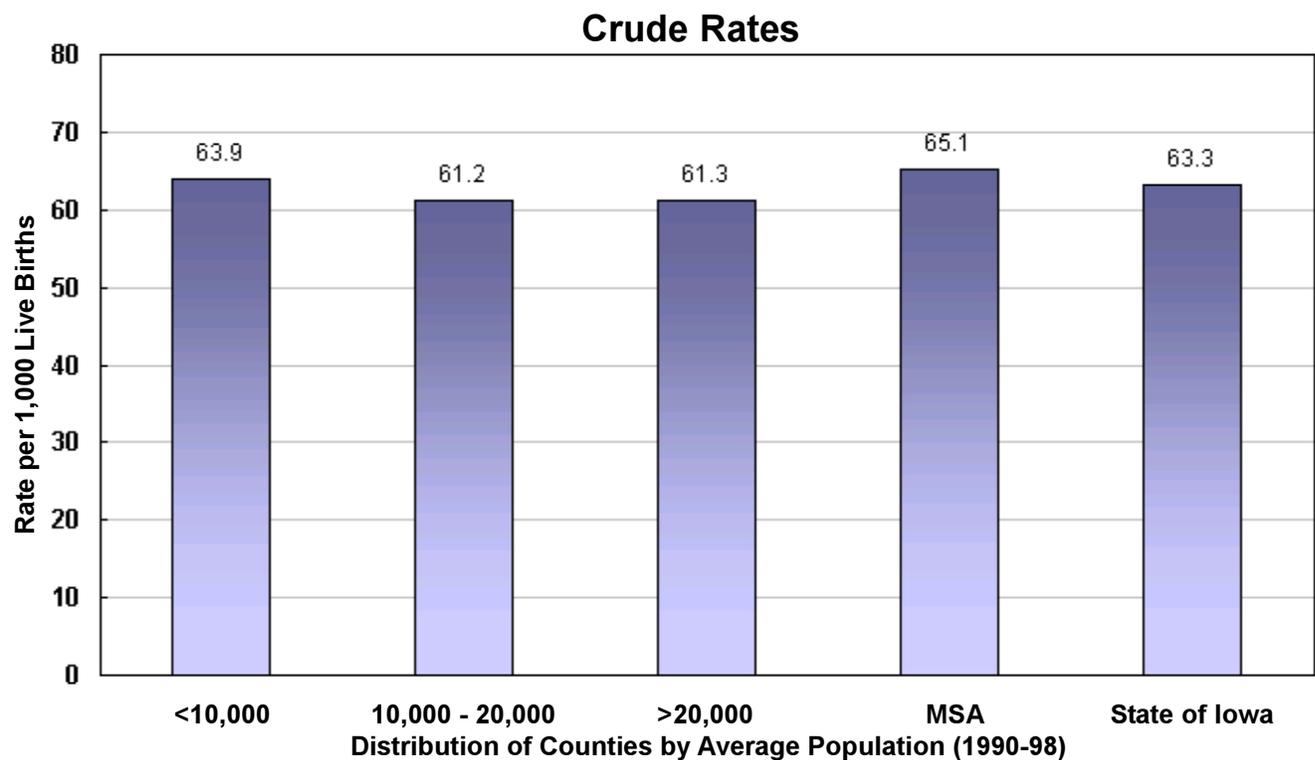
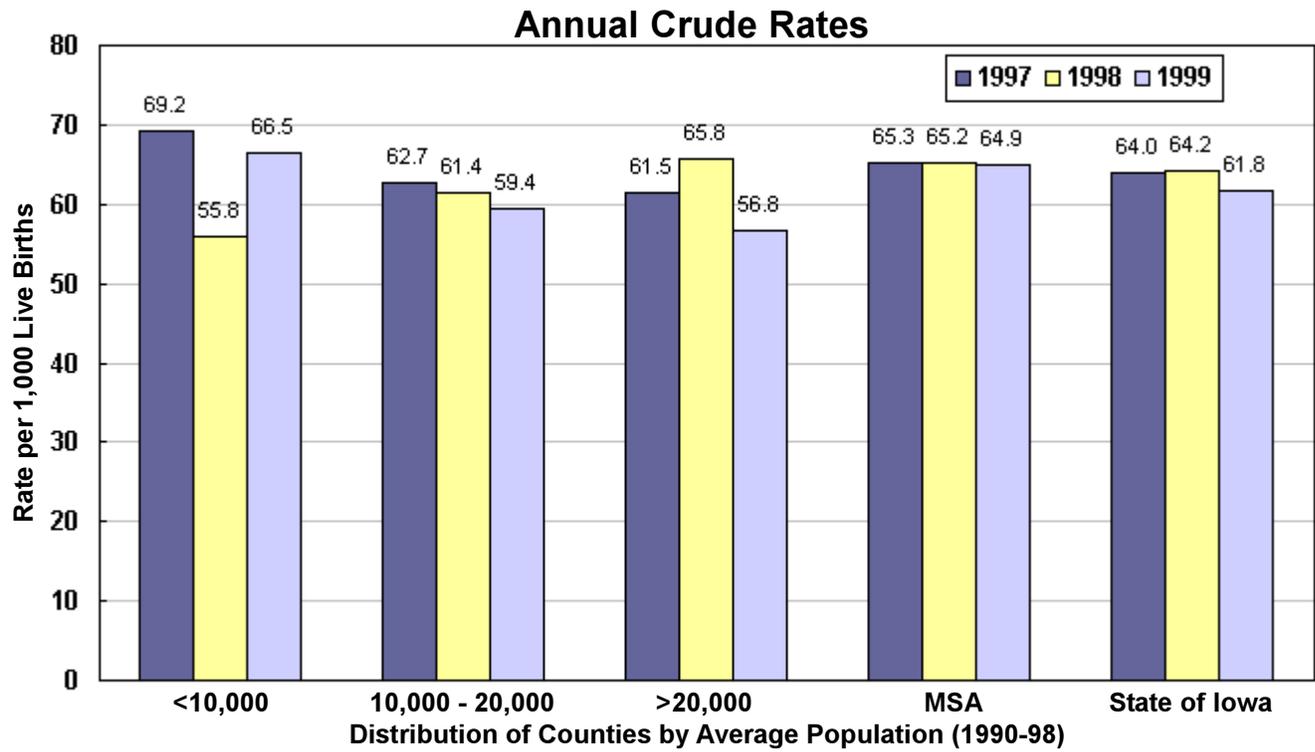
	County			County			
	County	Number	Crude	County	Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	56	64.3	Mahaska	44	52.1	
	Boone	66	73.2	Marion	61	52.2	
	Bremer	34	51.1	Marshall	81	52.1	
	Buchanan	64	71.8	Muscatine	99	54.9	
	Carroll	57	77.4	Plymouth	46	49.8	
	Cerro Gordo	106	66.2	Sioux	60	49.6	
	Clinton	129	66.7	Story	163	62.9	
	Des Moines	95	60.0	Wapello	88	72.7	
	Fayette	41	56.6	Washington	52	61.6	
	Jackson	33	46.1	Webster	115	75.1	
	Jasper	77	58.6	Winneshiek	37	62.3	
	Lee	87	63.9				
	<b>Group Totals</b>						
	Number:	1,691					
Crude:	61.3						

	County			County		
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	366	76.0	Polk	1,184	67.5
	Dallas	82	54.2	Pottawattamie	247	69.4
	Dubuque	208	60.3	Scott	432	63.7
	Johnson	251	64.7	Warren	94	62.7
	Linn	446	56.0	Woodbury	336	67.4
<b>Group Totals</b>						
Number:	3,646					
Crude:	65.1					

<sup>1</sup>Rates per 1,000 live births

Source: Iowa Department of Public Health, Vital Statistics

## Low Birth Weight (< 2500 Grams) 1997-1999



## Mothers Who Began Prenatal Care in the First Trimester: 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	96,305	864.1

	County			County		
	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	191	888.4	Lucas	237	772.0
	Adams	108	830.8	Monroe	235	864.0
	Audubon	212	955.0	Osceola	202	882.1
	Clarke	251	868.5	Pocahontas	210	913.0
	Davis	209	647.1	Ringgold	153	845.3
	Decatur	227	810.7	Taylor	176	834.1
	Fremont	237	843.4	Van Buren	202	745.4
	Howard	290	821.5	Wayne	147	781.9
	Ida	247	918.2	Worth	217	900.4
	<u>Group Totals</u>					
Number:	3,751					
Crude:	835.0					

	County			County		
	Number	Crude	County	Number	Crude	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	430	822.2	Henry	644	873.8
	Appanoose	380	840.7	Humboldt	311	852.1
	Buena Vista	599	799.7	Iowa	448	881.9
	Butler	435	904.4	Jefferson	416	847.3
	Calhoun	272	866.2	Jones	517	873.3
	Cass	420	915.0	Keokuk	332	842.6
	Cedar	503	891.8	Kossuth	429	842.8
	Cherokee	383	941.0	Louisa	446	846.3
	Chickasaw	366	869.4	Lyon	395	897.7
	Clay	527	922.9	Madison	477	915.5
	Clayton	485	815.1	Mills	452	888.0
	Crawford	522	857.1	Mitchell	302	776.3
	Delaware	567	871.0	Monona	286	885.4
	Dickinson	480	928.4	Montgomery	356	868.3
	Emmet	303	823.4	O'Brien	494	928.6
	Floyd	436	730.3	Page	509	913.8
	Franklin	282	779.0	Palo Alto	297	891.9
	Greene	276	800.0	Poweshiek	517	918.3
	Grundy	342	929.3	Sac	318	859.5
	Guthrie	318	817.5	Shelby	374	884.2
Hamilton	568	895.9	Tama	580	816.9	
Hancock	332	853.5	Union	371	858.8	
Hardin	546	866.7	Winnebago	324	846.0	
Harrison	445	849.2	Wright	392	841.2	

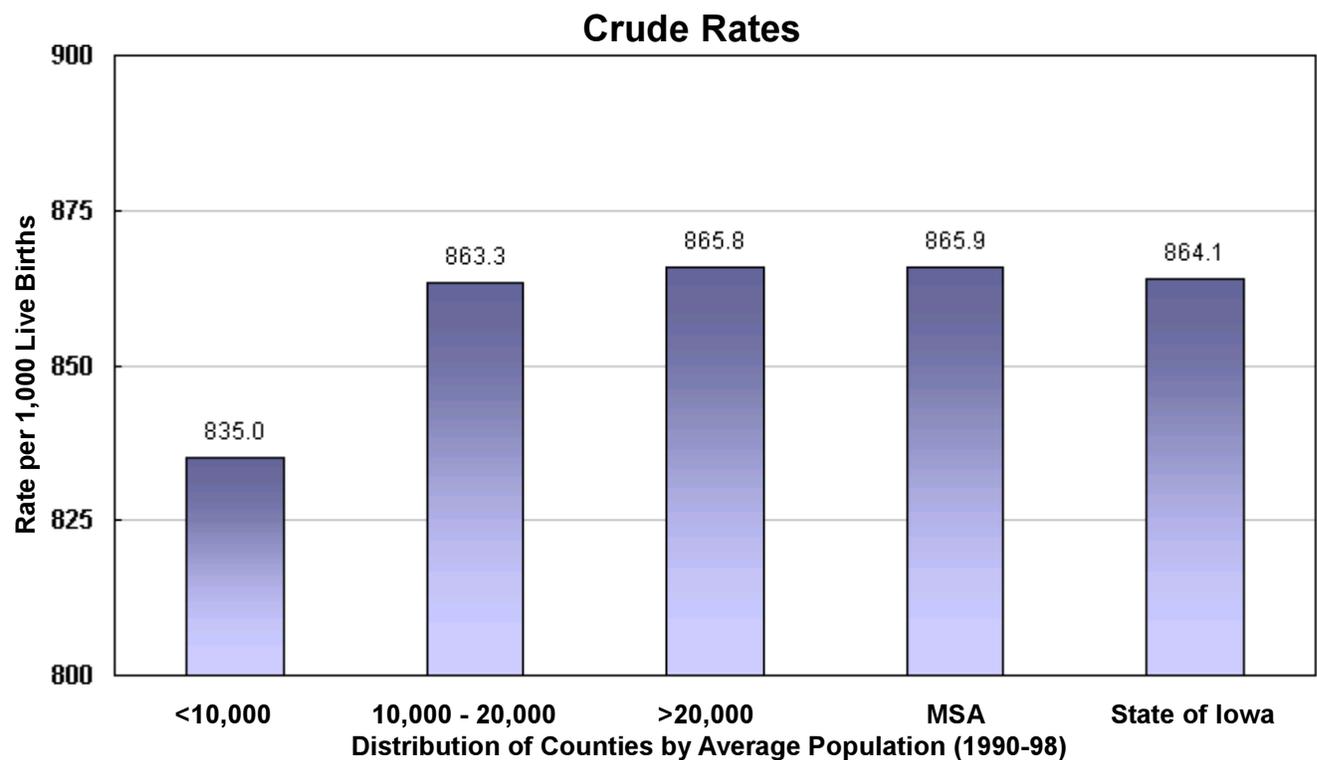
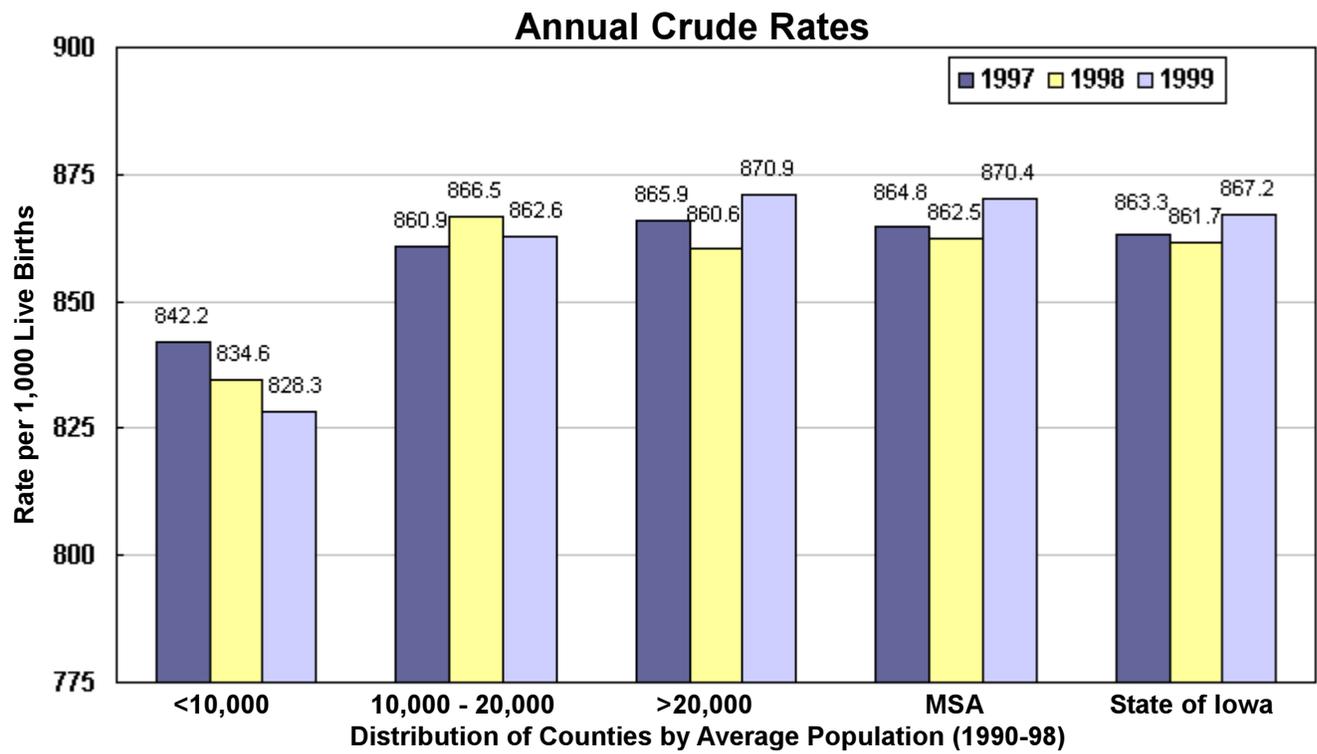
	County			County		
	Number	Crude	County	Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	775	889.8	Mahaska	734	869.7
	Boone	796	882.5	Marion	1,048	897.3
	Bremer	605	909.8	Marshall	1,287	827.1
	Buchanan	696	781.1	Muscatine	1,588	880.8
	Carroll	696	945.7	Plymouth	821	889.5
	Cerro Gordo	1,348	842.0	Sioux	1,094	904.1
	Clinton	1,678	867.2	Story	2,329	898.9
	Des Moines	1,326	837.7	Wapello	971	801.8
	Fayette	644	888.3	Washington	721	854.3
	Jackson	624	871.5	Webster	1,239	809.3
	Jasper	1,170	891.1	Winneshek	495	833.3
	Lee	1,189	873.6			

	County			County		
	Number	Crude	County	Number	Crude	
<b>MSA Counties</b>	Black Hawk	4,281	888.5	Polk	15,177	865.4
	Dallas	1,294	855.3	Pottawattamie	2,957	830.4
	Dubuque	3,071	890.4	Scott	5,606	827.1
	Johnson	3,487	898.5	Warren	1,371	914.0
	Linn	7,103	891.9	Woodbury	4,129	828.8
<u>Group Totals</u>						
Number:	48,476					
Crude:	865.9					

<sup>1</sup>Rates per 1,000 live births

Source: Iowa Department of Public Health, Vital Statistics

## Mothers Who Began Prenatal Care in the First Trimester 1997-1999



## Mothers Who Smoked During Pregnancy 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	20,137	180.7

Counties with Average Population <10,000  Group Totals Number: 826 Crude: 183.9	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
	Adair	49	227.9	Lucas	67	218.2
	Adams	35	269.2	Monroe	49	180.1
	Audubon	26	117.1	Osceola	41	179.0
	Clarke	58	200.7	Pocahontas	44	191.3
	Davis	42	130.0	Ringgold	25	138.1
	Decatur	68	242.9	Taylor	49	232.2
	Fremont	61	217.1	Van Buren	46	169.7
	Howard	50	141.6	Wayne	38	202.1
	Ida	35	130.1	Worth	43	178.4

Counties with Average Population 10,000 to 20,000  Group Totals Number: 4,309 Crude: 184.1	County	Number	Crude	County	Number	Crude
	Allamakee	87	166.3	Henry	168	228.0
	Appanoose	101	223.5	Humboldt	61	167.1
	Buena Vista	95	126.8	Iowa	80	157.5
	Butler	78	162.2	Jefferson	68	138.5
	Calhoun	56	178.3	Jones	104	175.7
	Cass	109	237.5	Keokuk	54	137.1
	Cedar	95	168.4	Kossuth	82	161.1
	Cherokee	100	245.7	Louisa	77	146.1
	Chickasaw	72	171.0	Lyon	53	120.5
	Clay	126	220.7	Madison	79	151.6
	Clayton	91	152.9	Mills	127	249.5
	Crawford	117	192.1	Mitchell	48	123.4
	Delaware	108	165.9	Monona	58	179.6
	Dickinson	66	127.7	Montgomery	102	248.8
	Emmet	73	198.4	O'Brien	72	135.3
	Floyd	95	159.1	Page	133	238.8
	Franklin	60	165.7	Palo Alto	62	186.2
	Greene	81	234.8	Poweshiek	129	229.1
	Grundy	40	108.7	Sac	67	181.1
Guthrie	87	223.7	Shelby	81	191.5	
Hamilton	139	219.2	Tama	141	198.6	
Hancock	58	149.1	Union	113	261.6	
Hardin	131	207.9	Winnebago	75	195.8	
Harrison	125	238.5	Wright	85	182.4	

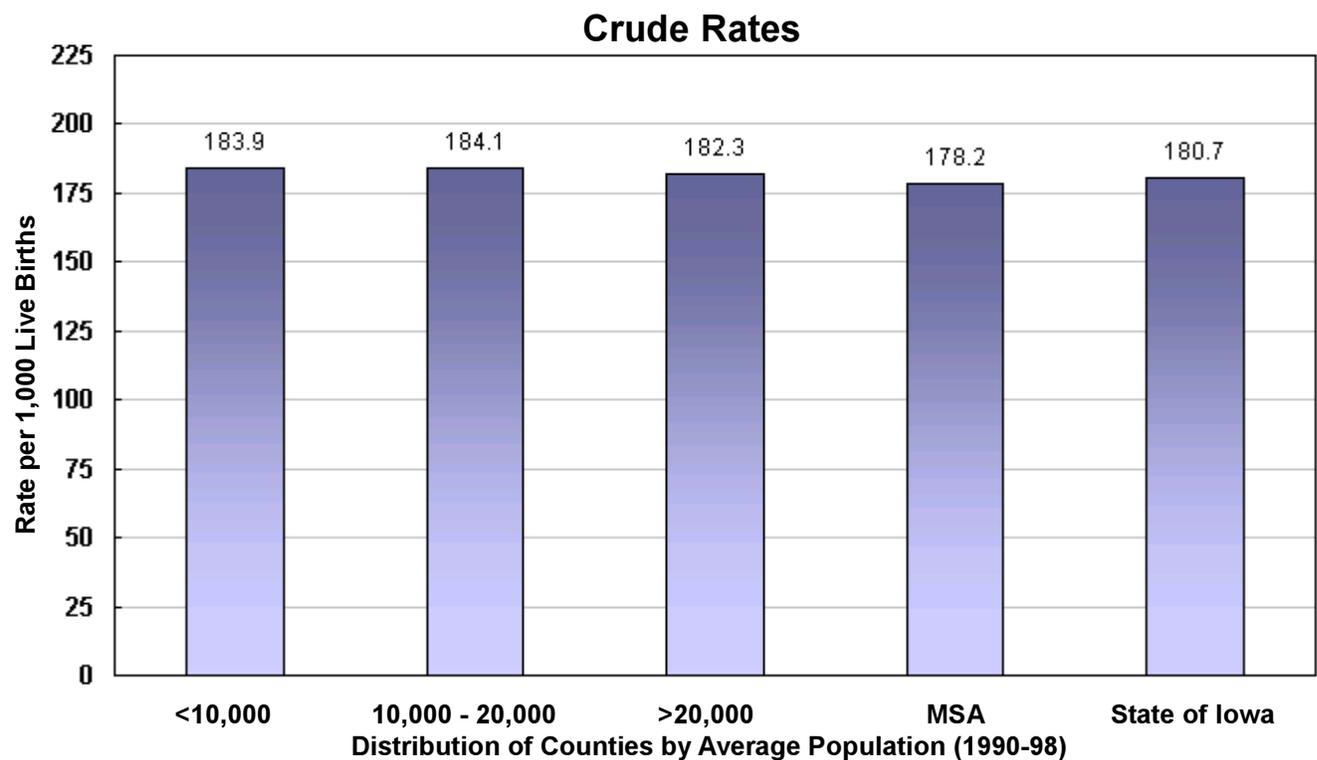
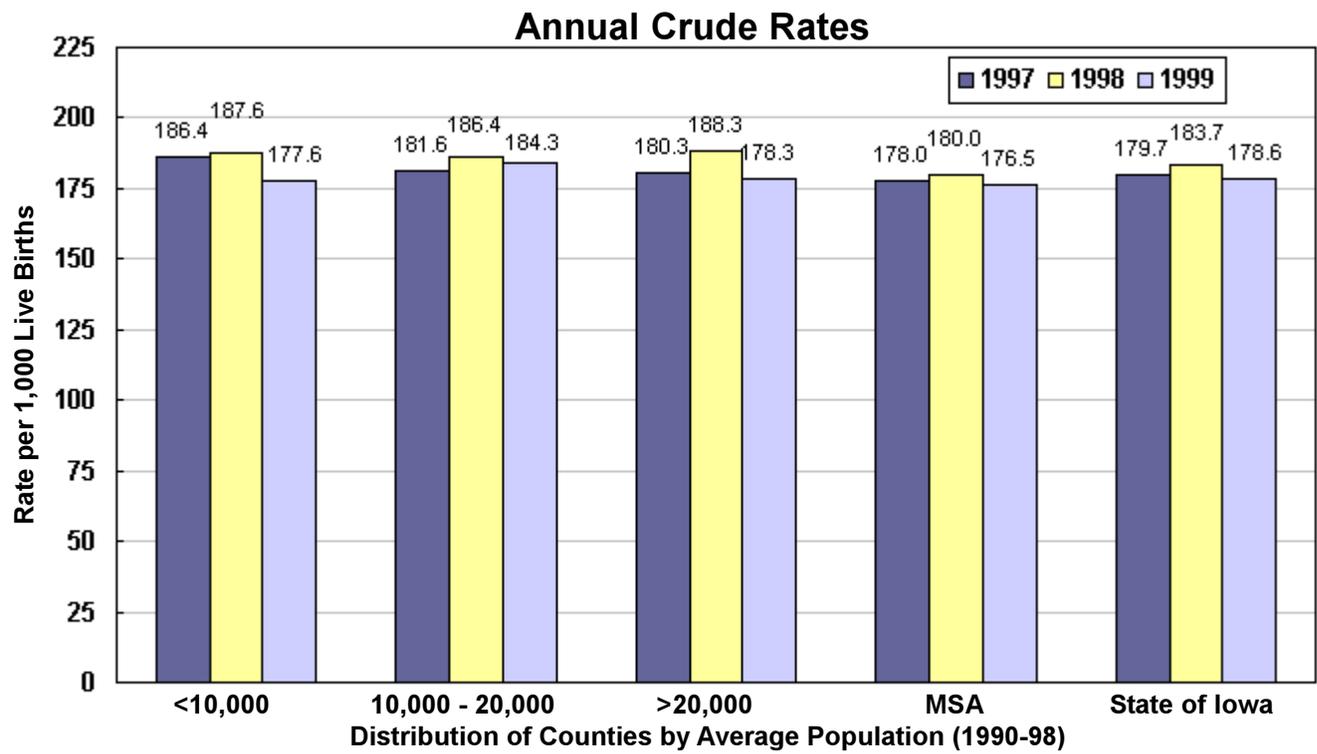
Counties with Average Population >20,000  Group Totals Number: 5,026 Crude: 182.3	County	Number	Crude	County	Number	Crude
	Benton	151	173.4	Mahaska	153	181.3
	Boone	187	207.3	Marion	204	174.7
	Bremer	96	144.4	Marshall	324	208.2
	Buchanan	159	178.5	Muscatine	298	165.3
	Carroll	49	66.6	Plymouth	142	153.8
	Cerro Gordo	319	199.3	Sioux	84	69.4
	Clinton	502	259.4	Story	202	78.0
	Des Moines	406	256.5	Wapello	255	210.6
	Fayette	124	171.0	Washington	105	124.4
	Jackson	116	162.0	Webster	404	263.9
	Jasper	301	229.2	Winneshiek	70	117.8
	Lee	375	275.5			

MSA Counties  Group Totals Number: 9,976 Crude: 178.2	County	Number	Crude	County	Number	Crude
	Black Hawk	927	192.4	Polk	3,061	174.5
	Dallas	222	146.7	Pottawattamie	1,026	288.1
	Dubuque	501	145.3	Scott	1,349	199.0
	Johnson	320	82.5	Warren	232	154.7
	Linn	1,389	174.4	Woodbury	949	190.5

<sup>1</sup>Rates per 1,000 live births

Source: Iowa Department of Public Health, Vital Statistics

## Mothers Who Smoked During Pregnancy 1997-1999



## Mothers Who Drank During Pregnancy 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	1,474	13.2

	County	Number	Crude <sup>1</sup>		County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	*	*	<b>Counties with Average Population 10,000 to 20,000</b>	Lucas	4	13.0
	Adams	*	*		Monroe	*	*
	Audubon	*	*		Osceola	*	*
	Clarke	*	*		Pocahontas	5	21.7
	Davis	*	*		Ringgold	*	*
	Decatur	3	10.7		Taylor	*	*
	Fremont	3	10.7		Van Buren	*	*
	Howard	4	11.3		Wayne	*	*
	Ida	*	*		Worth	*	*
	<u>Group Totals</u>						
Number:	27						
Crude:	6.0						

	County	Number	Crude		County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Allamakee	5	9.6	<b>MSA Counties</b>	Henry	6	8.1
	Appanoose	7	15.5		Humboldt	4	11.0
	Buena Vista	8	10.7		Iowa	6	11.8
	Butler	*	*		Jefferson	*	*
	Calhoun	*	*		Jones	15	25.3
	Cass	9	19.6		Keokuk	5	12.7
	Cedar	7	12.4		Kossuth	5	9.8
	Cherokee	5	12.3		Louisa	4	7.6
	Chickasaw	7	16.6		Lyon	*	*
	Clay	6	10.5		Madison	6	11.5
	Clayton	7	11.8		Mills	9	17.7
	Crawford	7	11.5		Mitchell	*	*
	Delaware	15	23.0		Monona	*	*
	Dickinson	7	13.5		Montgomery	4	9.8
	Emmet	10	27.2		O'Brien	*	*
	Floyd	6	10.1		Page	9	16.2
	Franklin	4	11.0		Palo Alto	7	21.0
	Greene	*	*		Poweshiek	5	8.9
	Grundy	*	*		Sac	7	18.9
	Guthrie	5	12.9		Shelby	5	11.8
Hamilton	6	9.5	Tama	8	11.3		
Hancock	3	7.7	Union	6	13.9		
Hardin	5	7.9	Winnebago	3	7.8		
Harrison	6	11.5	Wright	7	15.0		

	County	Number	Crude		County	Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	24	27.6	<b>MSA Counties</b>	Mahaska	3	3.6	
	Boone	3	3.3		Marion	4	3.4	
	Bremer	3	4.5		Marshall	15	9.6	
	Buchanan	3	3.4		Muscatine	9	5.0	
	Carroll	5	6.8		Plymouth	6	6.5	
	Cerro Gordo	21	13.1		Sioux	10	8.3	
	Clinton	8	4.1		Story	26	10.0	
	Des Moines	11	6.9		Wapello	6	5.0	
	Fayette	5	6.9		Washington	3	3.6	
	Jackson	*	*		Webster	28	18.3	
	Jasper	21	16.0		Winneshek	3	5.1	
	Lee	24	17.6					

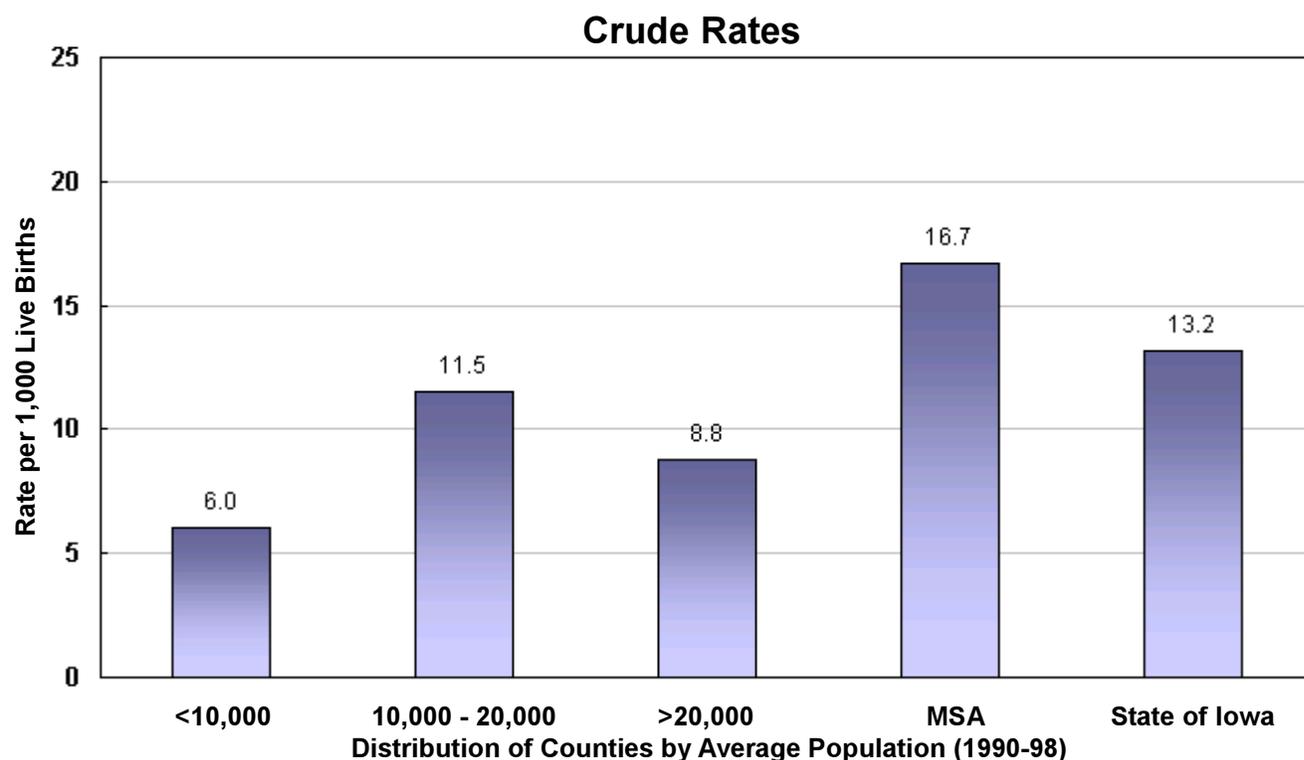
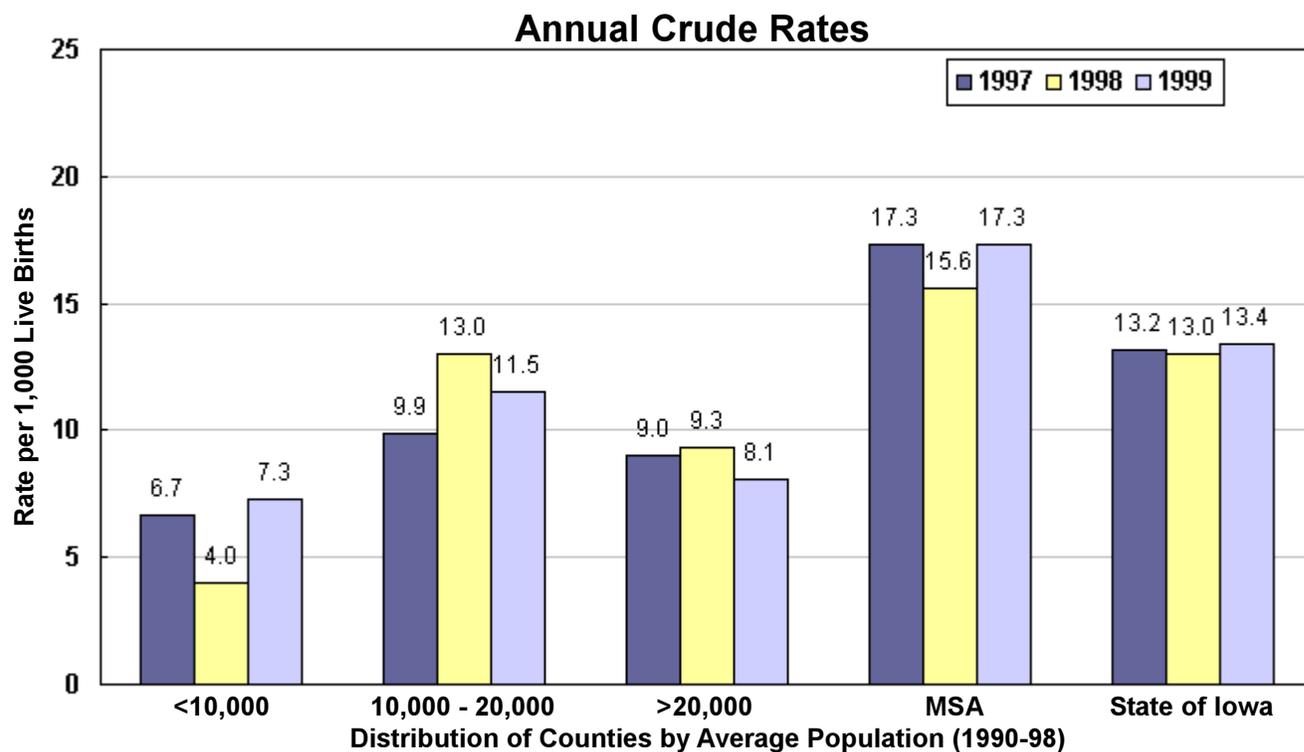
	County	Number	Crude		County	Number	Crude
<b>MSA Counties</b>	Black Hawk	37	7.7	<b>MSA Counties</b>	Polk	321	18.3
	Dallas	18	11.9		Pottawattamie	30	8.4
	Dubuque	39	11.3		Scott	136	20.1
	Johnson	41	10.6		Warren	13	8.7
	Linn	268	33.7		Woodbury	33	6.6
	<u>Group Totals</u>						
Number:	936						
Crude:	16.7						

<sup>1</sup>Rates per 1,000 live births

\*Number of events is less than 3 and rates are not reported

Source: Iowa Department of Public Health, Vital Statistics

## Mothers Who Drank During Pregnancy 1997-1999



## Fetal Deaths 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	648	5.8

	County			County		
	Number	Crude <sup>1</sup>		Number	Crude <sup>1</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	*	*	Lucas	*	*
	Adams	*	*	Monroe	*	*
	Audubon	*	*	Osceola	*	*
	Clarke	*	*	Pocahontas	*	*
	Davis	3	9.3	Ringgold	3	16.6
	Decatur	*	*	Taylor	*	*
	Fremont	*	*	Van Buren	*	*
	Howard	*	*	Wayne	*	*
	Ida	*	*	Worth	*	*
	<b>Group Totals</b>					
Number:	25					
Crude:	5.6					

	County			County		
	Number	Crude		Number	Crude	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	3	5.7	Henry	8	10.9
	Appanoose	3	6.6	Humboldt	*	*
	Buena Vista	5	6.7	Iowa	*	*
	Butler	*	*	Jefferson	3	6.1
	Calhoun	*	*	Jones	3	5.1
	Cass	*	*	Keokuk	6	15.2
	Cedar	7	12.4	Kossuth	5	9.8
	Cherokee	*	*	Louisa	*	*
	Chickasaw	*	*	Lyon	*	*
	Clay	*	*	Madison	10	19.2
	Clayton	4	6.7	Mills	*	*
	Crawford	4	6.6	Mitchell	3	7.7
	Delaware	11	16.9	Monona	*	*
	Dickinson	*	*	Montgomery	6	14.6
	Emmet	*	*	O'Brien	4	7.5
	Floyd	*	*	Page	4	7.2
	Franklin	3	8.3	Palo Alto	*	*
	Greene	3	8.7	Poweshiek	*	*
	Grundy	*	*	Sac	4	10.8
	Guthrie	4	10.3	Shelby	*	*
Hamilton	*	*	Tama	6	8.5	
Hancock	3	7.7	Union	*	*	
Hardin	*	*	Winnebago	*	*	
Harrison	*	*	Wright	3	6.4	
<b>Group Totals</b>						
Number:	144					
Crude:	6.2					

	County			County		
	Number	Crude		Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	8	9.2	Mahaska	3	3.6
	Boone	4	4.4	Marion	*	*
	Bremer	6	9.0	Marshall	7	4.5
	Buchanan	8	9.0	Muscatine	18	10.0
	Carroll	*	*	Plymouth	6	6.5
	Cerro Gordo	5	3.1	Sioux	6	5.0
	Clinton	12	6.2	Story	16	6.2
	Des Moines	13	8.2	Wapello	*	*
	Fayette	3	4.1	Washington	7	8.3
	Jackson	6	8.4	Webster	11	7.2
	Jasper	8	6.1	Winneshiek	*	*
	Lee	14	10.3			
	<b>Group Totals</b>					
Number:	169					
Crude:	6.1					

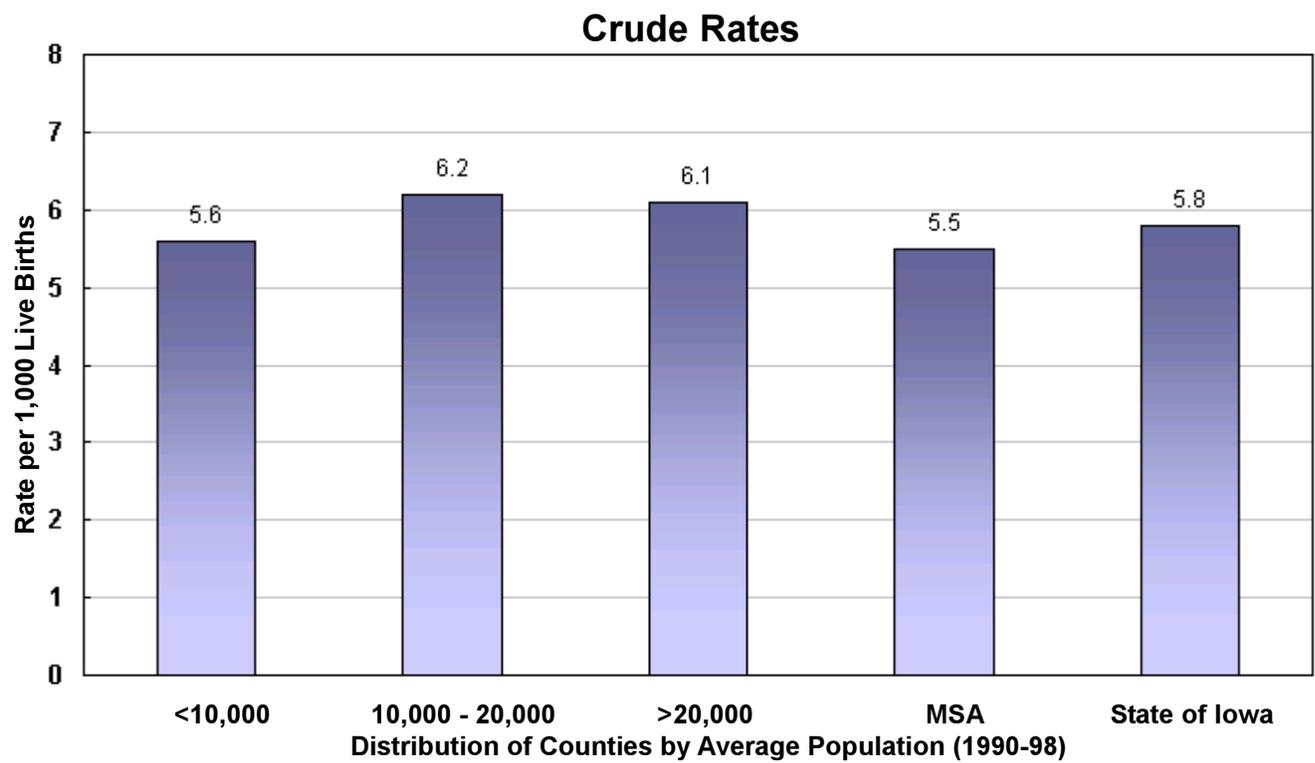
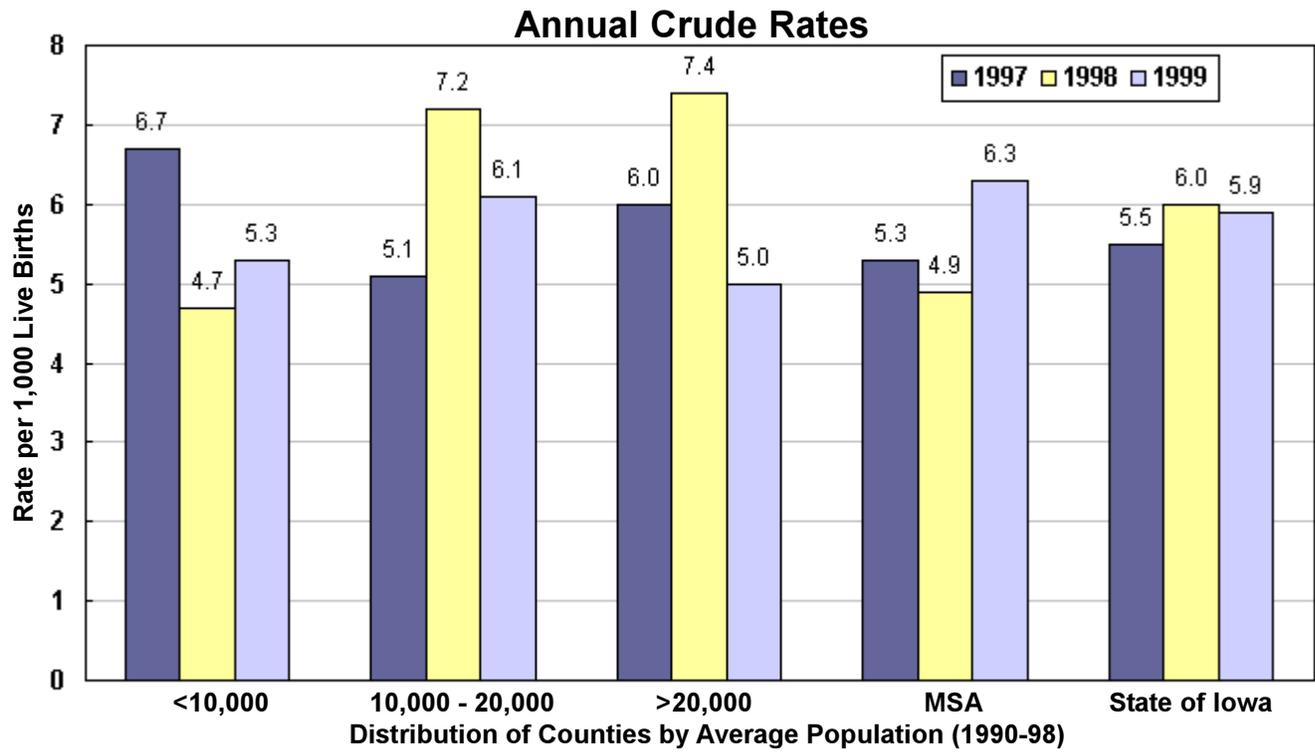
	County			County		
	Number	Crude		Number	Crude	
<b>MSA Counties</b>	Black Hawk	29	6.0	Polk	85	4.8
	Dallas	7	4.6	Pottawattamie	17	4.8
	Dubuque	21	6.1	Scott	36	5.3
	Johnson	25	6.4	Warren	12	8.0
	Linn	50	6.3	Woodbury	28	5.6
<b>Group Totals</b>						
Number:	310					
Crude:	5.5					

<sup>1</sup>Rates per 1,000 live births

\*Number of events is less than 3 and rates are not reported

Source: Iowa Department of Public Health, Vital Statistics

## Fetal Deaths 1997-1999



## Neonatal Deaths 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	443	4.0

	County	Number	Crude <sup>1</sup>		County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	*	*	<b>Counties with Average Population 10,000 to 20,000</b>	Lucas	*	*
	Adams	*	*		Monroe	*	*
	Audubon	*	*		Osceola	*	*
	Clarke	*	*		Pocahontas	*	*
	Davis	*	*		Ringgold	*	*
	Decatur	*	*		Taylor	*	*
	Fremont	*	*		Van Buren	*	*
	Howard	*	*		Wayne	*	*
	Ida	*	*		Worth	*	*
	<u>Group Totals</u>					<u>Group Totals</u>	
Number:	12			Number:	78		
Crude:	2.7			Crude:	3.3		

	County	Number	Crude		County	Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Allamakee	*	*	<b>MSA Counties</b>	Polk	82	4.7	
	Appanoose	*	*		Pottawattamie	15	4.2	
	Buena Vista	4	5.3		Scott	32	4.7	
	Butler	*	*		Warren	9	6.0	
	Calhoun	*	*		Woodbury	26	5.2	
	Cass	*	*					
	Cedar	*	*					
	Cherokee	*	*					
	Chickasaw	*	*					
	Clay	4	7.0					
	Clayton	*	*					
	Crawford	4	6.6					
	Delaware	*	*					
	Dickinson	*	*					
	Emmet	*	*					
	Floyd	*	*					
	Franklin	*	*					
	Greene	4	11.6					
	Grundy	*	*					
	Guthrie	*	*					
Hamilton	4	6.3						
Hancock	*	*						
Hardin	*	*						
Harrison	*	*						
<u>Group Totals</u>				<u>Group Totals</u>				
Number:	110			Number:	243			
Crude:	4.0			Crude:	4.3			

	County	Number	Crude		County	Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	6	6.9	<b>Counties with Average Population &gt;20,000</b>	Mahaska	*	*	
	Boone	*	*		Marion	6	5.1	
	Bremer	*	*		Marshall	5	3.2	
	Buchanan	5	5.6		Muscatine	4	2.2	
	Carroll	*	*		Plymouth	*	*	
	Cerro Gordo	3	1.9		Sioux	6	5.0	
	Clinton	5	2.6		Story	12	4.6	
	Des Moines	5	3.2		Wapello	6	5.0	
	Fayette	*	*		Washington	7	8.3	
	Jackson	4	5.6		Webster	6	3.9	
	Jasper	11	8.4		Winneshiek	3	5.1	
	Lee	9	6.6					

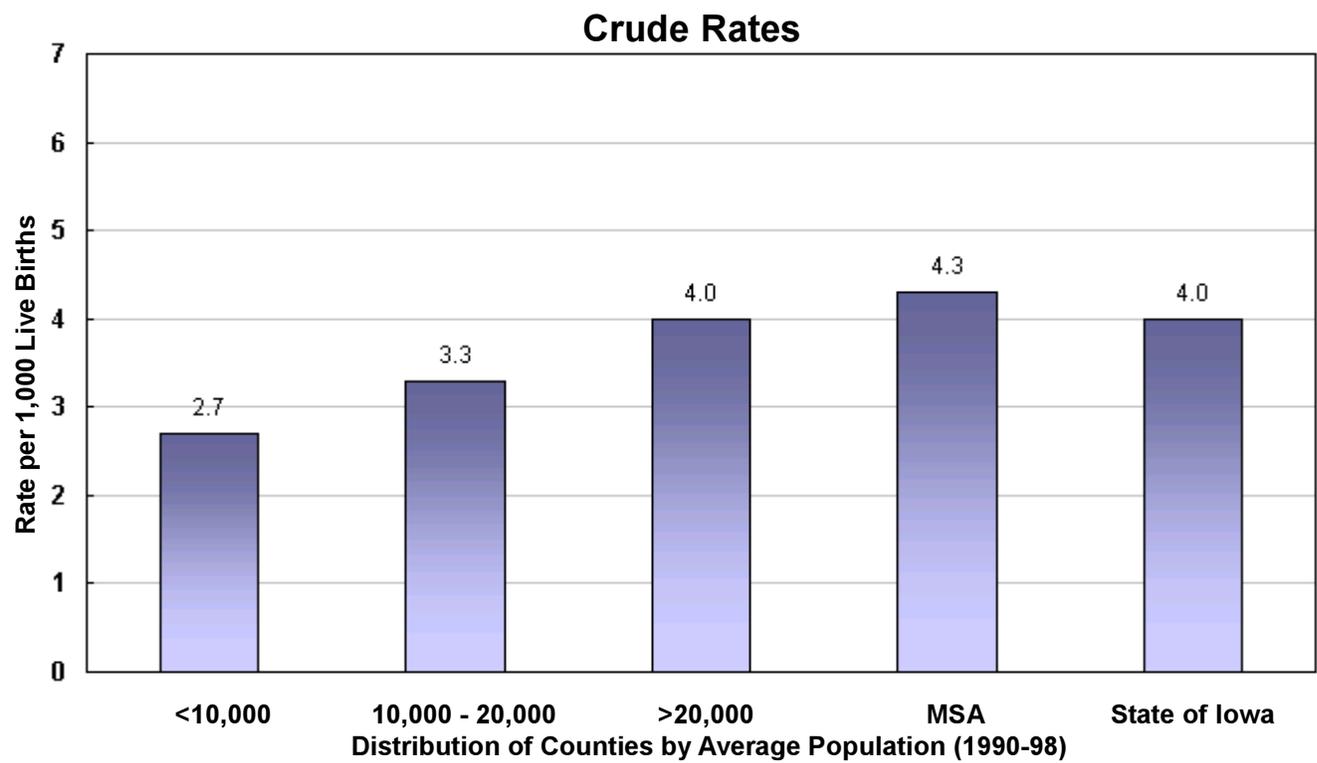
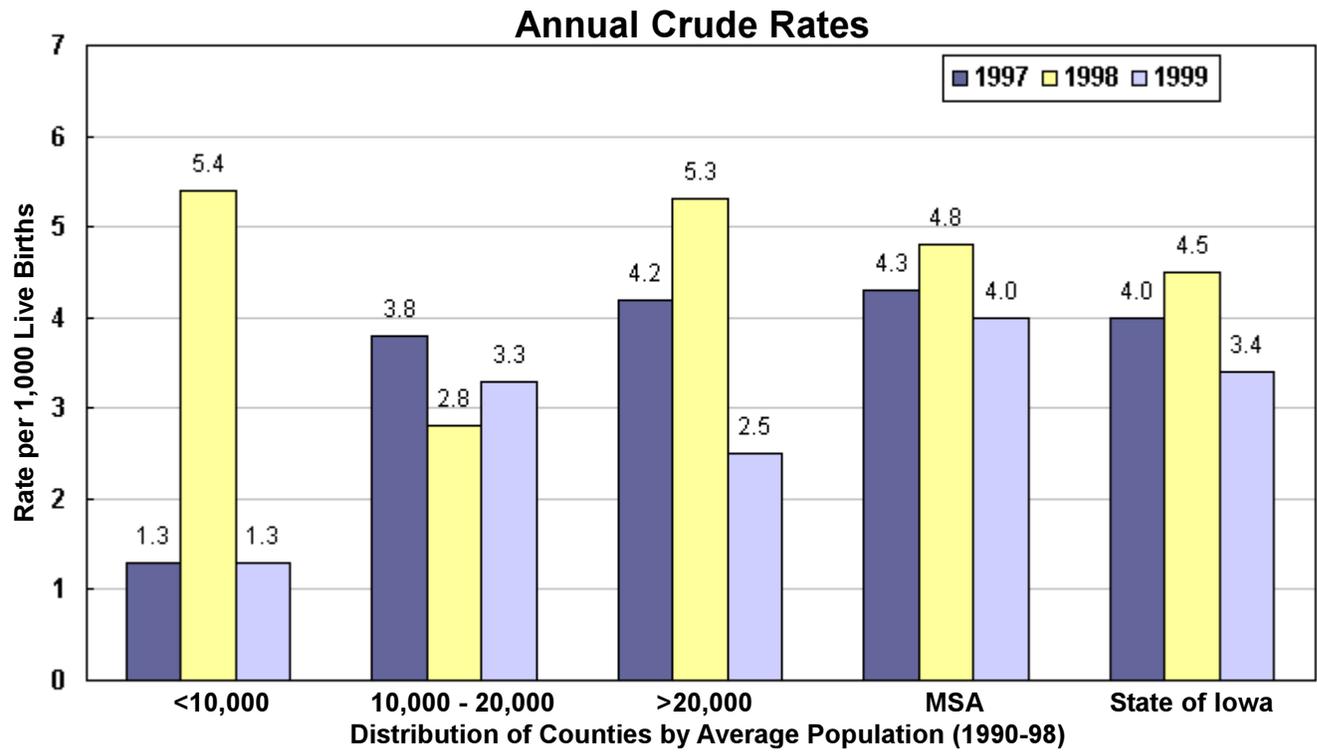
	County	Number	Crude		County	Number	Crude
<b>MSA Counties</b>	Black Hawk	19	3.9	<b>MSA Counties</b>	Polk	82	4.7
	Dallas	3	2.0		Pottawattamie	15	4.2
	Dubuque	8	2.3		Scott	32	4.7
	Johnson	17	4.4		Warren	9	6.0
	Linn	32	4.0		Woodbury	26	5.2
<u>Group Totals</u>				<u>Group Totals</u>			
Number:	243			Number:	243		
Crude:	4.3			Crude:	4.3		

<sup>1</sup>Rates per 1,000 live births

\*Number of events is less than 3 and rates are not reported

Source: Iowa Department of Public Health, Vital Statistics

## Neonatal Deaths 1997-1999



## Perinatal Deaths 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	1,091	9.8

	County	Number	Crude <sup>1</sup>		County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	*	*	<b>Counties with Average Population 10,000 to 20,000</b>	Lucas	3	9.8
	Adams	*	*		Monroe	3	11.0
	Audubon	*	*		Osceola	3	13.1
	Clarke	3	10.4		Pocahontas	*	*
	Davis	3	9.3		Ringgold	5	27.6
	Decatur	*	*		Taylor	*	*
	Fremont	4	14.2		Van Buren	*	*
	Howard	*	*		Wayne	*	*
	Ida	*	*		Worth	*	*
	<b>Group Totals</b>					<b>Group Totals</b>	
Number:	37			Number:	222		
Crude:	8.2			Crude:	9.5		

	County	Number	Crude		County	Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Allamakee	4	7.6	<b>MSA Counties</b>	Polk	167	9.5	
	Appanoose	4	8.8		Pottawattamie	32	9.0	
	Buena Vista	9	12.0		Scott	68	10.0	
	Butler	*	*		Warren	21	14.0	
	Calhoun	*	*		Woodbury	54	10.8	
	Cass	*	*					
	Cedar	9	16.0					
	Cherokee	*	*					
	Chickasaw	*	*					
	Clay	4	7.0					
	Clayton	4	6.7					
	Crawford	8	13.1					
	Delaware	13	20.0					
	Dickinson	*	*					
	Emmet	*	*					
	Floyd	*	*					
	Franklin	3	8.3					
	Greene	7	20.3					
	Grundy	*	*					
	Guthrie	4	10.3					
Hamilton	5	7.9						
Hancock	3	7.7						
Hardin	4	6.3						
Harrison	4	7.6						
<b>Group Totals</b>				<b>Group Totals</b>				
Number:	279			Number:	553			
Crude:	10.1			Crude:	9.9			

	County	Number	Crude		County	Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	14	16.1	<b>Counties with Average Population &gt;20,000</b>	Mahaska	3	3.6	
	Boone	6	6.7		Marion	8	6.8	
	Bremer	8	12.0		Marshall	12	7.7	
	Buchanan	13	14.6		Muscatine	22	12.2	
	Carroll	*	*		Plymouth	8	8.7	
	Cerro Gordo	8	5.0		Sioux	12	9.9	
	Clinton	17	8.8		Story	28	10.8	
	Des Moines	18	11.4		Wapello	8	6.6	
	Fayette	4	5.5		Washington	14	16.6	
	Jackson	10	14.0		Webster	17	11.1	
	Jasper	19	14.5		Winneshiek	5	8.4	
	Lee	23	16.9					

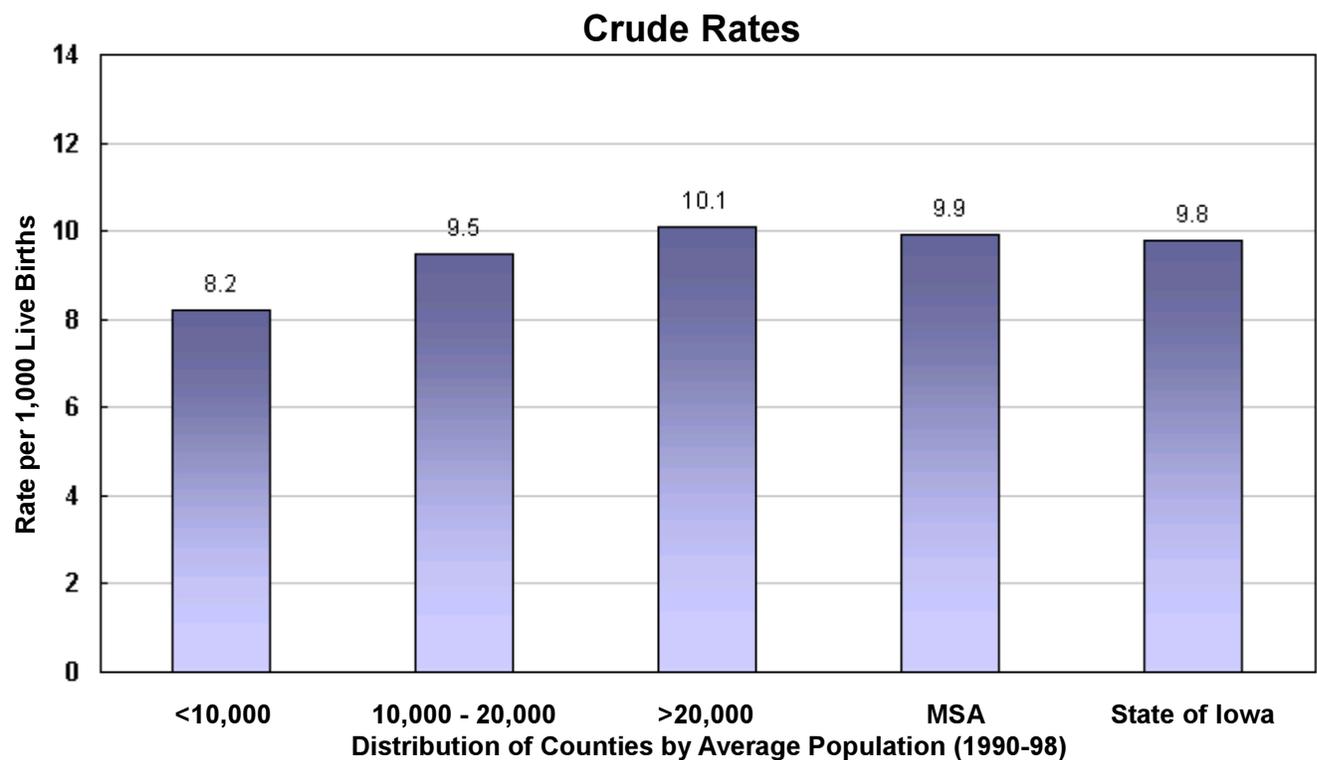
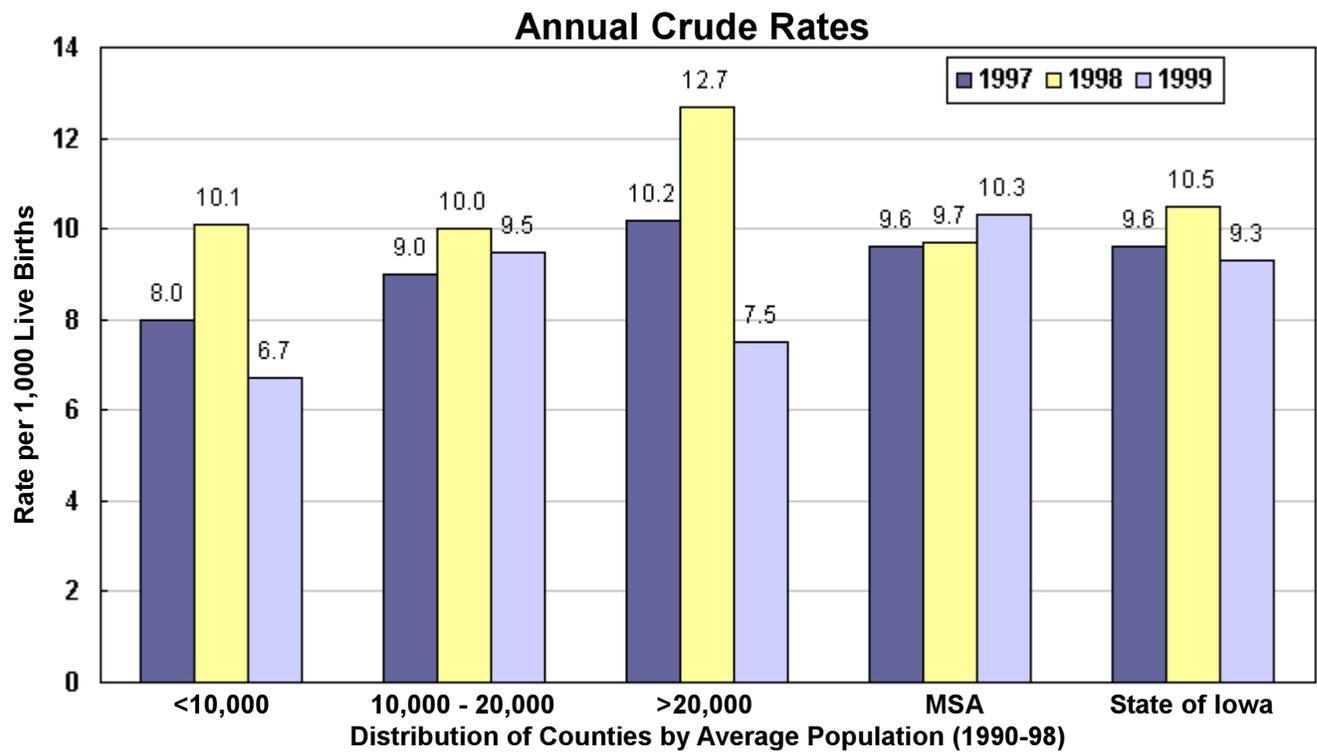
	County	Number	Crude		County	Number	Crude
<b>MSA Counties</b>	Black Hawk	48	10.0	<b>MSA Counties</b>	Polk	167	9.5
	Dallas	10	6.6		Pottawattamie	32	9.0
	Dubuque	29	8.4		Scott	68	10.0
	Johnson	42	10.8		Warren	21	14.0
	Linn	82	10.3		Woodbury	54	10.8
<b>Group Totals</b>				<b>Group Totals</b>			
Number:	553			Number:	553		
Crude:	9.9			Crude:	9.9		

<sup>1</sup>Rates per 1,000 live births

\*Number of events is less than 3 and rates are not reported

Source: Iowa Department of Public Health, Vital Statistics

## Perinatal Deaths 1997-1999



## Infant Deaths 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	685	6.1

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	*	*	Lucas	*	*
	Adams	*	*	Monroe	*	*
	Audubon	*	*	Osceola	*	*
	Clarke	*	*	Pocahontas	*	*
	Davis	*	*	Ringgold	*	*
	Decatur	*	*	Taylor	*	*
	Fremont	3	10.7	Van Buren	*	*
	Howard	3	8.5	Wayne	*	*
	Ida	*	*	Worth	*	*
	<u>Group Totals</u>					
Number:	23					
Crude:	5.1					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	4	7.6	Henry	6	8.1
	Appanoose	*	*	Humboldt	*	*
	Buena Vista	4	5.3	Iowa	4	7.9
	Butler	*	*	Jefferson	*	*
	Calhoun	*	*	Jones	*	*
	Cass	*	*	Keokuk	*	*
	Cedar	*	*	Kossuth	5	9.8
	Cherokee	3	7.4	Louisa	3	5.7
	Chickasaw	*	*	Lyon	3	6.8
	Clay	4	7.0	Madison	4	7.7
	Clayton	*	*	Mills	*	*
	Crawford	5	8.2	Mitchell	*	*
	Delaware	4	6.1	Monona	*	*
	Dickinson	*	*	Montgomery	6	14.6
	Emmet	*	*	O'Brien	5	9.4
	Floyd	*	*	Page	6	10.8
	Franklin	*	*	Palo Alto	*	*
	Greene	5	14.5	Poweshiek	*	*
	Grundy	*	*	Sac	4	10.8
	Guthrie	*	*	Shelby	3	7.1
Hamilton	4	6.3	Tama	8	11.3	
Hancock	*	*	Union	*	*	
Hardin	*	*	Winnebago	3	7.8	
Harrison	*	*	Wright	*	*	
<u>Group Totals</u>						
Number:	125					
Crude:	5.3					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	8	9.2	Mahaska	4	4.7
	Boone	4	4.4	Marion	7	6.0
	Bremer	*	*	Marshall	6	3.9
	Buchanan	6	6.7	Muscatine	5	2.8
	Carroll	*	*	Plymouth	4	4.3
	Cerro Gordo	7	4.4	Sioux	6	5.0
	Clinton	12	6.2	Story	15	5.8
	Des Moines	6	3.8	Wapello	9	7.4
	Fayette	*	*	Washington	11	13.0
	Jackson	4	5.6	Webster	11	7.2
	Jasper	12	9.1	Winneshiek	4	6.7
	Lee	12	8.8			
	<u>Group Totals</u>					
Number:	159					
Crude:	5.8					

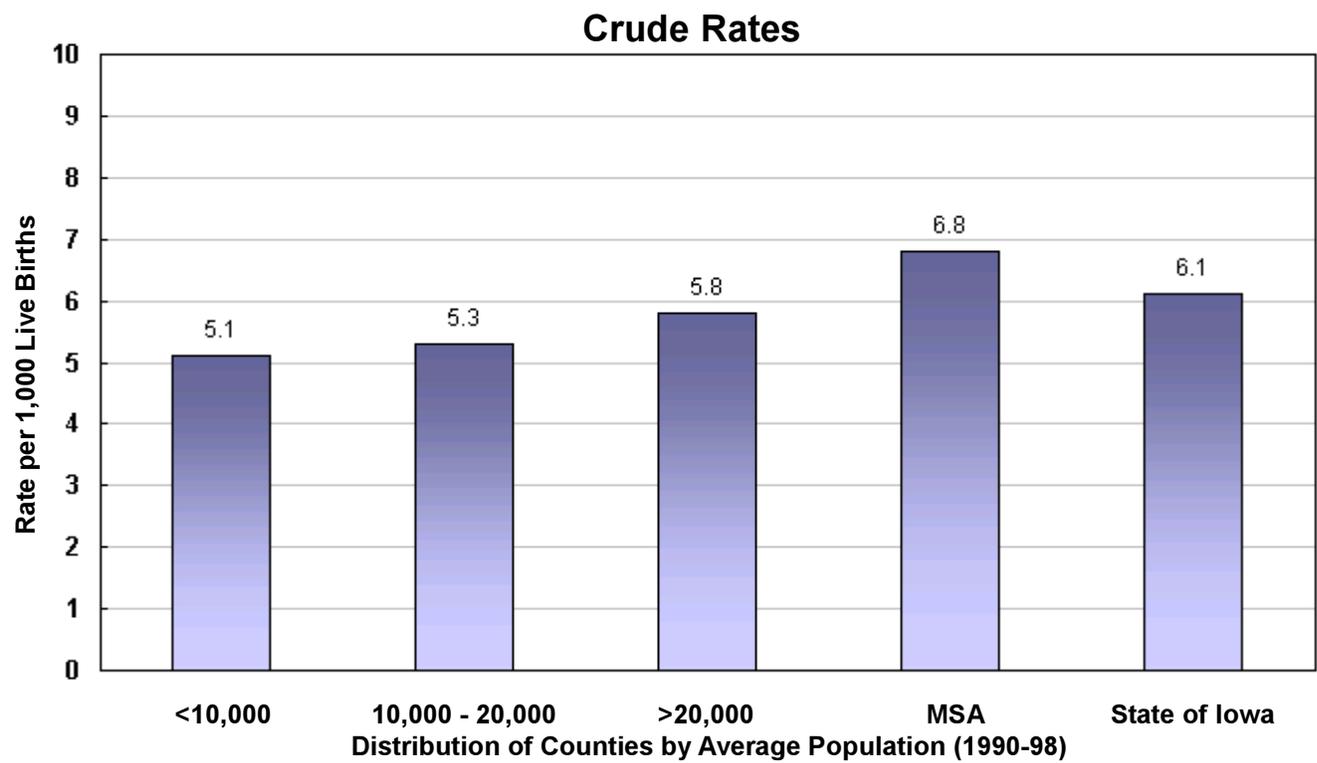
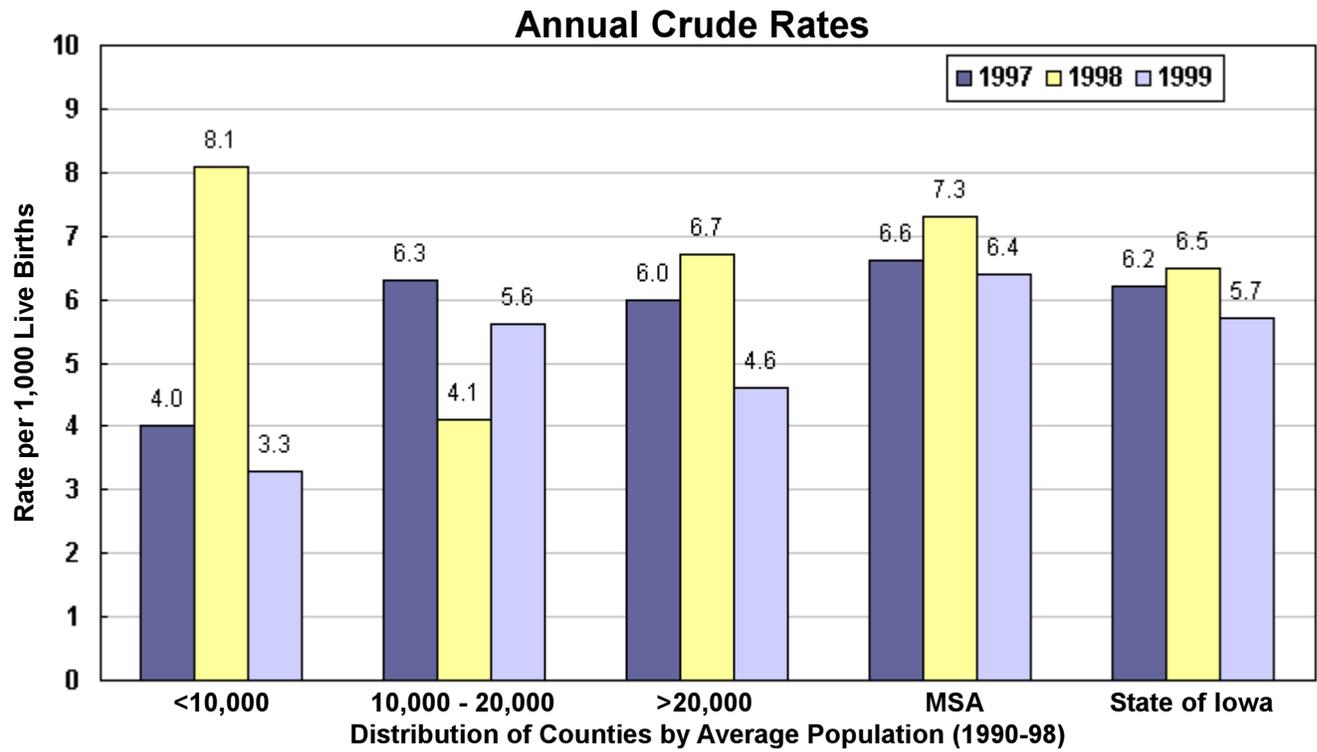
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	33	6.8	Polk	124	7.1
	Dallas	6	4.0	Pottawattamie	28	7.9
	Dubuque	14	4.1	Scott	49	7.2
	Johnson	27	7.0	Warren	11	7.3
	Linn	43	5.4	Woodbury	43	8.6
	<u>Group Totals</u>					
Number:	378					
Crude:	6.8					

<sup>1</sup>Rates per 1,000 live births

\*Number of events is less than 3 and rates are not reported

Source: Iowa Department of Public Health, Vital Statistics

## Infant Deaths 1997-1999



## Congenital Malformations 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	1,298	11.6

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	*	*	Lucas	*	*
	Adams	4	30.8	Monroe	6	22.1
	Audubon	4	18.0	Osceola	4	17.5
	Clarke	*	*	Pocahontas	*	*
	Davis	3	9.3	Ringgold	6	33.1
	Decatur	3	10.7	Taylor	3	14.2
	Fremont	6	21.4	Van Buren	3	11.1
	Howard	7	19.8	Wayne	3	16.0
	Ida	*	*	Worth	4	16.6
	<b>Group Totals</b>					
Number:	66					
Crude:	14.7					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	9	17.2	Henry	24	32.6
	Appanoose	7	15.5	Humboldt	6	16.4
	Buena Vista	8	10.7	Iowa	7	13.8
	Butler	*	*	Jefferson	9	18.3
	Calhoun	*	*	Jones	10	16.9
	Cass	7	15.3	Keokuk	*	*
	Cedar	9	16.0	Kossuth	8	15.7
	Cherokee	10	24.6	Louisa	9	17.1
	Chickasaw	7	16.6	Lyon	9	20.5
	Clay	13	22.8	Madison	*	*
	Clayton	8	13.4	Mills	10	19.6
	Crawford	10	16.4	Mitchell	5	12.9
	Delaware	15	23.0	Monona	3	9.3
	Dickinson	4	7.7	Montgomery	12	29.3
	Emmet	7	19.0	O'Brien	7	13.2
	Floyd	14	23.5	Page	9	16.2
	Franklin	9	24.9	Palo Alto	8	24.0
	Greene	6	17.4	Poweshiek	8	14.2
	Grundy	*	*	Sac	4	10.8
	Guthrie	*	*	Shelby	14	33.1
Hamilton	6	9.5	Tama	7	9.9	
Hancock	4	10.3	Union	9	20.8	
Hardin	5	7.9	Winnebago	4	10.4	
Harrison	7	13.4	Wright	10	21.5	

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	8	9.2	Mahaska	12	14.2
	Boone	11	12.2	Marion	14	12.0
	Bremer	5	7.5	Marshall	15	9.6
	Buchanan	9	10.1	Muscatine	25	13.9
	Carroll	11	14.9	Plymouth	14	15.2
	Cerro Gordo	23	14.4	Sioux	17	14.0
	Clinton	25	12.9	Story	17	6.6
	Des Moines	25	15.8	Wapello	21	17.3
	Fayette	14	19.3	Washington	15	17.8
	Jackson	10	14.0	Webster	12	7.8
	Jasper	15	11.4	Winneshek	14	23.6
	Lee	23	16.9			

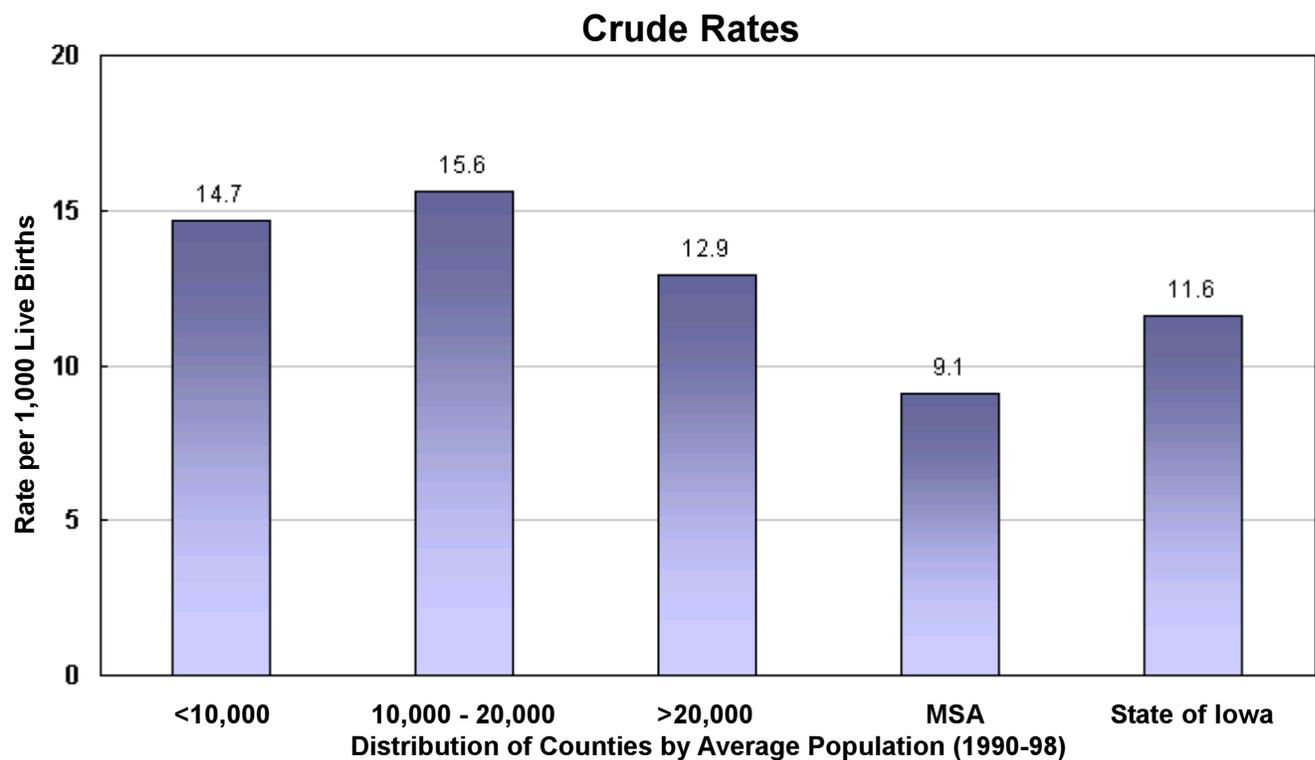
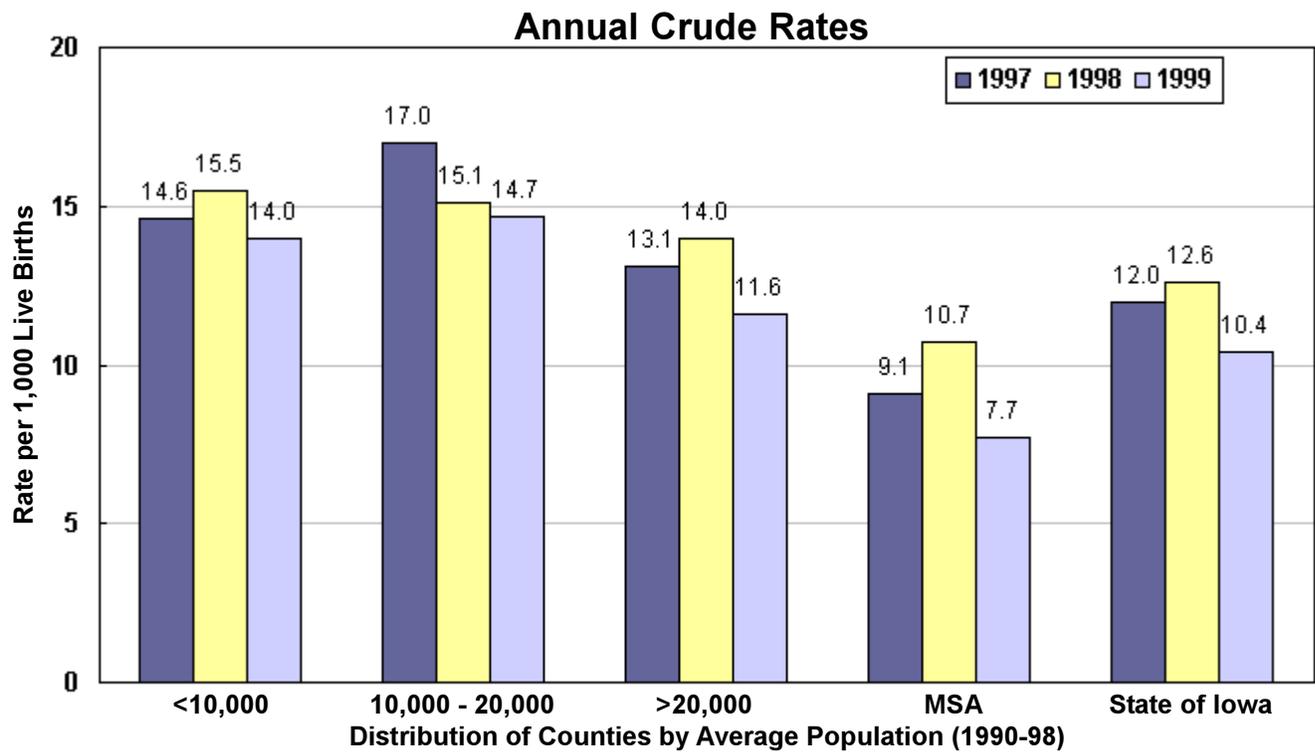
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	43	8.9	Polk	118	6.7
	Dallas	7	4.6	Pottawattamie	66	18.5
	Dubuque	22	6.4	Scott	88	13.0
	Johnson	57	14.7	Warren	3	2.0
	Linn	76	9.5	Woodbury	32	6.4
	<b>Group Totals</b>					
Number:	512					
Crude:	9.1					

<sup>1</sup>Rates per 1,000 live births

\*Number of events is less than 3 and rates are not reported

Source: Iowa Department of Public Health, Vital Statistics

## Congenital Malformations 1997-1999



## Birth Defects 1996-1998

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	4,710	42.4

	County	Number	Crude <sup>1</sup>		County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	5	24.4	<b>Counties with Average Population &gt;20,000</b>	Lucas	15	45.0
	Adams	5	38.2		Monroe	12	44.6
	Audubon	3	13.8		Osceola	10	42.6
	Clarke	9	33.5		Pocahontas	10	46.3
	Davis	13	37.2		Ringgold	7	45.2
	Decatur	10	34.8		Taylor	5	22.7
	Fremont	5	20.6		Van Buren	11	40.4
	Howard	9	27.4		Wayne	7	39.5
	Ida	7	24.3		Worth	11	44.0
	<u>Group Totals</u>					<u>Group Totals</u>	
Number:	154			Number:	843		
Crude:	34.7			Crude:	36.0		

	County	Number	Crude		County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	17	33.3	<b>Counties with Average Population &gt;20,000</b>	Henry	42	60.5
	Appanoose	13	28.1		Humboldt	10	28.9
	Buena Vista	28	38.7		Iowa	28	50.3
	Butler	24	51.1		Jefferson	20	39.7
	Calhoun	13	39.9		Jones	29	46.8
	Cass	11	24.1		Keokuk	22	54.6
	Cedar	29	50.2		Kossuth	19	37.3
	Cherokee	11	28.4		Louisa	27	51.5
	Chickasaw	11	27.1		Lyon	13	29.8
	Clay	18	31.9		Madison	22	45.4
	Clayton	24	41.5		Mills	7	13.2
	Crawford	12	18.9		Mitchell	13	33.7
	Delaware	28	40.7		Monona	8	26.1
	Dickinson	11	22.3		Montgomery	8	18.9
	Emmet	12	31.7		O'Brien	21	38.7
	Floyd	24	40.1		Page	13	23.6
	Franklin	15	40.8		Palo Alto	9	27.5
	Greene	12	35.3		Poweshiek	22	37.9
	Grundy	15	38.7		Sac	15	37.4
	Guthrie	15	39.6		Shelby	10	25.2
Hamilton	15	24.6	Tama	37	52.9		
Hancock	17	44.4	Union	19	41.8		
Hardin	23	37.6	Winnebago	7	17.2		
Harrison	2	3.9	Wright	22	46.5		

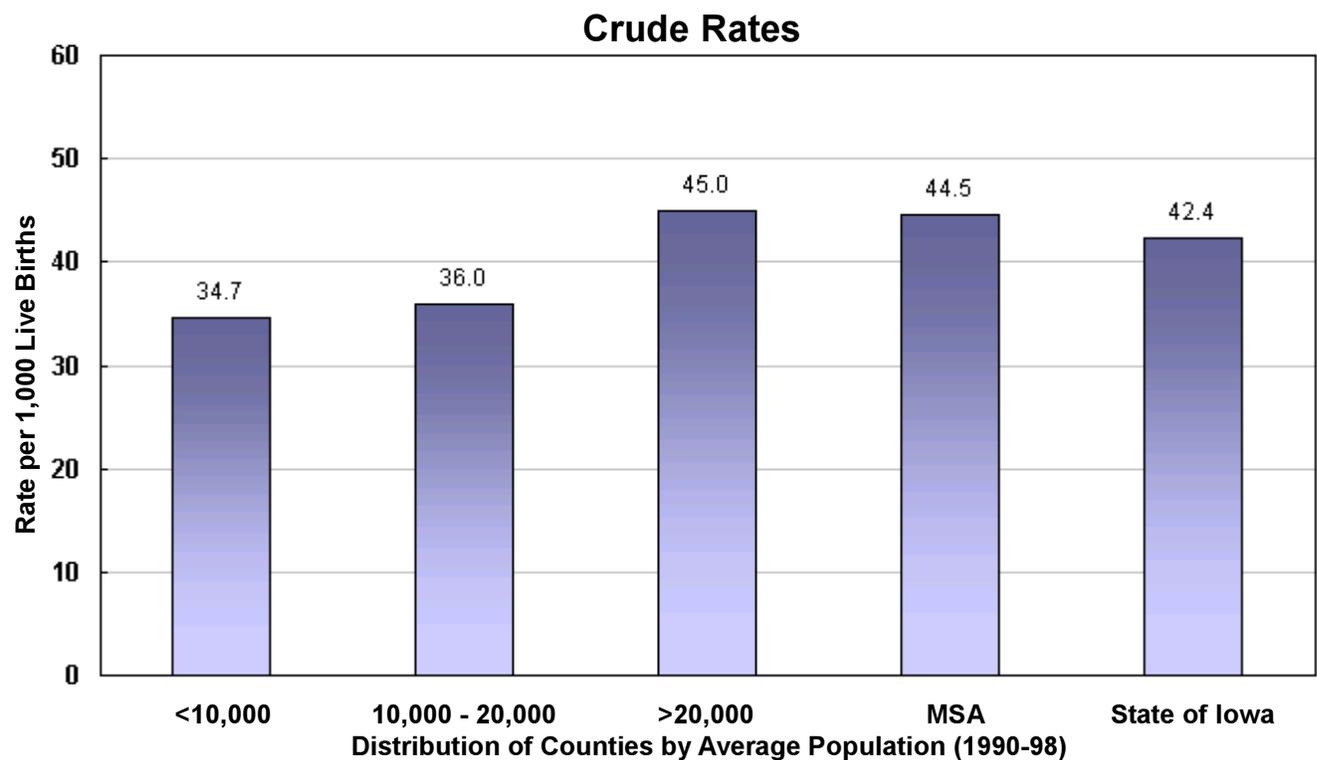
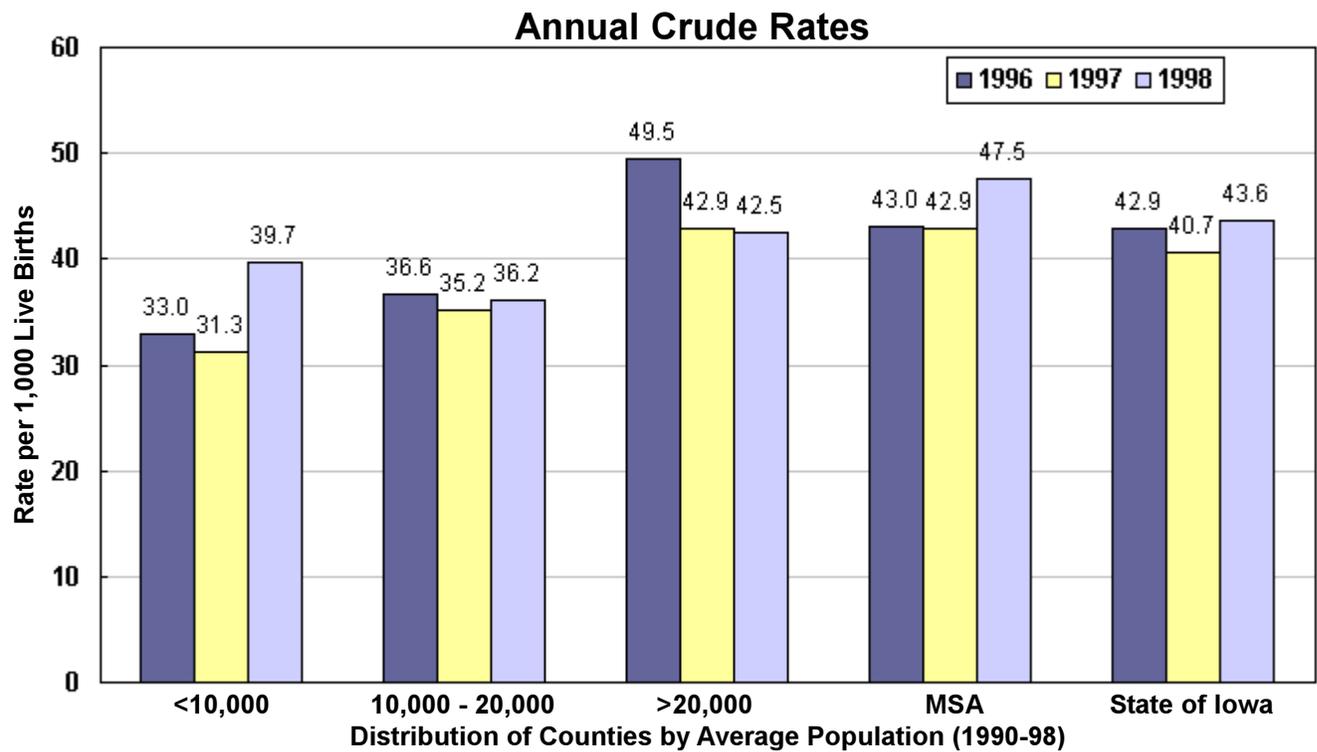
	County	Number	Crude		County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	30	34.5	<b>MSA Counties</b>	Mahaska	35	43.6
	Boone	33	37.4		Marion	46	41.3
	Bremer	25	37.7		Marshall	64	41.7
	Buchanan	51	58.0		Muscatine	110	62.0
	Carroll	32	43.0		Plymouth	42	44.4
	Cerro Gordo	64	38.8		Sioux	44	37.0
	Clinton	90	47.2		Story	93	35.6
	Des Moines	85	52.2		Wapello	66	52.1
	Fayette	31	41.7		Washington	56	64.7
	Jackson	37	51.8		Webster	72	47.1
	Jasper	49	38.2		Winneshiek	20	32.3
	Lee	67	48.8				

	County	Number	Crude		County	Number	Crude
<b>MSA Counties</b>	Black Hawk	247	51.2	<b>MSA Counties</b>	Polk	834	48.0
	Dallas	55	36.4		Pottawattamie	63	18.3
	Dubuque	168	48.1		Scott	274	40.2
	Johnson	237	62.0		Warren	64	42.7
	Linn	371	47.8		Woodbury	158	31.3
<u>Group Totals</u>				<u>Group Totals</u>			
Number:	2,471			Number:	2,471		
Crude:	44.5			Crude:	44.5		

<sup>1</sup>Rates per 1,000 live births

Source: Iowa Birth Defects Registry,  
The University of Iowa

## Birth Defects 1996-1998



## Selected Birth Defects in Iowa 1995-1998

Defect Name	1995		1996		1997		1998	
	Defects	Crude <sup>1</sup> Rate						
Anencephalus	18	0.49	26	0.70	11	0.30	9	0.24
Anophthalmos Microphthal	9	0.24	7	0.19	6	0.16	9	0.24
Aortic Valve Stenosis and Atresia	39	1.06	42	1.13	34	0.93	45	1.21
Congenital Arthrogyposis	21	0.57	9	0.24	13	0.35	12	0.32
Atrial Septal Defect	131	3.56	161	4.34	165	4.50	266	7.14
Rectal and Intestinal Atresia and Stenosis	14	0.38	25	0.67	20	0.55	18	0.48
Bladder Exstrophy	1	0.03	1	0.03	2	0.05	3	0.08
Cleft Lip	37	1.01	53	1.43	54	1.47	45	1.21
Cleft Palate without Cleft Lip	18	0.49	15	0.40	15	0.41	22	0.59
Club foot without CNS Defect	106	2.88	101	2.72	98	2.67	81	2.17
Coarctation of Aorta	28	0.76	21	0.57	25	0.68	25	0.67
Coloboma Of Eye	1	0.03	10	0.27	3	0.08	2	0.05
Congenital Cataract	14	0.38	12	0.32	10	0.27	13	0.35
Down Syndrome (Trisomy 21)	37	1.01	51	1.37	49	1.34	48	1.29
Endocardial Cushion Defect	9	0.24	26	0.70	20	0.55	19	0.51
Trisomy 18 (Edward's Syndrome)	4	0.11	9	0.24	7	0.19	10	0.27
Encephalocele	4	0.11	4	0.11	5	0.14	3	0.08
Hydrocephalus without Spina Bifida	50	1.36	37	1.00	30	0.82	26	0.70
Hypoplastic Left Heart Syndrome	19	0.52	20	0.54	13	0.35	26	0.70
Lung Agenesis and Hypoplasia	15	0.41	21	0.57	12	0.33	10	0.27
Microcephalus	52	1.41	35	0.94	37	1.01	29	0.78
Pulmonary Artery Anomaly	60	1.63	91	2.45	96	2.62	115	3.09
Trisomy 13 (Patau's Syndrome)	2	0.05	4	0.11	6	0.16	5	0.13
Patent Ductus Arteriosus	117	3.18	127	3.42	130	3.55	157	4.21
Pulmonary Valve Stenosis and Atresia	52	1.41	35	0.94	35	0.96	53	1.42
Reduction Deformity of Upper Limbs	13	0.35	23	0.62	13	0.35	20	0.54
Reduction Deformity of Lower Limbs	8	0.22	7	0.19	6	0.16	12	0.32
Renal Agenesis	23	0.63	22	0.59	13	0.35	17	0.46
Spina Bifida without Anecephalus	21	0.57	23	0.62	21	0.57	14	0.38
Tetralogy of Fallot	11	0.3	13	0.35	18	0.49	11	0.30
Tracheo-Esophageal Anomalies	15	0.41	7	0.19	12	0.33	10	0.27
Transposition of Great Arteries	16	0.43	23	0.62	17	0.46	19	0.51
Tricuspid Valve Stenosis and Atresia	32	0.87	49	1.32	40	1.09	71	1.91
Common Truncus	4	0.11	4	0.11	2	0.05	4	0.11
Ventricular Septal Defect	142	3.86	146	3.93	156	4.26	161	4.32
Aniridia	8	0.22	2	0.05	8	0.22	6	0.16
Conus Arteriosus	30	0.82	37	1.00	35	0.96	34	0.91
Omphalocele	15	0.41	7	0.19	10	0.27	9	0.24
Gastroschisis	12	0.33	8	0.22	12	0.33	20	0.54

<sup>1</sup>Crude rates per 1,000 live births

Source: Iowa Birth Defects Registry,  
The University of Iowa

# Infectious Diseases

Fifty-one infectious diseases and rare diseases are listed as reportable conditions in Iowa Administrative Code 641, Chapter 1. Disease surveillance is conducted by the Bureau of Disease Prevention for STDs, HIV/AIDS, and Tuberculosis, and by the Center for Acute Disease Epidemiology for other reportable conditions. Local public health nurses or disease prevention specialists, in conjunction with staff epidemiologists at the Iowa Department of Public Health, interview persons with selected conditions or diseases and conduct investigations of disease outbreaks. Partner counseling and referral services are offered to all persons reported with sexually transmitted diseases and to their sexual and/or needle sharing partners.

Drastic increases in reported cases of certain infectious diseases are often the result of specific outbreak situations. Increases in Hepatitis A cases reported from 1996 – 1998 were due to outbreaks in Woodbury (1996) and Polk (1997-1998) counties and were related to transmission among methamphetamine users. The increase in pertussis cases in 1997 occurred mainly in grade school children in Johnson County. The 30 cases of rubella in 1999 originated in a Hispanic migrant worker population. Immunization clinics were held in a number of packing plants across the state to contain the outbreak.

Several infectious diseases show significant declines over the past few years. Shigella cases are on a downward trend, probably due to the cyclical nature of the disease. Syphilis morbidity in Iowa has reached its lowest level since reporting began in the late 1940's. The state of Iowa now has a very real chance for the total elimination of endemic syphilis.

Decreases in AIDS cases from 1994 – 1998 were due both to the change in definition of AIDS that occurred in 1992 and caused an increase in the number of persons who were reported with AIDS in 1993, and to a true decline in diagnoses resulting from highly active antiretroviral therapies that became widely used after 1995. An increase in cases reported in 1999 was expected because of enhanced laboratory surveillance activities but may also signal an increase in AIDS diagnoses over previous years.

## HIGHLIGHTS...

- Drastic increases in reported cases of certain infectious diseases are often the result of specific outbreak situations.
- Several infectious diseases show significant declines over the past few years.

## Sexually Transmitted Diseases<sup>2</sup> 1997-1999

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	20,011	2.3

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>Counties with Average Population &lt;10,000</b>	Adair	16	0.7	Lucas	13	0.5
	Adams	7	0.5	Monroe	23	1.0
	Audubon	5	0.2	Osceola	4	0.2
	Clarke	24	1.0	Pocahontas	8	0.3
	Davis	11	0.4	Ringgold	11	0.7
	Decatur	12	0.5	Taylor	17	0.8
	Fremont	15	0.6	Van Buren	14	0.6
	Howard	6	0.2	Wayne	10	0.5
	Ida	9	0.4	Worth	11	0.5
	<b>Group Totals</b>					
Number:	216					
Crude:	0.5					

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	27	0.6	Henry	82	1.4
	Appanoose	28	0.7	Humboldt	21	0.7
	Buena Vista	78	1.3	Iowa	52	1.1
	Butler	30	0.6	Jefferson	32	0.6
	Calhoun	34	1.0	Jones	43	0.7
	Cass	31	0.7	Keokuk	30	0.9
	Cedar	48	0.9	Kossuth	13	0.2
	Cherokee	23	0.6	Louisa	64	1.8
	Chickasaw	17	0.4	Lyon	6	0.2
	Clay	31	0.6	Madison	28	0.7
	Clayton	24	0.4	Mills	36	0.8
	Crawford	58	1.2	Mitchell	16	0.5
	Delaware	34	0.6	Monona	22	0.7
	Dickinson	17	0.4	Montgomery	36	1.0
	Emmet	56	1.7	O'Brien	19	0.4
	Floyd	42	0.9	Page	35	0.7
	Franklin	27	0.8	Palo Alto	13	0.4
	Greene	16	0.5	Poweshiek	46	0.8
	Grundy	24	0.7	Sac	16	0.4
	Guthrie	18	0.5	Shelby	14	0.4
Hamilton	40	0.8	Tama	105	2.0	
Hancock	16	0.4	Union	51	1.4	
Hardin	59	1.1	Winnebago	23	0.6	
Harrison	27	0.6	Wright	29	0.7	
<b>Group Totals</b>						
Number:	1,637					
Crude:	0.8					

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>Counties with Average Population &gt;20,000</b>	Benton	77	1.0	Mahaska	70	1.1
	Boone	70	0.9	Marion	68	0.7
	Bremer	74	1.1	Marshall	292	2.5
	Buchanan	58	0.9	Muscatine	287	2.3
	Carroll	45	0.7	Plymouth	78	1.1
	Cerro Gordo	152	1.1	Sioux	37	0.4
	Clinton	424	2.8	Story	400	1.8
	Des Moines	597	4.7	Wapello	179	1.7
	Fayette	53	0.8	Washington	52	0.8
	Jackson	41	0.7	Webster	409	3.5
	Jasper	106	1.0	Winneshek	37	0.6
	Lee	265	2.3			
	<b>Group Totals</b>					
Number:	3,871					
Crude:	1.7					

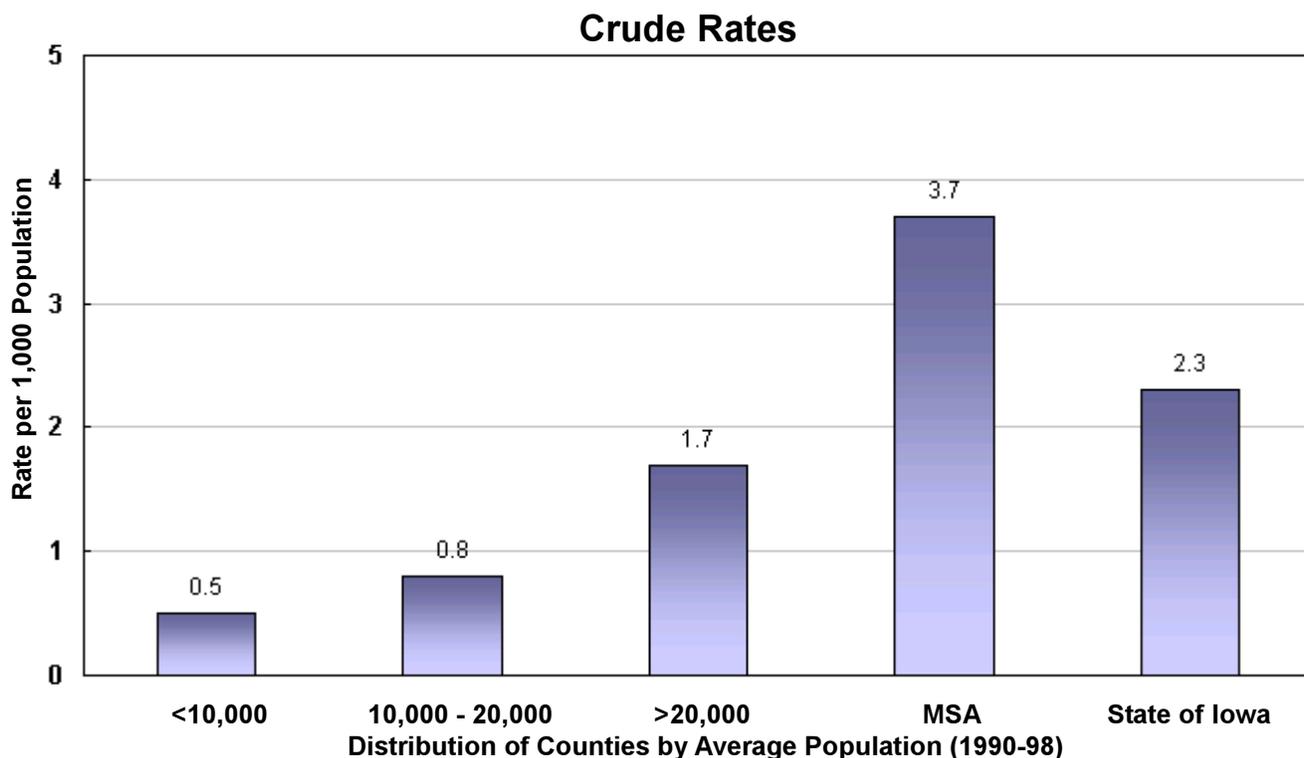
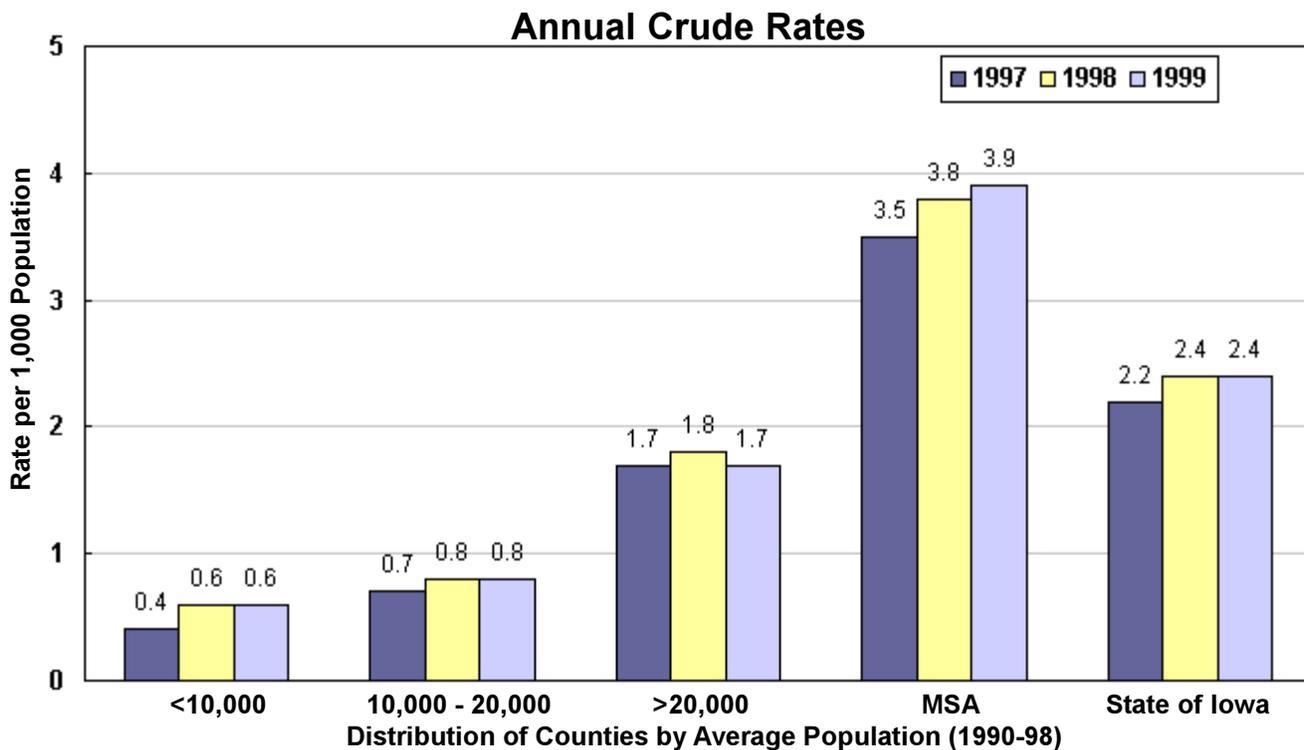
	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>		
<b>MSA Counties</b>	Black Hawk	2,230	6.2	Polk	3,441	3.2
	Dallas	86	0.8	Pottawattamie	455	1.8
	Dubuque	427	1.6	Scott	2,925	6.2
	Johnson	945	3.1	Warren	110	0.9
	Linn	2,149	3.9	Woodbury	1,519	5.0
<b>Group Totals</b>						
Number:	14,287					
Crude:	3.7					

<sup>1</sup>Rates per 1,000 population

<sup>2</sup>Includes syphilis, gonorrhea, and chlamydia and syphilis does not include late latent cases (infection >1 year)

Source: Iowa Department of Public Health, Vital Statistics

## Sexually Transmitted Diseases 1997-1999



**Infectious Disease  
State of Iowa  
1994-1999**

	Number of Case Reported					
	1994	1995	1996	1997	1998	1999
Syphilis <i>(not including late latent infection &gt;1 year)</i>	75	48	22	8	5	9
Gonorrhea	1,645	1,723	1,144	1,309	1,615	1,365
Chlamydia	5,413	5,088	4,165	4,906	5,173	5,511
Tuberculosis (TB) Cases <i>(Age 18 or older)</i>	66	72	70	74	55	58
AIDS	121	115	106	109	68	86
Salmonella	404	433	335	296	375	260
Campylobacter	280	274	339	425	455	467
Shigella	338	351	151	90	69	74
E. coli	54	64	123	114	93	114
Hepatitis A	64	106	346	490	400	161
Giardia	339	391	410	358	429	377
Cryptosporidium	71	21	75	71	66	56
Pertussis	23	11	32	207	78	111
Measles	7	0	1	0	0	0
Mumps	16	11	3	10	11	8
Rubella	0	0	0	0	0	30

*Source: Iowa Department of  
Public Health, Vital Statistics*

# Cancer Incidence and Mortality

Cancer is the second leading cause of death in Iowa. From 1990 through 1998, there were 57,359 Iowans who died from cancer. Cancer accounted for about one out of every four deaths in Iowa over this time period. During this same period, 134,158 cancers were newly diagnosed among residents of Iowa. Cancer affects Iowans in every county. Although it occurs in people of all ages, more than 80 percent of new cancers occur in those 55 years of age and older.

For all sites of cancer incidence and mortality the age-adjusted rates by county grouping increased as the average population increased. The crude rates, however, show the opposite trend, indicating that a larger proportion of older people reside in the more rural counties (see tables and graph in Demographics). During the 1990s, declines in cancer incidence and mortality have also been seen in the United States. Today, less than half of the people in Iowa newly diagnosed with a cancer will die from it. Survival rates, however, vary considerably by cancer site and as the number of cancer deaths gets closer to the number of observed incident cancers, the survival rate for that cancer decreases.

Tobacco use is the leading modifiable risk factor for cancer. Tobacco-associated cancers include the lung & bronchus, oral cavity (excluding lip), esophagus, larynx, pancreas, uterine cervix, urinary bladder, and kidney & renal pelvis. Alcohol consumption is also a known risk factor for cancers of the oral cavity (excluding lip), esophagus, and larynx. Ongoing research indicates that dietary factors may play an important role in the occurrence of cancers of the prostate and colorectum. Other important risk factors include obesity for cancer of the uterine corpus, excessive sunlight exposure for skin melanoma, and genetic predisposition (or positive family history) for breast cancer.

The Iowa Cancer Registry has been recording the occurrence of cancer in Iowa since 1973. It receives mortality data from the Iowa Department of Public Health. The Registry's incidence and mortality databases have been used to generate the cancer incidence and cancer mortality statistics provided in this section of the Iowa Health Fact Book.

## *FOUR PRIMARY TYPES OF CANCER IN IOWA...*

Lung & bronchus  
Colorectum  
Prostate  
Female Breast

## *MOST COMMON CANCERS IN IOWA....*

### **Females**

Breast  
Colorectum  
Lung

### **Males**

Prostate  
Lung  
Colorectum

### **Children (0-19)**

Leukemia  
Intracranial & Intraspinous neoplasms  
Lymphomas

## All Sites of Cancer Incidence 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	134,158	527.5	475.5

	County				County							
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>			
<b>Counties with Average Population &lt;10,000</b>	Adair	421	564.5	371.4	Lucas	496	608.3	431.0	Monroe	462	631.4	459.2
	Adams	256	622.6	401.2	Osceola	370	576.2	420.1	Pocahontas	561	682.8	459.2
	Audubon	449	712.7	454.0	Ringgold	341	706.2	427.3	Taylor	434	678.2	434.2
	Clarke	395	531.4	410.3	Van Buren	418	598.5	442.7	Wayne	451	726.7	451.7
	Davis	436	577.0	446.0	Worth	422	596.6	432.2				
	Decatur	444	602.9	460.2								
	Fremont	466	643.7	462.5								
	Howard	547	621.0	430.3								
	Ida	445	603.3	441.1								
	<b>Group Totals</b>											
Number:	7,814											
Crude:	623.9											
Adjusted:	435.1											

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	715	567.7	425.6	Henry	922	520.5	462.6	Humboldt	647	686.0	474.1
	Appanoose	798	648.7	461.4	Iowa	737	544.2	438.1	Jefferson	747	496.4	475.2
	Buena Vista	1,130	631.2	505.4	Jones	1,023	569.1	495.2	Keokuk	695	667.5	478.1
	Butler	945	667.7	481.2	Kossuth	942	577.7	439.0	Louisa	526	497.4	452.2
	Calhoun	689	665.4	443.5	Lyon	610	567.4	445.5	Madison	622	525.1	439.9
	Cass	849	631.3	434.2	Madison	622	525.1	439.9	Mills	646	528.8	512.2
	Cedar	803	505.1	410.5	Mitchell	657	663.5	456.1	Monona	686	757.4	480.2
	Cherokee	777	629.1	471.6	Montgomery	707	657.9	456.3	O'Brien	933	680.0	484.8
	Chickasaw	660	549.3	445.8	Page	921	604.5	435.2	Palo Alto	691	743.5	518.1
	Clay	918	579.2	485.6	Poweshiek	894	525.1	433.7	Sac	703	647.2	436.1
	Clayton	1,054	622.4	490.3	Sac	703	647.2	436.1	Shelby	650	550.3	388.7
	Crawford	865	581.1	464.0	Shelby	650	550.3	388.7	Tama	1,018	642.5	481.1
	Delaware	730	442.7	409.1	Tama	1,018	642.5	481.1	Union	700	619.4	488.0
	Dickinson	959	686.3	480.0	Union	700	619.4	488.0	Winnebago	571	530.3	404.7
	Emmet	618	608.9	458.6	Winnebago	571	530.3	404.7	Wright	912	713.3	487.2
	Floyd	986	655.8	486.7	Wright	912	713.3	487.2				
	Franklin	599	599.6	442.3								
	Greene	582	642.5	420.0								
	Grundy	648	593.1	436.8								
	Guthrie	685	675.6	476.7								
Hamilton	903	624.3	481.1									
Hancock	579	526.4	411.0									
Hardin	1,194	709.5	495.5									
Harrison	875	649.6	494.9									

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population &gt;20,000</b>	Benton	1,121	522.2	450.4	Mahaska	1,039	532.3	443.3	Marion	1,444	523.2	457.8
	Boone	1,339	582.0	471.1	Marshall	2,094	606.5	495.6	Muscatine	1,790	487.5	487.7
	Bremer	1,122	538.8	461.8	Plymouth	1,211	557.7	476.4	Sioux	1,301	468.8	439.9
	Buchanan	1,007	530.5	484.3	Sioux	1,301	468.8	439.9	Story	2,347	350.4	452.3
	Carroll	1,219	629.0	505.0	Story	2,347	350.4	452.3	Wapello	1,987	618.1	482.9
	Cerro Gordo	2,465	588.2	480.8	Wapello	1,987	618.1	482.9	Washington	961	524.5	423.6
	Clinton	2,633	576.5	497.4	Washington	961	524.5	423.6	Webster	2,296	645.2	516.7
	Des Moines	2,167	565.8	484.1	Webster	2,296	645.2	516.7	Winnesiek	857	454.7	411.3
	Fayette	1,231	623.8	482.0	Winnesiek	857	454.7	411.3				
	Jackson	1,058	585.4	490.3								
	Jasper	1,777	559.7	469.7								
	Lee	1,974	565.1	478.3								

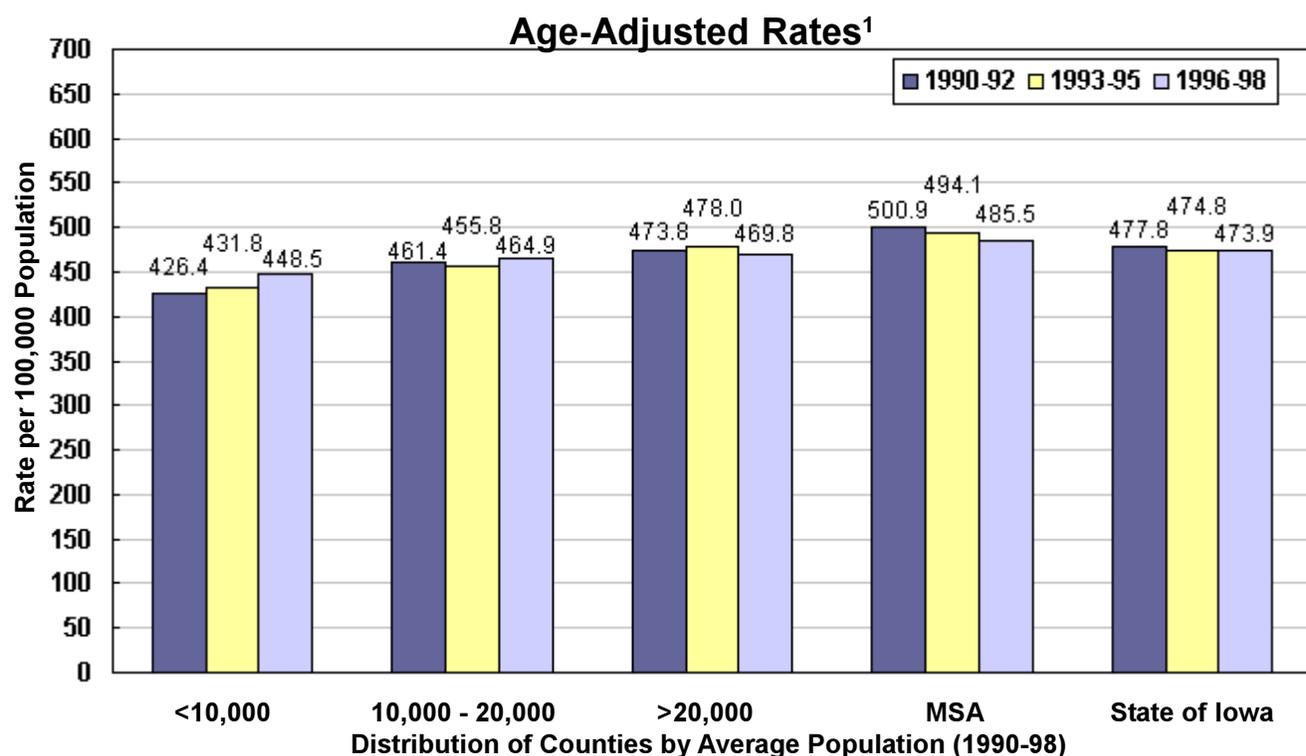
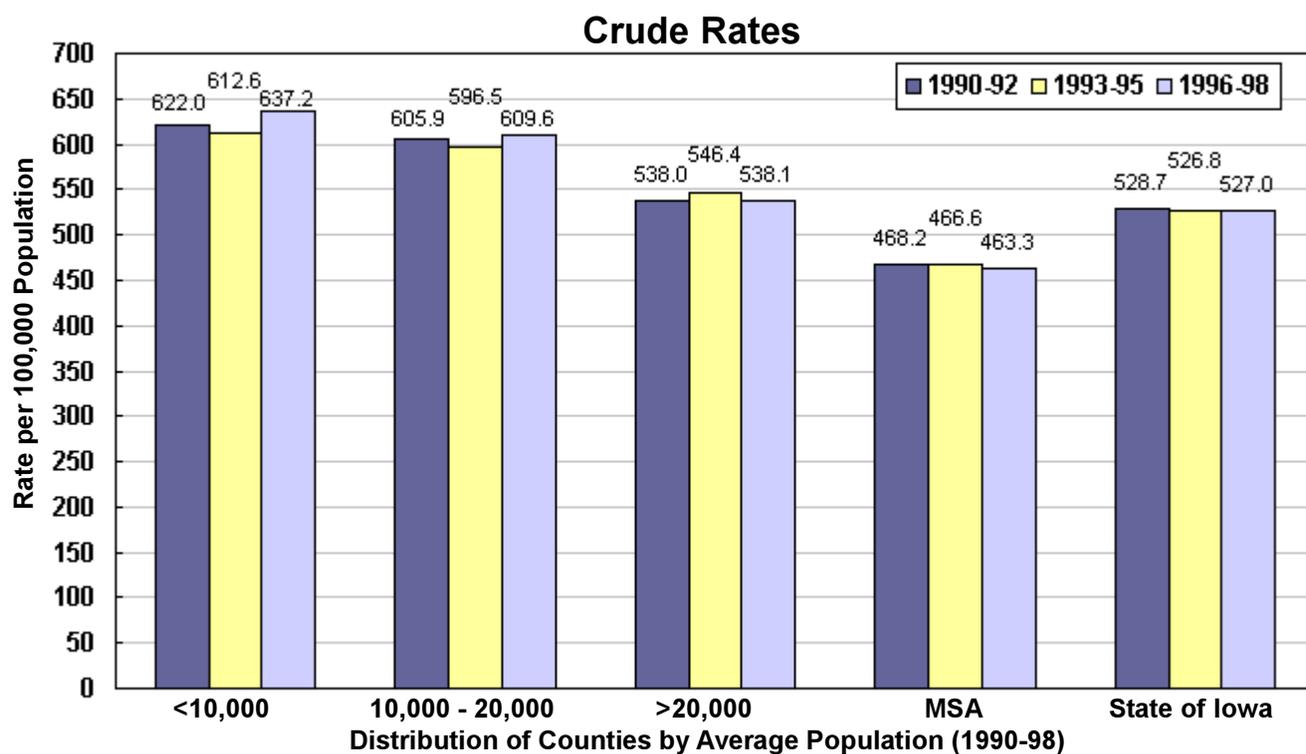
	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>MSA Counties</b>	Black Hawk	5,964	538.3	518.5	Polk	13,994	450.0	493.8	Pottawattamie	3,782	500.5	476.7
	Dallas	1,420	479.6	462.3	Scott	6,300	449.6	493.4	Warren	1,400	406.4	452.6
	Dubuque	4,297	544.2	514.9	Warren	1,400	406.4	452.6	Woodbury	4,723	520.5	494.5
	Johnson	2,726	303.8	459.4	Woodbury	4,723	520.5	494.5				
	Linn	7,577	477.1	494.7								
	<b>Group Totals</b>											
Number:	52,183											
Crude:	466.0											
Adjusted:	493.4											

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: Iowa Cancer Registry,  
The University of Iowa

## All Sites of Cancer Incidence by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## All Sites of Cancer Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	57,359	225.5	197.1

	County				County			
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>		Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	218	292.3	173.8	Lucas	226	277.2	187.5
	Adams	129	313.7	194.9	Monroe	208	284.3	197.2
	Audubon	186	295.2	180.3	Osceola	153	238.3	162.7
	Clarke	188	252.9	184.6	Pocahontas	263	320.1	203.3
	Davis	176	232.9	176.6	Ringgold	148	306.5	165.0
	Decatur	214	290.6	207.1	Taylor	193	301.6	173.8
	Fremont	231	319.1	219.8	Van Buren	182	260.6	188.0
	Howard	253	287.2	181.6	Wayne	208	335.1	191.7
	Ida	184	249.4	171.2	Worth	211	298.3	201.2
	<u>Group Totals</u>							
Number:	3,571							
Crude:	285.1							
Adjusted:	186.8							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	293	232.7	165.2	Henry	411	232.0	197.8
	Appanoose	313	254.5	170.4	Humboldt	284	301.1	196.3
	Buena Vista	449	250.8	190.5	Iowa	339	250.3	188.6
	Butler	418	295.4	201.0	Jefferson	292	194.0	183.0
	Calhoun	316	305.2	186.7	Jones	404	224.8	187.3
	Cass	408	303.4	199.9	Keokuk	293	281.4	189.3
	Cedar	374	235.3	180.4	Kossuth	432	264.9	187.4
	Cherokee	293	237.2	170.6	Louisa	224	211.8	187.5
	Chickasaw	267	222.2	168.9	Lyon	278	258.6	193.7
	Clay	369	232.8	186.5	Madison	313	264.2	210.9
	Clayton	452	266.9	197.5	Mills	253	205.2	197.0
	Crawford	349	234.4	181.9	Mitchell	280	282.8	179.3
	Delaware	337	204.4	185.1	Monona	345	380.9	222.7
	Dickinson	389	278.4	188.6	Montgomery	318	295.9	193.8
	Emmet	265	261.1	187.4	O'Brien	384	279.9	185.7
	Floyd	440	292.6	209.6	Page	412	270.4	185.5
	Franklin	235	235.2	160.9	Palo Alto	300	322.8	203.3
	Greene	258	284.8	172.8	Poweshiek	404	237.3	184.7
	Grundy	249	227.9	159.1	Sac	313	288.1	180.2
	Guthrie	285	281.1	186.9	Shelby	275	232.8	157.7
Hamilton	391	270.3	199.2	Tama	427	269.5	193.5	
Hancock	235	213.7	163.4	Union	305	269.9	198.5	
Hardin	542	322.0	211.0	Winnebago	256	237.7	165.9	
Harrison	412	305.9	221.8	Wright	375	293.3	186.8	

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population &gt;20,000</b>	Benton	522	243.3	204.9	Mahaska	437	223.9	180.3
	Boone	556	241.7	183.7	Marion	639	231.5	197.4
	Bremer	466	223.8	181.6	Marshall	982	284.4	224.0
	Buchanan	484	255.0	228.4	Muscatine	740	201.5	199.2
	Carroll	475	245.1	188.7	Plymouth	499	229.8	188.2
	Cerro Gordo	1,112	265.3	207.1	Sioux	485	174.8	158.2
	Clinton	1,147	251.1	212.6	Story	954	142.4	180.9
	Des Moines	932	243.3	201.2	Wapello	950	295.5	223.4
	Fayette	527	267.1	199.3	Washington	421	229.8	172.5
	Jackson	447	247.3	200.7	Webster	921	258.8	199.1
	Jasper	775	244.1	199.8	Winneschik	378	200.6	174.5
	Lee	947	271.1	224.5				

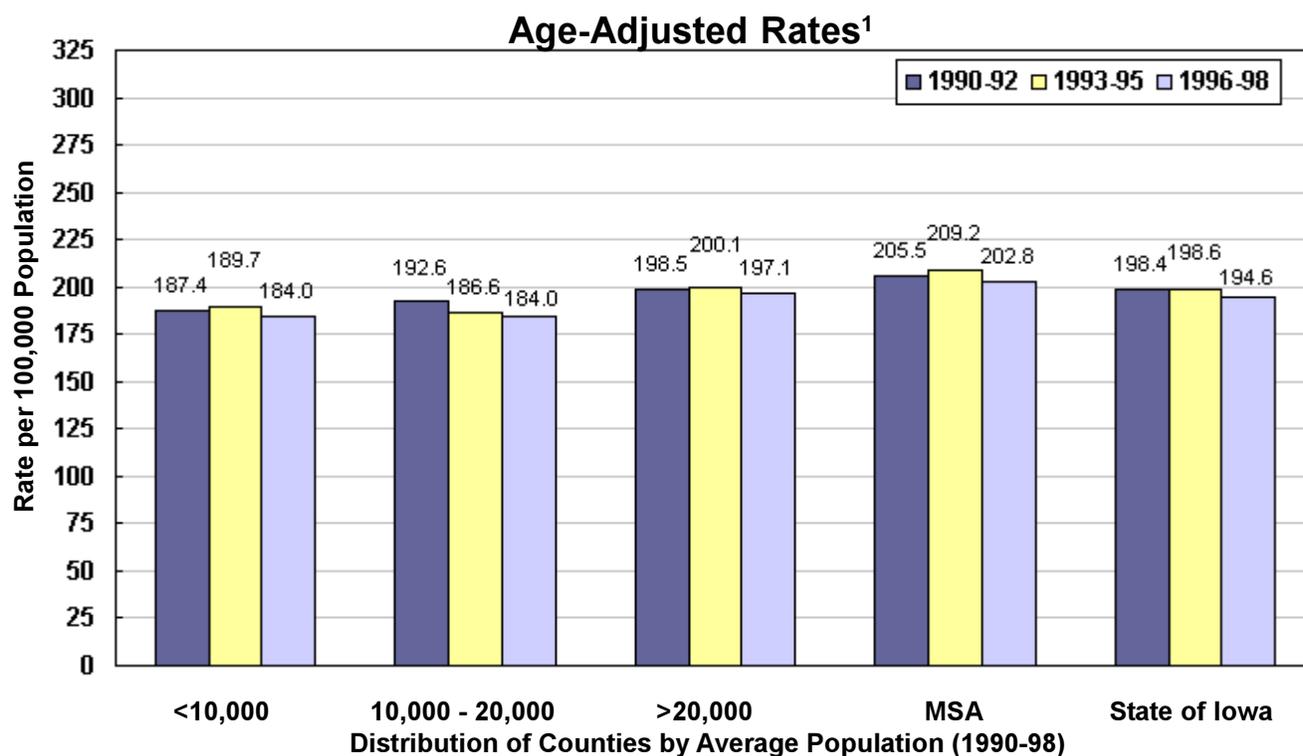
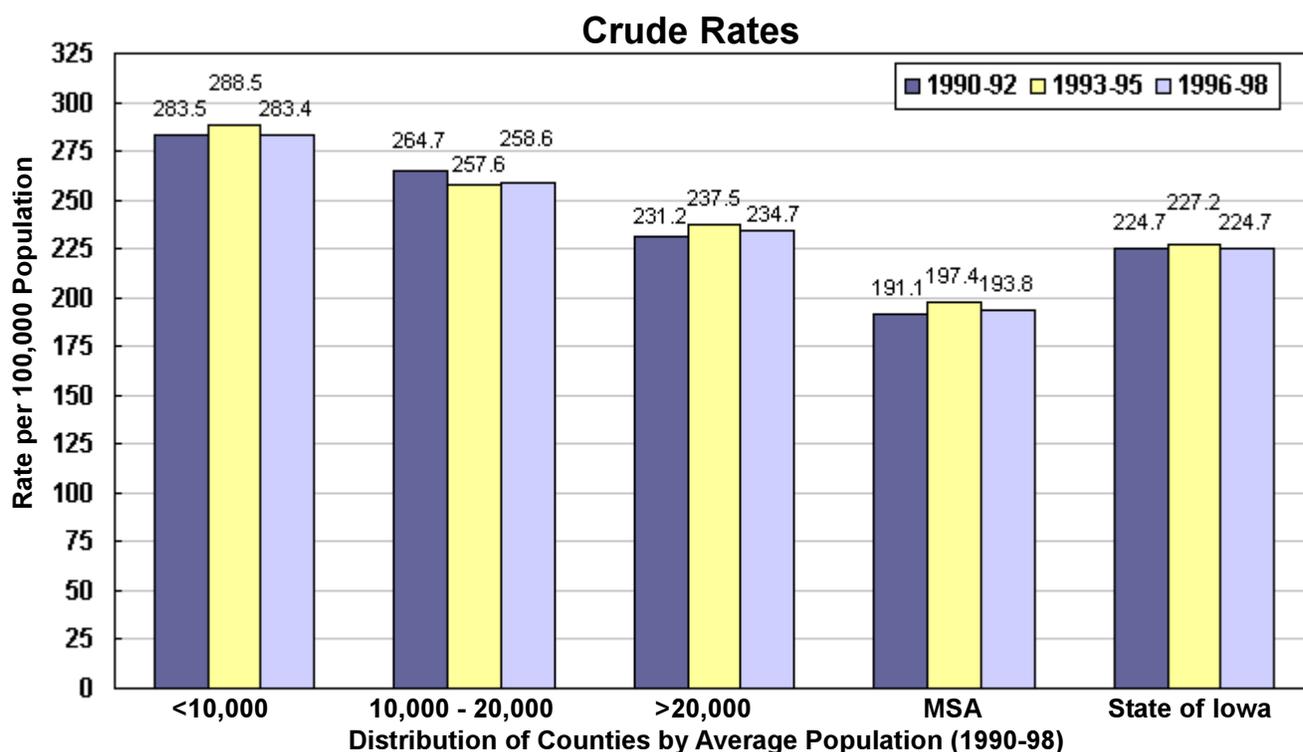
	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>MSA Counties</b>	Black Hawk	2,508	226.4	216.4	Polk	5,898	189.7	210.6
	Dallas	584	197.2	186.0	Pottawattamie	1,664	220.2	209.7
	Dubuque	1,795	227.3	209.6	Scott	2,633	187.9	208.8
	Johnson	1,048	116.8	185.4	Warren	572	166.0	185.1
	Linn	3,061	192.7	200.2	Woodbury	1,973	217.4	201.7
	<u>Group Totals</u>							
Number:	21,736							
Crude:	194.1							
Adjusted:	205.8							

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## All Sites of Cancer Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Prostate Cancer Incidence 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	20,304	164.3	166.4

	Counties with Average Population <10,000				Counties with Average Population 10,000 to 20,000			
	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	73	202.4	138.6	Lucas	78	200.4	147.1
	Adams	45	222.8	153.1	Monroe	67	189.5	147.7
	Audubon	75	247.5	161.6	Osceola	57	182.1	145.6
	Clarke	62	174.5	138.9	Pocahontas	112	281.0	198.6
	Davis	72	194.6	163.6	Ringgold	56	243.7	154.2
	Decatur	50	140.2	103.7	Taylor	59	193.8	127.7
	Fremont	60	174.4	133.7	Van Buren	71	205.4	154.9
	Howard	100	232.3	162.4	Wayne	85	287.6	169.5
	Ida	77	215.4	168.9	Worth	70	203.7	156.4
	<b>Group Totals</b>							
Number:	1,269							
Crude:	209.7							
Adjusted:	151.3							

	Counties with Average Population >20,000				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Allamakee	137	220.9	183.8	Henry	117	130.7	133.8
	Appanoose	121	205.7	149.9	Humboldt	114	248.5	181.0
	Buena Vista	240	275.4	233.5	Iowa	108	164.1	141.1
	Butler	184	265.1	205.1	Jefferson	100	135.9	152.0
	Calhoun	105	208.5	151.7	Jones	143	153.1	152.6
	Cass	117	182.2	137.9	Keokuk	95	187.0	145.6
	Cedar	138	177.6	151.9	Kossuth	146	183.6	148.9
	Cherokee	139	233.2	185.9	Louisa	65	122.3	122.0
	Chickasaw	114	190.6	167.6	Lyon	107	202.8	177.8
	Clay	152	200.8	182.2	Madison	95	163.8	154.3
	Clayton	158	189.3	153.3	Mills	96	157.2	181.0
	Crawford	145	199.3	175.7	Mitchell	123	255.4	180.2
	Delaware	109	134.2	134.8	Monona	111	257.2	172.5
	Dickinson	191	284.4	203.6	Montgomery	110	215.9	164.2
	Emmet	110	224.7	184.6	O'Brien	173	261.3	199.6
	Floyd	155	216.4	170.2	Page	108	143.2	113.9
	Franklin	100	206.9	157.2	Palo Alto	130	288.6	215.5
	Greene	77	177.5	122.8	Poweshiek	129	157.2	141.8
	Grundy	113	214.7	169.6	Sac	124	233.6	164.6
	Guthrie	115	235.7	173.1	Shelby	106	183.4	135.2
Hamilton	157	223.6	185.5	Tama	180	234.1	184.0	
Hancock	94	174.9	146.9	Union	98	183.4	158.2	
Hardin	168	205.8	154.9	Winnebago	92	175.9	140.2	
Harrison	133	204.4	171.2	Wright	134	219.4	151.4	

	Counties with Average Population >20,000				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Benton	176	166.7	161.4	Mahaska	156	163.7	150.7
	Boone	193	175.0	158.2	Marion	184	134.0	122.3
	Bremer	216	213.0	201.0	Marshall	347	205.1	176.5
	Buchanan	178	190.7	193.9	Muscatine	238	132.0	152.2
	Carroll	210	224.0	199.3	Plymouth	230	215.5	204.3
	Cerro Gordo	314	158.2	141.5	Sioux	255	188.9	195.1
	Clinton	369	168.0	161.1	Story	378	109.2	180.4
	Des Moines	279	152.2	147.2	Wapello	254	164.9	139.9
	Fayette	201	208.8	174.5	Washington	142	160.2	144.3
	Jackson	166	186.5	169.9	Webster	347	203.9	180.6
	Jasper	230	147.2	136.8	Winneshek	138	149.5	141.1
	Lee	277	161.1	159.6				

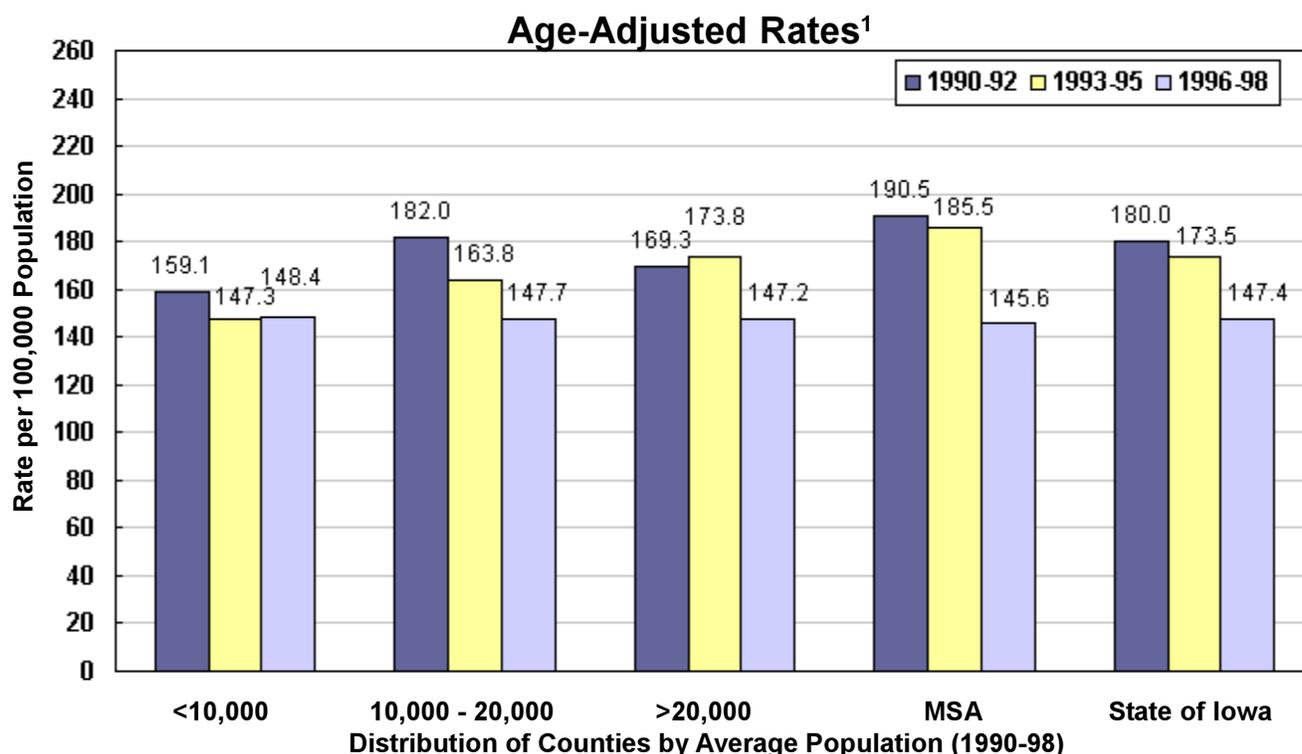
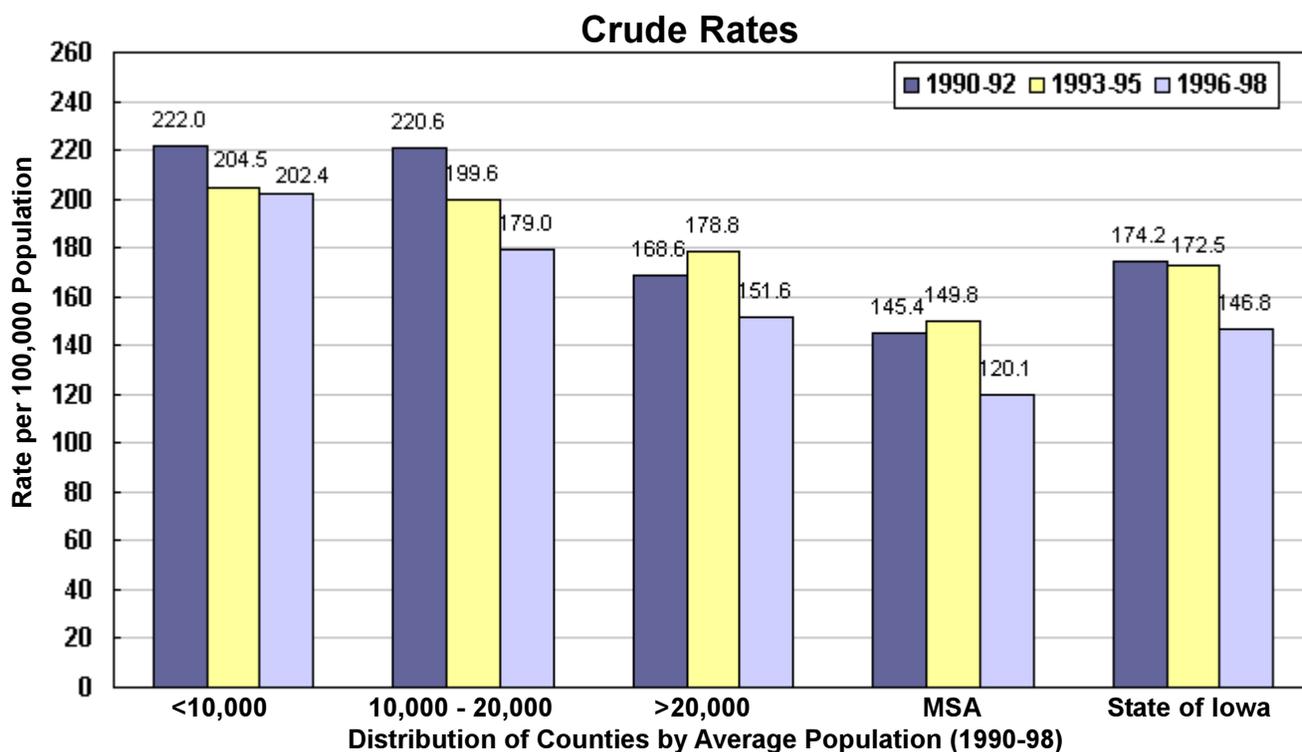
	MSA Counties				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	1071	202.7	220.5	Polk	1790	120.5	160.9
	Dallas	209	143.7	165.6	Pottawattamie	425	116.9	124.7
	Dubuque	717	187.4	203.1	Scott	799	117.5	152.3
	Johnson	363	81.3	155.5	Warren	175	104.0	137.3
	Linn	1185	153.4	185.8	Woodbury	747	170.0	188.1
<b>Group Totals</b>								
Number:	7,481							
Crude:	138.2							
Adjusted:	172.9							

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: Iowa Cancer Registry,  
The University of Iowa

## Prostate Cancer Incidence by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Prostate Cancer Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	4,012	32.5	35.9

	County				County							
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>			
<b>Counties with Average Population &lt;10,000</b>	Adair	20	55.5	36.1	Lucas	14	36.0	26.6	Monroe	15	42.4	35.6
	Adams	12	59.4	38.8	Osceola	16	51.1	40.1	Pocahontas	18	45.2	32.7
	Audubon	20	66.0	43.5	Ringgold	15	65.3	40.1	Taylor	15	49.3	31.7
	Clarke	14	39.4	32.3	Van Buren	15	43.4	33.9	Wayne	24	81.2	45.9
	Davis	19	51.3	45.1	Worth	17	49.5	34.9				
	Decatur	21	58.9	42.9								
	Fremont	17	49.4	36.1								
	Howard	26	60.4	42.1								
	Ida	19	53.2	41.7								
	<b>Group Totals</b>											
Number:	317											
Crude:	52.4											
Adjusted:	37.7											

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	28	45.2	38.9	Henry	31	34.6	35.1	Humboldt	21	45.8	33.1
	Appanoose	23	39.1	28.4	Iowa	24	36.5	33.6	Jefferson	20	27.2	30.5
	Buena Vista	42	48.2	42.5	Jones	27	28.9	31.9	Keokuk	19	37.4	27.9
	Butler	32	46.1	36.9	Kossuth	34	42.7	36.4	Louisa	12	22.6	23.4
	Calhoun	22	43.7	32.0	Lyon	19	36.0	33.2	Madison	31	53.4	50.6
	Cass	32	49.8	37.5	Mills	15	24.6	31.5	Mitchell	25	51.9	37.8
	Cedar	29	37.3	32.9	Monona	36	83.4	54.9	Montgomery	19	37.3	26.1
	Cherokee	24	40.3	32.4	O'Brien	26	39.3	31.7	O'Brien	26	39.3	31.7
	Chickasaw	18	30.1	28.0	Page	31	41.1	32.8	Palo Alto	30	66.6	49.1
	Clay	25	33.0	32.2	Poweshiek	29	35.3	33.7	Sac	27	50.9	35.1
	Clayton	36	43.1	35.4	Sac	27	50.9	35.1	Shelby	27	46.7	34.6
	Crawford	22	30.2	27.7	Shelby	27	46.7	34.6	Tama	30	39.0	31.8
	Delaware	22	27.1	31.3	Tama	30	39.0	31.8	Union	23	43.1	39.7
	Dickinson	28	41.7	31.6	Union	23	43.1	39.7	Winnebago	31	59.3	46.7
	Emmet	22	44.9	36.3	Winnebago	31	59.3	46.7	Wright	27	44.2	31.6
	Floyd	41	57.3	47.9	Wright	27	44.2	31.6				
	Franklin	14	29.0	22.5								
	Greene	20	46.1	34.6								
	Grundy	17	32.3	26.6								
	Guthrie	25	51.2	39.5								
Hamilton	28	39.9	39.4									
Hancock	20	37.2	34.6									
Hardin	33	40.4	30.8									
Harrison	34	52.3	43.8									

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population &gt;20,000</b>	Benton	33	31.3	34.2	Mahaska	37	38.8	38.2	Marion	44	32.1	31.0
	Boone	43	39.0	36.3	Marshall	80	47.3	42.9	Muscatine	47	26.1	32.0
	Bremer	49	48.3	47.2	Plymouth	40	37.5	37.0	Sioux	35	25.9	28.8
	Buchanan	41	43.9	49.5	Sioux	35	25.9	28.8	Story	83	24.0	43.7
	Carroll	41	43.7	40.0	Story	83	24.0	43.7	Wapello	58	37.7	35.9
	Cerro Gordo	56	28.2	28.0	Wapello	58	37.7	35.9	Washington	42	47.4	42.1
	Clinton	62	28.2	30.9	Washington	42	47.4	42.1	Webster	59	34.7	33.1
	Des Moines	59	32.2	35.1	Webster	59	34.7	33.1	Winneschik	27	29.2	28.8
	Fayette	34	35.3	31.7	Winneschik	27	29.2	28.8				
	Jackson	42	47.2	46.0								
	Jasper	58	37.1	39.7								
	Lee	54	31.4	34.2								

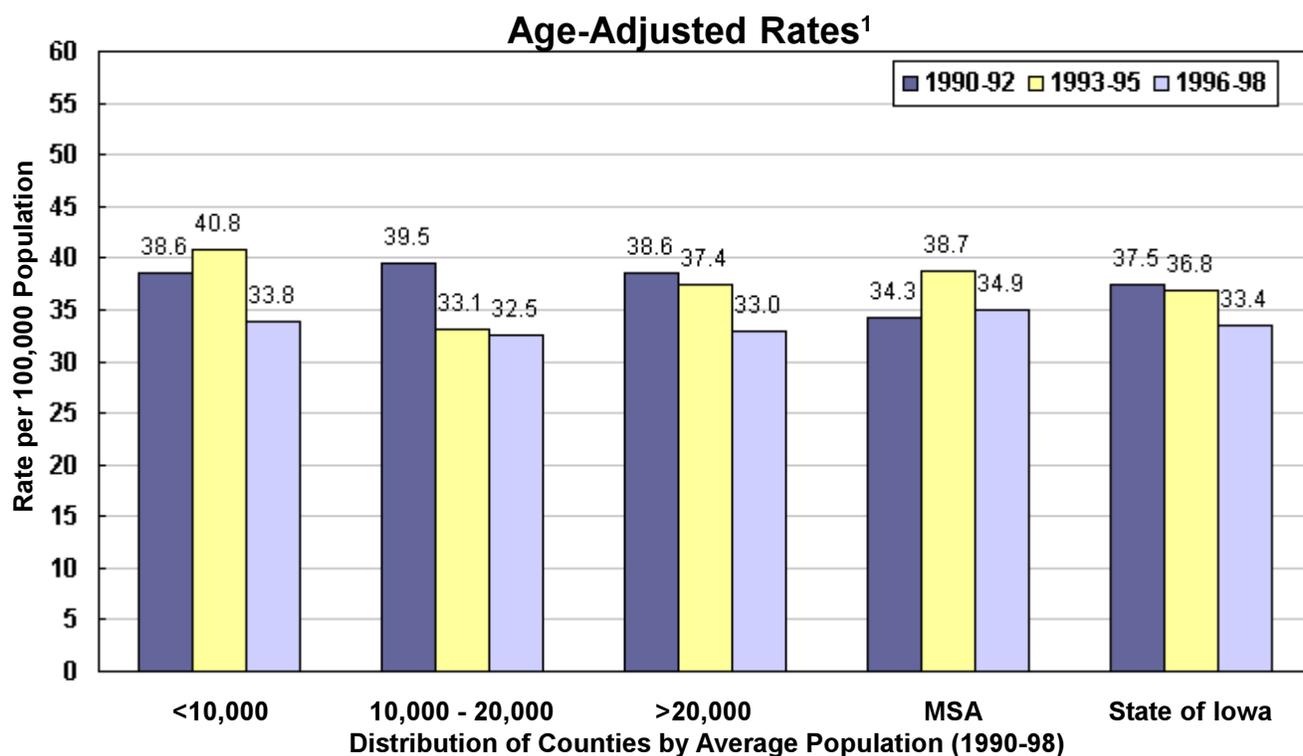
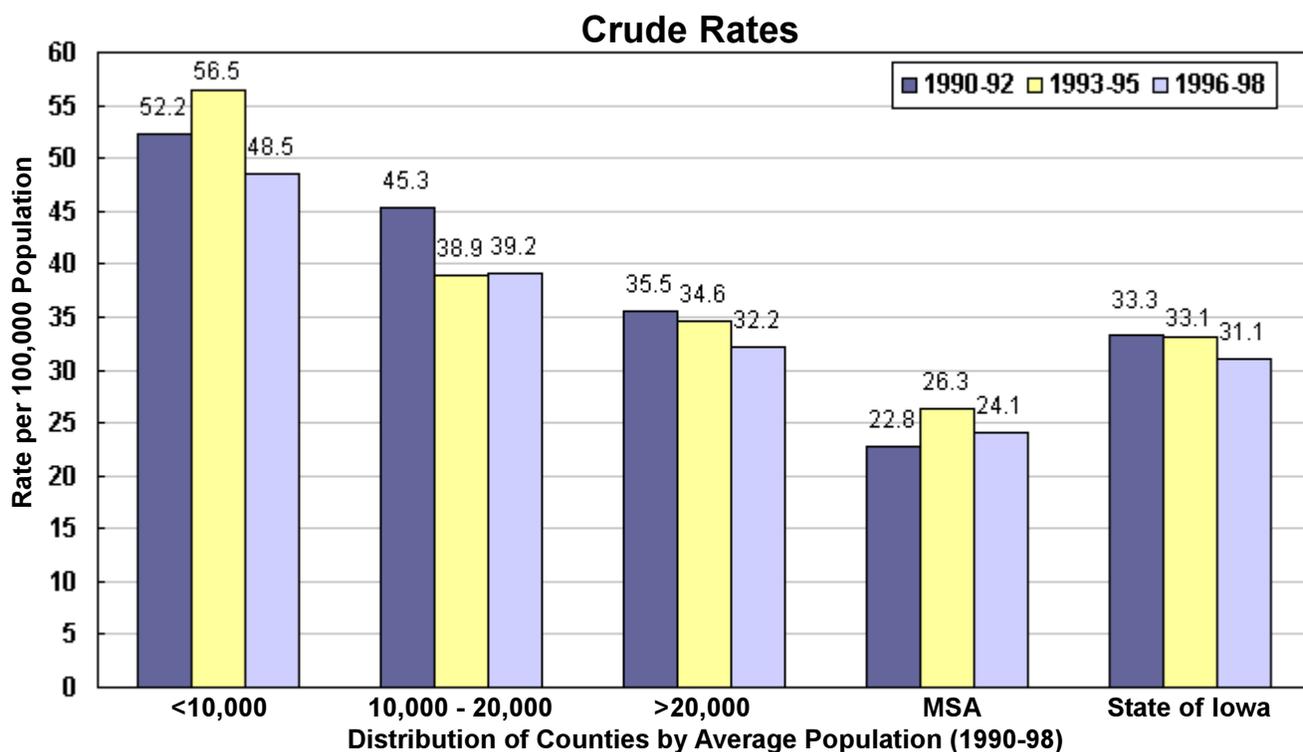
	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>MSA Counties</b>	Black Hawk	184	34.8	43.8	Polk	361	24.3	40.0	Pottawattamie	80	22.0	26.7
	Dallas	39	26.8	34.7	Scott	148	21.8	34.4	Warren	32	19.0	30.1
	Dubuque	99	25.9	34.2	Warren	32	19.0	30.1	Woodbury	103	23.4	28.1
	Johnson	67	15.0	35.1	Woodbury	103	23.4	28.1				
	Linn	207	26.8	38.0								
	<b>Group Totals</b>											
Number:	1,320											
Crude:	24.4											
Adjusted:	36.0											

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Prostate Cancer Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Lung & Bronchus Cancer Incidence 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	19,277	75.8	67.6

	County				County							
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>			
<b>Counties with Average Population &lt;10,000</b>	Adair	61	81.8	52.1	Lucas	73	89.5	62.0	Monroe	69	94.3	69.3
	Adams	36	87.5	58.8	Osceola	41	63.8	49.1	Pocahontas	64	77.9	52.8
	Audubon	46	73.0	43.1	Ringgold	53	109.8	63.7	Taylor	58	90.6	54.4
	Clarke	42	56.5	44.0	Van Buren	54	77.3	54.3	Wayne	64	103.1	63.7
	Davis	60	79.4	63.5	Worth	63	89.1	63.7				
	Decatur	60	81.5	59.7								
	Fremont	72	99.5	66.4								
	Howard	58	65.8	41.4								
	Ida	55	74.6	59.5								
	<b>Group Totals</b>											
Number:	1,029											
Crude:	82.2											
Adjusted:	56.4											

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	97	77.0	58.8	Henry	133	75.1	65.6	Humboldt	92	97.6	64.4
	Appanoose	113.0	91.9	64.6	Iowa	88	65.0	51.2	Jefferson	89	59.1	58.2
	Buena Vista	96	53.6	42.6	Jones	137	76.2	64.2	Keokuk	109	104.7	75.1
	Butler	103	72.8	50.0	Kossuth	107	65.6	48.1	Louisa	76	71.9	64.1
	Calhoun	100	96.6	61.9	Lyon	80	74.4	57.7	Madison	103	87.0	72.3
	Cass	121	90.0	62.9	Mills	94	76.2	73.8	Mitchell	101	102.0	66.6
	Cedar	105	66.1	53.1	Monona	102	112.6	68.2	Montgomery	101	94.0	66.2
	Cherokee	90	72.9	54.0	O'Brien	87	63.4	45.8	O'Brien	87	63.4	45.8
	Chickasaw	93	77.4	60.7	Page	157	103.1	73.9	Palo Alto	88	94.7	62.2
	Clay	114	71.9	59.1	Poweshiek	100	58.7	47.3	Sac	74	68.1	43.5
	Clayton	114	67.3	50.3	Shelby	77	65.2	44.7	Tama	119	75.1	57.2
	Crawford	110	73.9	56.7	Tama	119	75.1	57.2	Union	115	101.8	82.6
	Delaware	111	67.3	61.2	Union	115	101.8	82.6	Winnebago	53	49.2	37.3
	Dickinson	144	103.1	67.7	Winnebago	53	49.2	37.3	Wright	119	93.1	61.9
	Emmet	83	81.8	60.8								
	Floyd	133	88.5	65.8								
	Franklin	52	52.0	37.9								
	Greene	66	72.9	46.1								
	Grundy	65	59.5	40.7								
	Guthrie	98	96.7	66.2								
Hamilton	138	95.4	72.4									
Hancock	66	60.0	47.3									
Hardin	159	94.5	64.4									
Harrison	151	112.1	85.3									

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population &gt;20,000</b>	Benton	170	79.2	66.8	Mahaska	158	80.9	65.7	Marion	207	75.0	65.4
	Boone	202	87.8	69.7	Marshall	346	100.2	79.8	Muscatine	256	69.7	69.6
	Bremer	131	62.9	52.7	Plymouth	127	58.5	48.4	Sioux	102	36.8	34.0
	Buchanan	146	76.9	68.7	Story	265	39.6	52.3	Wapello	312	97.1	75.2
	Carroll	144	74.3	59.4	Washington	98	53.5	43.4	Washington	98	53.5	43.4
	Cerro Gordo	405	96.6	76.0	Webster	338	95.0	76.3	Webster	338	95.0	76.3
	Clinton	402	88.0	75.1	Winneschik	100	53.1	46.2	Winneschik	100	53.1	46.2
	Des Moines	340	88.8	75.8								
	Fayette	159	80.6	61.6								
	Jackson	159	88.0	72.1								
	Jasper	309	97.3	80.0								
	Lee	339	97.0	80.5								

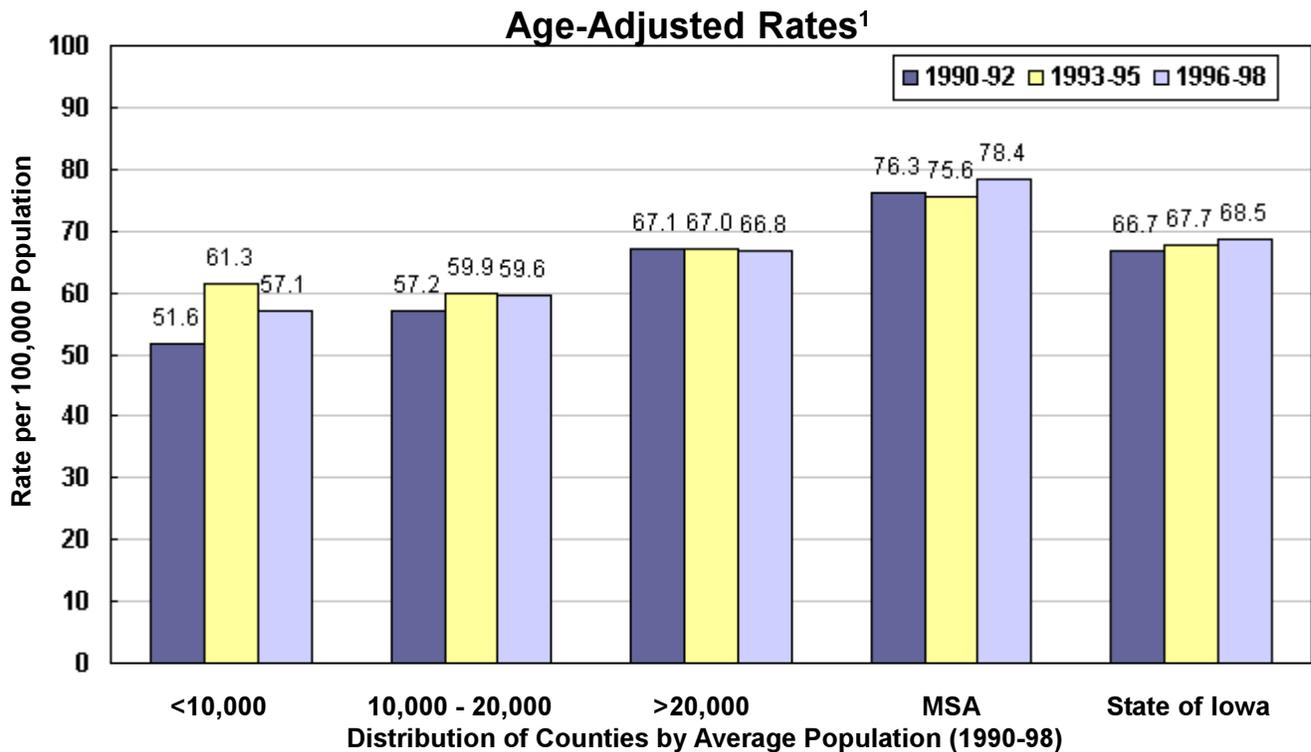
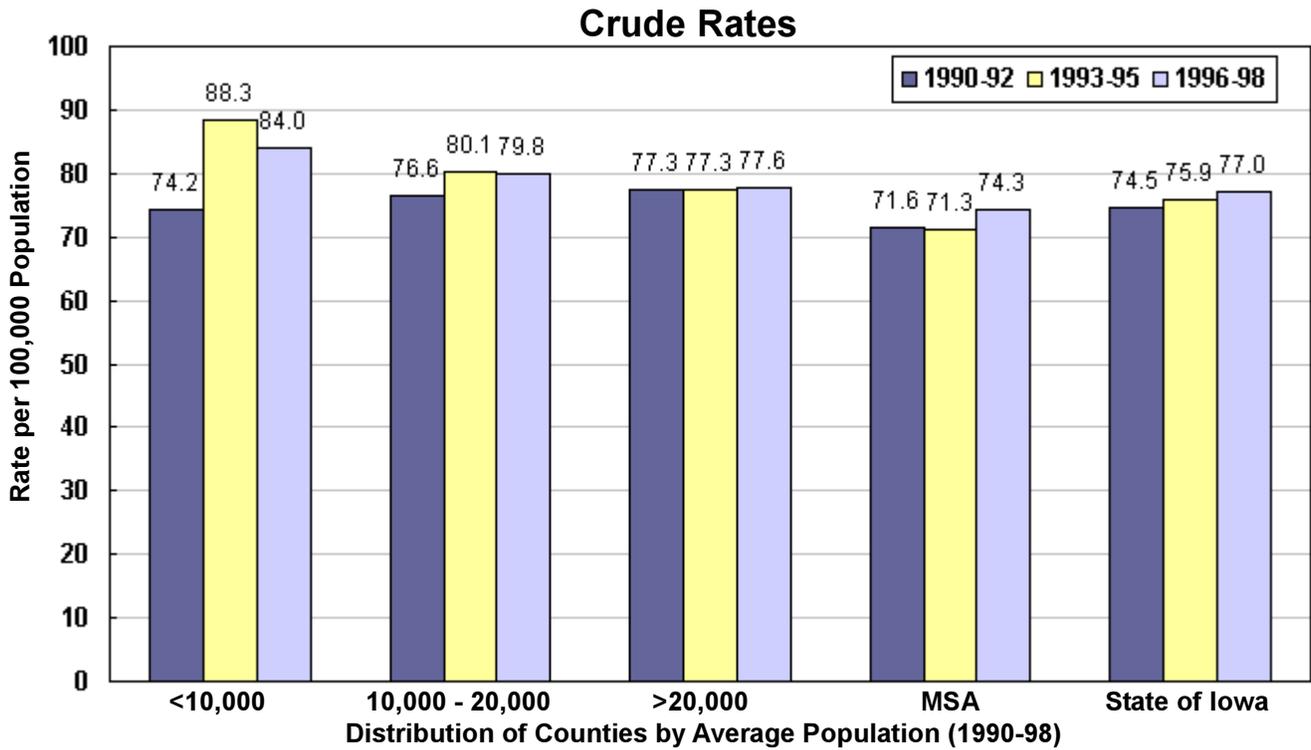
	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>MSA Counties</b>	Black Hawk	974	87.9	83.7	Polk	2280	73.3	81.3	Pottawattamie	680	90.0	84.0
	Dallas	190	64.2	62.3	Scott	998	71.2	78.3	Warren	219	63.6	71.9
	Dubuque	630	79.8	73.8	Woodbury	705	77.7	73.1				
	Johnson	320	35.7	58.2								
	Linn	1114	70.1	72.9								
	<b>Group Totals</b>											
Number:	8,110											
Crude:	72.4											
Adjusted:	76.8											

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: Iowa Cancer Registry,  
The University of Iowa

## Lung & Bronchus Cancer Incidence by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Lung & Bronchus Cancer Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	15,294	60.1	53.2

	County				County			
	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	57	76.4	46.4	Lucas	61	74.8	53.3
	Adams	29	70.5	45.4	Monroe	57	77.9	55.9
	Audubon	38	60.3	36.9	Osceola	33	51.4	39.1
	Clarke	46	61.9	46.8	Pocahontas	64	77.9	50.9
	Davis	43	56.9	44.8	Ringgold	37	76.6	43.1
	Decatur	45	61.1	44.0	Taylor	42	65.6	38.1
	Fremont	63	87.0	56.7	Van Buren	40	57.3	41.1
	Howard	41	46.5	27.0	Wayne	54	87.0	51.8
	Ida	39	52.9	39.0	Worth	45	63.6	43.6
	<b>Group Totals</b>							
Number:	834							
Crude:	66.6							
Adjusted:	44.7							

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	72	57.2	43.1	Henry	124	70.0	59.9
	Appanoose	77	62.6	42.6	Humboldt	81	85.9	55.8
	Buena Vista	81	45.2	35.1	Iowa	64	47.3	36.5
	Butler	86	60.8	42.1	Jefferson	68	45.2	42.7
	Calhoun	81	78.2	49.3	Jones	98	54.5	45.0
	Cass	103	76.6	52.5	Keokuk	71	68.2	49.3
	Cedar	84	52.8	40.8	Kossuth	76	46.6	33.7
	Cherokee	58	47.0	34.0	Louisa	52	49.2	43.7
	Chickasaw	67	55.8	43.1	Lyon	69	64.2	48.5
	Clay	98	61.8	50.3	Madison	71	59.9	49.4
	Clayton	93	54.9	41.6	Mills	73	59.2	57.0
	Crawford	94	63.1	49.0	Mitchell	70	70.7	45.4
	Delaware	83	50.3	45.8	Monona	83	91.6	54.4
	Dickinson	108	77.3	51.7	Montgomery	91	84.7	60.9
	Emmet	57	56.2	41.0	O'Brien	71	51.7	34.8
	Floyd	113	75.2	55.2	Page	116	76.1	54.2
	Franklin	50	50.0	35.6	Palo Alto	61	65.6	44.1
	Greene	55	60.7	38.3	Poweshiek	91	53.4	42.5
	Grundy	52	47.6	32.4	Sac	58	53.4	33.4
	Guthrie	80	78.9	52.4	Shelby	58	49.1	34.1
Hamilton	110	76.1	57.1	Tama	94	59.3	44.5	
Hancock	60	54.5	44.7	Union	83	73.4	57.0	
Hardin	126	74.9	49.7	Winnebago	43	39.9	29.7	
Harrison	123	91.3	69.1	Wright	99	77.4	50.6	

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Benton	130	60.6	50.9	Mahaska	116	59.4	47.1
	Boone	156	67.8	52.2	Marion	162	58.7	51.0
	Bremer	104	49.9	40.8	Marshall	300	86.9	68.3
	Buchanan	120	63.2	55.3	Muscatine	202	55.0	54.5
	Carroll	105	54.2	43.0	Plymouth	105	48.4	39.7
	Cerro Gordo	345	82.3	64.5	Sioux	81	29.2	26.8
	Clinton	334	73.1	61.9	Story	213	31.8	41.7
	Des Moines	251	65.5	54.8	Wapello	256	79.6	60.9
	Fayette	139	70.4	52.9	Washington	78	42.6	33.6
	Jackson	127	70.3	57.0	Webster	269	75.6	60.5
	Jasper	251	79.1	64.5	Winneshek	82	43.5	37.4
	Lee	301	86.2	71.6				

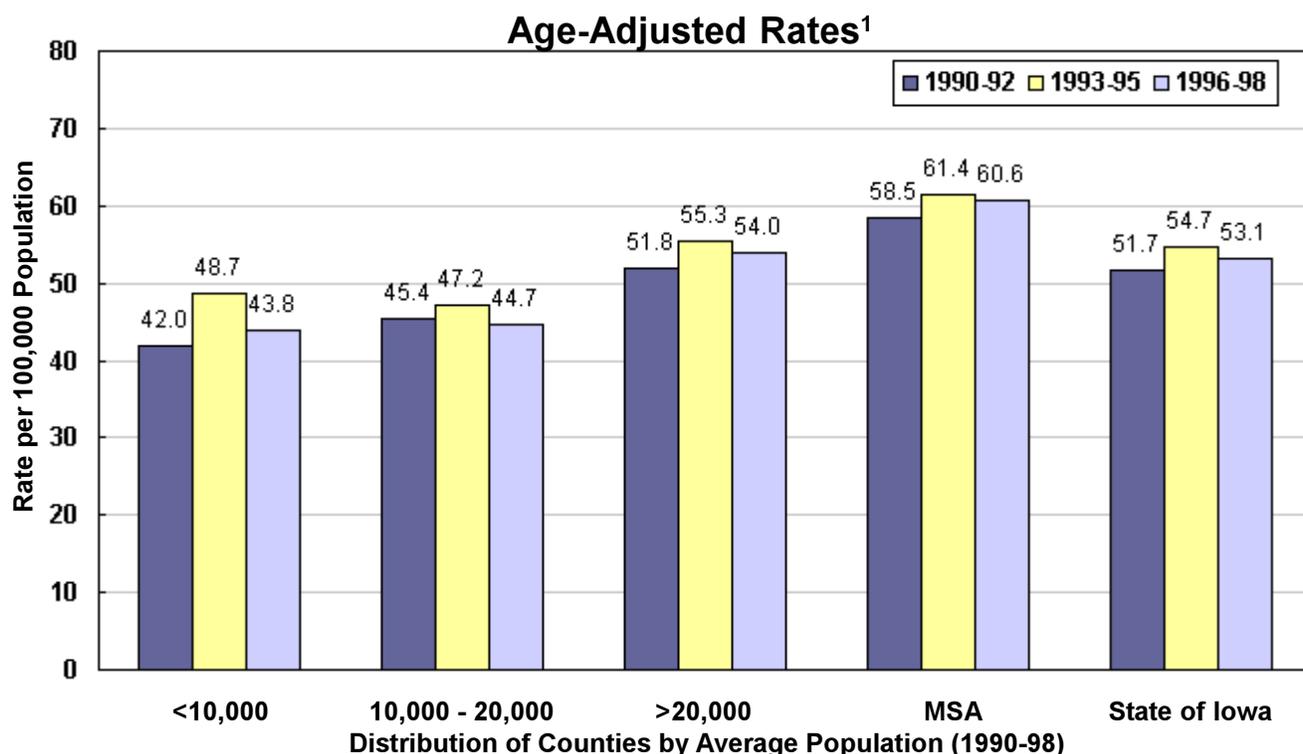
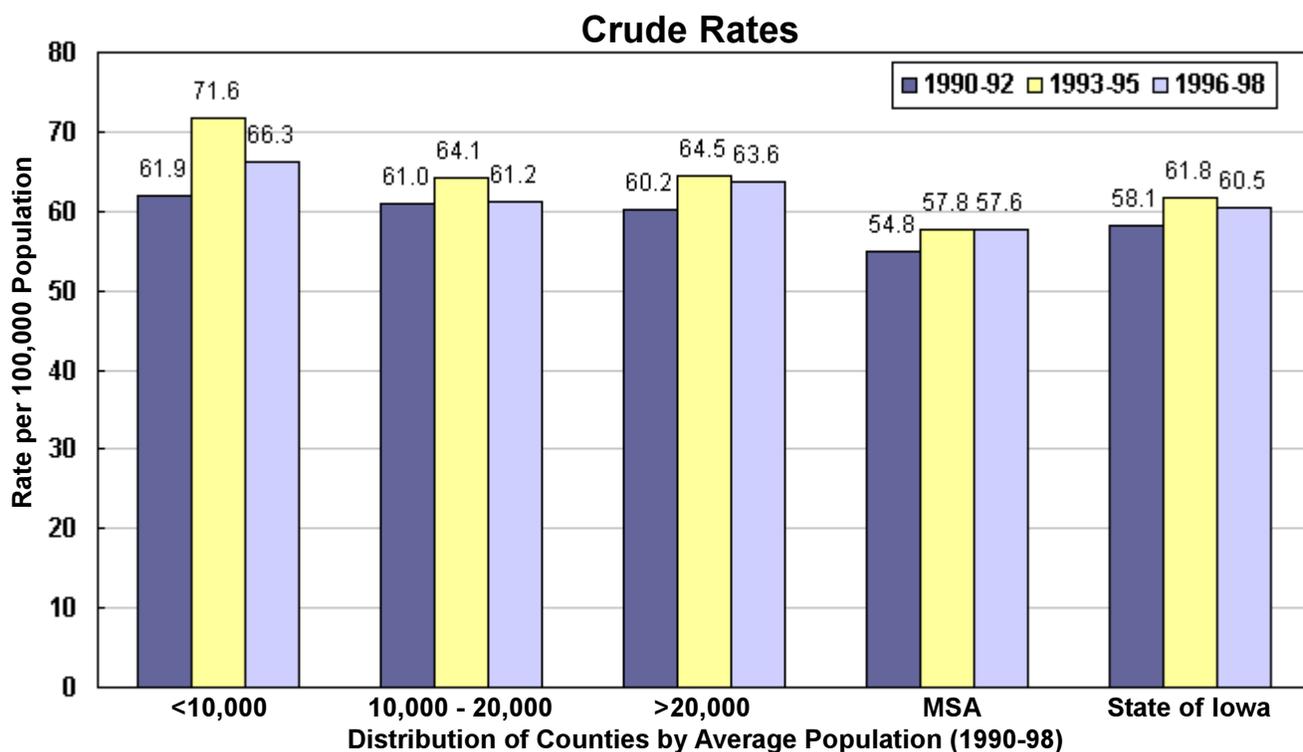
	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	799	72.1	68.7	Polk	1,842	59.2	65.8
	Dallas	157	53.0	50.8	Pottawattamie	516	68.3	64.0
	Dubuque	503	63.7	58.6	Scott	750	53.5	58.9
	Johnson	243	27.1	44.1	Warren	158	45.9	51.7
	Linn	810	51.0	53.0	Woodbury	579	63.8	59.7
	<b>Group Totals</b>							
Number:	6,357							
Crude:	56.8							
Adjusted:	60.2							

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Lung & Bronchus Cancer Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Female Breast Cancer Incidence 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	19,219	147.0	128.7

	County				County			
	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	51	132.4	90.7	Lucas	52	122.0	83.3
	Adams	39	186.4	119.3	Monroe	52	137.5	100.0
	Audubon	68	208.0	138.1	Osceola	55	167.1	113.8
	Clarke	54	139.1	111.0	Pocahontas	67	158.4	111.6
	Davis	63	163.4	120.0	Ringgold	46	181.7	106.0
	Decatur	58	152.7	115.1	Taylor	70	208.7	154.3
	Fremont	65	171.1	130.7	Van Buren	61	172.9	124.9
	Howard	68	151.0	110.7	Wayne	60	184.5	118.1
	Ida	76	199.9	138.1	Worth	53	145.7	104.6
	<b>Group Totals</b>							
Number:	1,058							
Crude:	163.5							
Adjusted:	115.0							

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	89	139.2	105.3	Henry	140	159.8	134.9
	Appanoose	86	134.0	100.3	Humboldt	81	167.3	117.2
	Buena Vista	145	157.8	125.1	Iowa	83	119.2	97.2
	Butler	133	184.4	126.8	Jefferson	110	143.0	125.5
	Calhoun	107	201.2	135.5	Jones	140	162.2	133.0
	Cass	144	205.0	135.1	Keokuk	79	148.2	111.0
	Cedar	106	130.4	96.7	Kossuth	129	154.5	116.1
	Cherokee	128	200.3	145.0	Louisa	76	144.5	126.6
	Chickasaw	82	135.9	114.8	Lyon	80	146.1	111.5
	Clay	140	169.1	143.4	Madison	93	153.8	127.5
	Clayton	170	197.9	158.0	Mills	106	170.3	158.5
	Crawford	127	166.9	138.7	Mitchell	80	157.3	112.2
	Delaware	104	124.3	110.3	Monona	69	145.5	100.4
	Dickinson	122	168.1	122.4	Montgomery	99	175.2	123.5
	Emmet	81	154.2	110.5	O'Brien	137	193.0	144.7
	Floyd	162	205.7	149.4	Page	157	204.0	148.7
	Franklin	106	205.6	144.9	Palo Alto	94	196.2	137.3
	Greene	86	182.1	124.5	Poweshiek	117	132.6	104.7
	Grundy	101	178.4	129.3	Sac	98	176.4	120.9
	Guthrie	82	155.9	106.9	Shelby	88	145.9	108.2
Hamilton	123	165.3	121.0	Tama	138	169.2	125.7	
Hancock	106	188.5	138.6	Union	107	179.5	139.9	
Hardin	169	195.0	136.1	Winnebago	77	139.0	97.6	
Harrison	102	146.5	116.9	Wright	140	209.7	149.3	

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Benton	128	117.3	101.0	Mahaska	153	153.1	125.2
	Boone	206	172.0	135.4	Marion	216	155.7	132.9
	Bremer	168	157.3	133.1	Marshall	263	149.4	122.8
	Buchanan	122	126.5	113.5	Muscatine	261	139.7	134.7
	Carroll	162	161.9	131.0	Plymouth	172	155.8	139.0
	Cerro Gordo	394	178.6	142.5	Sioux	183	128.4	118.9
	Clinton	386	162.8	137.1	Story	360	111.2	131.1
	Des Moines	287	143.7	114.4	Wapello	293	175.0	136.1
	Fayette	162	160.3	122.8	Washington	132	139.6	112.5
	Jackson	133	145.0	121.2	Webster	310	167.0	133.9
	Jasper	236	146.3	116.3	Winneshek	119	123.8	114.9
	Lee	252	142.1	115.3				

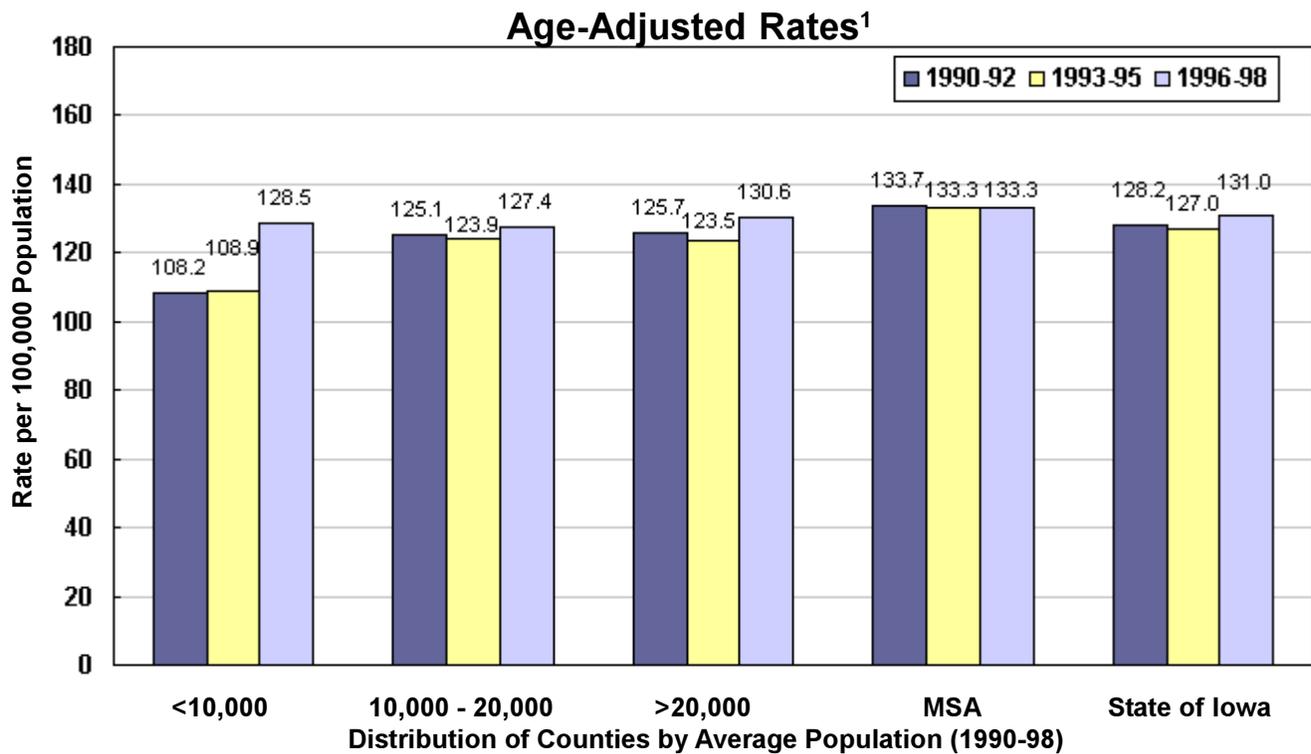
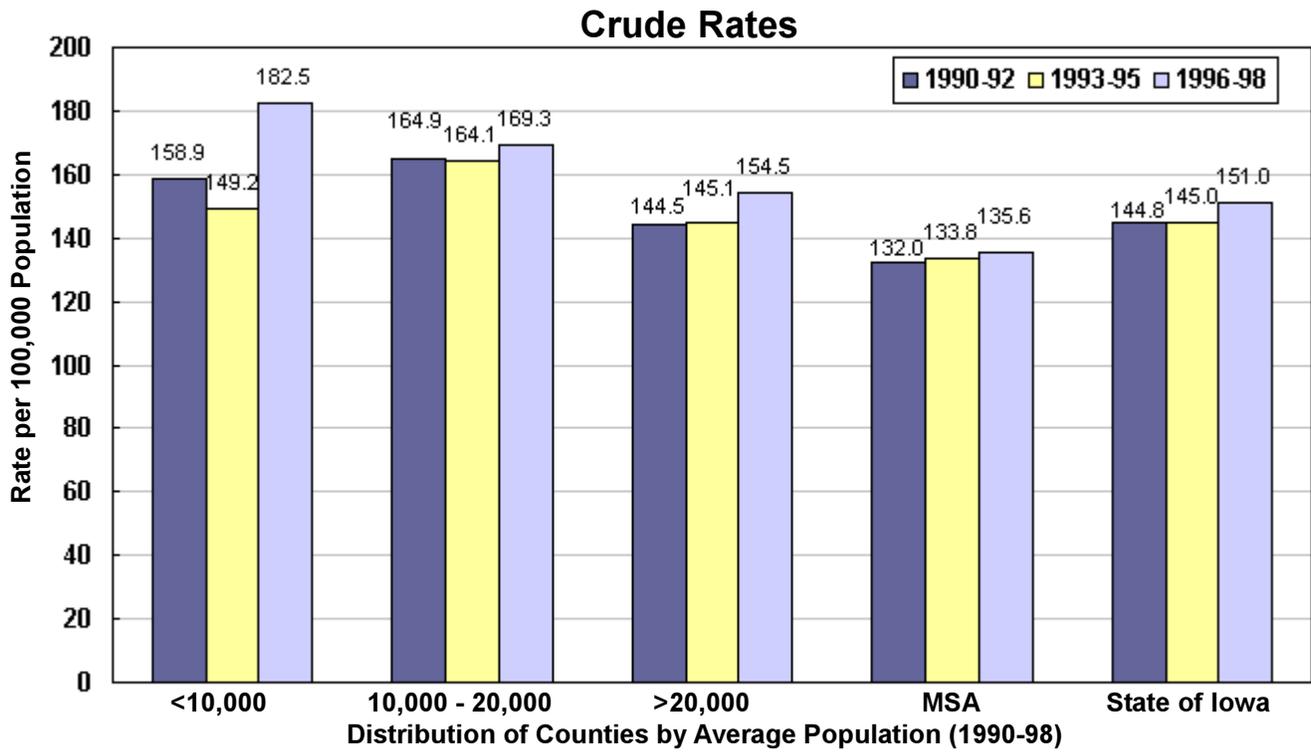
	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	868	149.8	140.2	Polk	2184	134.4	137.2
	Dallas	221	146.7	136.2	Pottawattamie	523	133.4	122.7
	Dubuque	624	153.3	138.9	Scott	953	132.1	135.2
	Johnson	437	96.9	135.4	Warren	193	109.5	114.0
	Linn	1068	130.9	126.8	Woodbury	673	143.8	131.7
	<b>Group Totals</b>							
Number:	7,744							
Crude:	133.8							
Adjusted:	133.4							

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: Iowa Cancer Registry,  
The University of Iowa

## Female Breast Cancer Incidence by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Female Breast Cancer Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	4,761	36.4	29.7

	County				County				
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	12	31.2	20.5	Lucas	10	23.5	15.6	
	Adams	8	38.2	23.7	Monroe	14	37.0	25.3	
	Audubon	9	27.5	14.7	Osceola	16	48.6	29.2	
	Clarke	19	48.9	35.7	Pocahontas	27	63.8	35.8	
	Davis	10	25.9	20.5	Ringgold	7	27.7	10.6	
	Decatur	19	50.0	36.2	Taylor	23	68.6	39.8	
	Fremont	17	44.7	37.1	Van Buren	17	48.2	33.6	
	Howard	25	55.5	37.1	Wayne	15	46.1	28.2	
	Ida	18	47.3	32.8	Worth	16	44.0	24.9	
	<b>Group Totals</b>								
Number:	282								
Crude:	43.6								
Adjusted:	28.0								

	County				County			
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	31	48.5	30.6	Henry	28	32.0	26.6
	Appanoose	27	42.1	27.8	Humboldt	19	39.2	22.0
	Buena Vista	30	32.7	24.1	Iowa	23	33.0	28.2
	Butler	34	47.1	28.9	Jefferson	34	44.2	41.1
	Calhoun	28	52.6	28.8	Jones	30	34.8	24.4
	Cass	26	37.0	23.9	Keokuk	19	35.6	22.6
	Cedar	30	36.9	25.2	Kossuth	41	49.1	34.4
	Cherokee	33	51.6	34.4	Louisa	23	43.7	34.4
	Chickasaw	29	48.1	32.5	Lyon	25	45.7	32.3
	Clay	33	39.9	31.0	Madison	26	43.0	32.0
	Clayton	42	48.9	38.3	Mills	23	37.0	34.6
	Crawford	23	30.2	24.2	Mitchell	25	49.1	30.8
	Delaware	29	34.7	29.7	Monona	21	44.3	22.4
	Dickinson	40	55.1	34.3	Montgomery	19	33.6	22.2
	Emmet	26	49.5	29.8	O'Brien	36	50.7	33.4
	Floyd	40	50.8	37.6	Page	35	45.5	28.3
	Franklin	23	44.6	28.6	Palo Alto	26	54.3	35.8
	Greene	21	44.5	26.9	Poweshiek	23	26.1	19.5
	Grundy	30	53.0	35.0	Sac	26	46.8	30.0
	Guthrie	21	39.9	24.5	Shelby	15	24.9	17.5
Hamilton	27	36.3	22.0	Tama	44	53.9	40.1	
Hancock	15	26.7	23.2	Union	23	38.6	26.5	
Hardin	58	66.9	42.4	Winnebago	24	43.3	28.7	
Harrison	23	33.0	23.2	Wright	28	41.9	26.2	

	County				County			
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	37	33.9	27.8	Mahaska	47	47.0	37.6
	Boone	39	32.6	22.8	Marion	47	33.9	27.1
	Bremer	44	41.2	32.3	Marshall	78	44.3	33.9
	Buchanan	51	52.9	44.1	Muscatine	66	35.3	33.1
	Carroll	57	57.0	44.7	Plymouth	51	46.2	36.2
	Cerro Gordo	109	49.4	38.1	Sioux	44	30.9	27.6
	Clinton	96	40.5	31.2	Story	95	29.4	32.3
	Des Moines	56	28.0	21.4	Wapello	83	49.6	36.0
	Fayette	41	40.6	29.6	Washington	34	36.0	26.6
	Jackson	24	26.2	19.2	Webster	71	38.2	30.1
	Jasper	61	37.8	28.4	Winneshek	37	38.5	29.8
	Lee	77	43.4	34.4				

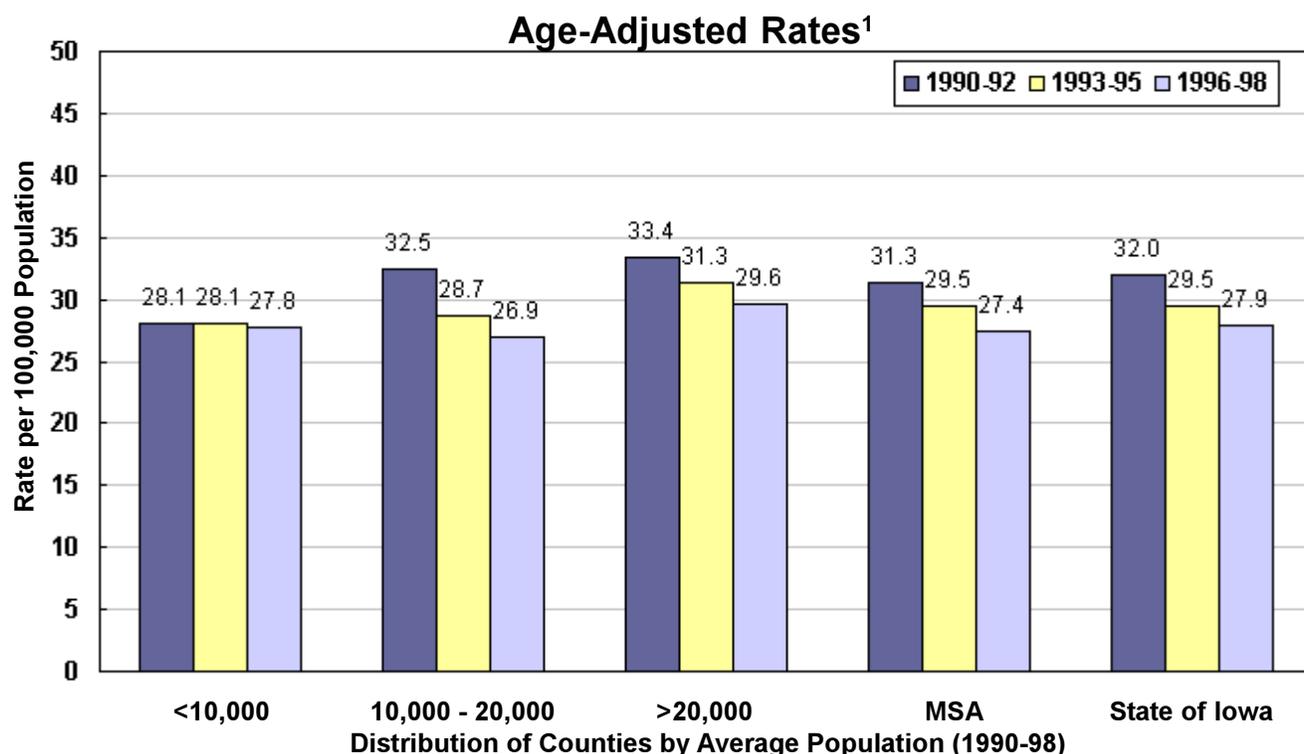
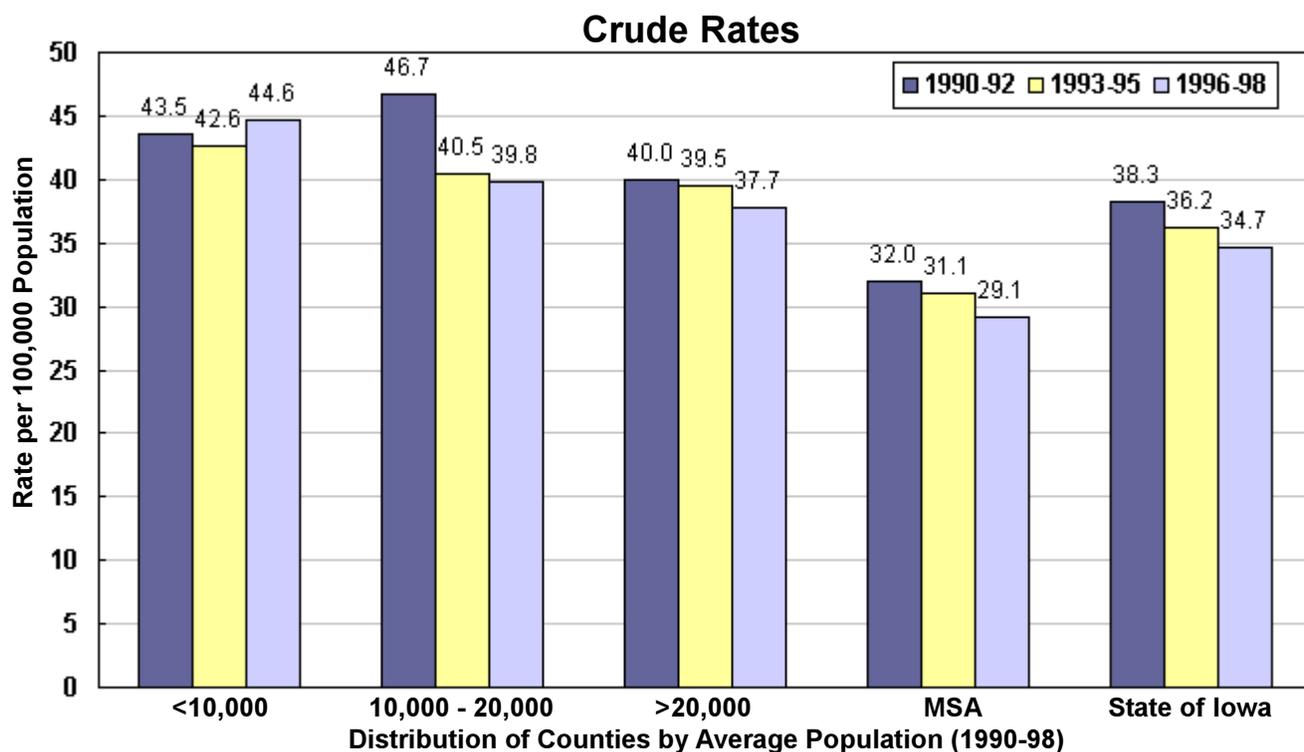
	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	199	34.3	31.0	Polk	495	30.5	29.9	
	Dallas	49	32.5	28.8	Pottawattamie	134	34.2	29.9	
	Dubuque	163	40.1	33.3	Scott	204	28.3	28.2	
	Johnson	103	22.8	31.3	Warren	47	26.7	26.7	
	Linn	212	26.0	24.2	Woodbury	173	37.0	29.9	
	<b>Group Totals</b>								
Number:	1,779								
Crude:	30.7								
Adjusted:	29.3								

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Female Breast Cancer Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Colorectal Cancer Incidence 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	18,740	73.7	64.1

	Counties with Average Population <10,000				Counties with Average Population 10,000 to 20,000			
	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	65	87.2	50.4	Lucas	72	88.3	58.3
	Adams	37	90.0	53.9	Monroe	65	88.8	59.1
	Audubon	55	87.3	52.3	Osceola	66	102.8	67.1
	Clarke	50	67.3	47.6	Pocahontas	93	113.2	72.8
	Davis	68	90.0	62.7	Ringgold	46	95.3	57.6
	Decatur	72	97.8	70.9	Taylor	85	132.8	76.9
	Fremont	81	111.9	77.0	Van Buren	63	90.2	63.5
	Howard	95	107.9	70.8	Wayne	59	95.1	50.9
	Ida	75	101.7	69.3	Worth	49	69.3	48.3
<b>Group Totals</b>								
Number:	1,196							
Crude:	95.5							
Adjusted:	62.1							

	Counties with Average Population >20,000				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Allamakee	119	94.5	66.9	Henry	120	72.8	59.8
	Appanoose	140	113.8	76.1	Humboldt	106	112.4	72.4
	Buena Vista	186	103.9	77.6	Iowa	107	79.0	59.5
	Butler	116	82.0	54.3	Jefferson	127	84.4	81.4
	Calhoun	105	101.4	63.7	Jones	144	80.1	67.4
	Cass	124	92.2	57.4	Keokuk	113	108.5	71.6
	Cedar	98	61.6	47.2	Kossuth	144	88.3	63.4
	Cherokee	102	82.6	57.2	Louisa	83	78.5	69.3
	Chickasaw	90	74.9	58.9	Lyon	91	84.6	62.2
	Clay	139	87.7	67.9	Madison	77	65.0	52.1
	Clayton	156	92.1	68.9	Mills	87	70.5	67.7
	Crawford	129	86.7	66.9	Mitchell	79	79.8	52.2
	Delaware	107	64.9	58.4	Monona	126	139.1	78.9
	Dickinson	123	88.0	57.8	Montgomery	107	99.6	59.7
	Emmet	96	94.6	64.6	O'Brien	163	118.8	78.8
	Floyd	133	88.5	61.9	Page	133	87.3	58.7
	Franklin	90	90.1	63.3	Palo Alto	109	117.3	75.2
	Greene	96	106.0	61.7	Poweshiek	147	86.3	67.3
	Grundy	81	74.1	51.9	Sac	113	104.0	66.0
	Guthrie	108	106.5	71.1	Shelby	113	95.7	64.1
	Hamilton	121	83.7	61.0	Tama	144	90.9	61.3
	Hancock	84	76.4	56.2	Union	96	84.9	61.1
	Hardin	185	109.9	68.7	Winnebago	73	67.8	52.6
	Harrison	146	108.4	78.6	Wright	155	121.2	76.8
<b>Group Totals</b>								
Number:	5,640							
Crude:	90.3							
Adjusted:	64.5							

	Counties with Average Population >20,000				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Benton	176	82.0	68.6	Mahaska	156	79.9	63.8
	Boone	199	86.5	66.3	Marion	187	67.8	56.7
	Bremer	162	77.8	64.6	Marshall	272	78.8	61.3
	Buchanan	129	68.0	60.4	Muscatine	258	70.3	68.6
	Carroll	203	104.7	78.7	Plymouth	211	97.2	79.7
	Cerro Gordo	342	81.6	62.6	Sioux	195	70.3	64.6
	Clinton	371	81.2	67.7	Story	289	43.1	55.4
	Des Moines	355	92.7	77.2	Wapello	277	86.2	65.4
	Fayette	164	83.1	62.0	Washington	168	91.7	69.7
	Jackson	177	97.9	79.6	Webster	360	101.2	77.0
	Jasper	255	80.3	66.7	Winneshek	124	65.8	58.0
	Lee	295	84.4	69.6				
<b>Group Totals</b>								
Number:	5,325							
Crude:	79.0							
Adjusted:	66.8							

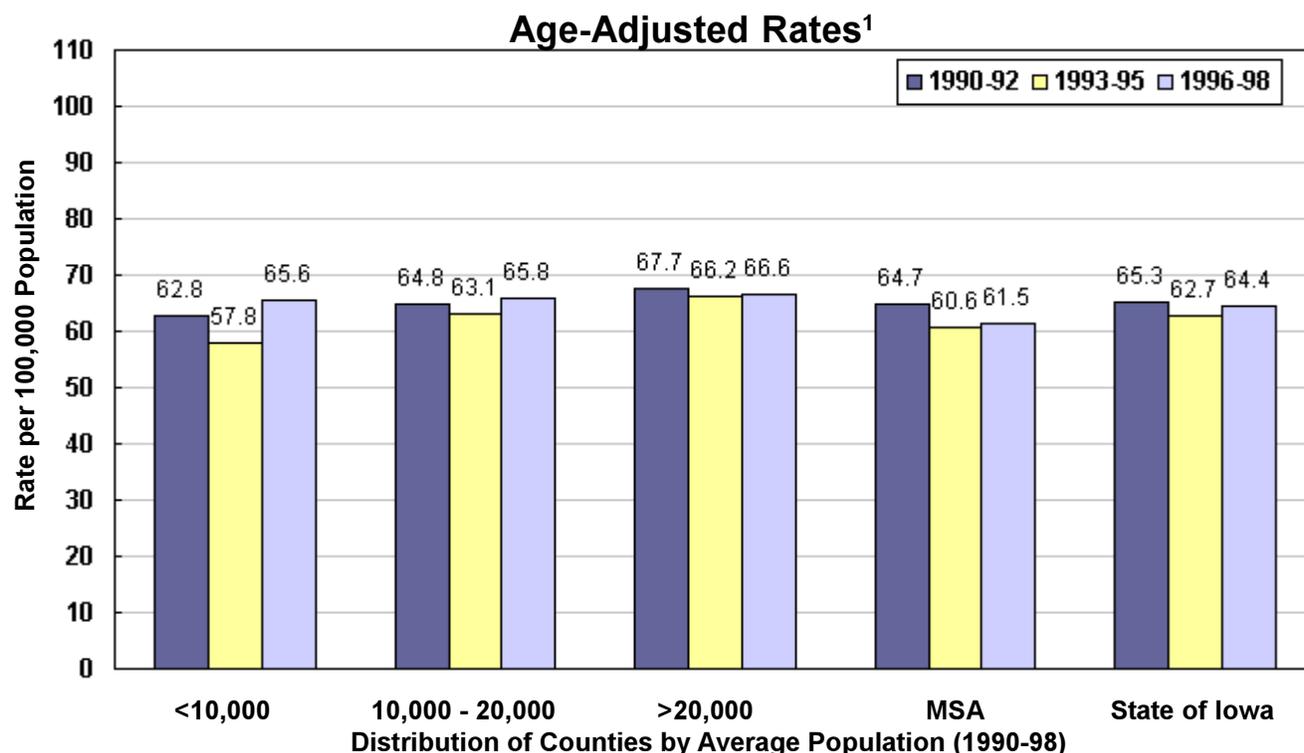
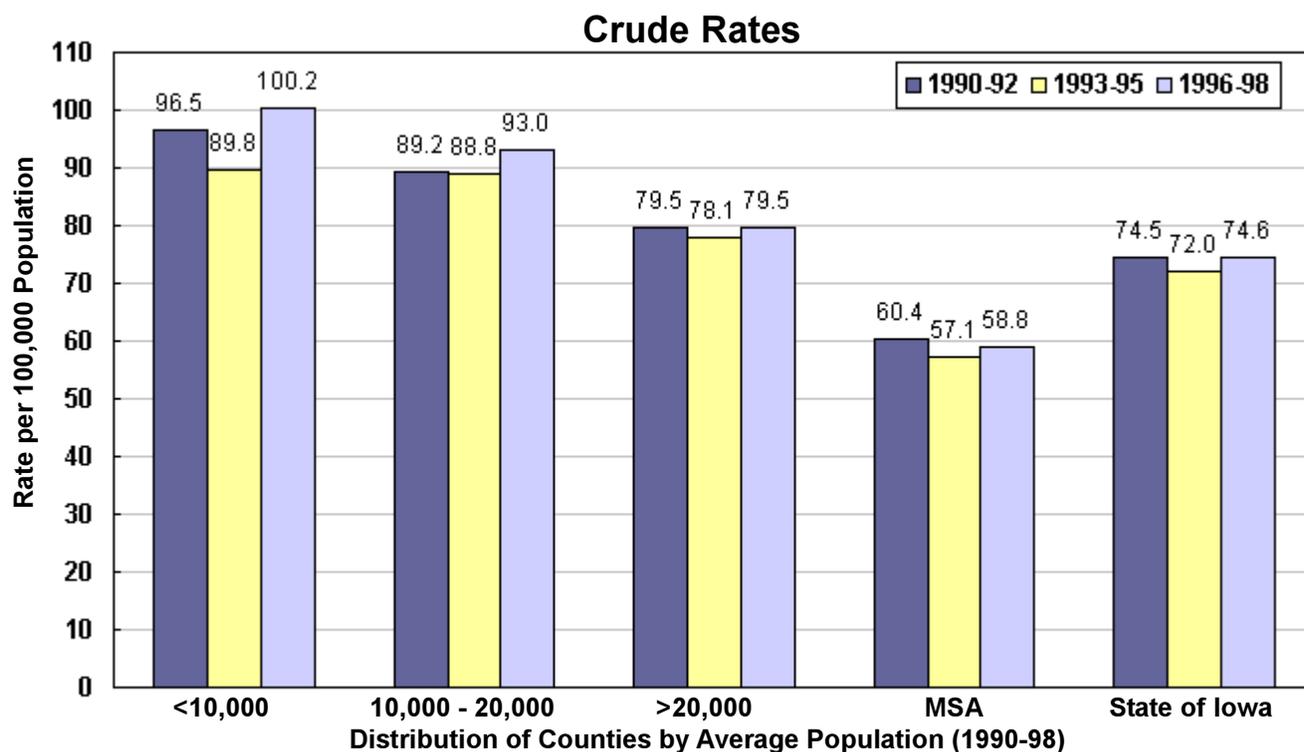
	MSA Counties				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	720	65.0	61.5	Polk	1665	53.5	59.6
	Dallas	178	60.1	56.8	Pottawattamie	510	67.5	63.9
	Dubuque	562	71.2	65.9	Scott	862	61.5	68.4
	Johnson	282	31.4	50.3	Warren	195	56.6	64.1
	Linn	986	62.1	64.5	Woodbury	619	68.2	63.2
<b>Group Totals</b>								
Number:	6,579							
Crude:	58.8							
Adjusted:	62.2							

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: Iowa Cancer Registry,  
The University of Iowa

## Colorectal Cancer Incidence by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Colorectal Cancer Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	7,188	28.3	24.1

	County				County			
	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	34	45.6	26.0	Lucas	33	40.5	25.4
	Adams	16	38.9	22.9	Monroe	30	41.0	26.1
	Audubon	20	31.7	20.0	Osceola	20	31.1	18.4
	Clarke	20	26.9	17.3	Pocahontas	40	48.7	28.9
	Davis	28	37.1	25.9	Ringgold	18	37.3	18.3
	Decatur	36	48.9	33.7	Taylor	36	56.3	31.5
	Fremont	33	45.6	30.7	Van Buren	31	44.4	30.5
	Howard	38	43.1	27.0	Wayne	30	48.3	24.6
	Ida	30	40.7	24.1	Worth	26	36.8	22.4
	<b>Group Totals</b>							
Number:	519							
Crude:	41.4							
Adjusted:	25.5							

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	48	38.1	25.7	Henry	50	28.2	22.4
	Appanoose	48	39.0	24.7	Humboldt	28	29.7	18.9
	Buena Vista	77	43.0	31.1	Iowa	55	40.6	28.4
	Butler	53	37.4	24.1	Jefferson	37	24.6	22.7
	Calhoun	42	40.6	24.7	Jones	45	25.0	20.6
	Cass	55	40.9	25.4	Keokuk	39	37.5	24.4
	Cedar	42	26.4	19.6	Kossuth	49	30.1	20.7
	Cherokee	37	30.0	20.3	Louisa	33	31.2	28.0
	Chickasaw	37	30.8	23.2	Lyon	34	31.6	22.8
	Clay	53	33.4	25.0	Madison	35	29.5	23.2
	Clayton	69	40.7	28.7	Mills	31	25.1	23.5
	Crawford	59	39.6	29.1	Mitchell	29	29.3	19.5
	Delaware	60	36.4	33.1	Monona	53	58.5	30.2
	Dickinson	45	32.2	21.5	Montgomery	34	31.6	18.4
	Emmet	28	27.6	18.5	O'Brien	63	45.9	29.1
	Floyd	49	32.6	22.8	Page	46	30.2	19.9
	Franklin	38	38.0	25.3	Palo Alto	41	44.1	26.4
	Greene	47	51.9	29.6	Poweshiek	68	39.9	29.3
	Grundy	23	21.1	14.0	Sac	52	47.9	28.9
	Guthrie	44	43.4	28.0	Shelby	45	38.1	24.1
Hamilton	51	35.3	25.9	Tama	60	37.9	24.0	
Hancock	27	24.5	18.3	Union	42	37.2	26.5	
Hardin	71	42.2	23.8	Winnebago	28	26.0	17.7	
Harrison	55	40.8	28.0	Wright	50	39.1	25.3	

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Benton	66	30.7	25.5	Mahaska	53	27.2	21.9
	Boone	82	35.6	26.4	Marion	78	28.3	22.9
	Bremer	63	30.3	24.2	Marshall	117	33.9	26.2
	Buchanan	58	30.6	27.5	Muscatine	86	23.4	22.3
	Carroll	71	36.6	26.5	Plymouth	72	33.2	27.8
	Cerro Gordo	126	30.1	22.7	Sioux	78	28.1	24.7
	Clinton	143	31.3	26.1	Story	112	16.7	21.0
	Des Moines	134	35.0	29.1	Wapello	120	37.3	27.2
	Fayette	71	36.0	27.4	Washington	68	37.1	26.2
	Jackson	55	30.4	23.8	Webster	88	24.7	17.9
	Jasper	89	28.0	22.9	Winneshek	49	26.0	21.7
	Lee	134	38.4	31.0				

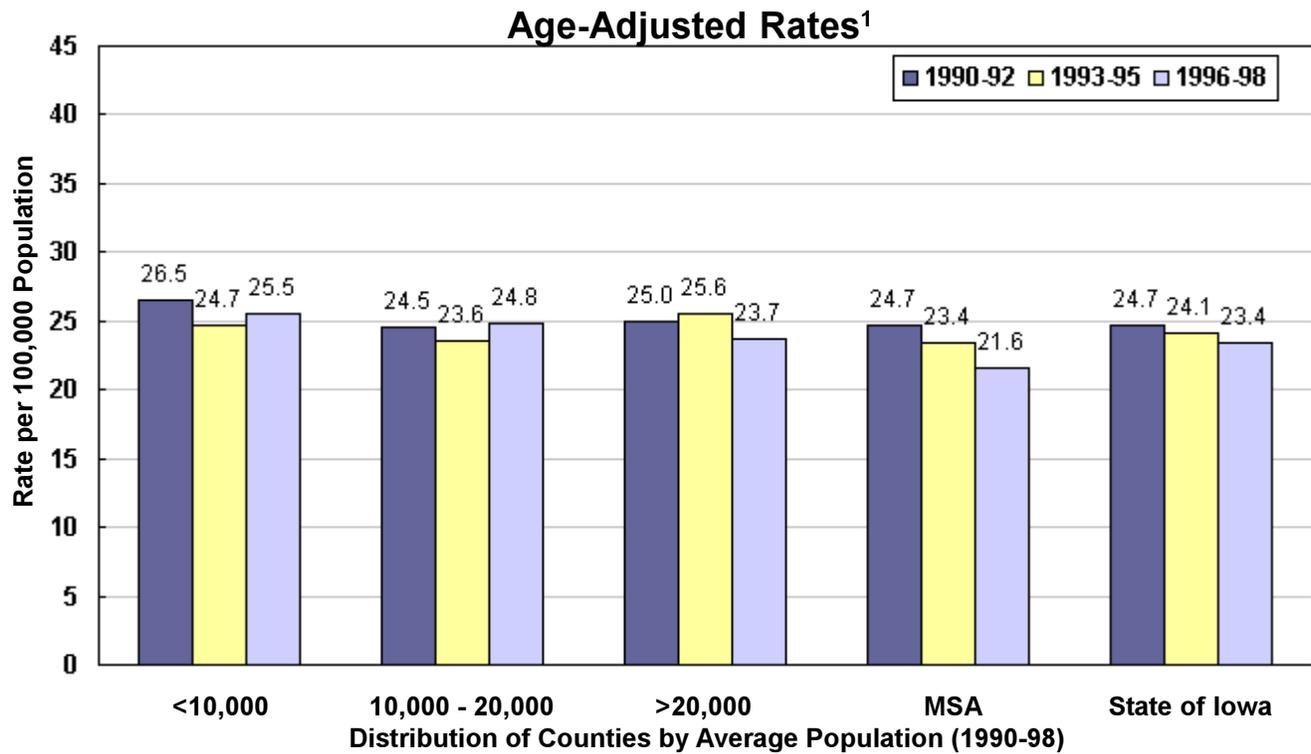
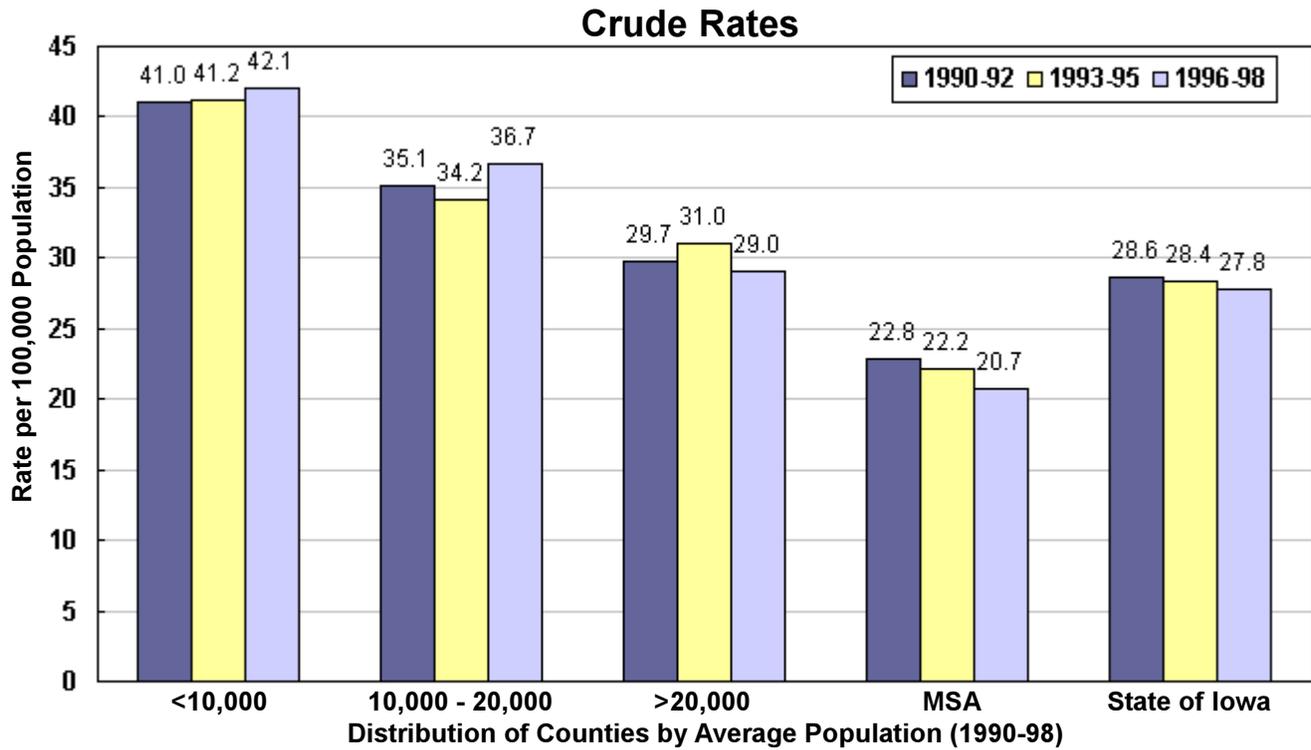
	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	264	23.8	22.7	Polk	602	19.4	21.6
	Dallas	84	28.4	26.1	Pottawattamie	162	21.4	20.4
	Dubuque	218	27.6	25.0	Scott	324	23.1	25.9
	Johnson	111	12.4	19.9	Warren	73	21.2	23.8
	Linn	399	25.1	26.1	Woodbury	214	23.6	21.4
	<b>Group Totals</b>							
Number:	2,451							
Crude:	21.9							
Adjusted:	23.2							

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Colorectal Cancer Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Non-Hodgkin's Lymphoma Incidence 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	5,309	20.9	19.0

	County				County			
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>		Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	19	25.5	18.6	Lucas	18	22.1	17.3
	Adams	7	17.0	12.0	Monroe	19	26.0	18.8
	Audubon	9	14.3	10.5	Osceola	18	28.0	21.3
	Clarke	20	26.9	21.7	Pocahontas	25	30.4	22.2
	Davis	16	21.2	16.0	Ringgold	16	33.1	19.8
	Decatur	25	33.9	24.4	Taylor	17	26.6	15.1
	Fremont	15	20.7	16.2	Van Buren	13	18.6	16.3
	Howard	20	22.7	18.4	Wayne	20	32.2	24.7
	Ida	22	29.8	19.0	Worth	19	26.9	21.4
	<b>Group Totals</b>							
Number:	318							
Crude:	25.4							
Adjusted:	18.7							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	28	22.2	17.1	Henry	30	16.9	15.9
	Appanoose	36	29.3	19.0	Humboldt	26	27.6	18.7
	Buena Vista	44	24.6	20.8	Iowa	36	26.6	21.4
	Butler	37	26.1	19.2	Jefferson	34	22.6	22.0
	Calhoun	29	28.0	17.9	Jones	45	25.0	22.8
	Cass	28	20.8	15.5	Keokuk	23	22.1	14.4
	Cedar	31	19.5	16.0	Kossuth	42	25.8	20.3
	Cherokee	27	21.9	16.4	Louisa	19	18.0	16.9
	Chickasaw	30	25.0	20.1	Lyon	30	27.9	21.5
	Clay	30	18.9	16.6	Madison	15	12.7	10.4
	Clayton	35	20.7	16.7	Mills	18	14.6	14.2
	Crawford	26	17.5	14.0	Mitchell	32	32.3	23.2
	Delaware	23	13.9	13.1	Monona	29	32.0	20.7
	Dickinson	42	30.1	22.0	Montgomery	32	29.8	19.0
	Emmet	27	26.6	19.5	O'Brien	37	27.0	18.8
	Floyd	48	31.9	22.9	Page	29	19.0	13.3
	Franklin	25	25.0	17.1	Palo Alto	26	28.0	20.6
	Greene	26	28.7	18.2	Poweshiek	46	27.0	22.4
	Grundy	27	24.7	17.8	Sac	13	12.0	7.6
	Guthrie	21	20.7	15.2	Shelby	31	26.2	17.4
Hamilton	41	28.3	23.3	Tama	44	27.8	21.5	
Hancock	21	19.1	14.6	Union	32	28.3	22.8	
Hardin	43	25.6	17.7	Winnebago	29	26.9	22.4	
Harrison	29	21.5	16.6	Wright	25	19.6	13.3	
<b>Group Totals</b>								
Number:	1,477							
Crude:	23.7							
Adjusted:	18.1							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population &gt;20,000</b>	Benton	50	23.3	20.5	Mahaska	37	19.0	16.6
	Boone	43	18.7	16.3	Marion	60	21.7	20.0
	Bremer	38	18.2	15.4	Marshall	78	22.6	18.8
	Buchanan	40	21.1	19.4	Muscatine	76	20.7	20.9
	Carroll	69	35.6	29.3	Plymouth	47	21.6	18.0
	Cerro Gordo	86	20.5	17.7	Sioux	52	18.7	17.7
	Clinton	107	23.4	20.4	Story	90	13.4	16.8
	Des Moines	89	23.2	20.4	Wapello	85	26.4	20.9
	Fayette	50	25.3	19.5	Washington	38	20.7	17.6
	Jackson	35	19.4	15.7	Webster	73	20.5	17.3
	Jasper	71	22.4	19.1	Winneshek	24	12.7	11.6
	Lee	91	26.0	22.4				
	<b>Group Totals</b>							
Number:	1,429							
Crude:	21.2							
Adjusted:	18.9							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>MSA Counties</b>	Black Hawk	218	19.7	19.0	Polk	575	18.5	20.3
	Dallas	61	20.6	20.0	Pottawattamie	141	18.7	18.1
	Dubuque	191	24.2	22.7	Scott	241	17.2	18.9
	Johnson	124	13.8	20.1	Warren	54	15.7	17.2
	Linn	299	18.8	19.6	Woodbury	181	19.9	19.3
	<b>Group Totals</b>							
Number:	2,085							
Crude:	18.6							
Adjusted:	19.7							

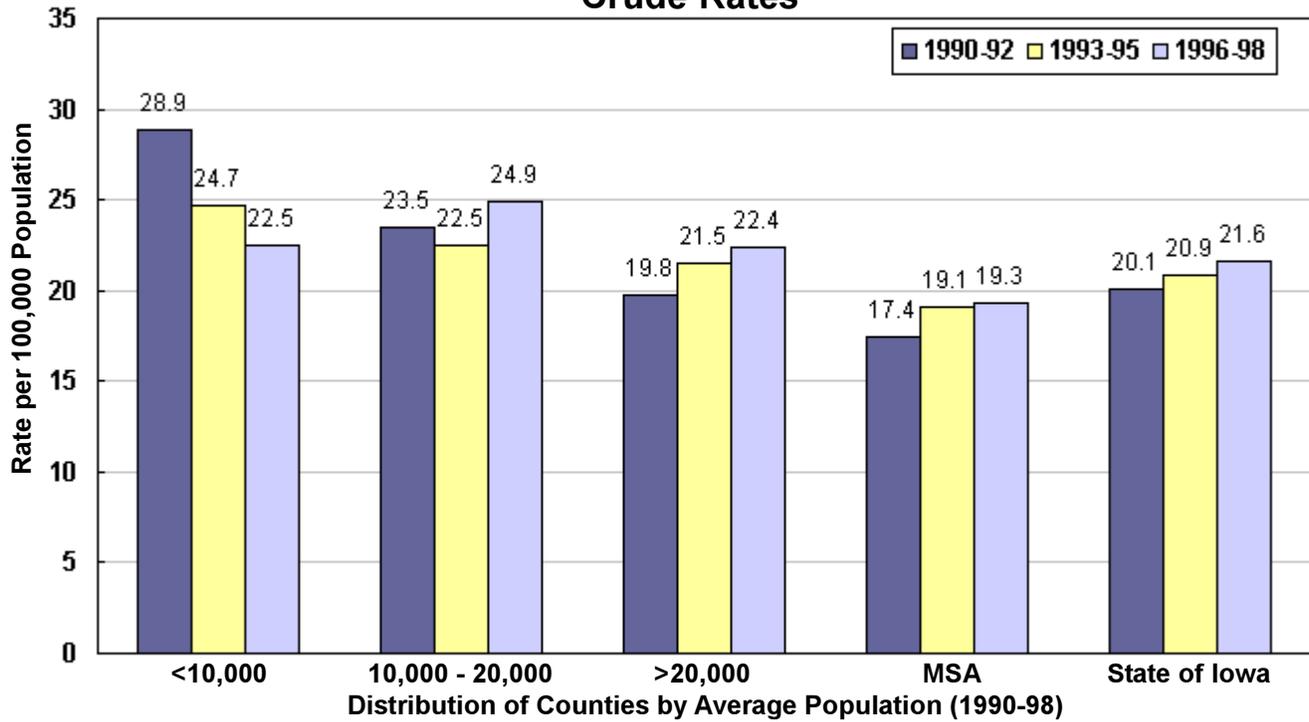
<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

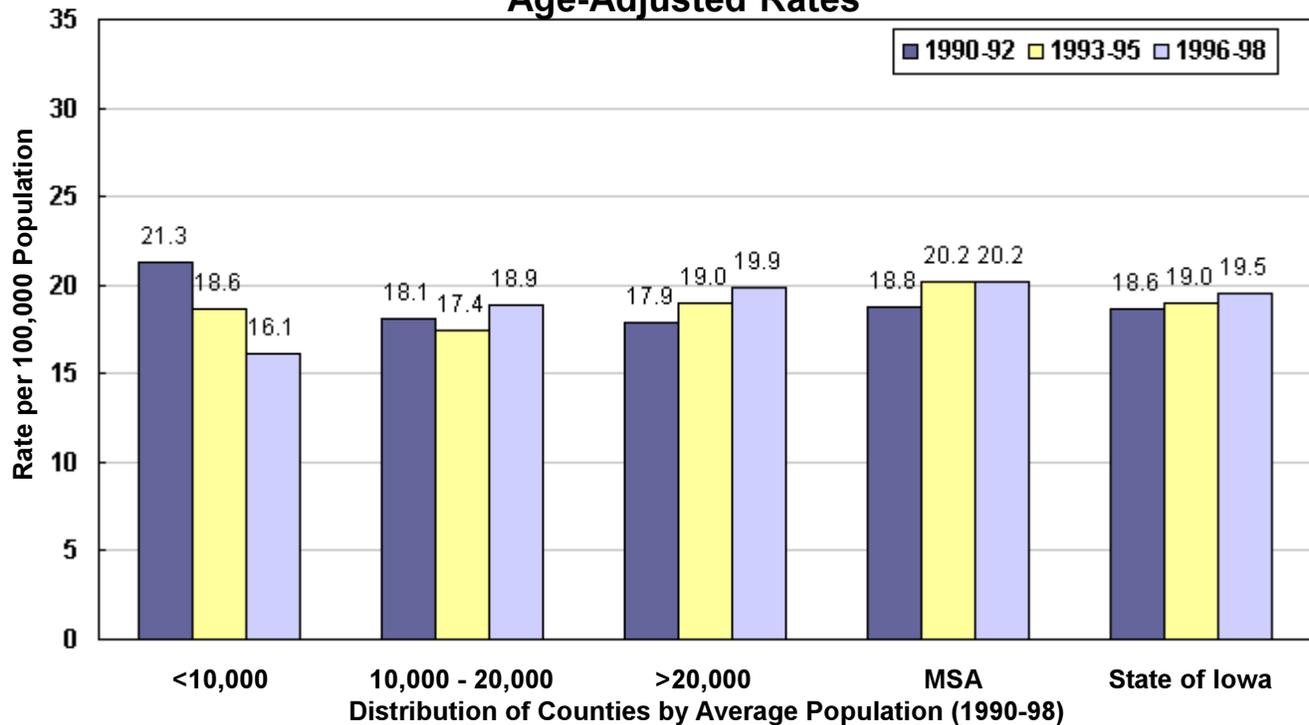
Source: Iowa Cancer Registry,  
The University of Iowa

## Non-Hodgkin's Lymphoma Incidence by County Group 1990-1998

### Crude Rates



### Age-Adjusted Rates<sup>1</sup>



<sup>1</sup>Adjusted to Year 2000 US population

## Non-Hodgkin's Lymphoma Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	2,738	10.8	9.3

	County				County							
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>			
<b>Counties with Average Population &lt;10,000</b>	Adair	12	16.1	8.9	Lucas	10	12.3	8.1	Monroe	7	9.6	5.7
	Adams	5	12.2	8.6	Osceola	8	12.5	8.0	Pocahontas	15	18.3	11.8
	Audubon	3	4.8	2.6	Ringgold	10	20.7	11.0	Taylor	6	9.4	4.5
	Clarke	16	21.5	16.7	Van Buren	4	5.7	4.8	Wayne	7	11.3	6.6
	Davis	10	13.2	9.5	Worth	12	17.0	13.8				
	Decatur	14	19.0	14.3								
	Fremont	12	16.6	13.6								
	Howard	10	11.4	8.8								
	Ida	11	14.9	9.7								
	<b>Group Totals</b>											
Number:	172											
Crude:	13.7											
Adjusted:	9.4											

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	16	12.7	9.3	Henry	16	9.0	7.6	Humboldt	18	19.1	12.1
	Appanoose	18	14.6	9.2	Iowa	24	17.7	12.7	Jefferson	22	14.6	13.7
	Buena Vista	23	12.8	10.4	Jones	18	10.0	8.5	Keokuk	13	12.5	8.0
	Butler	13	9.2	6.7	Kossuth	22	13.5	10.1	Louisa	8	7.6	6.3
	Calhoun	17	16.4	11.9	Lyon	13	12.1	9.1	Madison	15	12.7	11.4
	Cass	13	9.7	6.4	Mills	11	8.9	8.5	Mitchell	17	17.2	9.9
	Cedar	18	11.3	8.8	Monona	12	13.2	6.7	Montgomery	25	23.3	13.4
	Cherokee	15	12.1	8.6	O'Brien	15	10.9	7.2	O'Brien	15	10.9	7.2
	Chickasaw	15	12.5	9.3	Page	20	13.1	8.4	Palo Alto	19	20.4	11.7
	Clay	20	12.6	10.1	Poweshiek	24	14.1	10.7	Sac	12	11.0	7.4
	Clayton	18	10.6	8.2	Shelby	6	5.1	3.1	Shelby	6	5.1	3.1
	Crawford	13	8.7	6.9	Tama	21	13.3	9.3	Tama	21	13.3	9.3
	Delaware	18	10.9	9.5	Union	13	11.5	7.9	Union	13	11.5	7.9
	Dickinson	19	13.6	9.7	Winnebago	13	12.1	9.0	Winnebago	13	12.1	9.0
	Emmet	20	19.7	14.1	Wright	18	14.1	8.9	Wright	18	14.1	8.9
	Floyd	32	21.3	14.6								
	Franklin	8	8.0	4.9								
	Greene	14	15.5	10.4								
	Grundy	15	13.7	9.1								
	Guthrie	11	10.8	7.8								
Hamilton	19	13.1	10.0									
Hancock	19	17.3	12.6									
Hardin	25	14.9	9.0									
Harrison	14	10.4	6.6									

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population &gt;20,000</b>	Benton	31	14.4	11.9	Mahaska	21	10.8	9.1	Marion	30	10.9	9.1
	Boone	21	9.1	6.6	Marshall	41	11.9	9.1	Muscatine	32	8.7	8.5
	Bremer	26	12.5	10.2	Plymouth	22	10.1	7.7	Plymouth	22	10.1	7.7
	Buchanan	30	15.8	14.1	Sioux	30	10.8	9.4	Sioux	30	10.8	9.4
	Carroll	23	11.9	8.7	Story	43	6.4	7.9	Story	43	6.4	7.9
	Cerro Gordo	51	12.2	9.7	Wapello	42	13.1	9.6	Wapello	42	13.1	9.6
	Clinton	63	13.8	11.7	Washington	21	11.5	9.4	Washington	21	11.5	9.4
	Des Moines	54	14.1	11.6	Webster	49	13.8	10.7	Webster	49	13.8	10.7
	Fayette	23	11.7	8.2	Winneshek	15	8.0	6.6	Winneshek	15	8.0	6.6
	Jackson	19	10.5	8.1								
	Jasper	35	11.0	9.3								
	Lee	52	14.9	12.7								

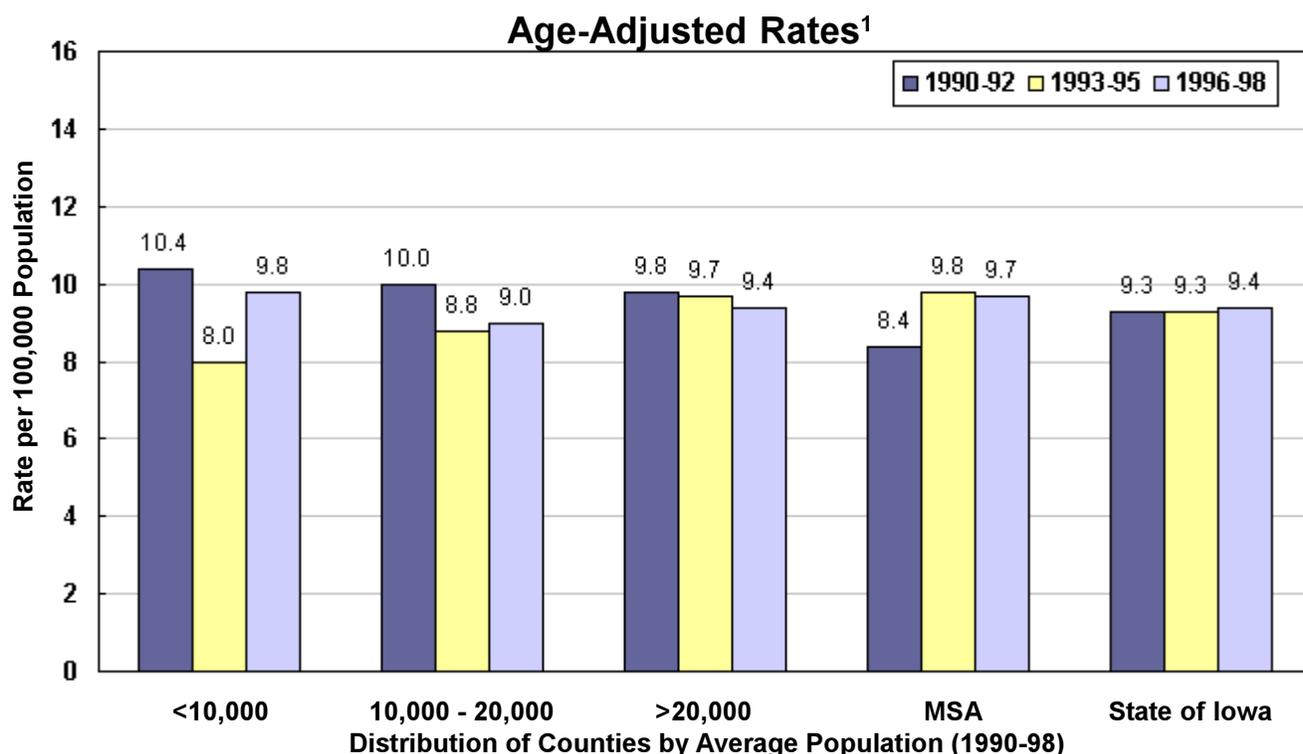
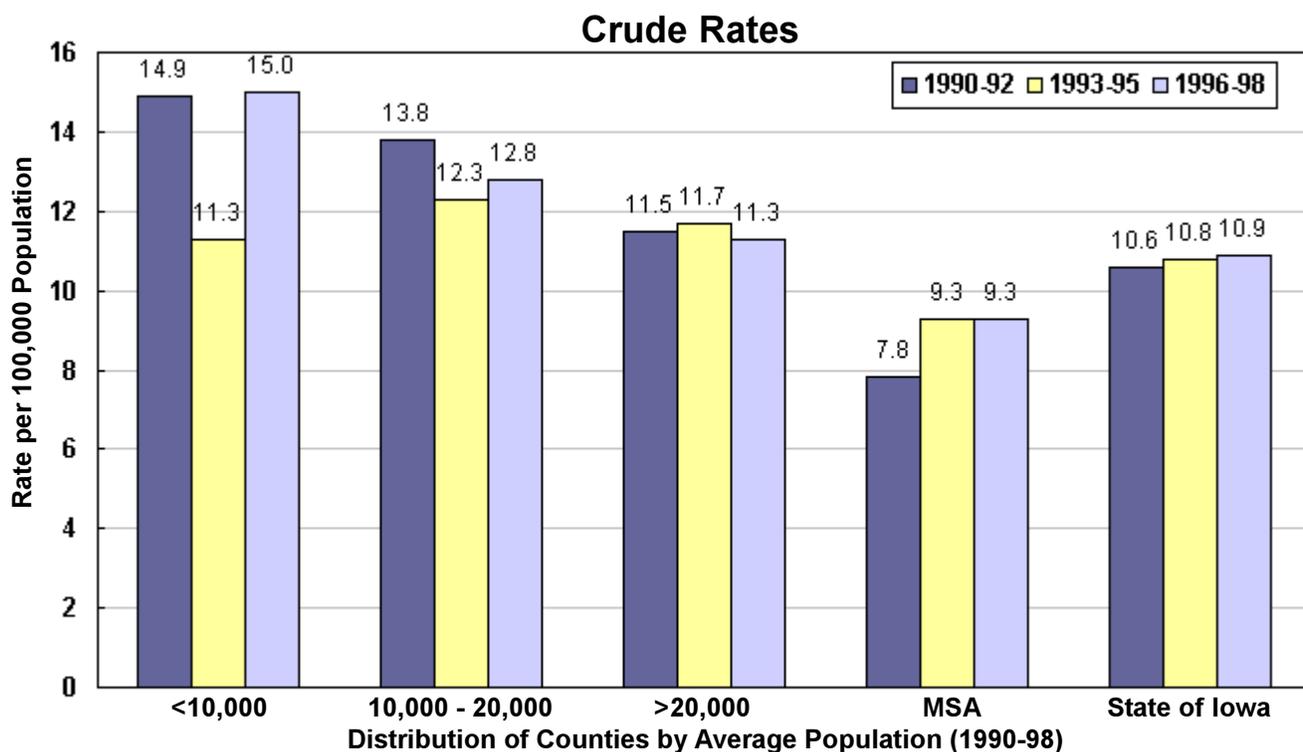
	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>MSA Counties</b>	Black Hawk	104	9.4	8.8	Polk	293	9.4	10.5	Pottawattamie	66	8.7	8.4
	Dallas	27	9.1	8.8	Scott	114	8.1	9.1	Scott	114	8.1	9.1
	Dubuque	82	10.4	9.4	Warren	21	6.1	6.6	Warren	21	6.1	6.6
	Johnson	48	5.3	8.3	Woodbury	90	9.9	9.2	Woodbury	90	9.9	9.2
	Linn	139	8.8	9.1								
	<b>Group Totals</b>											
Number:	984											
Crude:	8.8											
Adjusted:	9.3											

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Non-Hodgkin's Lymphoma Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

# Leukemia Incidence 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	4,159	16.4	14.7

	County				County				
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	13	17.4	11.6	Lucas	20	24.5	18.0	
	Adams	3	7.3	5.1	Monroe	15	20.5	16.1	
	Audubon	17	27.0	14.0	Osceola	13	20.2	16.0	
	Clarke	14	18.8	15.3	Pocahontas	20	24.3	17.4	
	Davis	14	18.5	14.8	Ringgold	7	14.5	7.8	
	Decatur	10	13.6	9.1	Taylor	10	15.6	9.6	
	Fremont	17	23.5	16.4	Van Buren	14	20.0	13.4	
	Howard	16	18.2	11.2	Wayne	15	24.2	16.2	
	Ida	8	10.8	9.7	Worth	10	14.1	10.9	
	<b>Group Totals</b>								
Number:	236								
Crude:	18.8								
Adjusted:	13.1								

	County				County			
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	24	19.1	13.2	Henry	32	18.1	15.6
	Appanoose	17	13.8	9.7	Humboldt	22	23.3	16.7
	Buena Vista	43	24.0	21.3	Iowa	27	19.9	15.4
	Butler	37	26.1	20.0	Jefferson	24	15.9	14.7
	Calhoun	23.0	22.2	14.0	Jones	25	13.9	11.7
	Cass	24	17.8	11.2	Keokuk	30	28.8	20.1
	Cedar	30	18.9	15.2	Kossuth	33	20.2	15.9
	Cherokee	17	13.8	10.5	Louisa	15	14.2	12.1
	Chickasaw	17	14.1	10.5	Lyon	12	11.2	8.3
	Clay	24	15.1	12.3	Madison	20	16.9	14.6
	Clayton	27	15.9	12.9	Mills	17	13.8	14.1
	Crawford	27	18.1	14.4	Mitchell	19	19.2	15.0
	Delaware	19	11.5	10.8	Monona	26	28.7	22.0
	Dickinson	30	21.5	14.3	Montgomery	21	19.5	12.4
	Emmet	16	15.8	12.1	O'Brien	33	24.1	16.5
	Floyd	27	18.0	13.3	Page	18	11.8	8.1
	Franklin	16	16.0	12.5	Palo Alto	20	21.5	16.0
	Greene	21	23.2	13.7	Poweshiek	35	20.6	16.2
	Grundy	28	25.6	20.3	Sac	19	17.5	11.8
	Guthrie	19	18.7	12.5	Shelby	19	16.1	12.1
Hamilton	38	26.3	19.9	Tama	33	20.8	15.9	
Hancock	22	20.0	15.0	Union	16	14.2	11.8	
Hardin	37	22.0	16.0	Winnebago	21	19.5	15.2	
Harrison	24	17.8	11.7	Wright	33	25.8	17.8	

	County				County			
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	49	22.8	19.0	Mahaska	32	16.4	13.7
	Boone	53	23.0	18.0	Marion	67	24.3	21.0
	Bremer	29	13.9	11.8	Marshall	71	20.6	16.8
	Buchanan	36	19.0	17.5	Muscatine	51	13.9	13.9
	Carroll	34	17.5	14.5	Plymouth	36	16.6	13.8
	Cerro Gordo	76	18.1	14.8	Sioux	44	15.9	14.5
	Clinton	72	15.8	13.7	Story	86	12.8	15.9
	Des Moines	75	19.6	16.5	Wapello	67	20.8	15.7
	Fayette	57	28.9	22.7	Washington	50	27.3	21.1
	Jackson	42	23.2	18.7	Webster	72	20.2	16.9
	Jasper	60	18.9	15.9	Winneshek	32	17.0	15.1
	Lee	57	16.3	13.8				

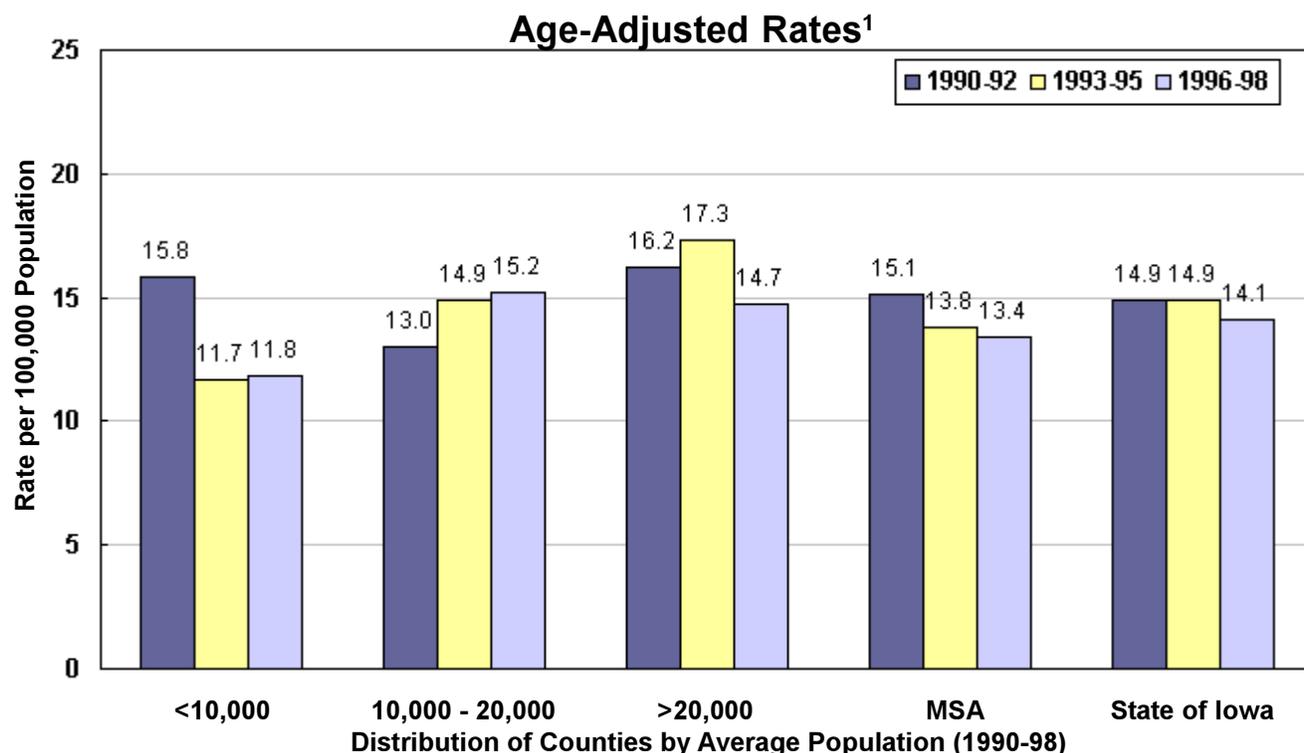
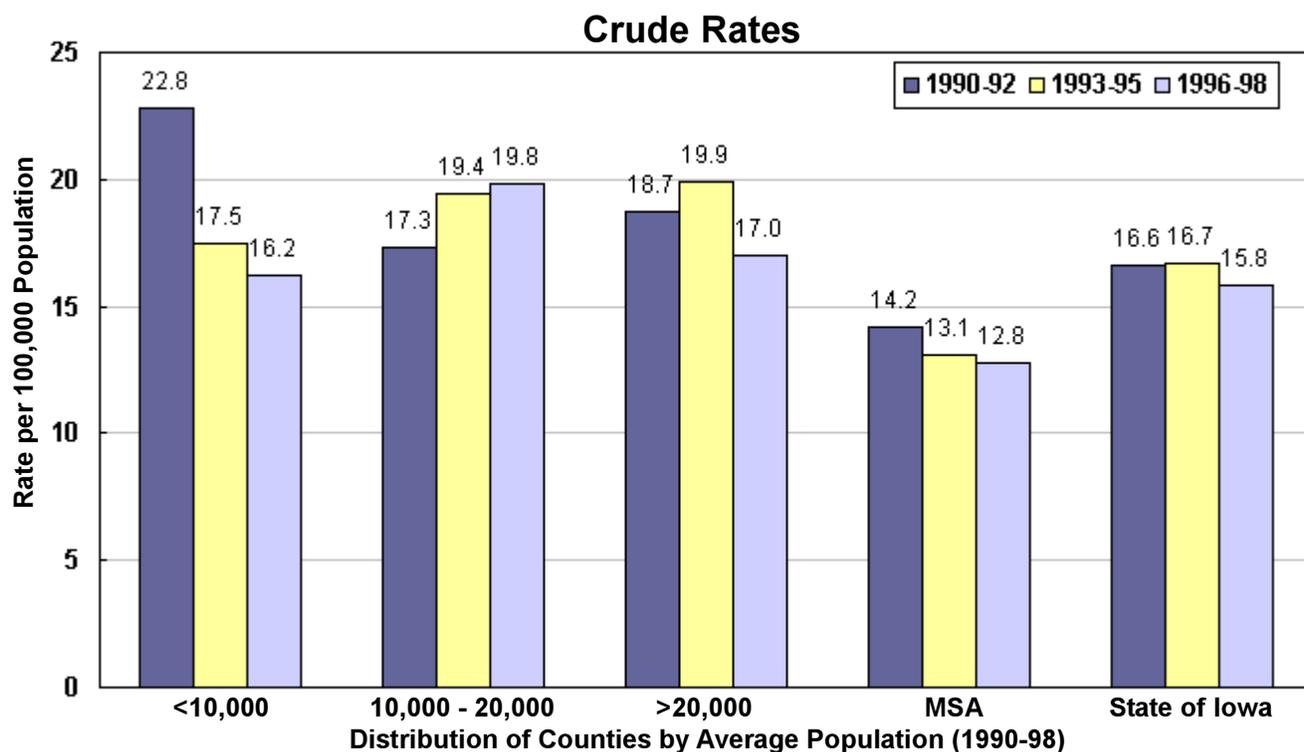
	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	149	13.4	12.9	Polk	432	13.9	15.2	
	Dallas	45	15.2	14.5	Pottawattamie	123	16.3	15.7	
	Dubuque	103	13.0	12.4	Scott	162	11.6	12.6	
	Johnson	97	10.8	16.2	Warren	51	14.8	16.0	
	Linn	176	11.1	11.5	Woodbury	160	17.6	16.4	
	<b>Group Totals</b>								
Number:	1,498								
Crude:	13.4								
Adjusted:	14.1								

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: Iowa Cancer Registry, The University of Iowa

## Leukemia Incidence by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Leukemia Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	2,413	9.5	8.2

	County				County			
	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	12	16.1	9.6	Lucas	15	18.4	12.5
	Adams	*	*	*	Monroe	9	12.3	9.9
	Audubon	12	19.0	10.3	Osceola	8	12.5	9.3
	Clarke	14	18.8	14.6	Pocahontas	11	13.4	8.0
	Davis	9	11.9	8.5	Ringgold	*	*	*
	Decatur	5	6.8	4.6	Taylor	7	10.9	5.6
	Fremont	16	22.1	16.8	Van Buren	6	8.6	6.9
	Howard	10	11.4	6.9	Wayne	9	14.5	9.4
	Ida	4	5.4	3.2	Worth	10	14.1	11.7
	<b>Group Totals</b>							
Number:	160							
Crude:	12.8							
Adjusted:	8.6							

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	13	10.3	6.6	Henry	17	9.6	8.0
	Appanoose	7	5.7	3.8	Humboldt	14	14.8	10.1
	Buena Vista	17	9.5	7.9	Iowa	14	10.3	7.0
	Butler	26	18.4	13.3	Jefferson	11	7.3	6.3
	Calhoun	11	10.6	6.2	Jones	13	7.2	6.1
	Cass	21	15.6	9.4	Keokuk	12	11.5	7.3
	Cedar	18	11.3	8.7	Kossuth	27	16.6	12.7
	Cherokee	9	7.3	5.4	Louisa	10	9.5	8.2
	Chickasaw	10	8.3	5.8	Lyon	17	15.8	11.3
	Clay	12	7.6	5.6	Madison	16	13.5	10.6
	Clayton	20	11.8	8.8	Mills	7	5.7	5.3
	Crawford	16	10.7	9.2	Mitchell	13	13.1	8.2
	Delaware	11	6.7	6.2	Monona	11	12.1	7.5
	Dickinson	20	14.3	10.4	Montgomery	19	17.7	10.4
	Emmet	11	10.8	7.6	O'Brien	24	17.5	10.8
	Floyd	15	10.0	6.7	Page	14	9.2	6.3
	Franklin	16	16.0	11.5	Palo Alto	7	7.5	4.8
	Greene	14	15.5	8.3	Poweshiek	21	12.3	9.3
	Grundy	15	13.7	9.8	Sac	10	9.2	5.2
	Guthrie	9	8.9	6.0	Shelby	15	12.7	9.9
Hamilton	22	15.2	10.9	Tama	16	10.1	7.2	
Hancock	13	11.8	8.8	Union	11	9.7	7.8	
Hardin	28	16.6	12.4	Winnebago	10	9.3	7.5	
Harrison	15	11.1	7.1	Wright	17	13.3	7.8	
<b>Group Totals</b>								
Number:	715							
Crude:	11.4							
Adjusted:	8.2							

	County				County				
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted	
<b>Counties with Average Population &gt;20,000</b>	Benton	26	12.1	10.1	Mahaska	13	6.7	5.2	
	Boone	31	13.5	10.2	Marion	41	14.9	12.7	
	Bremer	15	7.2	5.5	Marshall	25	7.2	5.5	
	Buchanan	24	12.6	11.4	Muscatine	27	7.4	7.3	
	Carroll	17	8.8	6.6	Plymouth	22	10.1	8.2	
	Cerro Gordo	46	11.0	8.3	Sioux	26	9.4	8.5	
	Clinton	47	10.3	9.1	Story	49	7.3	9.2	
	Des Moines	47	12.3	9.9	Wapello	45	14.0	10.6	
	Fayette	20	10.1	7.9	Washington	19	10.4	7.6	
	Jackson	23	12.7	10.3	Webster	35	9.8	7.5	
	Jasper	35	11.0	8.7	Winneshek	13	6.9	6.0	
	Lee	34	9.7	8.2					
	<b>Group Totals</b>								
	Number:	680							
Crude:	10.1								
Adjusted:	8.5								

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	88	7.9	7.5	Polk	223	7.2	8.0
	Dallas	22	7.4	7.2	Pottawattamie	77	10.2	9.9
	Dubuque	68	8.6	7.9	Scott	80	5.7	6.3
	Johnson	67	7.5	10.9	Warren	30	8.7	9.6
	Linn	121	7.6	7.9	Woodbury	82	9.0	8.3
	<b>Group Totals</b>							
Number:	858							
Crude:	7.7							
Adjusted:	8.1							

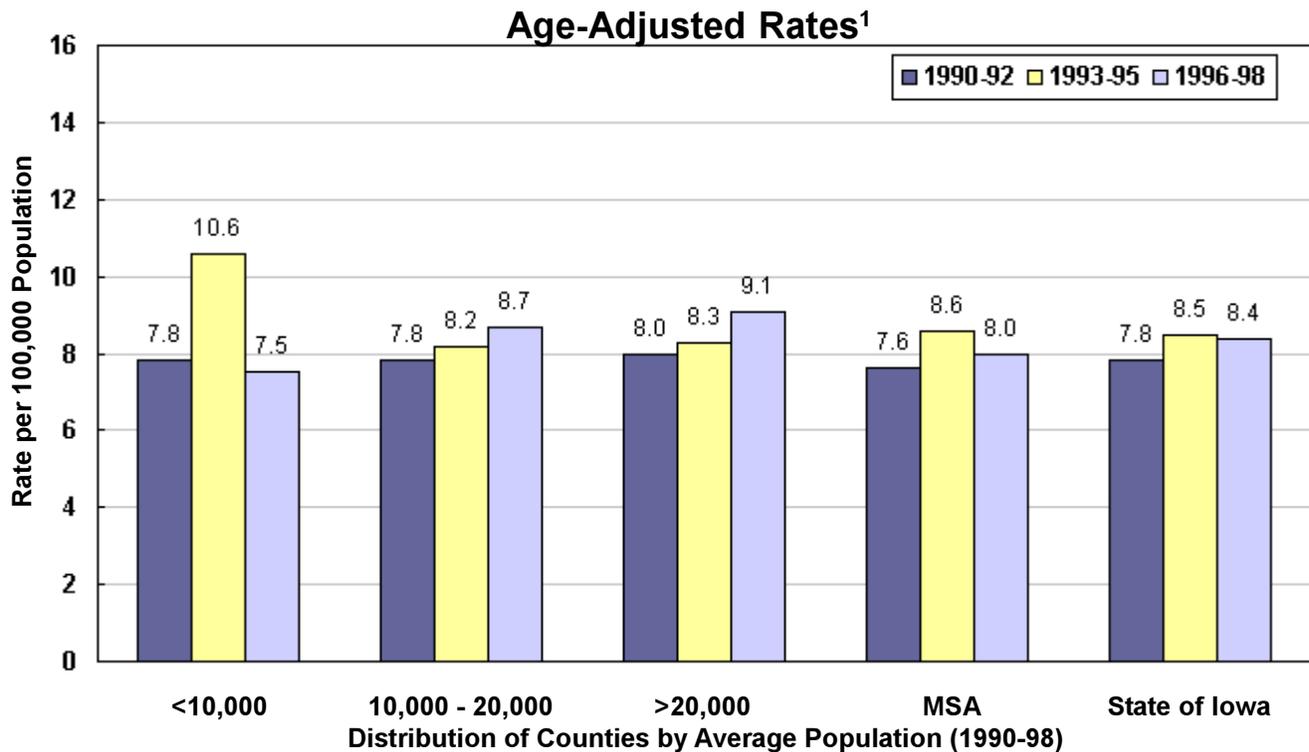
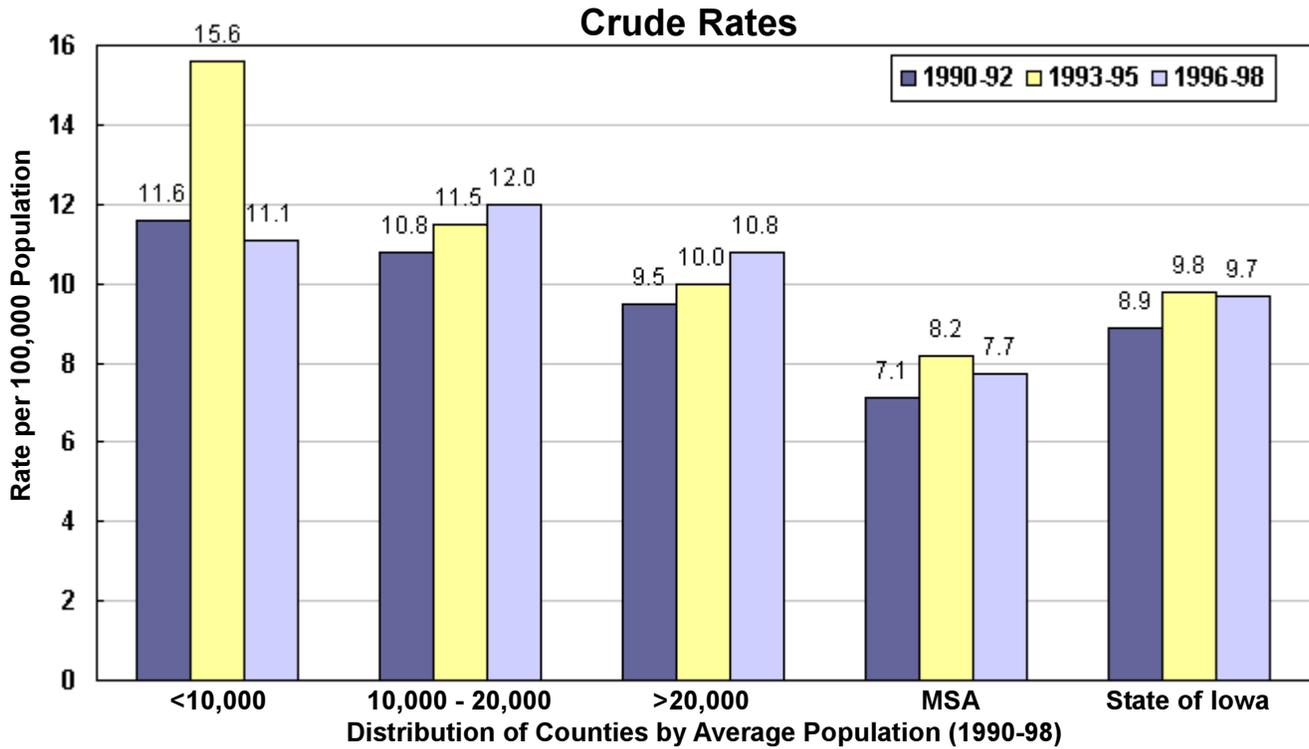
<sup>1</sup>Rates per 100,000 population

<sup>\*</sup>Number of events is less than 3

<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Leukemia Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Skin Melanoma Incidence 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	3,648	14.3	13.9

	County				County			
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>		Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	6	8.0	7.1	Lucas	14	17.2	16.0
	Adams	6	14.6	9.7	Monroe	11	15.0	11.6
	Audubon	8	12.7	7.7	Osceola	5	7.8	5.6
	Clarke	12	16.1	11.5	Pocahontas	7	8.5	5.1
	Davis	13	17.2	15.4	Ringgold	9	18.6	13.3
	Decatur	17	23.1	21.7	Taylor	10	15.6	11.4
	Fremont	6	8.3	5.9	Van Buren	10	14.3	13.0
	Howard	12	13.6	12.8	Wayne	5	8.1	4.4
	Ida	12	16.3	11.9	Worth	12	17.0	10.7
	<b>Group Totals</b>							
Number:	175							
Crude:	14.0							
Adjusted:	10.8							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	20	15.9	14.0	Henry	24	13.5	12.8
	Appanoose	22	17.9	13.3	Humboldt	13	13.8	10.2
	Buena Vista	12	6.7	7.4	Iowa	15	11.1	10.0
	Butler	20	14.1	12.6	Jefferson	24	15.9	15.0
	Calhoun	14	13.5	11.3	Jones	44	24.5	22.7
	Cass	16	11.9	9.1	Keokuk	13	12.5	10.3
	Cedar	27	17.0	15.4	Kossuth	19	11.7	10.8
	Cherokee	23	18.6	15.8	Louisa	19	18.0	17.3
	Chickasaw	14	11.7	10.9	Lyon	13	12.1	11.1
	Clay	15	9.5	8.9	Madison	14	11.8	10.8
	Clayton	27	15.9	13.8	Mills	16	13.0	13.3
	Crawford	15	10.1	8.6	Mitchell	18	18.2	12.8
	Delaware	20	12.1	12.6	Monona	14	15.5	12.3
	Dickinson	27	19.3	16.9	Montgomery	15	14.0	11.7
	Emmet	10	9.9	7.8	O'Brien	21	15.3	12.0
	Floyd	19	12.6	10.9	Page	22	14.4	12.1
	Franklin	12	12.0	11.2	Palo Alto	14	15.1	12.5
	Greene	15	16.6	12.9	Poweshiek	27	15.9	15.7
	Grundy	21	19.2	16.3	Sac	22	20.3	14.8
	Guthrie	19	18.7	14.8	Shelby	17	14.4	12.5
Hamilton	20	13.8	12.1	Tama	25	15.8	13.4	
Hancock	7	6.4	5.3	Union	21	18.6	17.0	
Hardin	27	16.0	13.5	Winnebago	19	17.6	17.0	
Harrison	15	11.1	10.3	Wright	24	18.8	13.4	

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population &gt;20,000</b>	Benton	25	11.6	10.4	Mahaska	19	9.7	9.1
	Boone	39	17.0	15.7	Marion	30	10.9	10.1
	Bremer	35	16.8	16.5	Marshall	61	17.7	16.1
	Buchanan	32	16.9	17.8	Muscatine	52	14.2	14.7
	Carroll	25	12.9	12.1	Plymouth	25	11.5	10.8
	Cerro Gordo	70	16.7	15.3	Sioux	31	11.2	11.7
	Clinton	76	16.6	15.7	Story	100	14.9	18.2
	Des Moines	53	13.8	13.2	Wapello	50	15.6	14.1
	Fayette	39	19.8	15.8	Washington	29	15.8	13.9
	Jackson	23	12.7	11.7	Webster	53	14.9	13.0
	Jasper	55	17.3	15.3	Winneshek	20	10.6	10.5
	Lee	57	16.3	15.0				

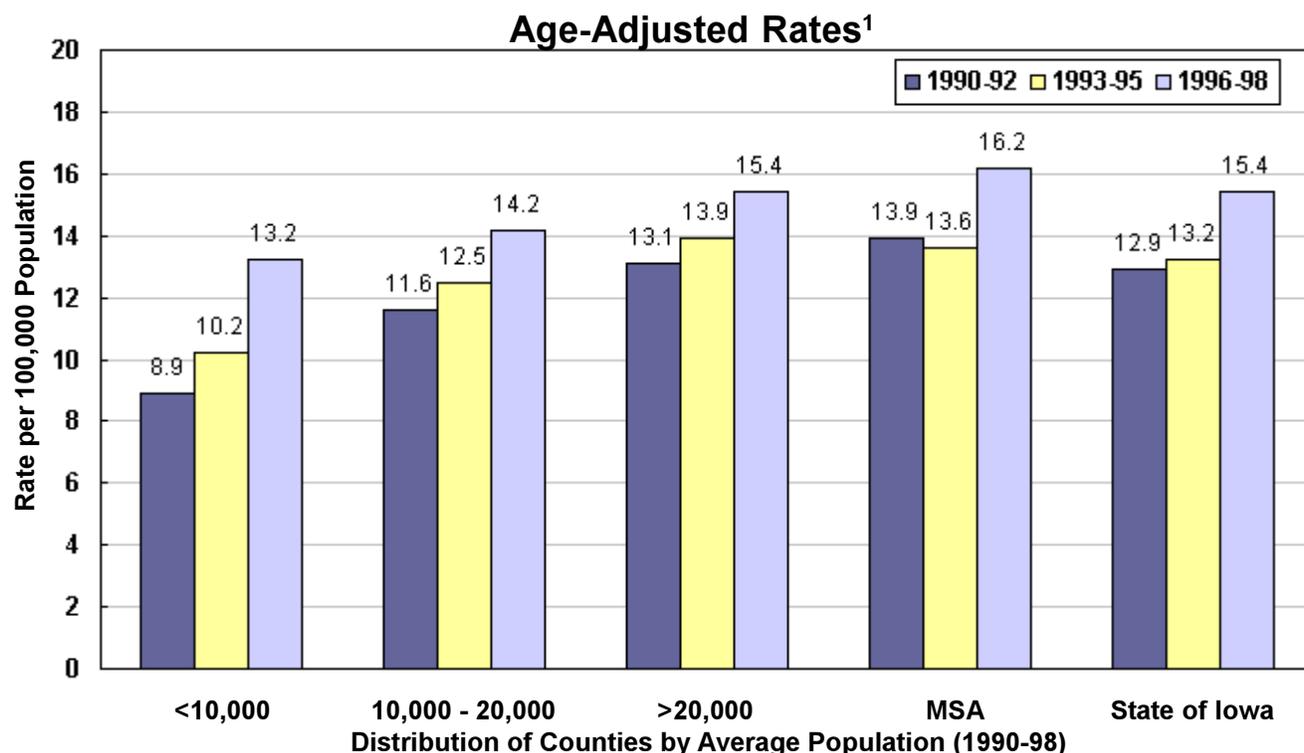
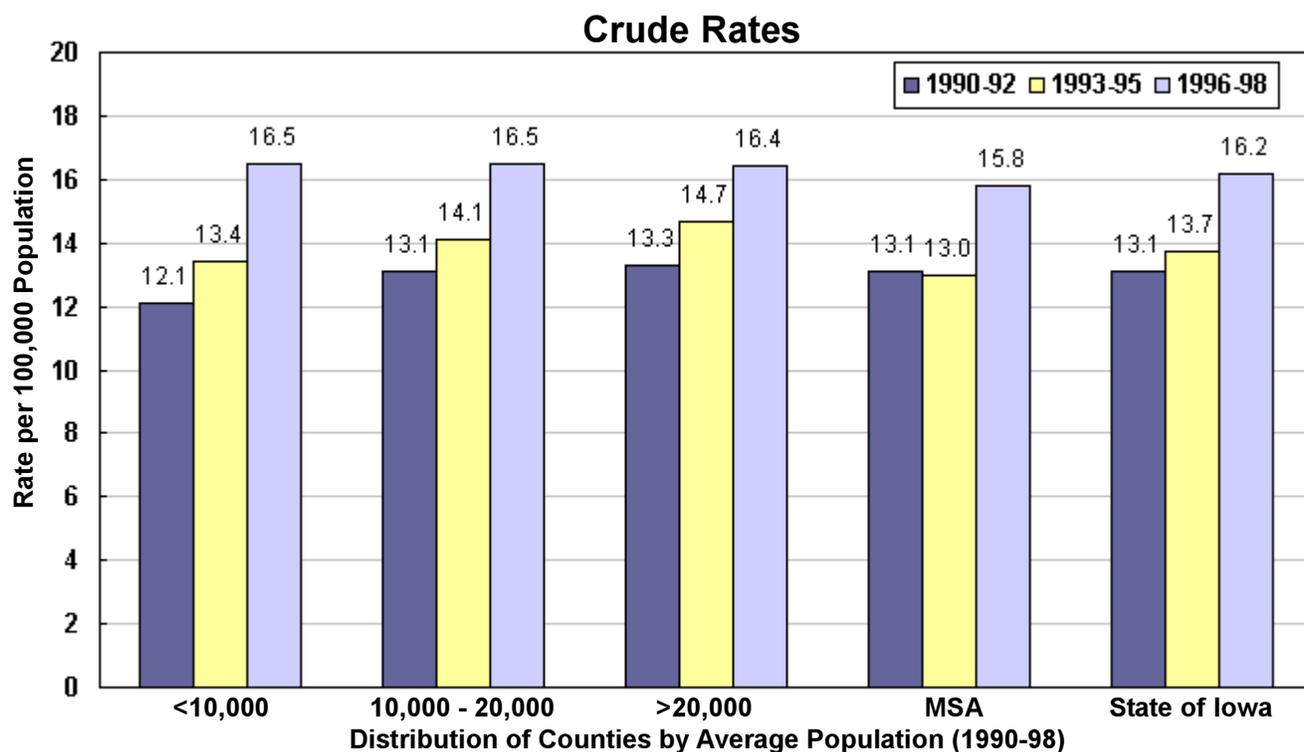
	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>MSA Counties</b>	Black Hawk	188	17.0	17.0	Polk	400	12.9	13.5
	Dallas	48	16.2	15.6	Pottawattamie	91	12.0	11.7
	Dubuque	136	17.2	17.7	Scott	179	12.8	13.6
	Johnson	139	15.5	19.5	Warren	50	14.5	15.4
	Linn	223	14.0	14.2	Woodbury	110	12.1	12.5
	<b>Group Totals</b>							
Number:	1,564							
Crude:	14.0							
Adjusted:	14.6							

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: Iowa Cancer Registry,  
The University of Iowa

## Skin Melanoma Incidence by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Skin Melanoma Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	697	2.7	2.5

	County				County			
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>		Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	5	6.7	5.6	Lucas	4	4.9	4.0
	Adams	*	*	*	Monroe	*	*	*
	Audubon	5	7.9	6.3	Osceola	*	*	*
	Clarke	*	*	*	Pocahontas	5	6.1	4.1
	Davis	*	*	*	Ringgold	4	8.3	4.8
	Decatur	4	5.4	4.9	Taylor	*	*	*
	Fremont	*	*	*	Van Buren	*	*	*
	Howard	4	4.5	4.2	Wayne	*	*	*
	Ida	*	*	*	Worth	5	7.1	4.1
	<b>Group Totals</b>							
Number:	48							
Crude:	3.8							
Adjusted:	2.8							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	5	4.0	2.7	Henry	3	1.7	1.8
	Appanoose	4	3.3	2.7	Humboldt	4	4.2	3.8
	Buena Vista	7	3.9	3.9	Iowa	3	2.2	1.8
	Butler	3	2.1	1.3	Jefferson	*	*	*
	Calhoun	*	*	*	Jones	6	3.3	3.0
	Cass	3	2.2	1.3	Keokuk	6	5.8	4.0
	Cedar	8	5.0	4.6	Kossuth	*	*	*
	Cherokee	4	3.2	2.5	Louisa	*	*	*
	Chickasaw	*	*	*	Lyon	3	2.8	2.0
	Clay	5	3.2	2.7	Madison	3	2.5	2.1
	Clayton	3	1.8	1.2	Mills	*	*	*
	Crawford	*	*	*	Mitchell	*	*	*
	Delaware	7	4.2	4.2	Monona	3	3.3	1.8
	Dickinson	5	3.6	2.2	Montgomery	4	3.7	3.5
	Emmet	3	3.0	2.2	O'Brien	10	7.3	4.8
	Floyd	3	2.0	1.6	Page	4	2.6	1.6
	Franklin	*	*	*	Palo Alto	6	6.5	4.7
	Greene	4	4.4	3.2	Poweshiek	4	2.3	2.7
	Grundy	7	6.4	4.7	Sac	3	2.8	1.5
	Guthrie	3	3.0	2.8	Shelby	5	4.2	4.5
Hamilton	6	4.1	3.3	Tama	4	2.5	2.7	
Hancock	7	6.4	4.6	Union	4	3.5	2.6	
Hardin	*	*	*	Winnebago	4	3.7	2.8	
Harrison	6	4.5	4.1	Wright	3	2.3	1.8	
<b>Group Totals</b>								
Number:	191							
Crude:	3.1							
Adjusted:	2.4							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population &gt;20,000</b>	Benton	3	1.4	1.2	Mahaska	3	1.5	1.6
	Boone	5	2.2	1.9	Marion	9	3.3	3.0
	Bremer	4	1.9	2.0	Marshall	4	1.2	1.2
	Buchanan	6	3.2	3.3	Muscatine	12	3.3	3.3
	Carroll	6	3.1	2.2	Plymouth	6	2.8	2.5
	Cerro Gordo	8	1.9	1.6	Sioux	7	2.5	2.5
	Clinton	9	2.0	1.7	Story	10	1.5	1.9
	Des Moines	17	4.4	4.0	Wapello	9	2.8	2.5
	Fayette	12	6.1	4.7	Washington	6	3.3	2.4
	Jackson	5	2.8	2.6	Webster	10	2.8	2.3
	Jasper	14	4.4	4.0	Winneshek	6	3.2	3.2
	Lee	13	3.7	3.1				
	<b>Group Totals</b>							
Number:	184							
Crude:	2.7							
Adjusted:	2.5							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>MSA Counties</b>	Black Hawk	31	2.8	2.7	Polk	76	2.4	2.7
	Dallas	5	1.7	1.5	Pottawattamie	20	2.6	2.6
	Dubuque	19	2.4	2.4	Scott	37	2.6	2.9
	Johnson	20	2.2	3.6	Warren	8	2.3	2.5
	Linn	34	2.1	2.2	Woodbury	24	2.6	2.6
	<b>Group Totals</b>							
Number:	274							
Crude:	2.4							
Adjusted:	2.6							

<sup>1</sup>Rates per 100,000 population

\*Number of events is less than 3

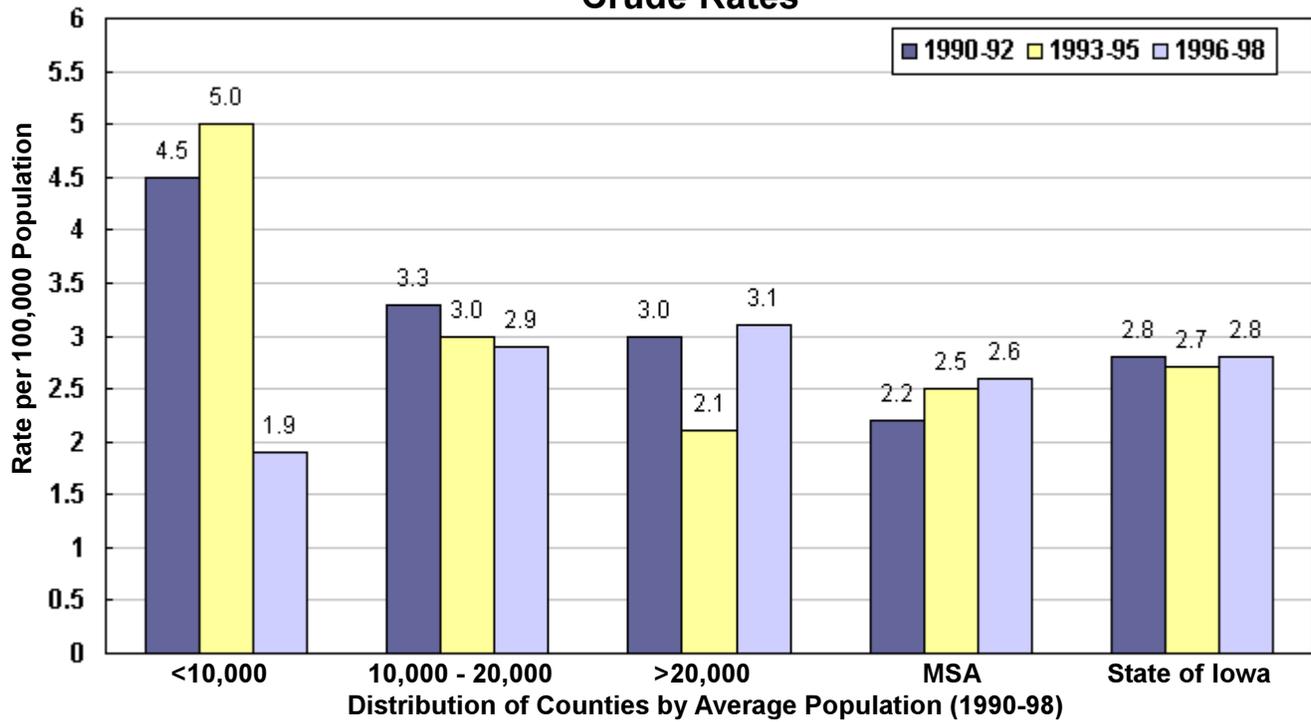
Source: IDPH Vital Records via

<sup>2</sup>Adjusted to Year 2000 US population

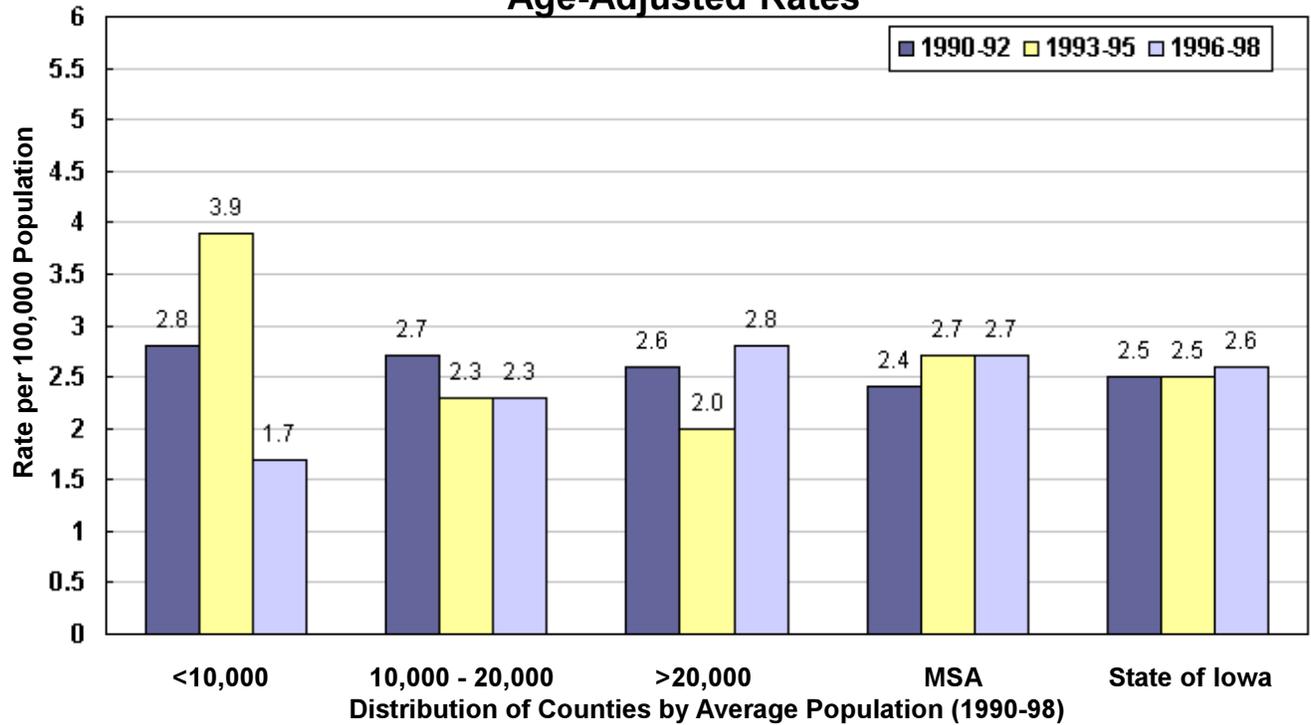
Iowa Cancer Registry, The University of Iowa

## Skin Melanoma Mortality by County Group 1990-1998

### Crude Rates



### Age-Adjusted Rates<sup>1</sup>



<sup>1</sup>Adjusted to Year 2000 US population

## Oral Cavity (Excluding Lip) Incidence 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	2,309	9.1	8.6

	Counties with Average Population <10,000				Counties with Average Population 10,000 to 20,000			
	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	6	8.0	6.0	Lucas	8	9.8	8.2
	Adams	9	21.9	14.5	Monroe	8	10.9	8.4
	Audubon	3	4.8	2.6	Osceola	5	7.8	6.3
	Clarke	12	16.1	13.0	Pocahontas	5	6.1	5.4
	Davis	3	4.0	3.1	Ringgold	6	12.4	8.8
<b>Group Totals</b>	Decatur	11	14.9	14.7	Taylor	6	9.4	7.3
Number:	Fremont	5	6.9	6.0	Van Buren	3	4.3	3.5
Crude:	Howard	8	9.1	6.8	Wayne	3	4.8	5.5
Adjusted:	Ida	8	10.8	6.7	Worth	6	8.5	7.5

	Counties with Average Population >20,000				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Allamakee	15	11.9	9.5	Polk	289	9.3	10.2
	Appanoose	16	13.0	10.8	Pottawattamie	80	10.6	10.2
	Buena Vista	20	11.2	9.9	Scott	109	7.8	8.6
	Butler	16	11.3	9.5	Warren	30	8.7	9.5
	Calhoun	8	7.7	6.1	Woodbury	77	8.5	8.4
	Cass	11	8.2	6.0				
<b>Group Totals</b>	Cedar	12	7.5	6.6				
Number:	Cherokee	15	12.1	9.1				
Crude:	Chickasaw	7	5.8	6.0				
Adjusted:	Clay	12	7.6	7.0				
	Clayton	13	7.7	6.4				
	Crawford	22	14.8	12.5				
	Delaware	*	*	*				
	Dickinson	8	5.7	3.7				
	Emmet	10	9.9	8.7				
	Floyd	10	6.7	5.1				
	Franklin	6	6.0	6.0				
	Greene	11	12.1	8.8				
	Grundy	14	12.8	9.9				
	Guthrie	5	4.9	3.8				
	Hamilton	16	11.1	9.2				
	Hancock	10	9.1	8.2				
	Hardin	24	14.3	10.0				
	Harrison	18	13.4	11.8				

	Counties with Average Population >20,000				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Benton	13	6.1	5.7	Mahaska	16	8.2	6.7
	Boone	24	10.4	9.5	Marion	21	7.6	7.0
	Bremer	21	10.1	9.0	Marshall	31	9.0	7.5
	Buchanan	23	12.1	11.5	Muscatine	24	6.5	6.6
	Carroll	17	8.8	7.2	Plymouth	27	12.4	11.3
<b>Group Totals</b>	Cerro Gordo	54	12.9	11.1	Sioux	18	6.5	6.6
Number:	Clinton	46	10.1	9.1	Story	26	3.9	5.2
Crude:	Des Moines	41	10.7	9.3	Wapello	41	12.8	10.4
Adjusted:	Fayette	17	8.6	7.3	Washington	17	9.3	8.0
	Jackson	14	7.7	6.8	Webster	39	11.0	9.6
	Jasper	20	6.3	5.2	Winneshek	22	11.7	10.7
	Lee	41	11.7	10.3				

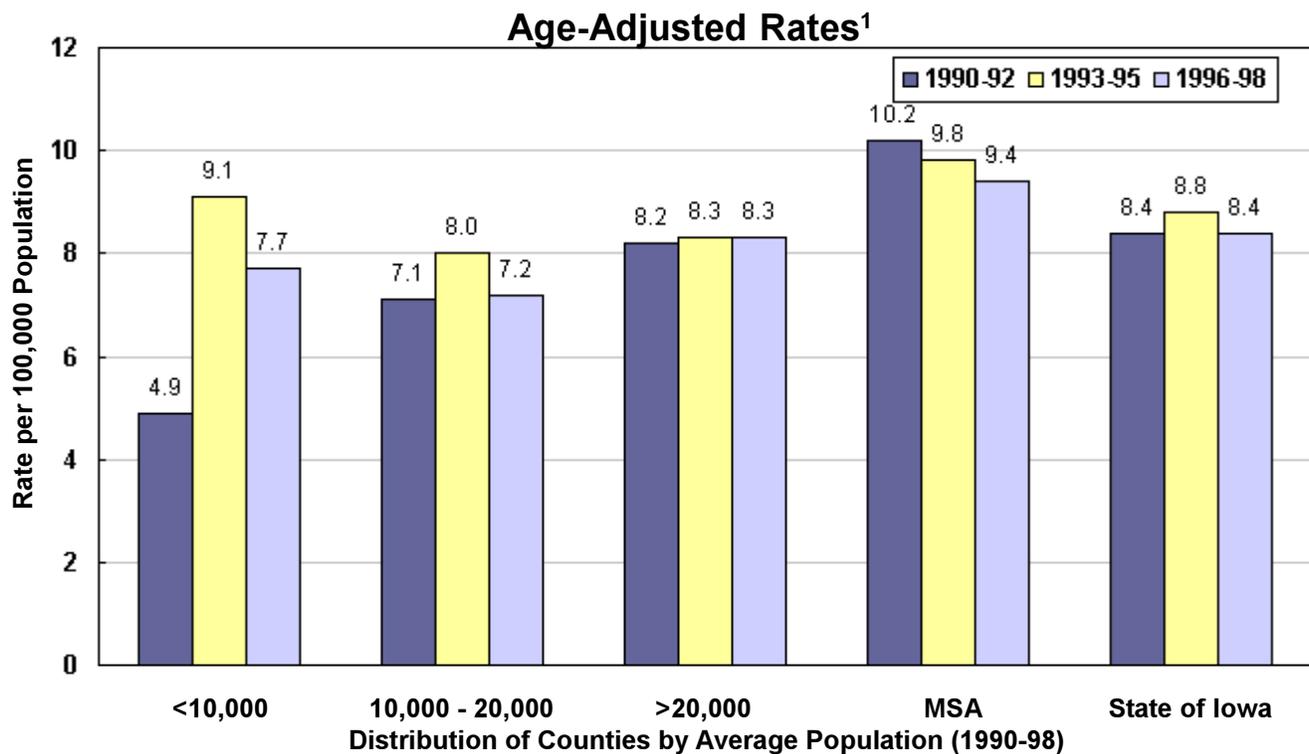
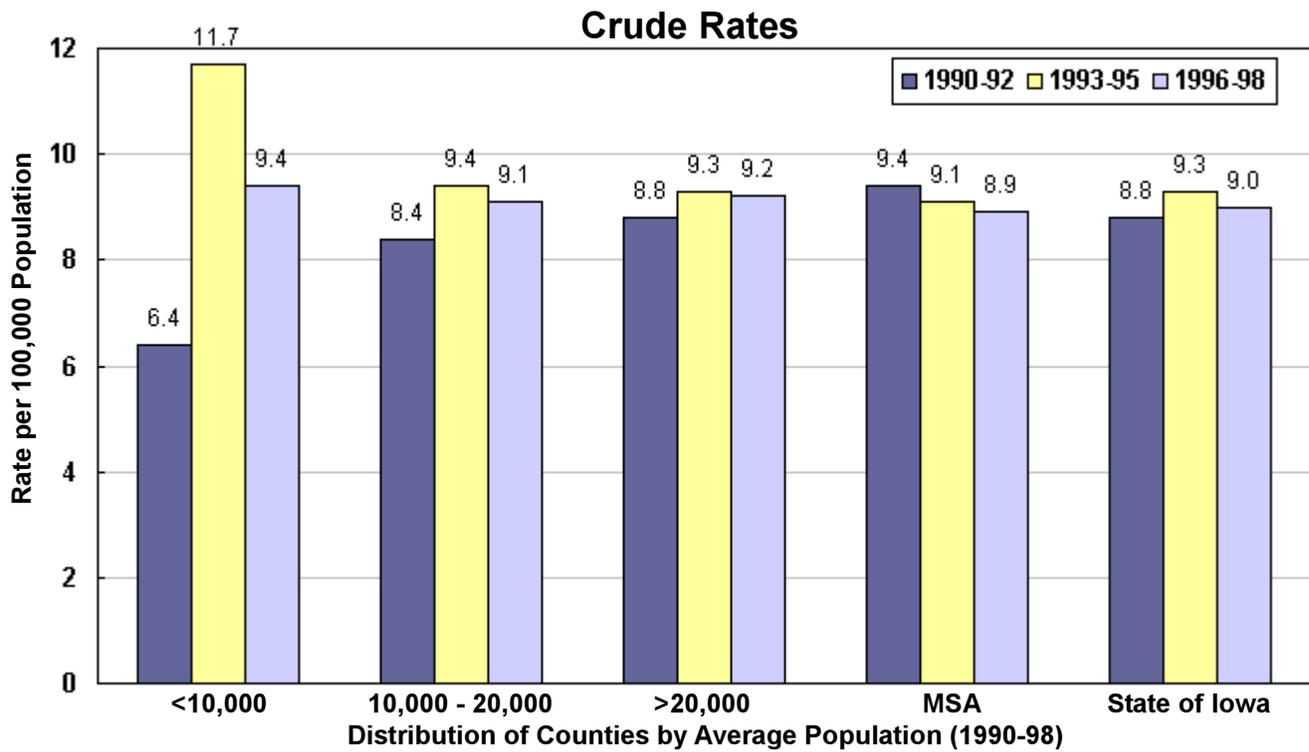
	Counties with Average Population >20,000				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Benton	13	6.1	5.7	Mahaska	16	8.2	6.7
	Boone	24	10.4	9.5	Marion	21	7.6	7.0
	Bremer	21	10.1	9.0	Marshall	31	9.0	7.5
	Buchanan	23	12.1	11.5	Muscatine	24	6.5	6.6
	Carroll	17	8.8	7.2	Plymouth	27	12.4	11.3
<b>Group Totals</b>	Cerro Gordo	54	12.9	11.1	Sioux	18	6.5	6.6
Number:	Clinton	46	10.1	9.1	Story	26	3.9	5.2
Crude:	Des Moines	41	10.7	9.3	Wapello	41	12.8	10.4
Adjusted:	Fayette	17	8.6	7.3	Washington	17	9.3	8.0
	Jackson	14	7.7	6.8	Webster	39	11.0	9.6
	Jasper	20	6.3	5.2	Winneshek	22	11.7	10.7
	Lee	41	11.7	10.3				

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

\*Number of events is less than 3  
Source: Iowa Cancer Registry, The University of Iowa

## Oral Cavity (Excluding Lip) Incidence by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Oral Cavity (Excluding Lip) Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	721	2.8	2.5

	County				County			
	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	4	5.4	3.4	Lucas	*	*	*
	Adams	5	12.2	8.4	Monroe	*	*	*
	Audubon	*	*	*	Osceola	*	*	*
	Clarke	5	6.7	5.8	Pocahontas	*	*	*
	Davis	*	*	*	Ringgold	*	*	*
	Decatur	4	5.4	3.4	Taylor	3	4.7	2.3
	Fremont	*	*	*	Van Buren	*	*	*
	Howard	3	3.4	1.8	Wayne	*	*	*
	Ida	3	4.1	2.1	Worth	*	*	*
	<b>Group Totals</b>							
Number:	42							
Crude:	3.4							
Adjusted:	2.3							

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	5	4.0	2.5	Henry	5	2.8	2.4
	Appanoose	4	3.3	3.1	Humboldt	5	5.3	3.8
	Buena Vista	3	1.7	1.1	Iowa	6	4.4	3.2
	Butler	*	*	*	Jefferson	*	*	*
	Calhoun	*	*	*	Jones	3	1.7	1.6
	Cass	5	3.7	2.1	Keokuk	5	4.8	3.0
	Cedar	5	3.1	2.3	Kossuth	6	3.7	2.4
	Cherokee	*	*	*	Louisa	3	2.8	2.4
	Chickasaw	*	*	*	Lyon	*	*	*
	Clay	4	2.5	2.2	Madison	4	3.4	3.1
<b>Group Totals</b>				Mills	4	3.2	3.3	
Number:	180			Mitchell	*	*	*	
Crude:	2.9			Monona	6	6.6	4.9	
Adjusted:	2.2			Montgomery	*	*	*	
				O'Brien	*	*	*	
				Page	6	3.9	2.6	
				Palo Alto	3	3.2	2.3	
				Poweshiek	3	1.8	1.5	
				Sac	4	3.7	2.2	
				Shelby	7	5.9	3.9	
				Tama	5	3.2	2.2	
				Union	3	2.7	2.0	
				Winnebago	4	3.7	2.8	
				Wright	3	2.3	1.3	

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Benton	4	1.9	1.5	Mahaska	6	3.1	2.3
	Boone	8	3.5	3.2	Marion	5	1.8	1.5
	Bremer	7	3.4	3.0	Marshall	10	2.9	2.2
	Buchanan	5	2.6	2.3	Muscatine	8	2.2	2.3
	Carroll	8	4.1	3.0	Plymouth	7	3.2	2.6
	Cerro Gordo	11	2.6	2.1	Sioux	6	2.2	2.1
	Clinton	13	2.8	2.5	Story	15	2.2	2.8
	Des Moines	13	3.4	2.8	Wapello	12	3.7	2.8
	Fayette	6	3.0	2.1	Washington	5	2.7	2.2
	Jackson	*	*	*	Webster	12	3.4	2.6
<b>Group Totals</b>				Winneshek	8	4.2	3.6	
Number:	187							
Crude:	2.8							
Adjusted:	2.4							

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	33	3.0	2.9	Polk	83	2.7	2.9
	Dallas	3	1.0	0.9	Pottawattamie	23	3.0	2.8
	Dubuque	24	3.0	2.9	Scott	48	3.4	3.8
	Johnson	11	1.2	1.9	Warren	5	1.5	1.7
	Linn	54	3.4	3.6	Woodbury	28	3.1	3.0
	<b>Group Totals</b>							
Number:	312							
Crude:	2.8							
Adjusted:	3.0							

<sup>1</sup>Rates per 100,000 population

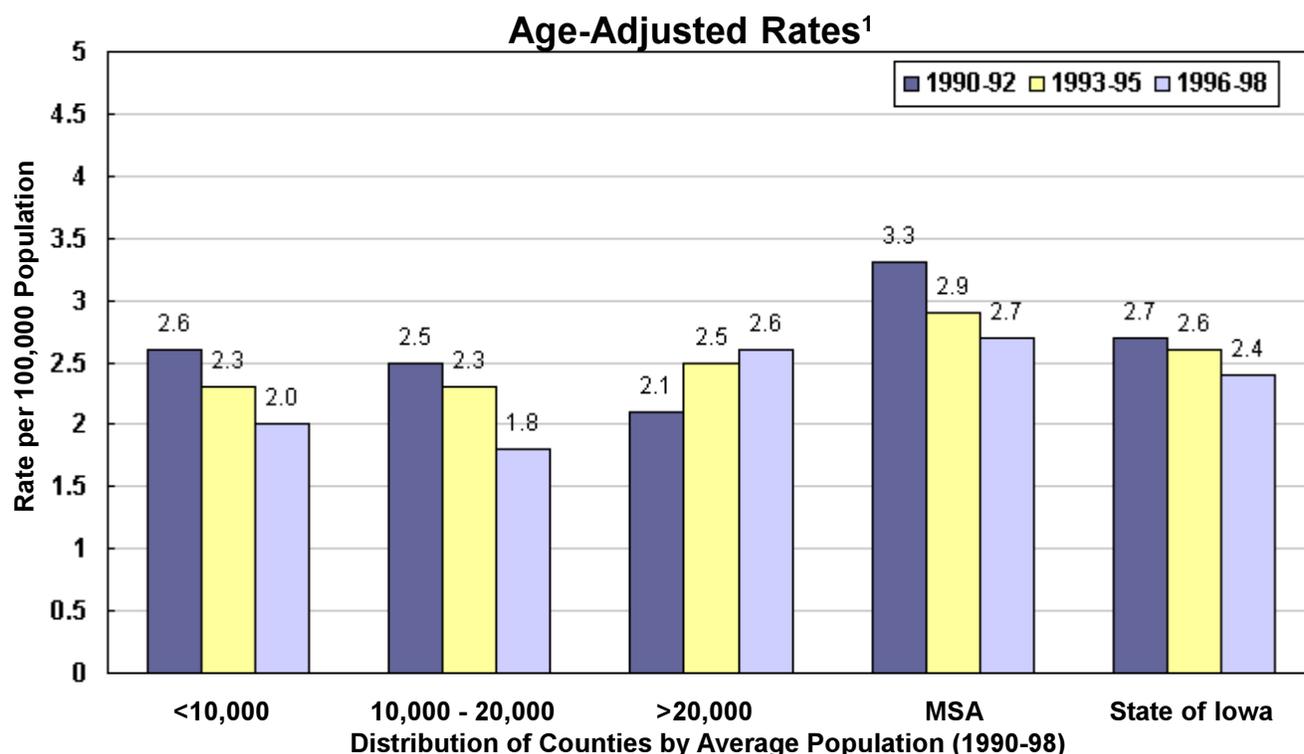
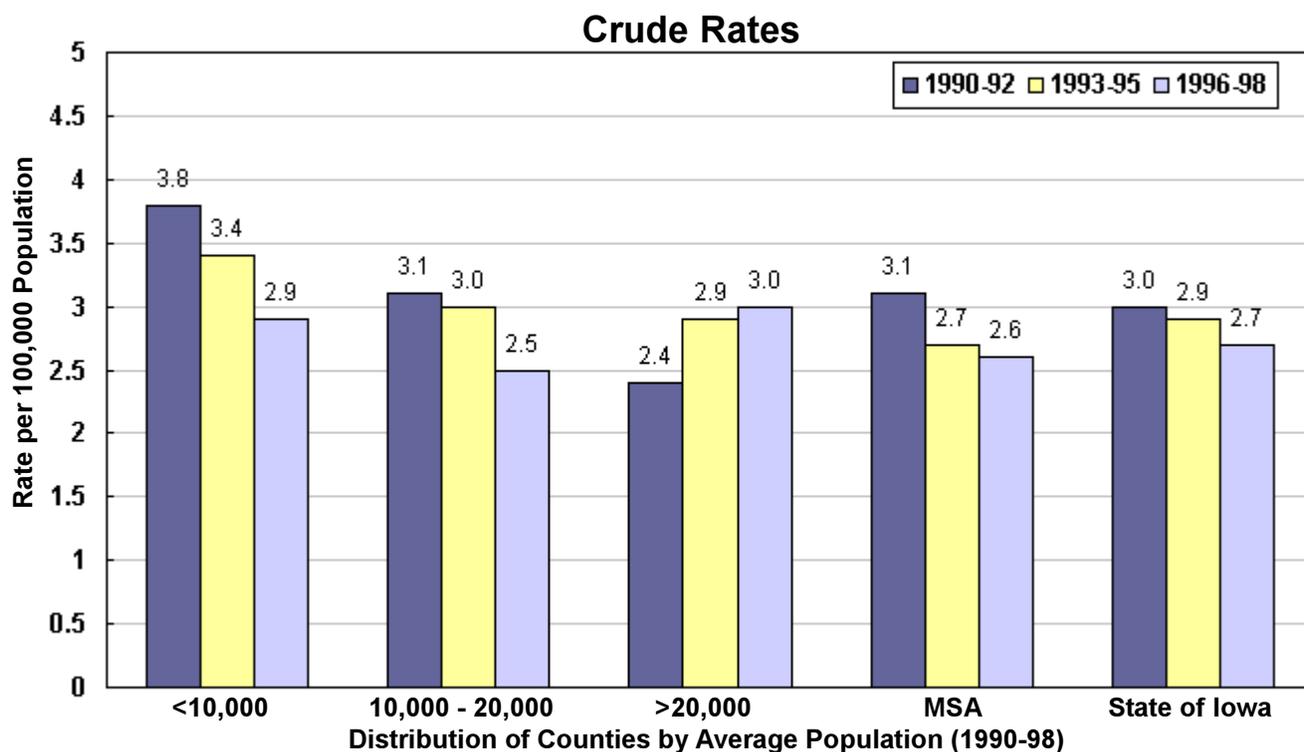
\*Number of events is less than 3

Source: IDPH Vital Records via

<sup>2</sup>Adjusted to Year 2000 US population

Iowa Cancer Registry, The University of Iowa

## Oral Cavity (Excluding Lip) Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Cervical Cancer Incidence 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	1,233	9.4	9.3

	County				County			
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>		Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	6	15.6	15.0	Lucas	*	*	*
	Adams	*	*	*	Monroe	6	15.9	10.8
	Audubon	*	*	*	Osceola	7	21.3	24.1
	Clarke	6	15.5	16.7	Pocahontas	3	7.1	5.5
	Davis	2	5.2	6.4	Ringgold	*	*	*
	Decatur	9	23.7	27.1	Taylor	5	14.9	14.2
	Fremont	9	23.7	23.1	Van Buren	4	11.3	8.6
	Howard	5	11.1	12.3	Wayne	3	9.2	7.0
	Ida	*	*	*	Worth	4	11.0	9.4
	<b>Group Totals</b>							
Number:	78							
Crude:	12.1							
Adjusted:	11.8							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	6	9.4	8.9	Henry	13	14.8	14.6
	Appanoose	11	17.1	17.8	Humboldt	5	10.3	8.8
	Buena Vista	12	13.1	13.6	Iowa	4	5.7	4.7
	Butler	*	*	*	Jefferson	9	11.7	11.5
	Calhoun	*	*	*	Jones	8	9.3	8.6
	Cass	7	10.0	10.0	Keokuk	*	*	*
	Cedar	8	9.8	9.7	Kossuth	9	10.8	11.8
	Cherokee	6	9.4	9.2	Louisa	10	19.0	18.1
	Chickasaw	5	8.3	8.0	Lyon	*	*	*
	Clay	9	10.9	10.8	Madison	6	9.9	10.3
	Clayton	12	14.0	16.6	Mills	6	9.6	9.7
	Crawford	6	7.9	7.7	Mitchell	3	5.9	7.1
	Delaware	7	8.4	8.2	Monona	4	8.4	7.0
	Dickinson	7	9.6	9.2	Montgomery	7	12.4	10.3
	Emmet	9	17.1	18.0	O'Brien	7	9.9	8.2
	Floyd	8	10.2	9.1	Page	8	10.4	10.4
	Franklin	3	5.8	6.0	Palo Alto	6	12.5	11.6
	Greene	5	10.6	10.8	Poweshiek	8	9.1	8.7
	Grundy	4	7.1	8.4	Sac	5	9.0	7.2
	Guthrie	6	11.4	12.3	Shelby	6	9.9	12.5
Hamilton	8	10.8	9.4	Tama	5	6.1	5.9	
Hancock	*	*	*	Union	5	8.4	7.6	
Hardin	10	11.5	9.7	Winnebago	4	7.2	7.0	
Harrison	10	14.4	13.3	Wright	8	12.0	12.2	
<b>Group Totals</b>								
Number:	313							
Crude:	9.8							
Adjusted:	9.5							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population &gt;20,000</b>	Benton	11	10.1	10.0	Mahaska	13	13.0	14.1
	Boone	13	10.9	11.5	Marion	7	5.0	5.3
	Bremer	5	4.7	4.8	Marshall	13	17.4	6.9
	Buchanan	11	11.4	12.0	Muscatine	23	12.3	11.9
	Carroll	12	12.0	12.6	Plymouth	4	3.6	3.4
	Cerro Gordo	14	6.3	5.7	Sioux	7	4.9	5.9
	Clinton	21	8.9	9.3	Story	18	5.6	7.0
	Des Moines	16	8.0	7.6	Wapello	14	8.4	7.5
	Fayette	13	12.9	12.7	Washington	11	11.6	10.9
	Jackson	5	5.4	5.8	Webster	24	12.9	11.3
	Jasper	19	11.8	11.5	Winneshek	5	5.2	5.7
	Lee	15	8.5	7.7				
	<b>Group Totals</b>							
	Number:	294						
Crude:	8.5							
Adjusted:	8.6							

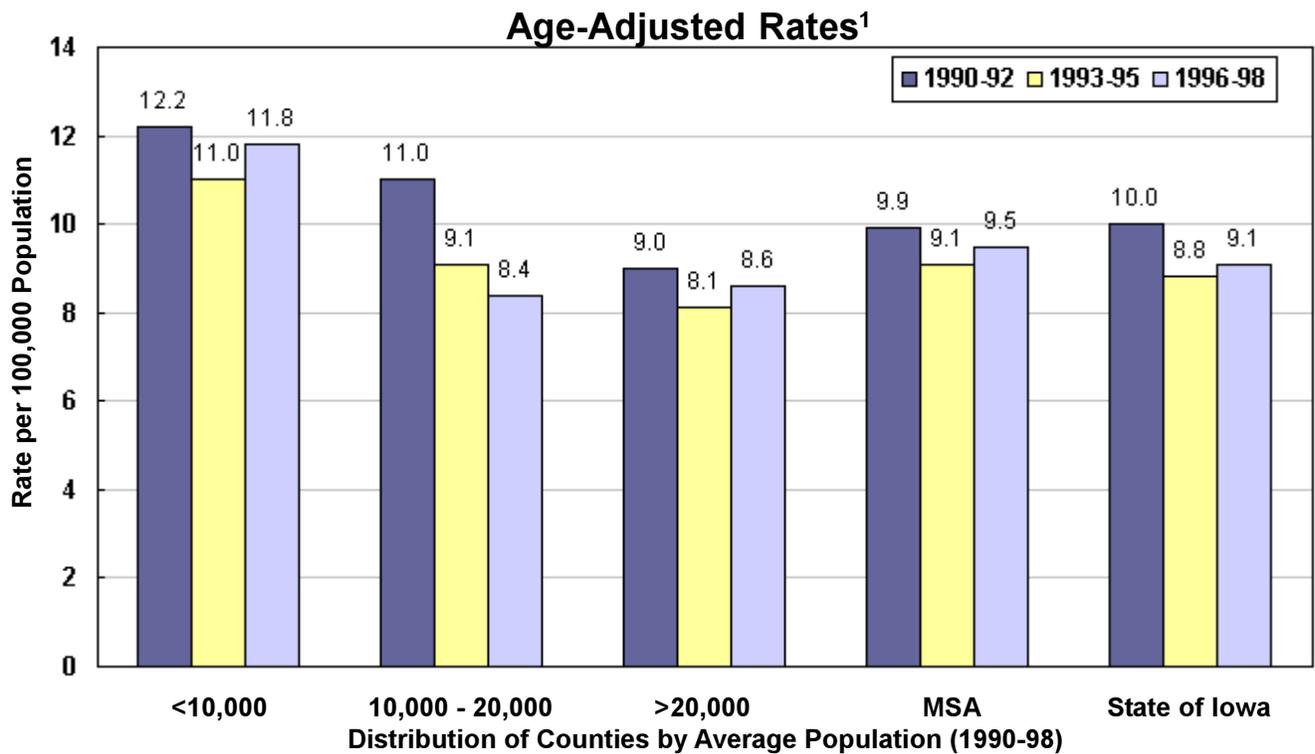
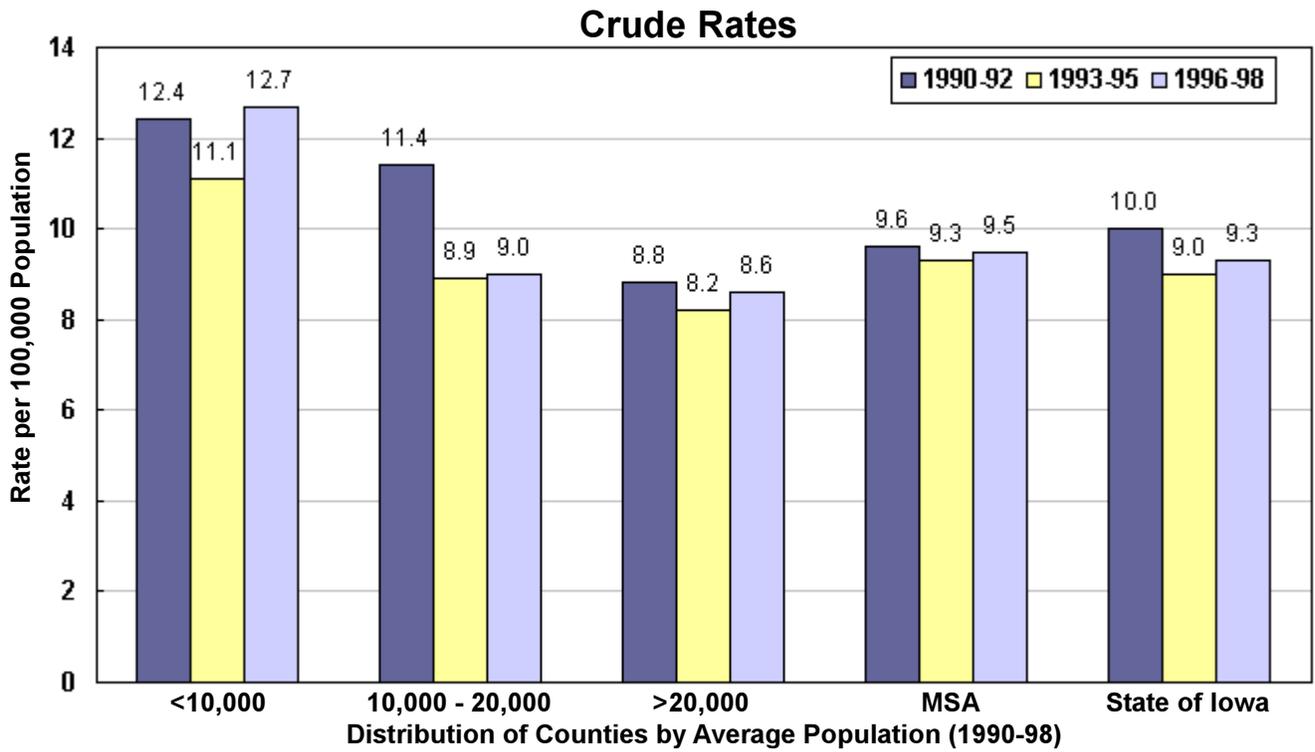
	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>MSA Counties</b>	Black Hawk	56	9.7	9.7	Polk	146	9.0	8.9
	Dallas	18	11.9	11.3	Pottawattamie	44	11.2	11.4
	Dubuque	35	8.6	8.8	Scott	70	9.7	9.9
	Johnson	29	6.4	7.7	Warren	15	8.5	8.5
	Linn	84	10.3	10.0	Woodbury	51	10.9	10.8
	<b>Group Totals</b>							
Number:	548							
Crude:	9.5							
Adjusted:	9.5							

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Number of events is less than 3

Source: Iowa Cancer Registry, The University of Iowa

## Cervical Cancer Incidence by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Cervical Cancer Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	373	2.9	2.6

	Counties with Average Population <10,000				Counties with Average Population 10,000 to 20,000			
	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Group Totals</b>								
Number:	26				98			
Crude:	4.0				3.1			
Adjusted:	3.0				2.6			

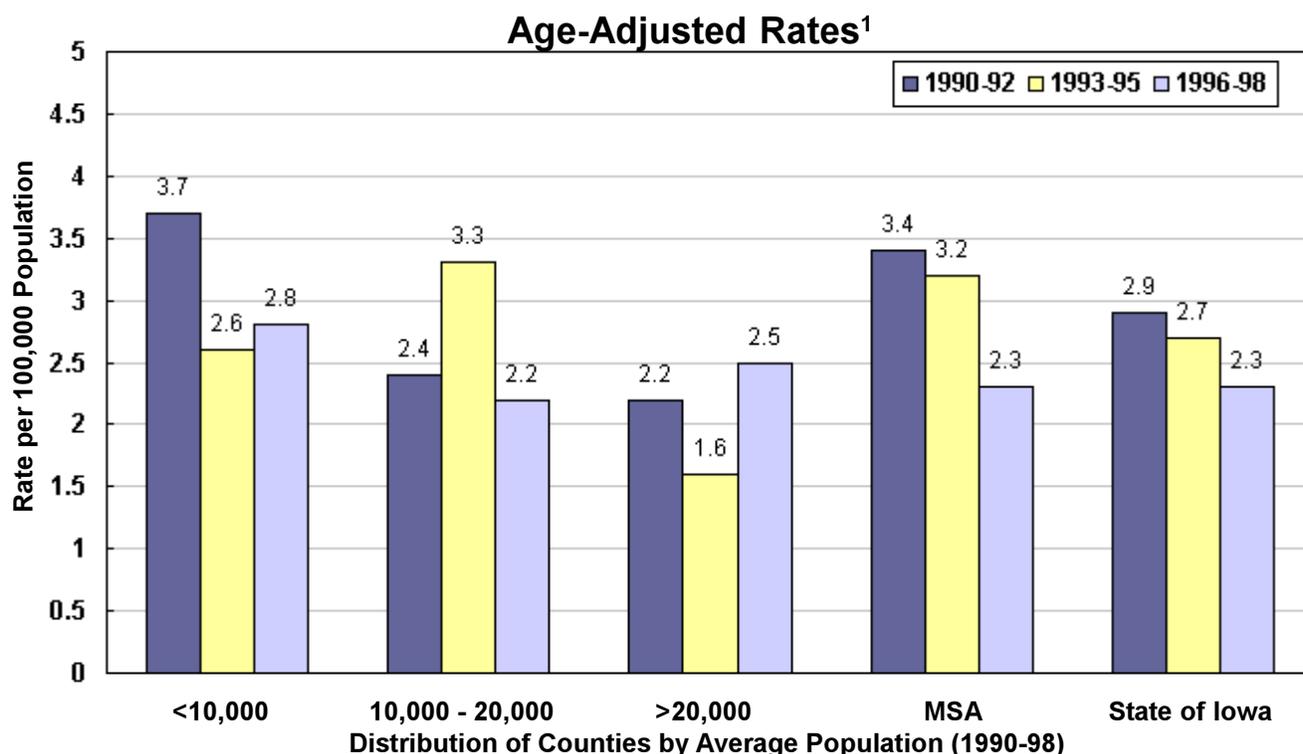
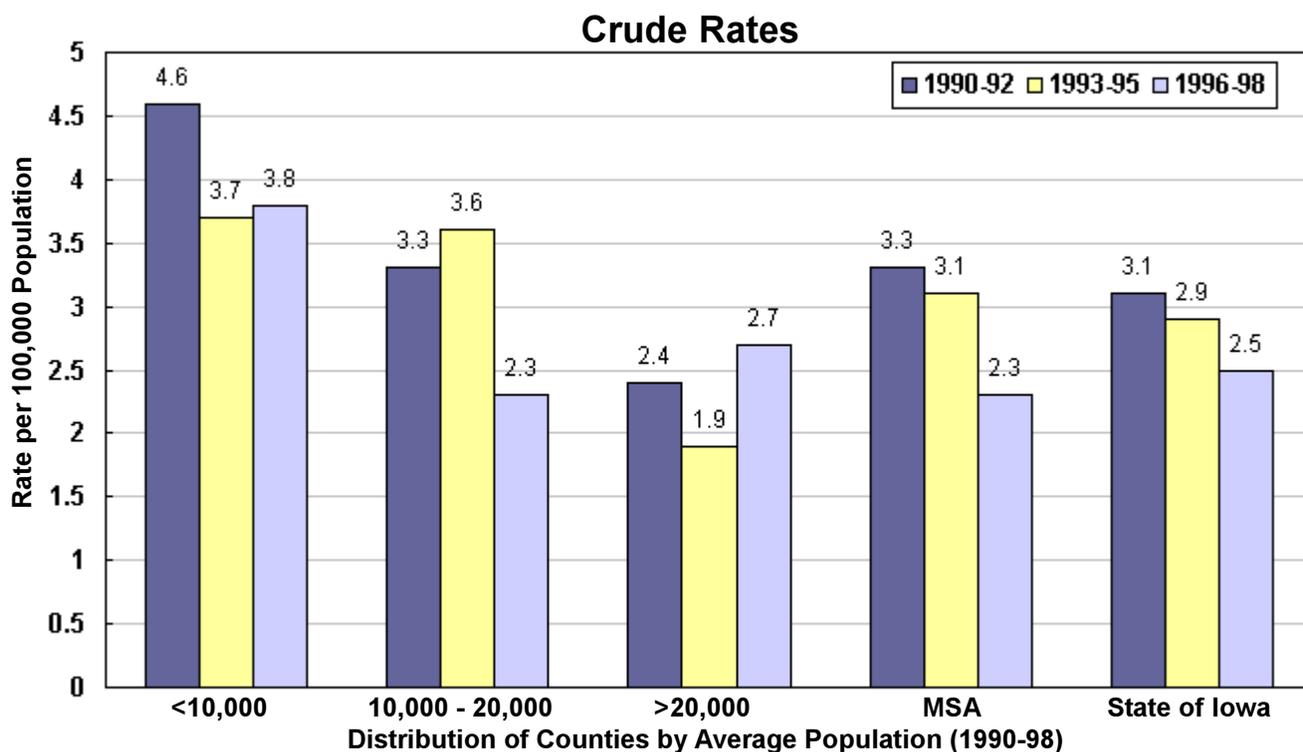
	Counties with Average Population >20,000				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Group Totals</b>								
Number:	80				169			
Crude:	2.3				2.9			
Adjusted:	2.1				2.9			

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

\*Number of events is less than 3  
Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Cervical Cancer Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

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## Injury Mortality

Injuries are the leading cause of death in persons 1-34 years of age both in Iowa and nationally. It is important to differentiate the etiology of the injury death to determine preventive strategies for injury control and to provide resources for trauma response through a statewide trauma system. The state of Iowa is in the process of developing a statewide system to be implemented in 2001.

From 1990-1998, transportation-related mortality accounted for 4,617 deaths in Iowa, 93% of which were motor vehicle fatalities. The rates for these fatalities are highest in the rural counties, and lowest in the most urban counties. Deaths from suicide, firearms, and falls show some variability between county levels, but in general have remained constant for the 9-year period. Homicide rates show a slight increase overall, reflected by increases in the more rural counties. Poisoning in general have increased slightly after an early decrease in the most rural counties. Death from burns had increased slightly in the 1993-95 period, but has now, in general, returned to the 1990-92 levels. Drowning deaths continue to decrease across all county levels. Deaths from all other unintentional injuries have remained about the same over the 9-year period.

The source of this information is the cause of death data obtained from death certificates filed at the Iowa Department of Public Health. Analysis was done by the State Health Registry of Iowa at The University of Iowa. Age-adjusted rates were calculated using the Year 2000 US population distribution.

### HIGHLIGHTS...

- Injuries are the leading cause of death in persons 1-34 years of age.
- In 2001, Iowa will implement a statewide trauma system.
- Motor vehicle deaths account for 93% of all transportation deaths in Iowa.

## All Transportation Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	4,617	18.2	17.7

	County				County				
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	25	33.5	33.2	Lucas	32	39.2	37.9	
	Adams	12	29.2	35.7	Monroe	26	35.5	39.5	
	Audubon	13	20.6	18.8	Osceola	16	24.9	28.1	
	Clarke	25	33.6	38.5	Pocahontas	19	23.1	25.8	
	Davis	31	41.0	41.0	Ringgold	12	24.8	23.9	
	Decatur	20	27.2	26.0	Taylor	14	21.9	25.1	
	Fremont	20	27.6	30.8	Van Buren	20	28.6	28.9	
	Howard	15	17.0	18.7	Wayne	28	45.1	54.7	
	Ida	19	25.8	31.0	Worth	13	18.4	18.6	
	<b>Group Totals</b>								
Number:	360								
Crude:	28.7								
Adjusted:	30.6								

	County				County			
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	40	31.8	33.3	Henry	37	20.9	20.6
	Appanoose	32	26.0	27.4	Humboldt	20	21.2	24.3
	Buena Vista	35	19.5	17.2	Iowa	32	23.6	25.3
	Butler	25	17.7	19.2	Jefferson	40	26.6	27.3
	Calhoun	18	17.4	19.3	Jones	50	27.8	27.6
	Cass	31	23.1	24.7	Keokuk	39	37.5	37.7
	Cedar	36	22.6	23.6	Kossuth	33	20.2	20.2
	Cherokee	31	25.1	25.0	Louisa	32	30.3	30.0
	Chickasaw	28	23.3	25.1	Lyon	25	23.3	23.1
	Clay	28	17.7	18.5	Madison	32	27.0	29.0
	Clayton	52	30.7	31.1	Mills	32	25.9	26.8
	Crawford	42	28.2	27.2	Mitchell	25	25.2	22.7
	Delaware	28	17.0	17.9	Monona	26	28.7	32.8
	Dickinson	27	19.3	18.0	Montgomery	25	23.3	24.2
	Emmet	22	21.7	22.0	O'Brien	29	21.1	23.0
	Floyd	31	20.6	19.5	Page	30	19.7	18.9
	Franklin	24	24.0	24.2	Palo Alto	29	31.2	31.1
	Greene	20	22.1	23.9	Poweshiek	27	15.9	15.4
	Grundy	19	17.4	18.9	Sac	32	29.5	31.4
	Guthrie	15	14.8	17.0	Shelby	31	26.2	27.4
Hamilton	36	24.9	23.8	Tama	53	33.4	35.9	
Hancock	23	20.9	20.9	Union	27	23.9	23.0	
Hardin	35	20.8	18.6	Winnebago	23	21.4	20.1	
Harrison	50	37.1	38.5	Wright	31	24.2	24.2	

	County				County			
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	39	18.2	18.8	Mahaska	45	23.1	23.2
	Boone	39	17.0	16.6	Marion	63	22.8	22.4
	Bremer	38	18.2	16.9	Marshall	83	24.0	24.4
	Buchanan	35	18.4	19.3	Muscatine	72	19.6	19.3
	Carroll	44	22.7	23.5	Plymouth	37	17.0	17.6
	Cerro Gordo	68	16.2	16.1	Sioux	48	17.3	16.3
	Clinton	87	19.0	18.9	Story	82	12.2	11.7
	Des Moines	70	18.3	18.6	Wapello	84	26.1	27.1
	Fayette	47	23.8	23.8	Washington	37	20.2	20.8
	Jackson	47	26.0	26.5	Webster	67	18.8	18.6
	Jasper	54	17.0	17.4	Winneshek	23	12.2	10.7
	Lee	95	27.2	27.7				

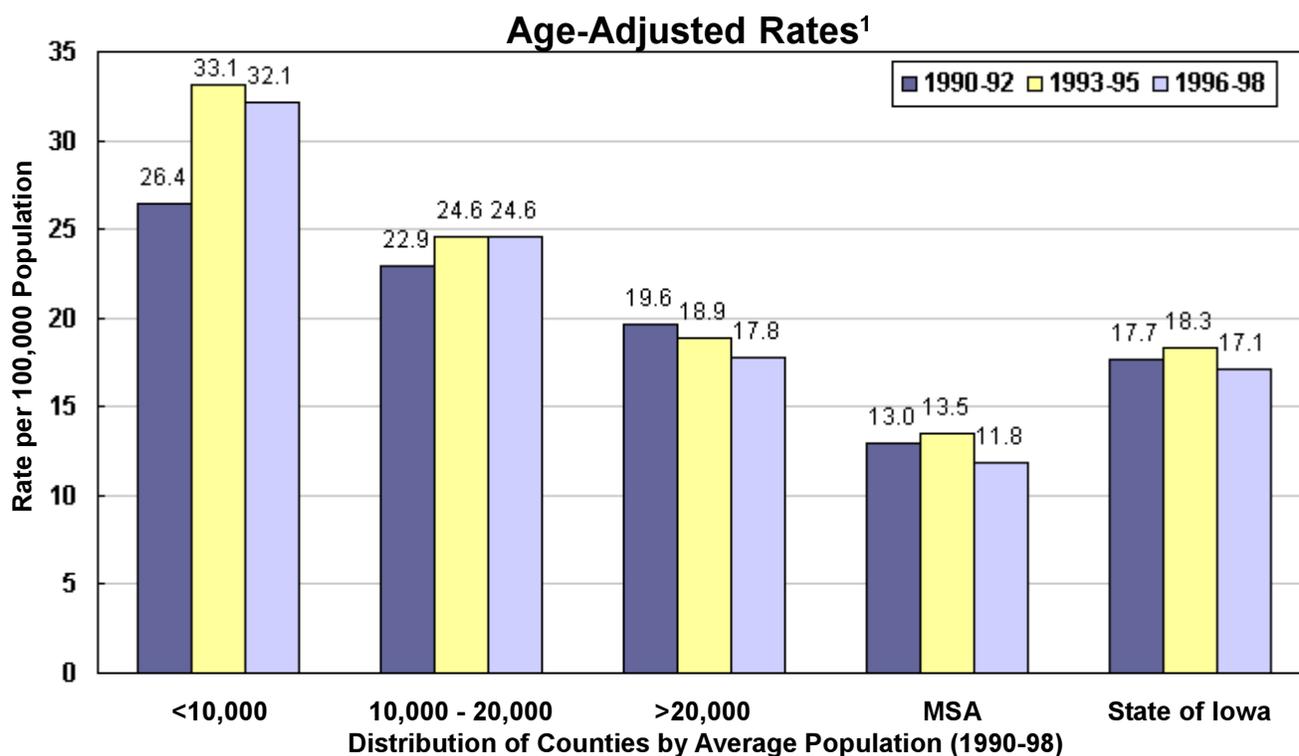
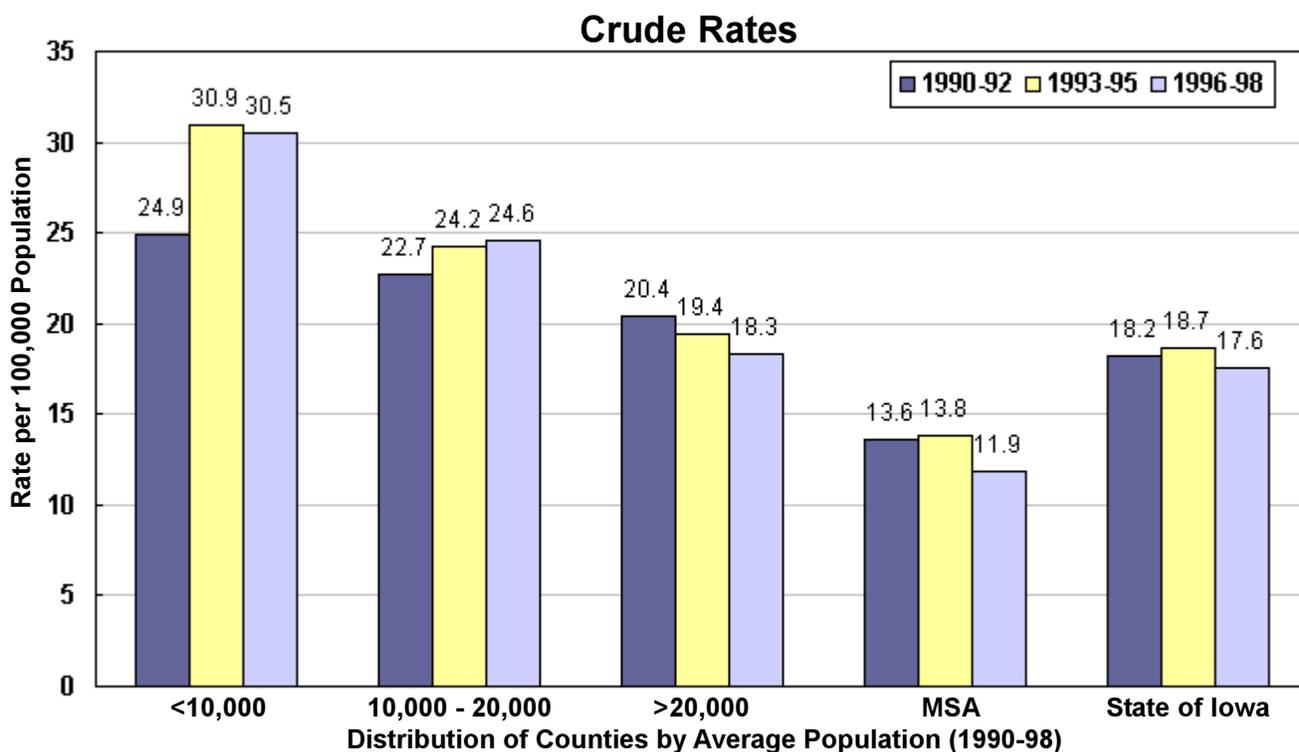
	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	184	16.6	16.2	Polk	394	12.7	12.7	
	Dallas	71	24.0	25.6	Pottawattamie	125	16.5	16.6	
	Dubuque	104	13.2	12.9	Scott	155	11.1	11.2	
	Johnson	79	8.8	8.9	Warren	37	10.7	10.8	
	Linn	192	12.1	11.9	Woodbury	124	13.7	13.4	
	<b>Group Totals</b>								
Number:	1,465								
Crude:	13.1								
Adjusted:	12.8								

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## All Transportation Mortality by County Group 1990-98



<sup>1</sup>Adjusted to Year 2000 US population

## Motor Vehicle Traffic Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	4,293	16.9	16.5

	County				County			
	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	24	32.2	32.0	Lucas	28	34.3	33.4
	Adams	12	29.2	35.7	Monroe	24	32.8	36.0
	Audubon	12	19.0	17.1	Osceola	14	21.8	24.0
	Clarke	22	29.6	33.1	Pocahontas	19	23.1	25.8
	Davis	30	39.7	39.6	Ringgold	12	24.8	23.9
	Decatur	19	25.8	24.1	Taylor	14	21.9	25.1
	Fremont	20	27.6	30.8	Van Buren	19	27.2	27.2
	Howard	13	14.8	17.0	Wayne	25	40.3	49.2
	Ida	19	25.8	31.0	Worth	11	15.6	15.4
	<b>Group Totals</b>							
Number:	337							
Crude:	26.9							
Adjusted:	28.5							

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	35	27.8	29.4	Henry	34	19.2	18.8
	Appanoose	30	24.4	25.9	Humboldt	18	19.1	20.6
	Buena Vista	34	19.0	16.6	Iowa	29	21.4	22.8
	Butler	24	17.0	18.3	Jefferson	40	26.6	27.3
	Calhoun	16	15.5	17.8	Jones	47	26.1	26.1
	Cass	30	22.3	24.0	Keokuk	37	35.5	36.1
	Cedar	35	22.0	23.0	Kossuth	32	19.6	19.4
	Cherokee	27	21.9	22.0	Louisa	30	28.4	28.1
	Chickasaw	28	23.3	25.1	Lyon	22	20.5	20.5
	Clay	28	17.7	18.5	Madison	32	27.0	29.0
	Clayton	50	29.5	29.8	Mills	30	24.3	25.2
	Crawford	40	26.9	25.7	Mitchell	25	25.2	22.7
	Delaware	25	15.2	15.9	Monona	24	26.5	30.8
	Dickinson	26	18.6	17.3	Montgomery	22	20.5	20.7
	Emmet	22	21.7	22.0	O'Brien	28	20.4	21.9
	Floyd	30	20.0	18.7	Page	29	19.0	18.2
	Franklin	22	22.0	22.1	Palo Alto	27	29.1	29.2
	Greene	19	21.0	23.4	Poweshiek	25	14.7	14.5
	Grundy	18	16.5	18.0	Sac	29	26.7	29.2
	Guthrie	14	13.8	15.4	Shelby	30	25.4	26.5
Hamilton	34	23.5	22.4	Tama	50	31.6	34.4	
Hancock	20	18.2	17.8	Union	26	23.0	22.2	
Hardin	33	19.6	17.3	Winnebago	21	19.5	18.3	
Harrison	48	35.6	36.8	Wright	29	22.7	22.9	

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Benton	36	16.8	17.2	Mahaska	45	23.1	23.2
	Boone	38	16.5	16.2	Marion	58	21.0	20.7
	Bremer	35	16.8	15.5	Marshall	80	23.2	23.5
	Buchanan	32	16.9	17.6	Muscatine	67	18.2	18.0
	Carroll	43	22.2	23.1	Plymouth	34	15.7	16.4
	Cerro Gordo	65	15.5	15.5	Sioux	45	16.2	15.2
	Clinton	82	18.0	17.7	Story	76	11.3	10.6
	Des Moines	61	15.9	16.1	Wapello	74	23.0	23.8
	Fayette	43	21.8	21.8	Washington	36	19.6	20.4
	Jackson	44	24.3	24.9	Webster	59	16.6	16.4
	Jasper	46	14.5	15.0	Winneshek	19	10.1	8.9
	Lee	81	23.2	23.8				

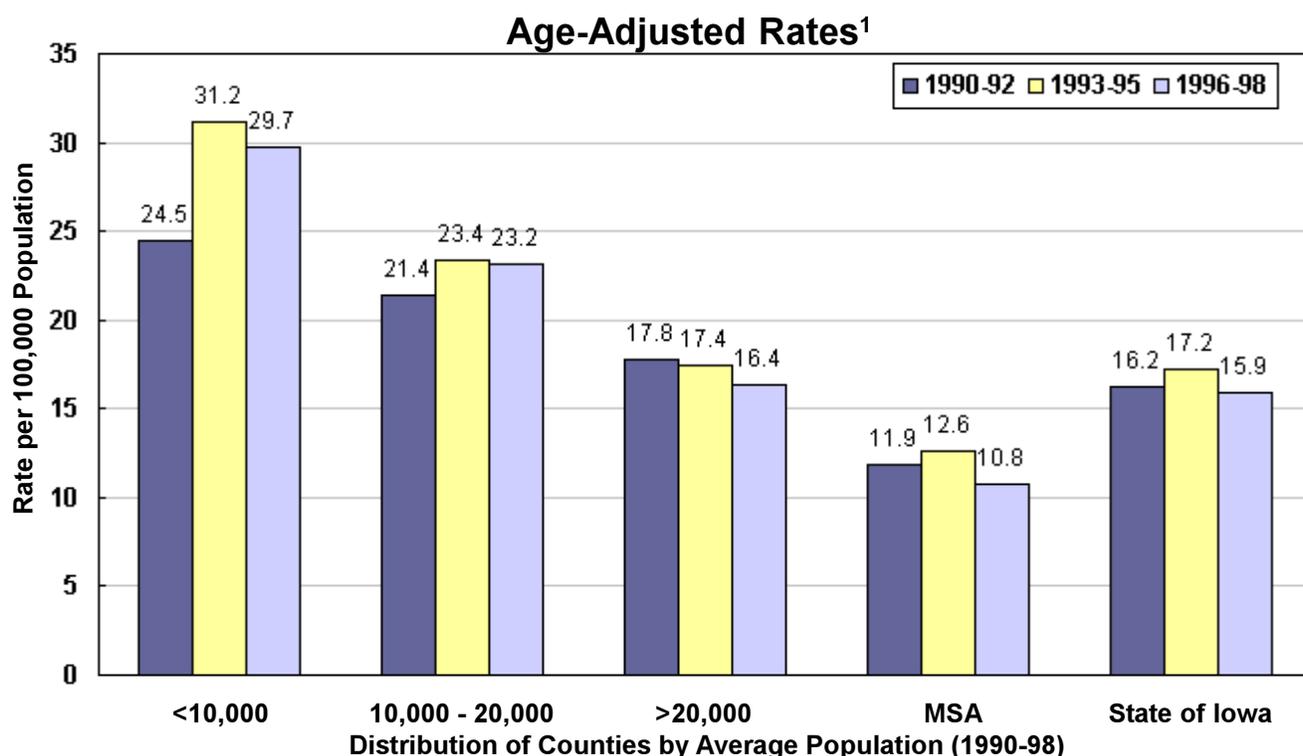
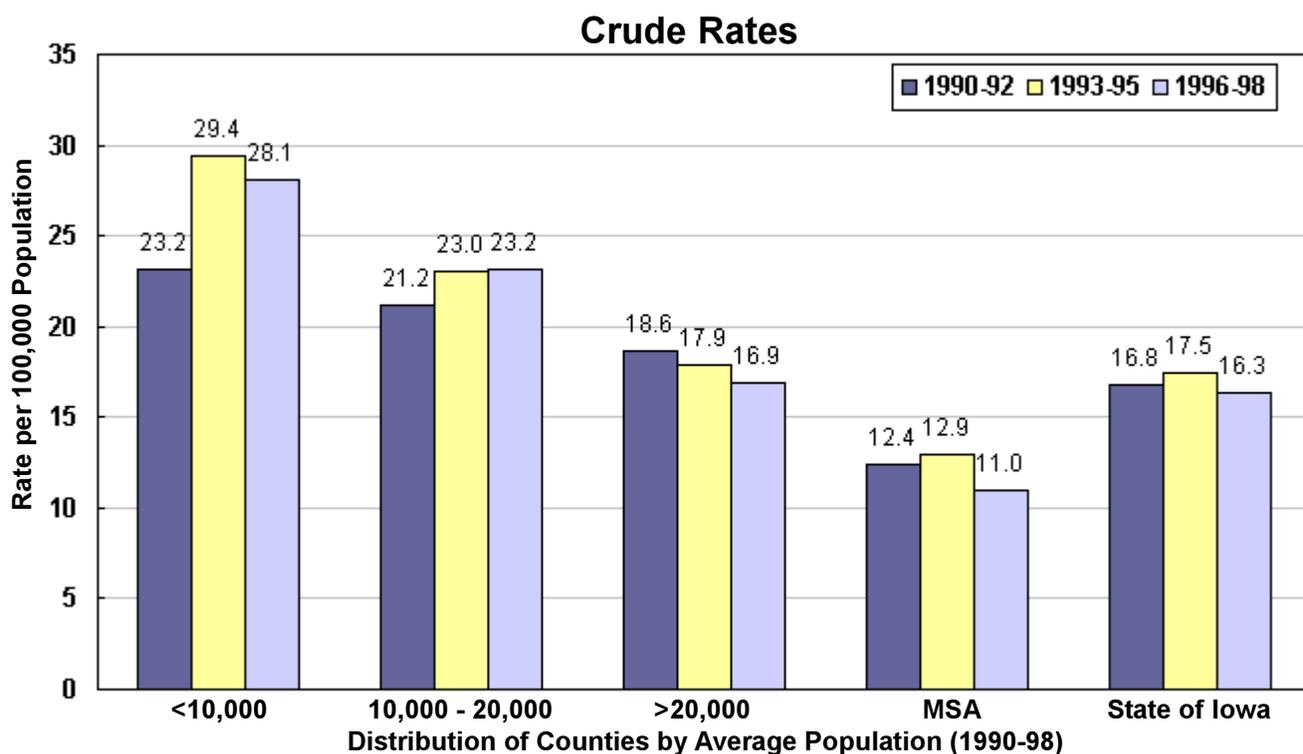
	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	175	15.8	15.3	Polk	366	11.8	11.7
	Dallas	69	23.3	25.0	Pottawattamie	115	15.2	15.3
	Dubuque	89	11.3	11.1	Scott	142	10.1	10.3
	Johnson	70	7.8	7.9	Warren	33	9.6	9.6
	Linn	178	11.2	11.1	Woodbury	116	12.8	12.5
	<b>Group Totals</b>							
Number:	1,353							
Crude:	12.1							
Adjusted:	11.8							

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via  
Iowa Cancer Registry, The University of Iowa

## Motor Vehicle Traffic Mortality by County Group 1990-98



<sup>1</sup>Adjusted to Year 2000 US population

## Suicide Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	2,927	11.5	11.4

	County				County			
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>		Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	10	13.4	12.4	Lucas	14	17.2	17.1
	Adams	3	7.3	8.7	Monroe	15	20.5	21.3
	Audubon	9	14.3	14.2	Osceola	7	10.9	10.3
	Clarke	11	14.8	14.6	Pocahontas	12	14.6	16.1
	Davis	9	11.9	11.3	Ringgold	7	14.5	12.1
	Decatur	14	19.0	17.8	Taylor	10	15.6	12.2
	Fremont	9	12.4	12.0	Van Buren	5	7.2	8.3
	Howard	5	5.7	6.9	Wayne	9	14.5	13.6
	Ida	7	9.5	9.1	Worth	12	17.0	19.5
	<b>Group Totals</b>							
Number:	168							
Crude:	13.4							
Adjusted:	13.3							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	15	11.9	11.9	Henry	15	8.5	7.8
	Appanoose	15	12.2	11.3	Humboldt	15	15.9	17.3
	Buena Vista	16	8.9	8.8	Iowa	15	11.1	10.6
	Butler	10	7.1	6.7	Jefferson	29	19.3	19.0
	Calhoun	12	11.6	11.3	Jones	26	14.5	13.8
	Cass	12	8.9	9.5	Keokuk	17	16.3	16.2
	Cedar	18	11.3	11.6	Kossuth	9	5.5	5.1
	Cherokee	22	17.8	18.2	Louisa	17	16.1	16.2
	Chickasaw	14	11.7	12.5	Lyon	7	6.5	5.5
	Clay	11	6.9	6.3	Madison	14	11.8	11.7
	Clayton	27	15.9	15.3	Mills	14	11.4	12.0
	Crawford	12	8.1	8.4	Mitchell	14	14.1	12.7
	Delaware	19	11.5	13.1	Monona	11	12.1	14.9
	Dickinson	16	11.5	12.2	Montgomery	14	13.0	12.0
	Emmet	11	10.8	9.9	O'Brien	16	11.7	12.8
	Floyd	21	14.0	12.5	Page	15	9.8	9.6
	Franklin	7	7.0	8.1	Palo Alto	7	7.5	7.8
	Greene	10	11.0	11.0	Poweshiek	20	11.7	11.5
	Grundy	14	12.8	12.4	Sac	13	12.0	13.0
	Guthrie	15	14.8	13.0	Shelby	15	12.7	12.4
Hamilton	21	14.5	13.9	Tama	24	15.1	14.0	
Hancock	10	9.1	9.1	Union	20	17.7	17.5	
Hardin	14	8.3	7.7	Winnebago	6	5.6	6.3	
Harrison	14	10.4	10.1	Wright	10	7.8	7.0	
<b>Group Totals</b>								
Number:	719							
Crude:	11.5							
Adjusted:	11.3							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population &gt;20,000</b>	Benton	22	10.2	10.0	Mahaska	16	8.2	8.0
	Boone	26	11.3	11.2	Marion	24	8.7	9.3
	Bremer	26	12.5	11.8	Marshall	45	13.0	13.0
	Buchanan	28	14.7	15.5	Muscatine	45	12.3	12.1
	Carroll	23	11.9	11.6	Plymouth	17	7.8	8.2
	Cerro Gordo	46	11.0	11.2	Sioux	10	3.6	3.6
	Clinton	54	11.8	11.5	Story	60	9.0	9.6
	Des Moines	60	15.7	15.1	Wapello	40	12.4	12.2
	Fayette	20	10.1	10.1	Washington	24	13.1	12.6
	Jackson	30	16.6	17.2	Webster	43	12.1	12.1
	Jasper	29	9.1	8.8	Winneshek	16	8.5	8.8
	Lee	44	12.6	12.9				
	<b>Group Totals</b>							
	Number:	748						
Crude:	11.1							
Adjusted:	11.0							

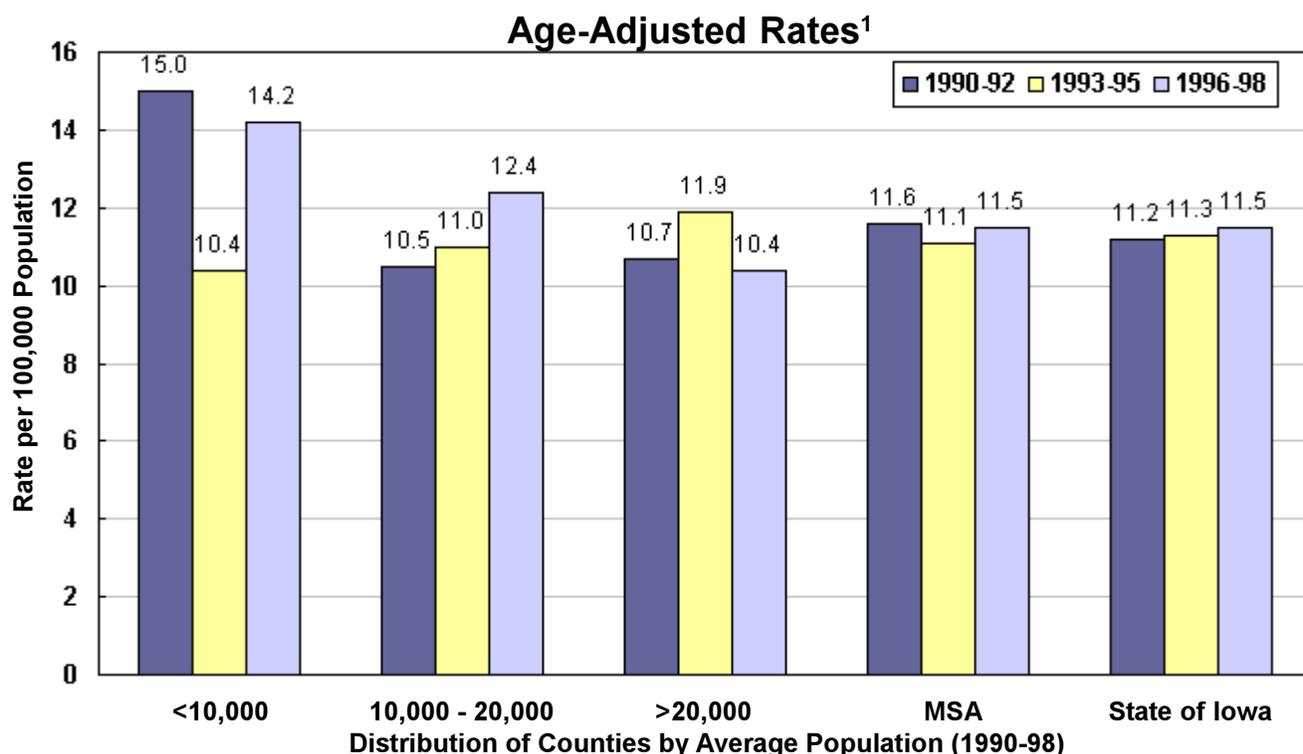
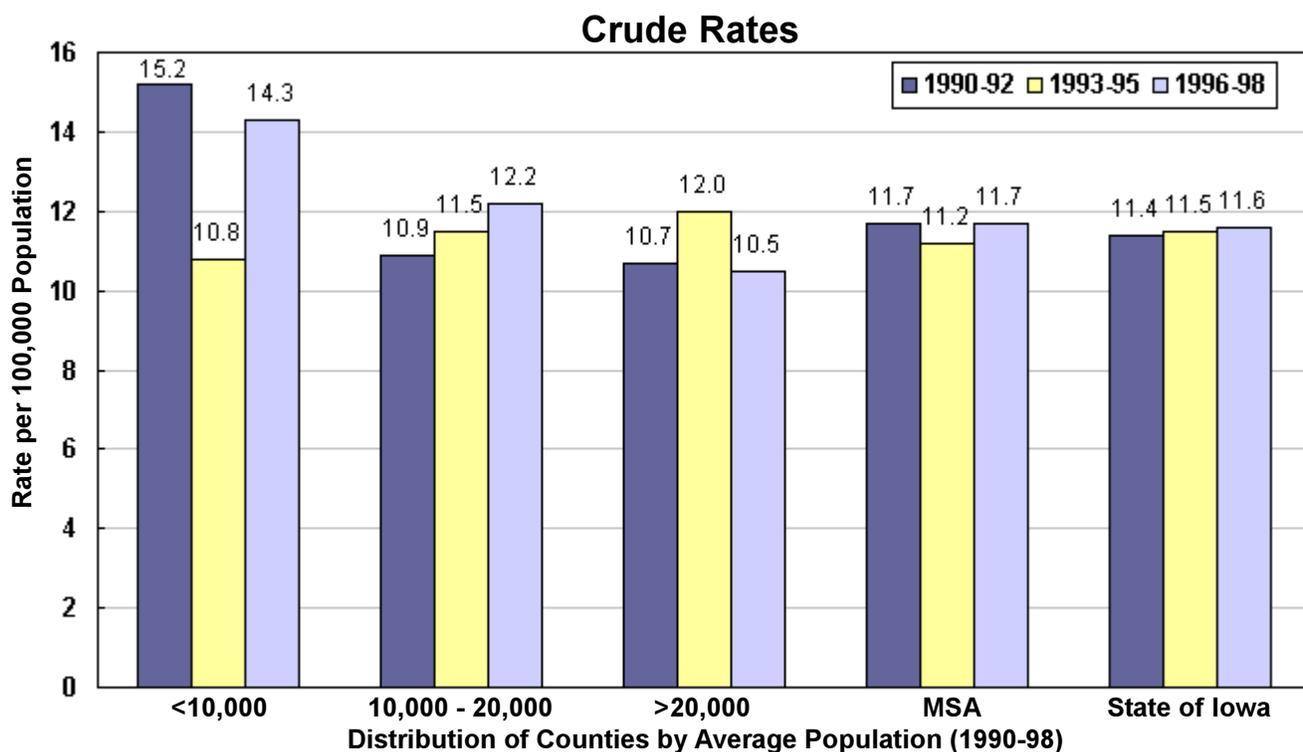
	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>MSA Counties</b>	Black Hawk	123	11.1	11.0	Polk	377	12.1	12.1
	Dallas	37	12.5	12.4	Pottawattamie	111	14.7	15.2
	Dubuque	86	10.9	11.0	Scott	155	11.1	11.4
	Johnson	86	9.6	9.1	Warren	33	9.6	9.7
	Linn	190	12.0	11.8	Woodbury	94	10.4	10.5
	<b>Group Totals</b>							
Number:	1,292							
Crude:	11.5							
Adjusted:	11.4							

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Suicide Mortality by County Group 1990-98



<sup>1</sup>Adjusted to Year 2000 US population

## Firearms Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	1,977	7.8	7.6

	County				County				
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	9	12.1	11.5	Lucas	10	12.3	12.1	
	Adams	4	9.7	12.3	Monroe	7	9.6	9.2	
	Audubon	6	9.5	8.1	Osceola	3	4.7	4.3	
	Clarke	11	14.8	16.2	Pocahontas	9	11.0	12.5	
	Davis	10	13.2	12.6	Ringgold	6	12.4	9.5	
	Decatur	14	19.0	19.7	Taylor	9	14.1	11.4	
	Fremont	8	11.1	11.0	Van Buren	7	10.0	10.7	
	Howard	5	5.7	6.9	Wayne	6	9.7	9.7	
	Ida	3	4.1	4.9	Worth	6	8.5	9.7	
	<b>Group Totals</b>								
Number:	133								
Crude:	10.6								
Adjusted:	10.7								

	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	12	9.5	10.2	Henry	12	6.8	6.2	
	Appanoose	12	9.8	9.2	Humboldt	9	9.5	10.9	
	Buena Vista	11	6.1	6.1	Iowa	13	9.6	9.4	
	Butler	8	5.7	4.9	Jefferson	22	14.6	16.2	
	Calhoun	7	6.8	6.3	Jones	15	8.3	8.1	
	Cass	12	8.9	9.0	Keokuk	14	13.4	13.9	
	Cedar	16	10.1	10.1	Kossuth	6	3.7	3.7	
	Cherokee	11	8.9	9.2	Louisa	10	9.5	9.3	
	Chickasaw	6	5.0	5.4	Lyon	4	3.7	3.7	
	Clay	5	3.2	3.0	Madison	12	10.1	9.6	
	Clayton	22	13.0	12.7	Mills	11	8.9	9.6	
	Crawford	8	5.4	5.1	Mitchell	5	5.0	3.3	
	Delaware	11	6.7	7.8	Monona	10	11.0	12.7	
	Dickinson	10	7.2	8.4	Montgomery	12	11.2	10.3	
	Emmet	8	7.9	7.8	O'Brien	14	10.2	11.2	
	Floyd	13	8.6	8.2	Page	10	6.6	6.1	
	Franklin	5	5.0	5.9	Palo Alto	5	5.4	5.1	
	Greene	5	5.5	6.9	Poweshiek	11	6.5	6.1	
	Grundy	9	8.2	9.0	Sac	7	6.4	7.4	
	Guthrie	10	9.9	9.3	Shelby	11	9.3	9.2	
Hamilton	15	10.4	9.7	Tama	18	11.4	11.0		
Hancock	10	9.1	9.3	Union	8	7.1	7.6		
Hardin	12	7.1	5.9	Winnebago	5	4.6	5.0		
Harrison	14	10.4	10.1	Wright	7	5.5	5.0		
<b>Group Totals</b>									
Number:	503								
Crude:	8.1								
Adjusted:	8.0								

	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Benton	9	4.2	4.0	Mahaska	13	6.7	6.6	
	Boone	14	6.1	5.9	Marion	24	8.7	9.0	
	Bremer	11	5.3	5.1	Marshall	33	9.6	9.7	
	Buchanan	20	10.5	10.9	Muscatine	29	7.9	7.8	
	Carroll	15	7.7	7.3	Plymouth	10	4.6	4.9	
	Cerro Gordo	26	6.2	6.4	Sioux	7	2.5	2.3	
	Clinton	35	7.7	7.4	Story	29	4.3	4.7	
	Des Moines	46	12.0	11.6	Wapello	37	11.5	11.2	
	Fayette	11	5.6	5.9	Washington	13	7.1	6.7	
	Jackson	14	7.7	7.5	Webster	27	7.6	7.7	
	Jasper	17	5.4	5.0	Winneshek	8	4.2	4.2	
	Lee	33	9.4	9.6					
	<b>Group Totals</b>								
Number:	481								
Crude:	7.1								
Adjusted:	7.0								

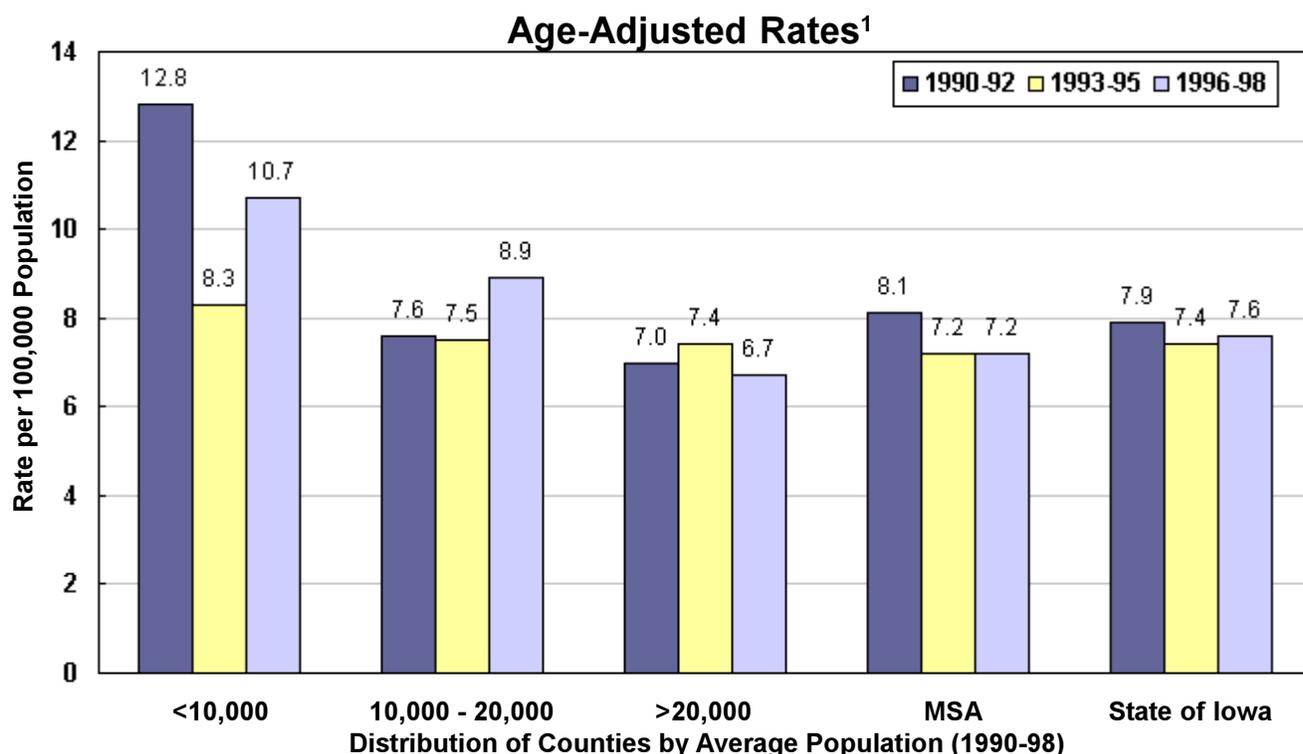
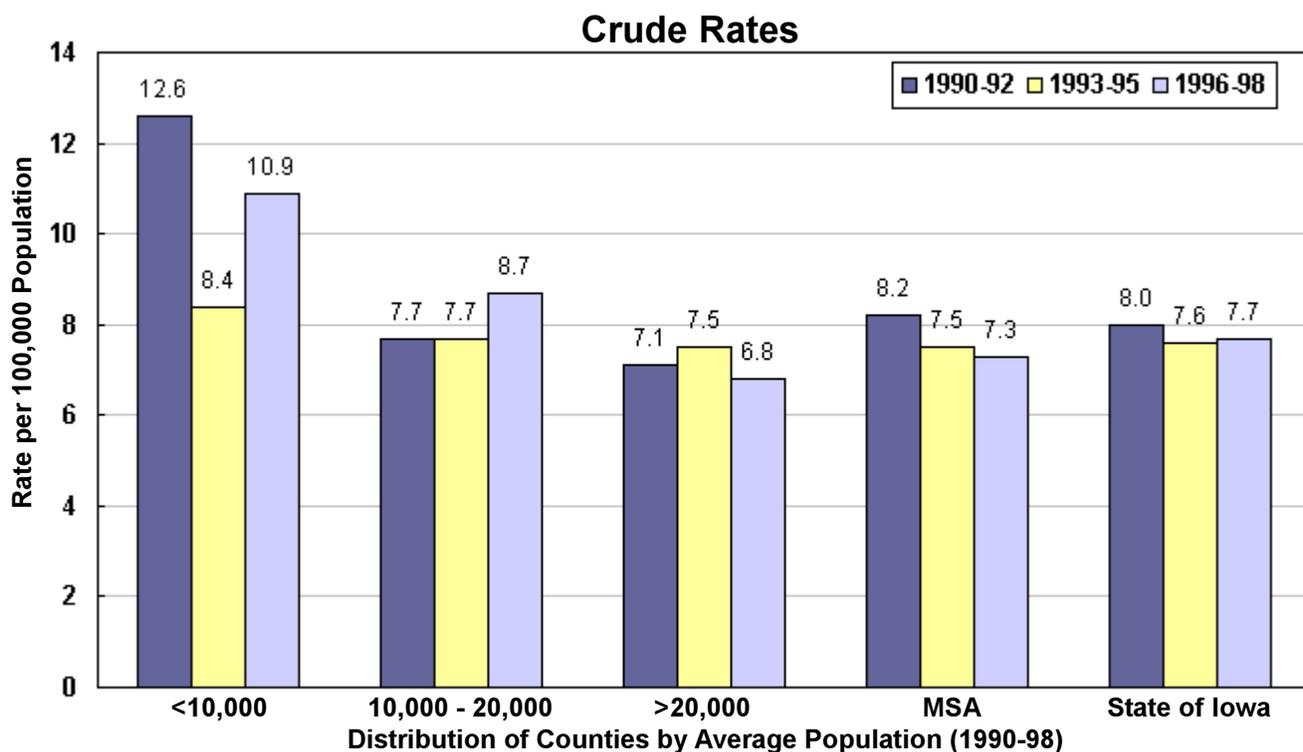
	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	88	7.9	7.8	Polk	280	9.0	8.9	
	Dallas	32	10.8	10.8	Pottawattamie	78	10.3	10.6	
	Dubuque	58	7.3	7.3	Scott	82	5.9	5.9	
	Johnson	44	4.9	4.9	Warren	28	8.1	8.2	
	Linn	107	6.7	6.6	Woodbury	63	6.9	6.9	
	<b>Group Totals</b>								
Number:	860								
Crude:	7.7								
Adjusted:	7.5								

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Firearms Mortality by County Group 1990-98



<sup>1</sup>Adjusted to Year 2000 US population

## Falls Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	1,960	7.7	6.3

	County				County				
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	12	16.1	7.3	Lucas	7	8.6	4.9	
	Adams	11	26.8	13.6	Monroe	5	6.8	4.1	
	Audubon	7	11.1	5.5	Osceola	*	*	*	
	Clarke	8	10.8	5.9	Pocahontas	10	12.2	7.2	
	Davis	8	10.6	6.9	Ringgold	4	8.3	4.1	
	Decatur	11	14.9	10.5	Taylor	4	6.3	2.8	
	Fremont	5	6.9	3.9	Van Buren	8	11.5	7.4	
	Howard	8	9.1	4.6	Wayne	11	17.7	7.2	
	Ida	13	17.6	9.1	Worth	9	12.7	7.0	
	<b>Group Totals</b>								
Number:	141								
Crude:	11.3								
Adjusted:	6.1								

	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	11	8.7	5.6	Henry	13	7.3	5.2	
	Appanoose	14	11.4	7.3	Humboldt	11	11.7	6.9	
	Buena Vista	9	5.0	3.3	Iowa	9	6.6	4.3	
	Butler	11	7.8	4.9	Jefferson	9	6.0	5.4	
	Calhoun	15	14.5	8.1	Jones	12	6.7	5.0	
	Cass	13	9.7	5.2	Keokuk	16	15.4	8.0	
	Cedar	18	11.3	7.9	Kossuth	12	7.4	4.3	
	Cherokee	11	8.9	6.0	Louisa	6	5.7	4.5	
	Chickasaw	6	5.0	3.7	Lyon	8	7.4	4.5	
	Clay	10	6.3	4.3	Madison	12	10.1	7.5	
	Clayton	12	7.1	5.5	Mills	7	5.7	5.5	
	Crawford	13	8.7	6.0	Mitchell	6	6.1	3.6	
	Delaware	9	5.5	4.4	Monona	9	9.9	6.1	
	Dickinson	11	7.9	4.9	Montgomery	21	19.5	9.4	
	Emmet	9	8.9	4.9	O'Brien	9	6.6	3.6	
	Floyd	9	6.0	3.5	Page	14	9.2	5.0	
	Franklin	7	7.0	4.9	Palo Alto	9	9.7	5.9	
	Greene	9	9.9	5.1	Poweshiek	27	15.9	10.6	
	Grundy	11	10.1	6.5	Sac	13	12.0	5.5	
	Guthrie	10	9.9	5.4	Shelby	7	5.9	3.0	
Hamilton	8	5.5	3.6	Tama	11	6.9	4.3		
Hancock	7	6.4	4.5	Union	16	14.2	8.7		
Hardin	18	10.7	5.4	Winnebago	5	4.6	3.1		
Harrison	16	11.9	6.9	Wright	16	12.5	6.6		
<b>Group Totals</b>									
Number:	545								
Crude:	8.7								
Adjusted:	5.5								

	County				County					
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted	
<b>Counties with Average Population &gt;20,000</b>	Benton	12	5.6	4.8	Mahaska	25	12.8	9.2		
	Boone	24	10.4	6.9	Marion	26	9.4	7.1		
	Bremer	12	5.8	5.1	Marshall	40	11.6	8.3		
	Buchanan	14	7.4	6.9	Muscatine	24	6.5	6.0		
	Carroll	18	9.3	6.5	Plymouth	9	4.1	2.8		
	Cerro Gordo	17	4.1	3.1	Sioux	24	8.6	7.1		
	Clinton	29	6.3	5.2	Story	38	5.7	6.3		
	Des Moines	29	7.6	5.9	Wapello	28	8.7	6.4		
	Fayette	19	9.6	7.5	Washington	30	16.4	10.0		
	Jackson	11	6.1	5.2	Webster	60	16.9	11.0		
	Jasper	29	9.1	7.2	Winneshek	17	9.0	6.3		
	Lee	22	6.3	5.0						
	<b>Group Totals</b>									
	Number:	557								
Crude:	8.3									
Adjusted:	6.5									

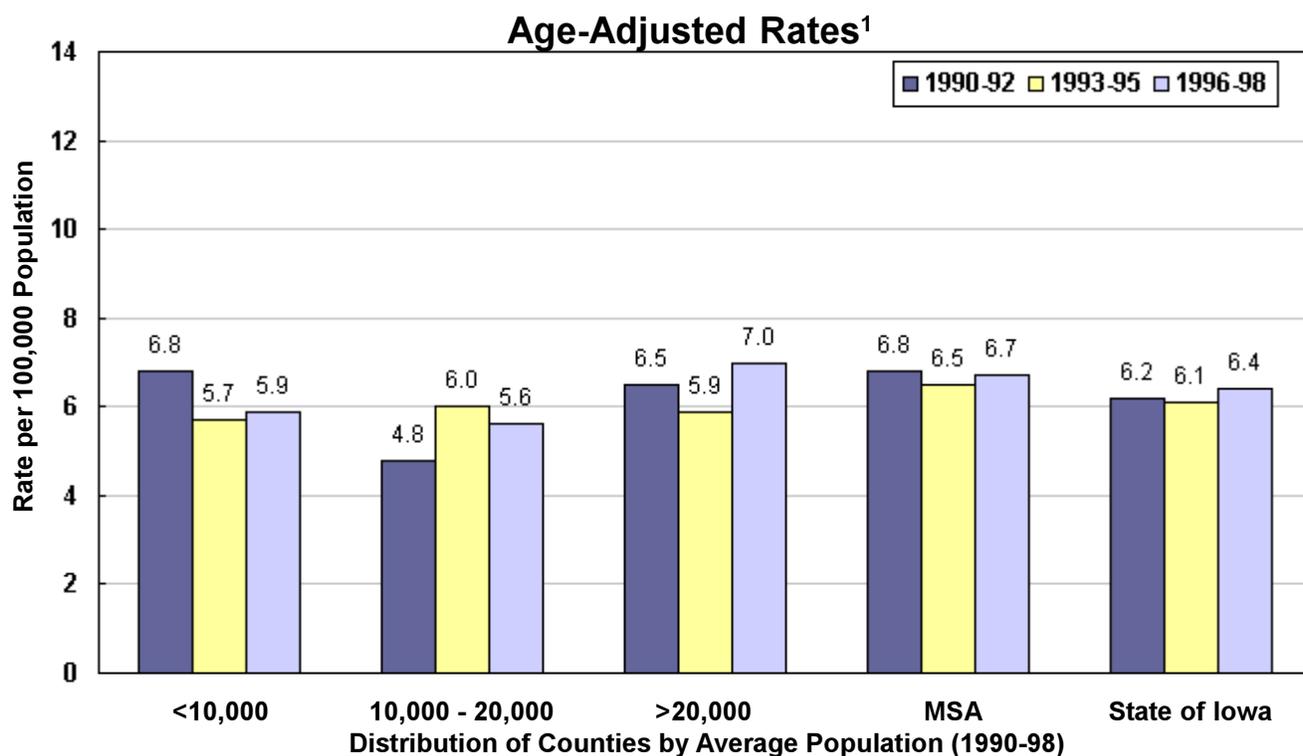
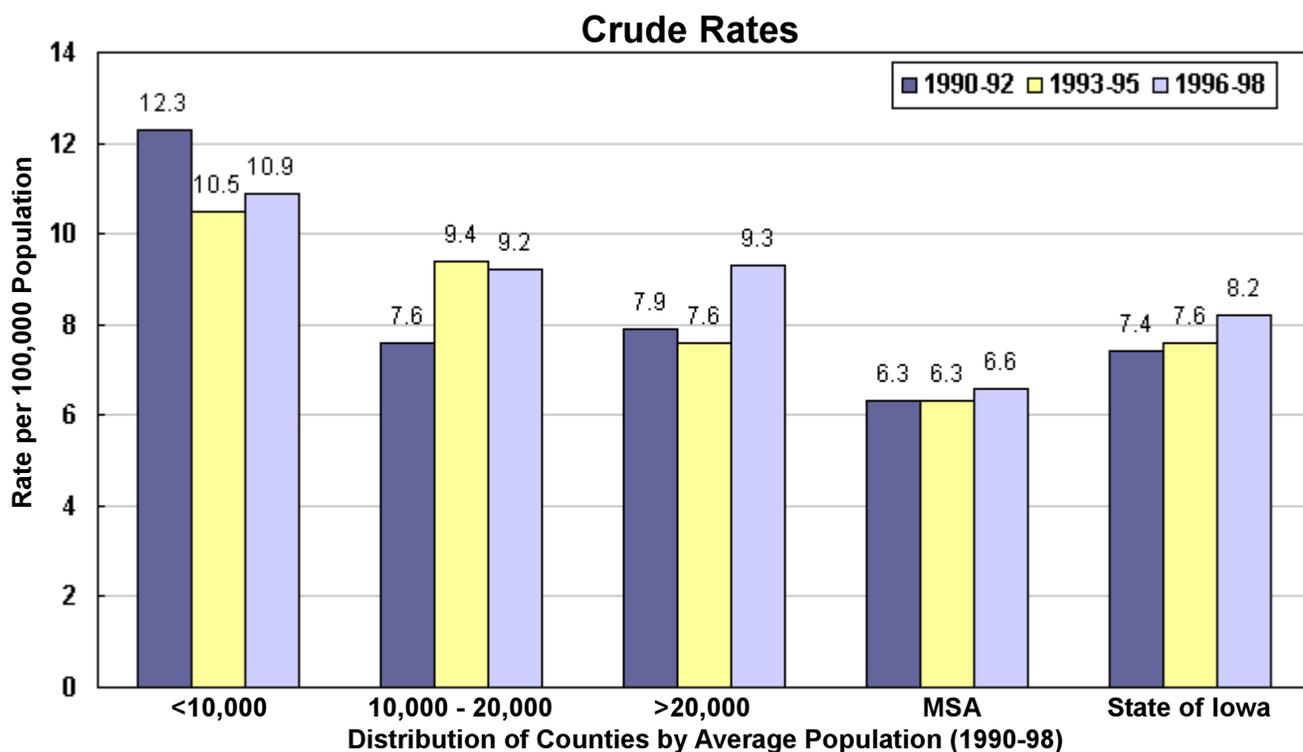
	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	75	6.8	6.5	Polk	264	8.5	9.5	
	Dallas	17	5.7	5.1	Pottawattamie	40	5.3	5.2	
	Dubuque	37	4.7	4.2	Scott	60	4.3	4.9	
	Johnson	30	3.3	4.9	Warren	26	7.5	7.9	
	Linn	98	6.2	6.3	Woodbury	70	7.7	6.9	
	<b>Group Totals</b>								
Number:	717								
Crude:	6.4								
Adjusted:	6.7								

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

\*Number of events is less than 3  
Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Falls Mortality by County Group 1990-98



<sup>1</sup>Adjusted to Year 2000 US population

## Homicide Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	576	2.3	2.3

	County				County			
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>		Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monroe	*	*	*
	Audubon	*	*	*	Osceola	*	*	*
	Clarke	*	*	*	Pocahontas	*	*	*
	Davis	*	*	*	Ringgold	*	*	*
	Decatur	3	4.1	5.0	Taylor	*	*	*
	Fremont	*	*	*	Van Buren	*	*	*
	Howard	*	*	*	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
	<b>Group Totals</b>							
Number:	19							
Crude:	1.5							
Adjusted:	1.6							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	*	*	*	Henry	*	*	*
	Appanoose	*	*	*	Humboldt	*	*	*
	Buena Vista	*	*	*	Iowa	4	3.0	3.4
	Butler	*	*	*	Jefferson	3	2.0	2.5
	Calhoun	*	*	*	Jones	*	*	*
	Cass	*	*	*	Keokuk	*	*	*
	Cedar	5	3.1	3.3	Kossuth	*	*	*
	Cherokee	*	*	*	Louisa	*	*	*
	Chickasaw	*	*	*	Lyon	*	*	*
	Clay	*	*	*	Madison	3	2.5	2.6
	Clayton	*	*	*	Mills	*	*	*
	Crawford	*	*	*	Mitchell	*	*	*
	Delaware	*	*	*	Monona	*	*	*
	Dickinson	3	2.1	2.4	Montgomery	3	2.8	2.6
	Emmet	*	*	*	O'Brien	4	2.9	3.2
	Floyd	3	2.0	2.3	Page	*	*	*
	Franklin	3	3.0	3.0	Palo Alto	*	*	*
	Greene	*	*	*	Poweshiek	*	*	*
	Grundy	*	*	*	Sac	*	*	*
	Guthrie	*	*	*	Shelby	*	*	*
Hamilton	*	*	*	Tama	8	5.0	5.7	
Hancock	*	*	*	Union	3	2.7	2.8	
Hardin	6	3.6	3.6	Winnebago	*	*	*	
Harrison	*	*	*	Wright	*	*	*	

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population &gt;20,000</b>	Benton	*	*	*	Mahaska	4	2.0	2.4
	Boone	3	1.3	1.3	Marion	6	2.2	2.1
	Bremer	*	*	*	Marshall	5	1.4	1.6
	Buchanan	*	*	*	Muscatine	8	2.2	2.1
	Carroll	*	*	*	Plymouth	*	*	*
	Cerro Gordo	8	1.9	2.1	Sioux	5	1.8	1.9
	Clinton	7	1.5	1.5	Story	6	0.9	1.1
	Des Moines	8	2.1	2.1	Wapello	9	2.8	3.0
	Fayette	*	*	*	Washington	*	*	*
	Jackson	*	*	*	Webster	13	3.7	3.9
	Jasper	*	*	*	Winneshek	*	*	*
	Lee	9	2.6	2.4				

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>MSA Counties</b>	Black Hawk	33	3.0	2.9	Polk	157	5.0	4.9
	Dallas	7	2.4	2.6	Pottawattamie	36	4.8	4.7
	Dubuque	8	1.0	1.1	Scott	40	2.9	2.8
	Johnson	19	2.1	2.2	Warren	9	2.6	2.4
	Linn	33	2.1	2.0	Woodbury	30	3.3	3.4
	<b>Group Totals</b>							
Number:	372							
Crude:	3.3							
Adjusted:	3.2							

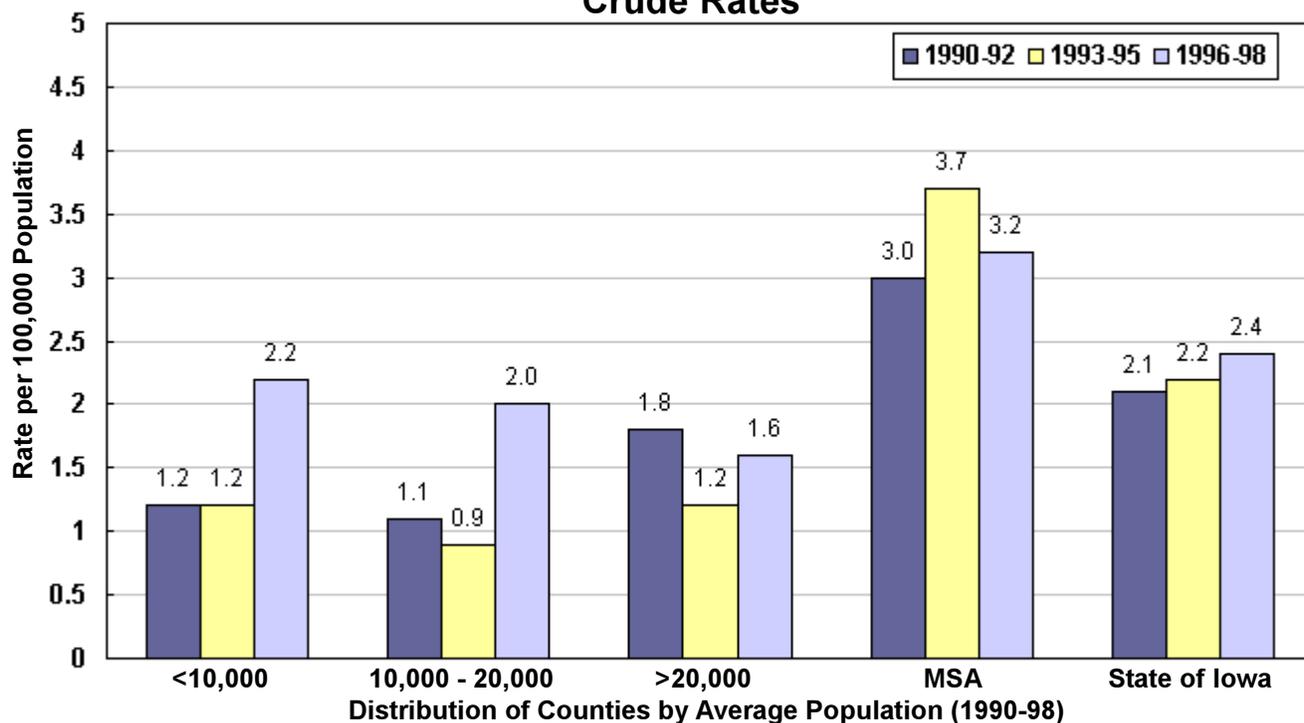
<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

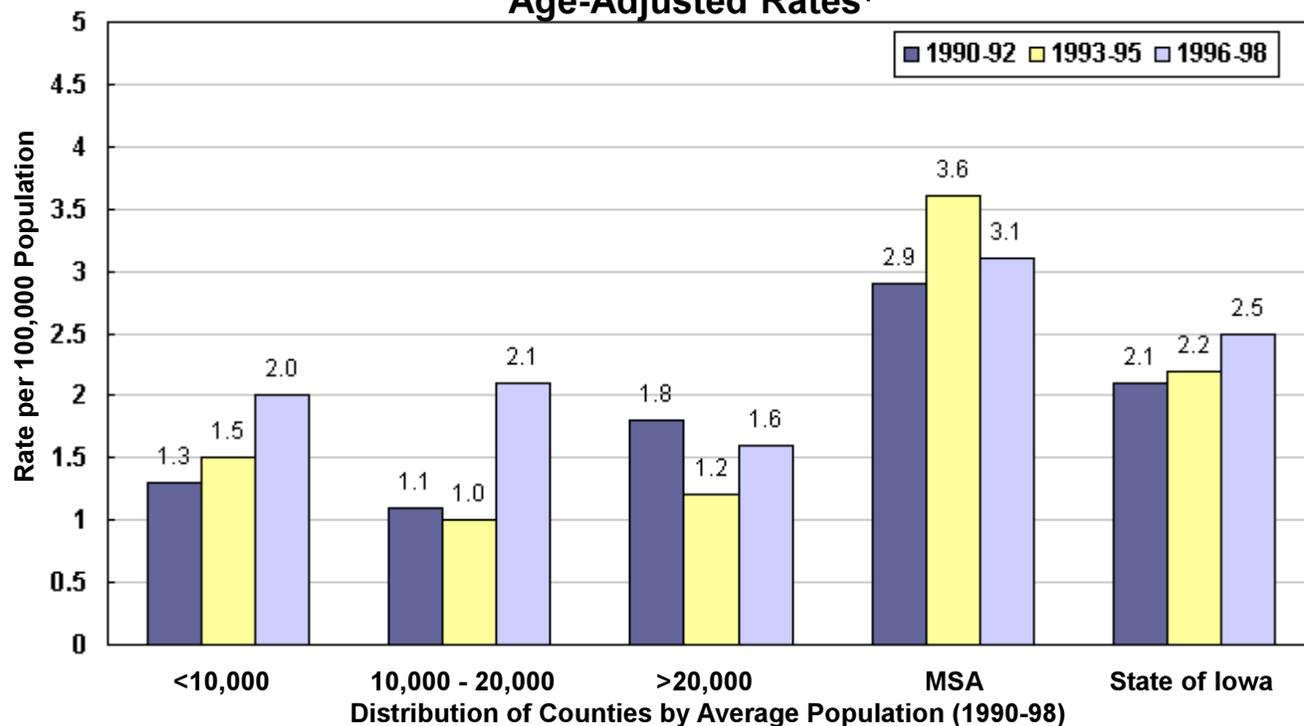
Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Homicide Mortality by County Group 1990-98

### Crude Rates



### Age-Adjusted Rates<sup>1</sup>



<sup>1</sup>Adjusted to Year 2000 US population

## Poisoning Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	357	1.4	1.4

	County				County			
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>		Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monroe	*	*	*
	Audubon	*	*	*	Osceola	*	*	*
	Clarke	*	*	*	Pocahontas	4	4.9	4.7
	Davis	*	*	*	Ringgold	*	*	*
	Decatur	5	6.8	6.2	Taylor	*	*	*
	Fremont	*	*	*	Van Buren	*	*	*
	Howard	*	*	*	Wayne	3	4.8	5.5
	Ida	*	*	*	Worth	*	*	*
	<b>Group Totals</b>							
Number:	23							
Crude:	1.8							
Adjusted:	1.8							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	*	*	*	Henry	*	*	*
	Appanoose	*	*	*	Humboldt	*	*	*
	Buena Vista	*	*	*	Iowa	*	*	*
	Butler	*	*	*	Jefferson	*	*	*
	Calhoun	*	*	*	Jones	3	1.7	1.4
	Cass	3.2	2.2	1.3	Keokuk	*	*	*
	Cedar	*	*	*	Kossuth	*	*	*
	Cherokee	5	4.0	3.3	Louisa	*	*	*
	Chickasaw	*	*	*	Lyon	3	2.8	2.4
	Clay	3	1.9	1.9	Madison	*	*	*
	Clayton	*	*	*	Mills	3	2.4	2.4
	Crawford	*	*	*	Mitchell	*	*	*
	Delaware	*	*	*	Monona	*	*	*
	Dickinson	*	*	*	Montgomery	*	*	*
	Emmet	*	*	*	O'Brien	*	*	*
	Floyd	*	*	*	Page	*	*	*
	Franklin	*	*	*	Palo Alto	*	*	*
	Greene	*	*	*	Poweshiek	3	1.8	2.0
	Grundy	*	*	*	Sac	3	2.8	2.2
	Guthrie	*	*	*	Shelby	*	*	*
Hamilton	*	*	*	Tama	4	2.5	2.2	
Hancock	3	2.7	2.3	Union	*	*	*	
Hardin	5	3.0	3.1	Winnebago	*	*	*	
Harrison	*	*	*	Wright	*	*	*	

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population &gt;20,000</b>	Benton	*	*	*	Mahaska	3	1.5	1.2
	Boone	*	*	*	Marion	3	1.1	1.1
	Bremer	*	*	*	Marshall	8	2.3	2.3
	Buchanan	4	2.1	2.3	Muscatine	4	1.1	1.1
	Carroll	3	1.5	1.9	Plymouth	4	1.8	2.2
	Cerro Gordo	6	1.4	1.4	Sioux	*	*	*
	Clinton	4	0.9	0.8	Story	9	1.3	1.3
	Des Moines	6	1.6	1.5	Wapello	8	2.5	2.6
	Fayette	8	4.1	3.8	Washington	*	*	*
	Jackson	*	*	*	Webster	*	*	*
	Jasper	6	1.9	1.9	Winneshek	*	*	*
	Lee	*	*	*				

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>MSA Counties</b>	Black Hawk	16	1.4	1.4	Polk	57	1.8	1.8
	Dallas	3	1.0	0.9	Pottawattamie	18	2.4	2.5
	Dubuque	3	0.4	0.4	Scott	21	1.5	1.5
	Johnson	12	1.3	1.4	Warren	*	*	*
	Linn	26	1.6	1.6	Woodbury	19	2.1	2.1
	<b>Group Totals</b>							
Number:	177							
Crude:	1.6							
Adjusted:	1.6							

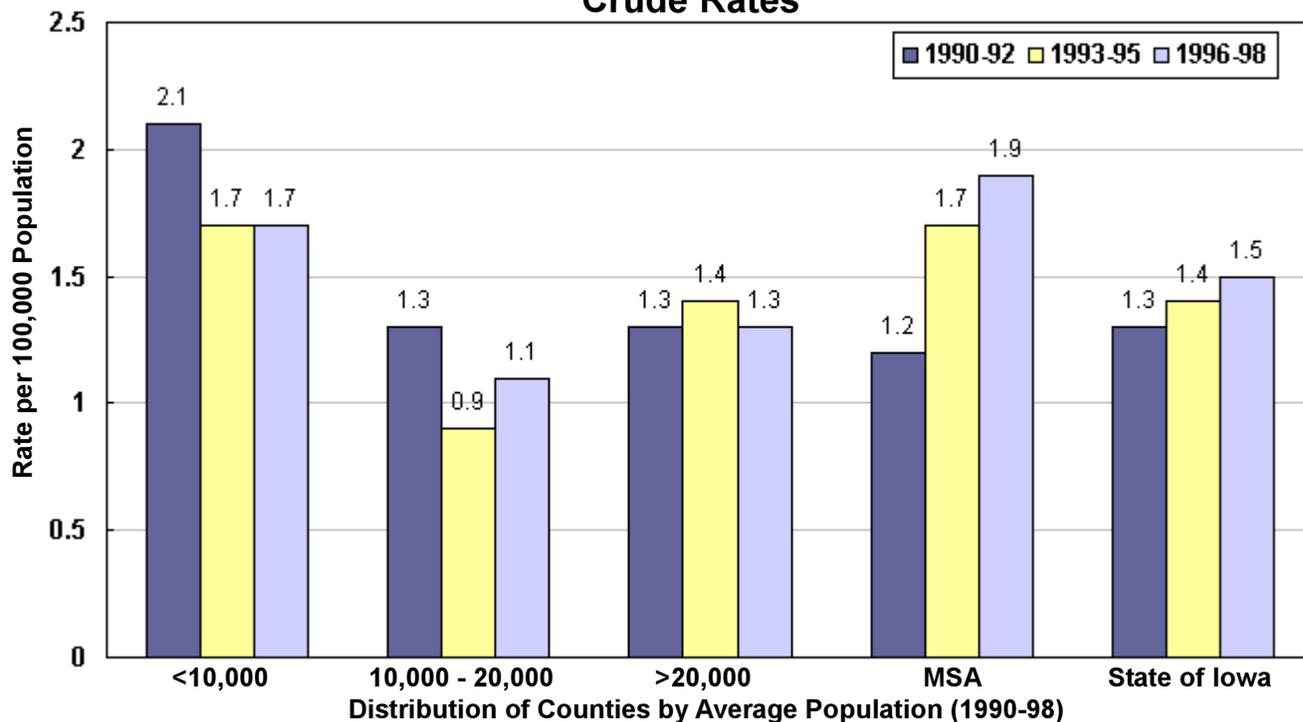
<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

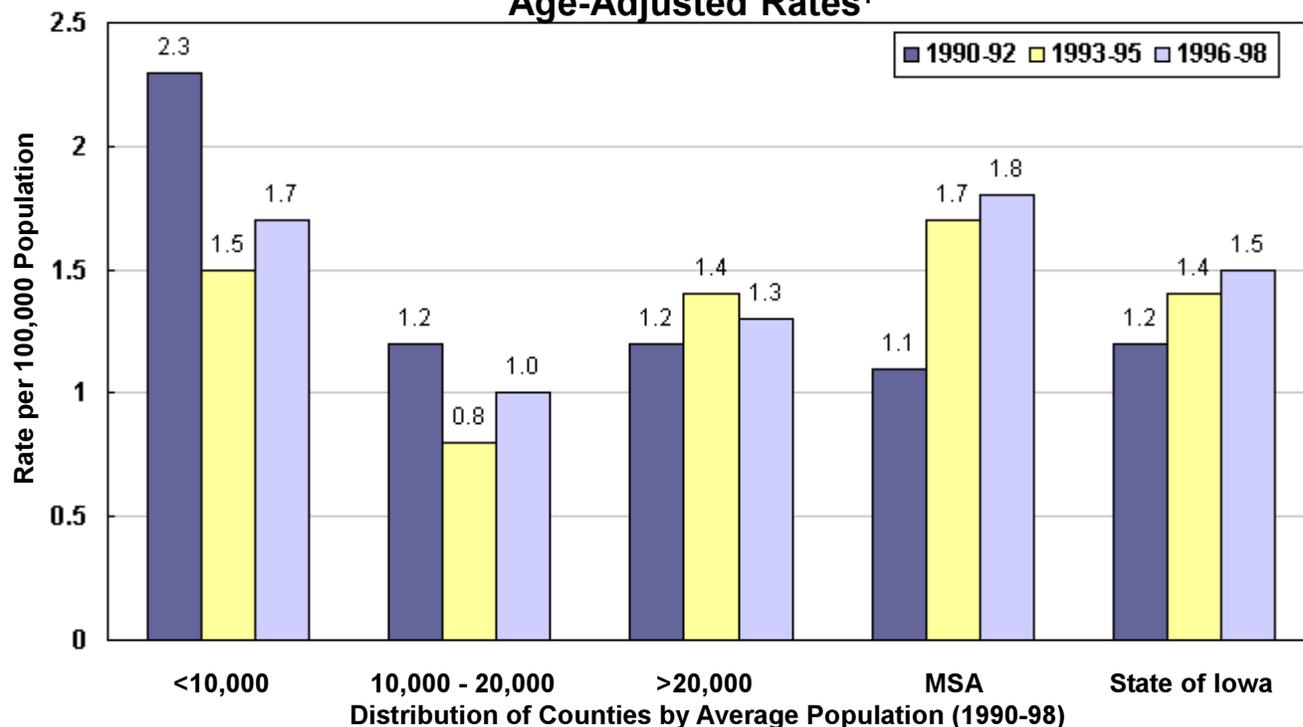
Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Poisoning Mortality by County Group 1990-98

### Crude Rates



### Age-Adjusted Rates<sup>1</sup>



<sup>1</sup>Adjusted to Year 2000 US population

## Burns Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	341	1.3	1.3

	County				County			
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>		Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	*	*	*	Lucas	5	6.1	4.9
	Adams	*	*	*	Monroe	3	4.1	2.8
	Audubon	*	*	*	Osceola	*	*	*
	Clarke	*	*	*	Pocahontas	*	*	*
	Davis	*	*	*	Ringgold	*	*	*
	Decatur	3	4.1	3.4	Taylor	*	*	*
	Fremont	*	*	*	Van Buren	3	4.3	4.6
	Howard	*	*	*	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
	<b>Group Totals</b>							
Number:	26							
Crude:	2.1							
Adjusted:	1.7							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	3	2.4	2.6	Henry	*	*	*
	Appanoose	*	*	*	Humboldt	*	*	*
	Buena Vista	4	2.2	2.0	Iowa	3	2.2	2.1
	Butler	*	*	*	Jefferson	*	*	*
	Calhoun	3	2.9	1.9	Jones	3	1.7	1.7
	Cass	5	3.7	3.0	Keokuk	3	2.9	2.5
	Cedar	*	*	*	Kossuth	*	*	*
	Cherokee	3	2.4	2.0	Louisa	5	4.7	4.7
	Chickasaw	5	4.2	3.6	Lyon	*	*	*
	Clay	*	*	*	Madison	6	5.1	4.6
	Clayton	*	*	*	Mills	*	*	*
	Crawford	*	*	*	Mitchell	*	*	*
	Delaware	*	*	*	Monona	*	*	*
	Dickinson	*	*	*	Montgomery	5	4.7	4.8
	Emmet	*	*	*	O'Brien	*	*	*
	Floyd	*	*	*	Page	3	2.0	1.7
	Franklin	3	3.0	2.3	Palo Alto	*	*	*
	Greene	3	3.3	3.8	Poweshiek	*	*	*
	Grundy	*	*	*	Sac	6	5.5	6.1
	Guthrie	4	3.9	2.4	Shelby	*	*	*
Hamilton	3	2.1	1.8	Tama	3	1.9	1.8	
Hancock	*	*	*	Union	4	3.5	3.6	
Hardin	*	*	*	Winnebago	6	5.6	4.4	
Harrison	*	*	*	Wright	*	*	*	
<b>Group Totals</b>								
Number:	104							
Crude:	1.7							
Adjusted:	1.5							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population &gt;20,000</b>	Benton	3	1.4	1.2	Mahaska	7	3.6	3.3
	Boone	*	*	*	Marion	4	1.4	1.2
	Bremer	*	*	*	Marshall	5	1.4	1.3
	Buchanan	*	*	*	Muscatine	*	*	*
	Carroll	*	*	*	Plymouth	*	*	*
	Cerro Gordo	4	1.0	0.9	Sioux	3	1.1	0.9
	Clinton	8	1.8	1.8	Story	5	0.7	0.9
	Des Moines	6	1.6	1.5	Wapello	8	2.5	2.3
	Fayette	*	*	*	Washington	4	2.2	2.2
	Jackson	3	1.7	1.5	Webster	6	1.7	1.7
	Jasper	7	2.2	1.9	Winneshek	4	2.1	1.9
	Lee	11	3.1	3.3				
	<b>Group Totals</b>							
Number:	93							
Crude:	1.4							
Adjusted:	1.3							

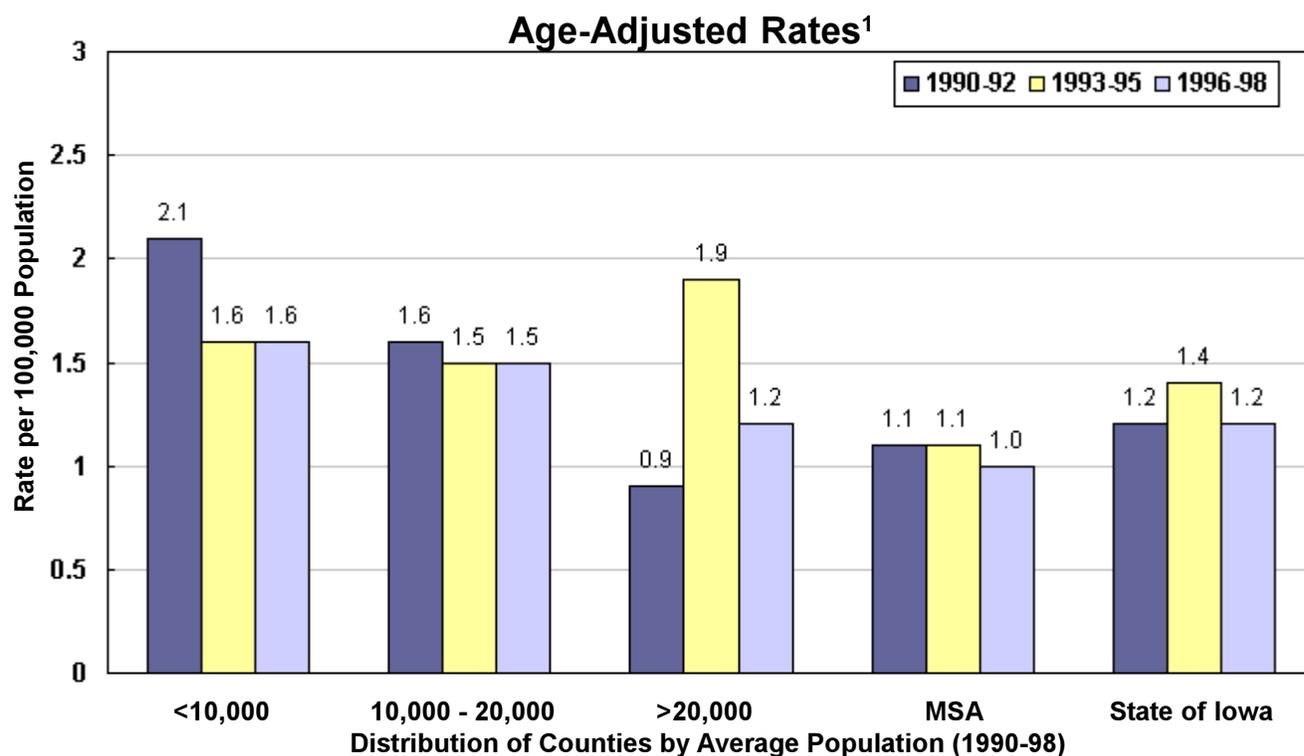
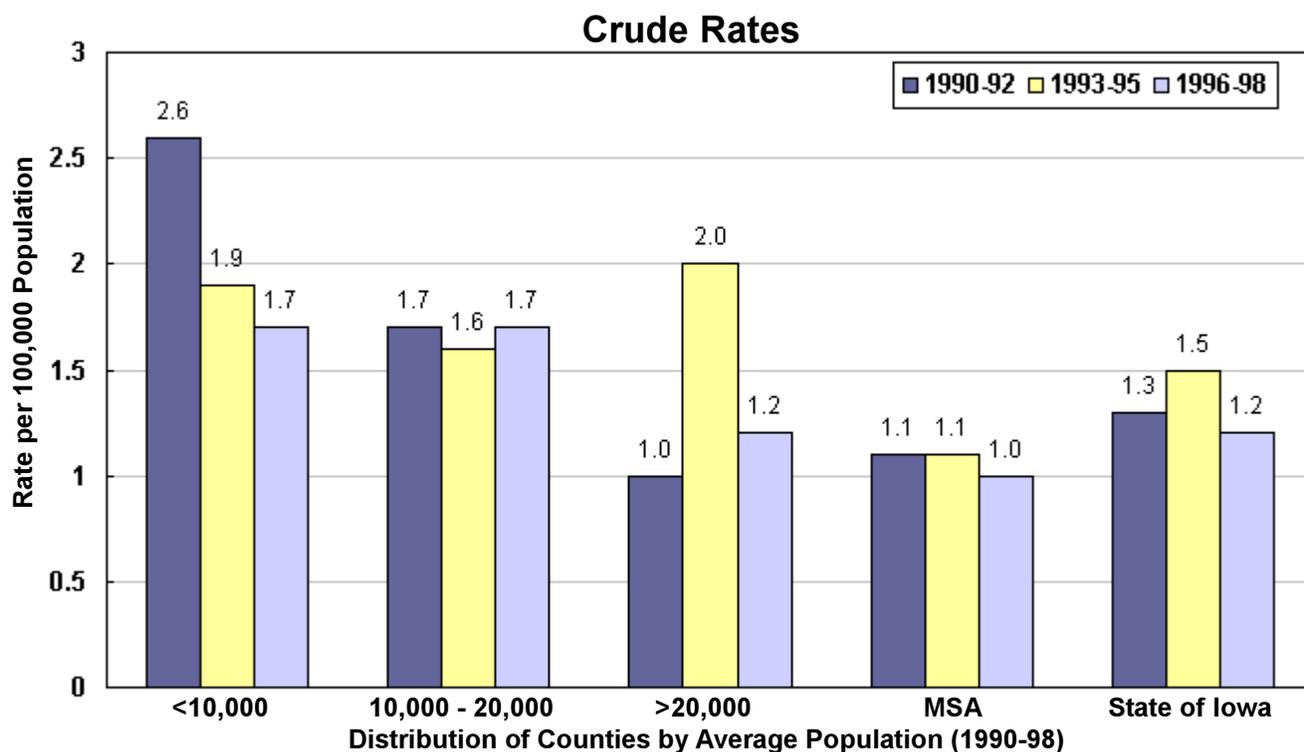
	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>MSA Counties</b>	Black Hawk	13	1.2	1.2	Polk	34	1.1	1.2
	Dallas	3	1.0	1.0	Pottawattamie	6	0.8	0.8
	Dubuque	6	0.8	0.7	Scott	14	1.0	1.0
	Johnson	13	1.4	1.8	Warren	*	*	*
	Linn	16	1.0	1.0	Woodbury	13	1.4	1.4
	<b>Group Totals</b>							
Number:	118							
Crude:	1.1							
Adjusted:	1.1							

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Burns Mortality by County Group 1990-98



<sup>1</sup>Adjusted to Year 2000 US population

## Drowning Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	342	1.3	1.3

	County				County							
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>			
<b>Counties with Average Population &lt;10,000</b>	Adair	*	*	*	Lucas	*	*	*	Monroe	*	*	*
	Adams	*	*	*	Osceola	*	*	*	Pocahontas	*	*	*
	Audubon	*	*	*	Ringgold	*	*	*	Taylor	*	*	*
	Clarke	*	*	*	Van Buren	*	*	*	Wayne	*	*	*
	Davis	3	4.0	3.6	Worth	*	*	*				
	Decatur	*	*	*								
	Fremont	*	*	*								
	Howard	3	3.4	3.0								
	Ida	*	*	*								
	<b>Group Totals</b>											
Number:	19											
Crude:	1.5											
Adjusted:	1.6											

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	*	*	*	Henry	*	*	*	Humboldt	*	*	*
	Appanoose	*	*	*	Iowa	*	*	*	Jefferson	*	*	*
	Buena Vista	*	*	*	Jones	3	1.7	1.6	Keokuk	*	*	*
	Butler	*	*	*	Keokuk	*	*	*	Kossuth	*	*	*
	Calhoun	*	*	*	Louisa	6	5.7	5.4	Lyon	*	*	*
	Cass	*	*	*	Madison	*	*	*	Mills	*	*	*
	Cedar	*	*	*	Mitchell	*	*	*	Monona	4	4.4	5.9
	Cherokee	*	*	*	Montgomery	5	4.7	4.7	O'Brien	*	*	*
	Chickasaw	*	*	*	Page	*	*	*	Palo Alto	*	*	*
	Clay	*	*	*	Poweshiek	*	*	*	Sac	*	*	*
	Clayton	*	*	*	Shelby	3	2.5	3.3	Tama	3	1.9	1.5
	Crawford	3	2.0	1.9	Union	*	*	*	Winnebago	*	*	*
	Delaware	4	2.4	2.2	Wright	*	*	*				
	Dickinson	3	2.1	2.9								
	Emmet	*	*	*								
	Floyd	*	*	*								
	Franklin	*	*	*								
	Greene	*	*	*								
	Grundy	*	*	*								
	Guthrie	*	*	*								
Hamilton	*	*	*									
Hancock	*	*	*									
Hardin	*	*	*									
Harrison	3	2.2	2.5									

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population &gt;20,000</b>	Benton	3	1.4	1.6	Mahaska	3	1.5	1.4	Marion	6	2.2	2.2
	Boone	*	*	*	Marshall	4	1.2	1.3	Muscatine	8	2.2	2.1
	Bremer	*	*	*	Plymouth	*	*	*	Sioux	*	*	*
	Buchanan	4	2.1	2.3	Story	6	0.9	1.0	Wapello	6	1.9	2.0
	Carroll	3	1.5	1.9	Washington	3	1.6	1.7	Webster	7	2.0	2.2
	Cerro Gordo	5	1.2	1.2	Winneshek	4	2.1	2.1				
	Clinton	8	1.8	1.8								
	Des Moines	6	1.6	1.6								
	Fayette	*	*	*								
	Jackson	5	2.8	2.5								
	Jasper	5	1.6	1.7								
	Lee	12	3.4	3.3								

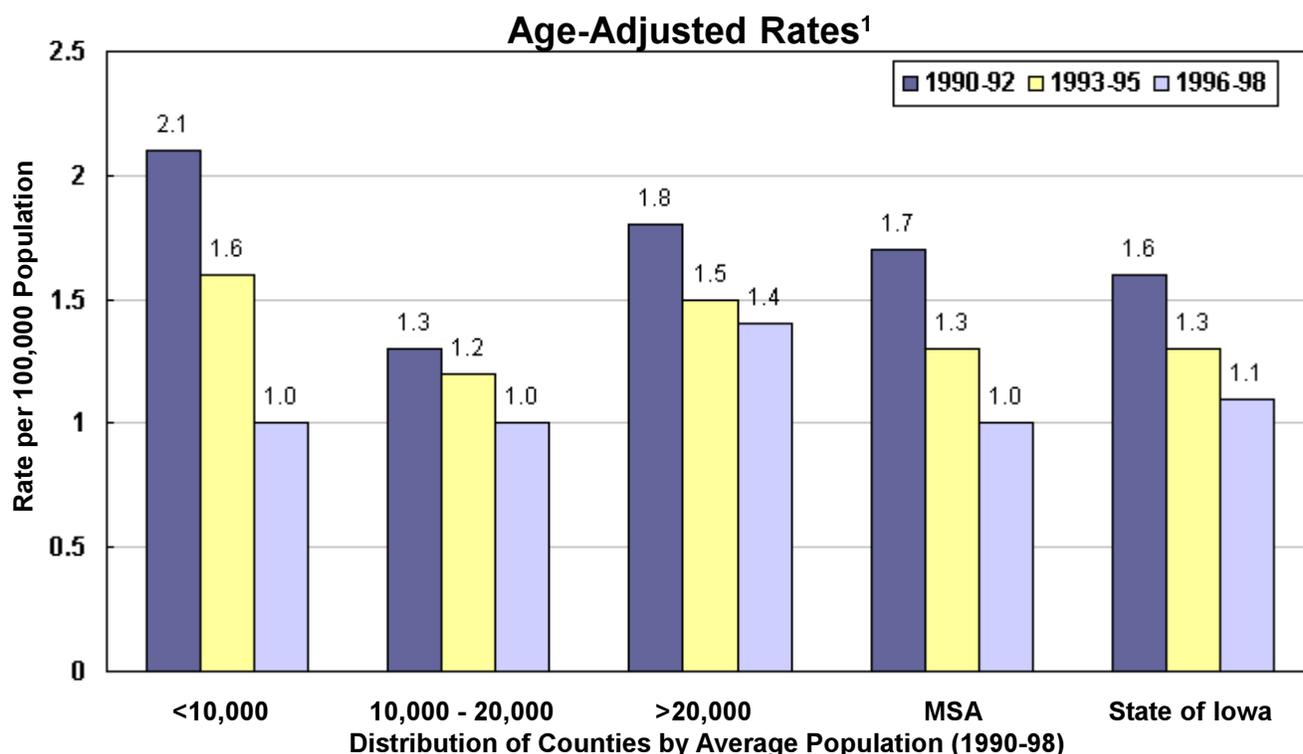
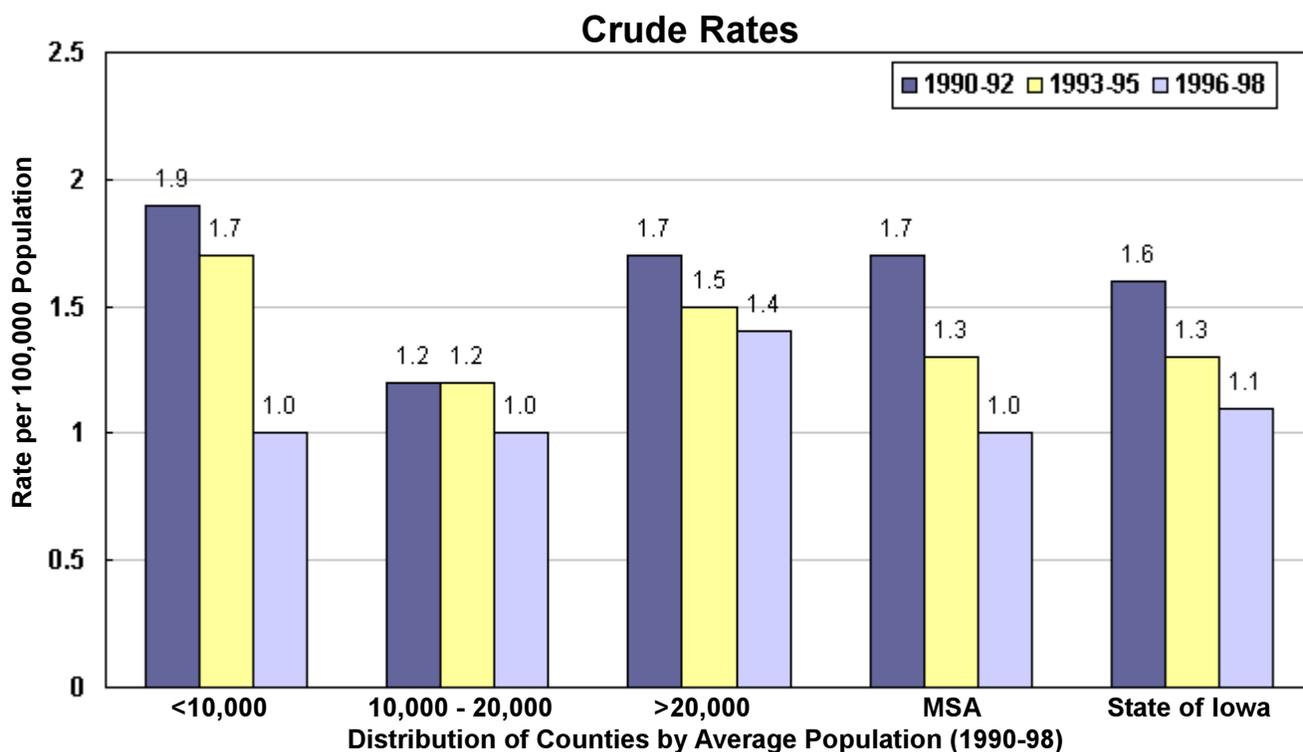
	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>MSA Counties</b>	Black Hawk	8	0.7	0.7	Polk	47	1.5	1.5	Pottawattamie	18	2.4	2.4
	Dallas	7	2.4	2.3	Scott	17	1.2	1.2	Warren	3	0.9	0.8
	Dubuque	9	1.1	1.1	Woodbury	10	1.1	1.2				
	Johnson	12	1.3	1.4								
	Linn	18	1.1	1.1								
	<b>Group Totals</b>											
Number:	149											
Crude:	1.3											
Adjusted:	1.3											

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Drowning Mortality by County Group 1990-98



<sup>1</sup>Adjusted to Year 2000 US population

## All Other Unintentional Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	1,669	6.6	6.0

	County				County				
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	5	6.7	6.0	Lucas	4	4.9	4.7	
	Adams	5	12.2	9.1	Monroe	7	9.6	8.2	
	Audubon	3	4.8	3.7	Osceola	3	4.7	3.9	
	Clarke	11	14.8	12.5	Pocahontas	5	6.1	5.7	
	Davis	10	13.2	12.0	Ringgold	5	10.4	6.9	
	Decatur	19	25.8	19.9	Taylor	5	7.8	4.9	
	Fremont	9	12.4	10.3	Van Buren	15	21.5	14.8	
	Howard	9	10.2	9.1	Wayne	4	6.4	3.4	
	Ida	9	12.2	10.1	Worth	11	15.6	10.4	
	<b>Group Totals</b>								
Number:	139								
Crude:	11.1								
Adjusted:	8.8								

	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	9	7.1	6.0	Henry	14	7.9	6.9	
	Appanoose	7	5.7	5.0	Humboldt	5	5.3	4.3	
	Buena Vista	6	3.4	3.8	Iowa	9	6.6	5.0	
	Butler	9	6.4	4.1	Jefferson	7	4.7	4.4	
	Calhoun	14	13.5	10.8	Jones	15	8.3	8.0	
	Cass	18	13.4	9.3	Keokuk	12	11.5	8.1	
	Cedar	12	7.5	6.0	Kossuth	19	11.7	9.6	
	Cherokee	12	9.7	9.5	Louisa	12	11.3	10.9	
	Chickasaw	8	6.7	5.0	Lyon	4	3.7	3.6	
	Clay	11	6.9	5.7	Madison	13	11.0	9.5	
	Clayton	20	11.8	10.5	Mills	13	10.5	10.5	
	Crawford	13	8.7	8.1	Mitchell	13	13.1	10.4	
	Delaware	12	7.3	6.8	Monona	9	9.9	9.1	
	Dickinson	10	7.2	6.0	Montgomery	10	9.3	6.6	
	Emmet	13	12.8	9.1	O'Brien	11	8.0	6.1	
	Floyd	11	7.3	6.4	Page	20	13.1	8.2	
	Franklin	8	8.0	5.0	Palo Alto	9	9.7	7.9	
	Greene	7	7.7	6.1	Poweshiek	10	5.9	4.9	
	Grundy	8	7.3	5.3	Sac	6	5.5	4.4	
	Guthrie	5	4.9	3.1	Shelby	13	11.0	7.5	
Hamilton	8	5.5	4.6	Tama	11	6.9	5.7		
Hancock	5	4.5	4.2	Union	9	8.0	6.3		
Hardin	24	14.3	9.8	Winnebago	12	11.1	9.6		
Harrison	13	9.7	7.2	Wright	12	9.4	8.3		
<b>Group Totals</b>									
Number:	531								
Crude:	8.5								
Adjusted:	6.9								

	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Benton	15	7.0	6.4	Mahaska	18	9.2	8.2	
	Boone	22	9.6	7.5	Marion	33	12.0	10.6	
	Bremer	13	6.2	5.3	Marshall	37	10.7	8.9	
	Buchanan	19	10.0	9.5	Muscatine	22	6.0	6.0	
	Carroll	17	8.8	8.4	Plymouth	18	8.3	7.5	
	Cerro Gordo	24	5.7	5.1	Sioux	12	4.3	4.7	
	Clinton	26	5.7	5.6	Story	24	3.6	4.2	
	Des Moines	27	7.0	6.4	Wapello	23	7.2	6.1	
	Fayette	10	5.1	3.8	Washington	13	7.1	5.6	
	Jackson	18	10.0	8.9	Webster	33	9.3	8.0	
	Jasper	14	4.4	4.5	Winneshek	6	3.2	3.0	
	Lee	16	4.6	3.9					
	<b>Group Totals</b>								
Number:	460								
Crude:	6.8								
Adjusted:	6.2								

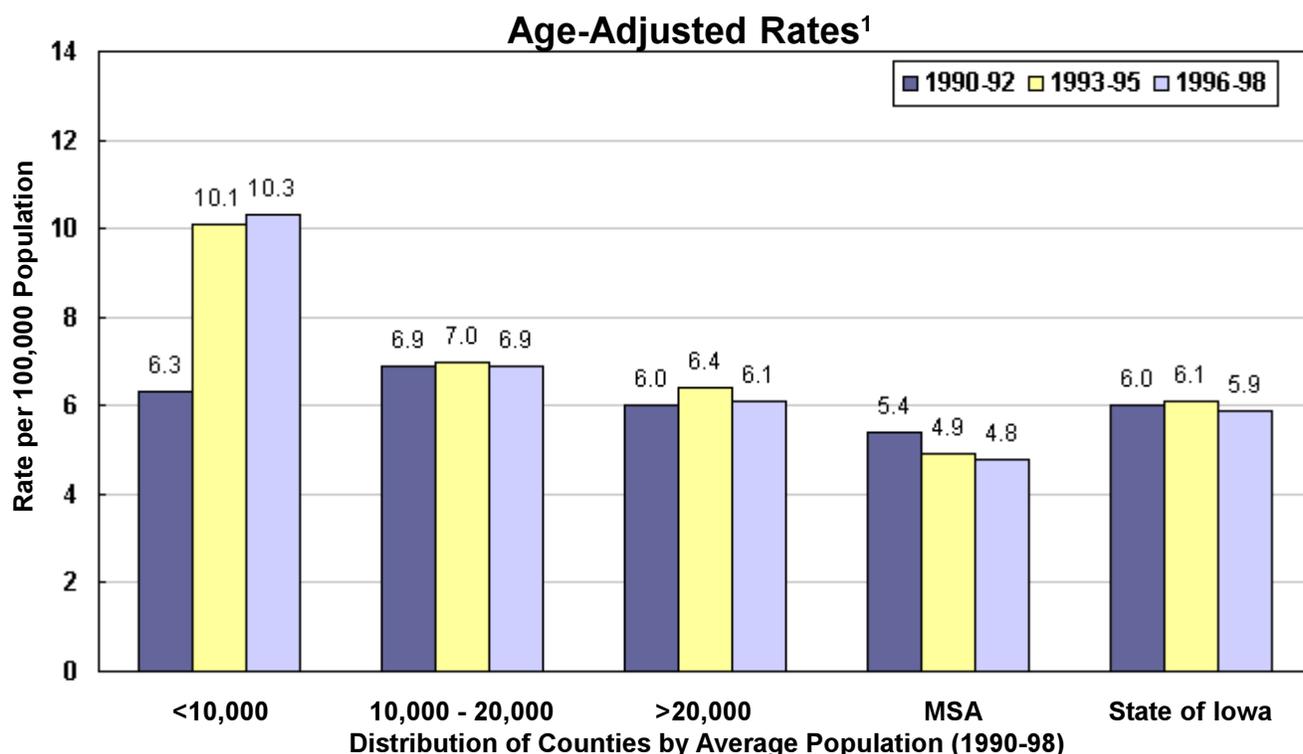
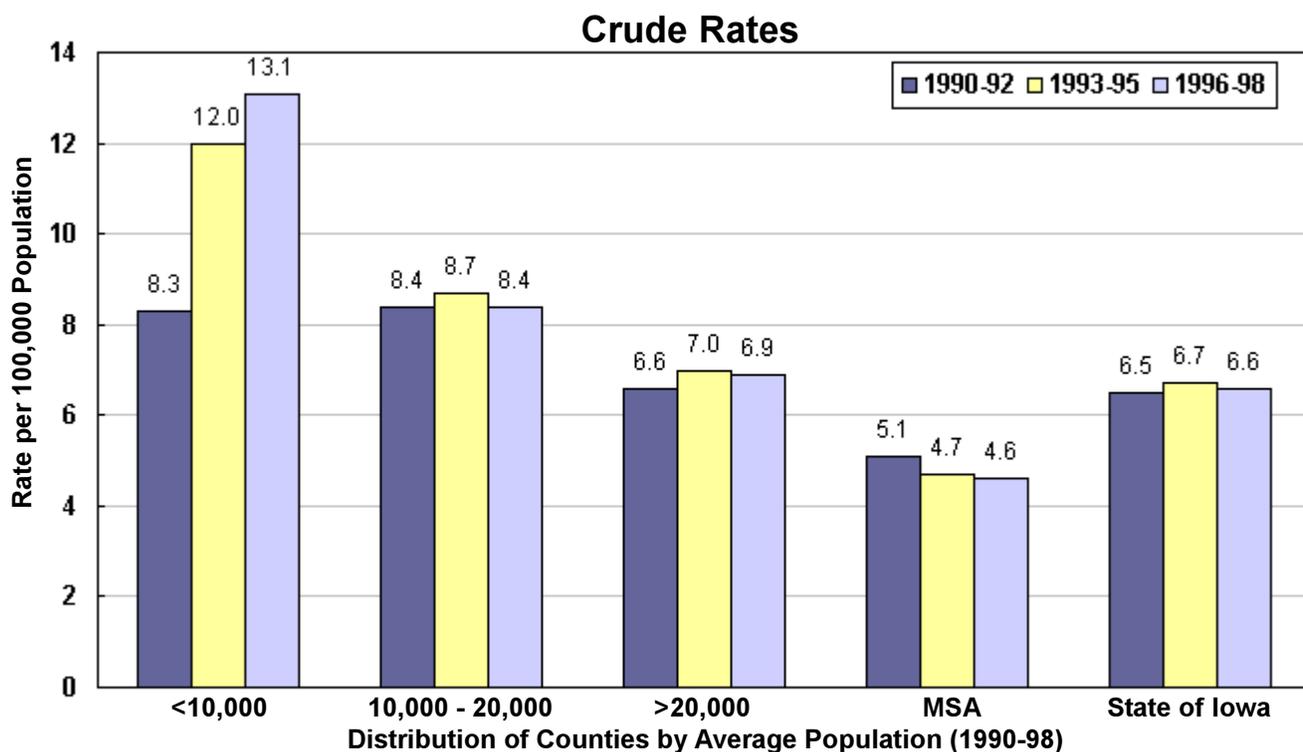
	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	81	7.3	7.3	Polk	142	4.6	4.9	
	Dallas	15	5.1	5.0	Pottawattamie	38	5.0	5.0	
	Dubuque	39	4.9	4.6	Scott	65	4.6	5.0	
	Johnson	29	3.2	4.3	Warren	15	4.4	4.6	
	Linn	66	4.2	4.2	Woodbury	49	5.4	5.2	
	<b>Group Totals</b>								
Number:	539								
Crude:	4.8								
Adjusted:	5.0								

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## All Other Unintentional Mortality by County Group 1990-98



<sup>1</sup>Adjusted to Year 2000 US population

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## Youth Injury Mortality

Injuries remain the leading cause of death in persons age 1-34 years and contribute the most to years of life lost (YLL), particularly for those events of pre-adult ages. Deaths from unintentional injuries, homicides and suicides are important public health problems in those 15-24 years of age and many of these deaths are preventable.

Transportation fatalities accounted for 641 deaths for youth aged 15-19 from 1990-1998. Of these, 98% were due to a motor vehicle traffic death. In the 0-14 age range, 321 transportation deaths occurred over this same period with 92% accounted for by motor vehicle traffic deaths. In general, rates are higher in the more rural counties for both age groups, but dramatically so for the 15-19 year olds. Tables for suicide and homicide are not presented due to the small number of events in both age ranges. Additionally for these events, the <10,000 and 10,000-20,000 county groups have been combined for presentation of crude and adjusted rates. In general, these rates demonstrate an increase in the most rural counties for suicide and homicide with more variable rates in the urban counties.

The source of this information is the cause of death data obtained from death certificates filed at the Iowa Department of Public Health. Analysis was done by the State Health Registry of Iowa at The University of Iowa. Age-adjusted rates were calculated using the Year 2000 US population distribution. Note that the crude rates and age-adjusted rates displayed in the graphs for ages 15-19 are identical to one another. This is because this represents only one age group in the age-adjustment analysis. The crude and age-adjusted rates for the 0-14 age group show slight differences as this represents three age groups (0-4, 5-9, and 10-14) in the age-adjustment analysis.

### HIGHLIGHTS...

- Unintentional injuries, homicides, and suicides are important public health problems in those 15-24 years of age.
- Injuries contribute the most to years of life lost (YLL).
- Motor vehicle deaths account for 98% of all transportation deaths in youth aged 15-19 in Iowa.

## Age 15-19: All Transportation Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	641	34.1	34.1

	County				County				
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	5	107.9	107.9	Lucas	3	54.8	54.8	
	Adams	*	*	*	Monroe	*	*	*	
	Audubon	*	*	*	Osceola	3	65.4	65.4	
	Clarke	*	*	*	Pocahontas	*	*	*	
	Davis	5	92.4	92.4	Ringgold	*	*	*	
	Decatur	*	*	*	Taylor	*	*	*	
	Fremont	6	119.0	119.0	Van Buren	*	*	*	
	Howard	*	*	*	Wayne	10	278.8	278.8	
	Ida	6	123.0	123.0	Worth	*	*	*	
	<b>Group Totals</b>								
Number:	52								
Crude:	61.9								
Adjusted:	61.9								

	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	7	80.3	80.3	Henry	5	38.6	38.6	
	Appanoose	6	67.3	67.3	Humboldt	3	50.8	50.8	
	Buena Vista	4	28.6	28.6	Iowa	4	48.9	48.9	
	Butler	6	60.5	60.5	Jefferson	7	74.3	74.3	
	Calhoun	*	*	*	Jones	11	87.8	87.8	
	Cass	7	81.0	81.0	Keokuk	6	86.3	86.3	
	Cedar	5	48.9	48.9	Kossuth	10	90.6	90.6	
	Cherokee	4	46.9	46.9	Louisa	6	76.5	76.5	
	Chickasaw	5	55.8	55.8	Lyon	6	76.2	76.2	
	Clay	3	29.2	29.2	Madison	7	77.4	77.4	
	Clayton	13	108.8	108.8	Mills	7	72.8	72.8	
	Crawford	8	65.4	65.4	Mitchell	6	86.0	86.0	
	Delaware	4	33.9	33.9	Monona	6	105.0	105.0	
	Dickinson	*	*	*	Montgomery	6	81.0	81.0	
	Emmet	*	*	*	O'Brien	7	75.3	75.3	
	Floyd	3	28.8	28.8	Page	3	28.1	28.1	
	Franklin	4	64.0	64.0	Palo Alto	5	69.3	69.3	
	Greene	*	*	*	Poweshiek	5	32.2	32.2	
	Grundy	*	*	*	Sac	3	44.8	44.8	
	Guthrie	*	*	*	Shelby	3	36.9	36.9	
Hamilton	3	31.4	31.4	Tama	9	84.4	84.4		
Hancock	6	78.5	78.5	Union	7	78.5	78.5		
Hardin	*	*	*	Winnebago	*	*	*		
Harrison	5	52.1	52.1	Wright	4	51.8	51.8		
<b>Group Totals</b>									
Number:	235								
Crude:	53.5								
Adjusted:	53.5								

	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Benton	7	48.0	48.0	Mahaska	3	21.9	21.9	
	Boone	*	*	*	Marion	6	27.0	27.0	
	Bremer	4	22.6	22.6	Marshall	8	33.3	33.3	
	Buchanan	3	20.9	20.9	Muscatine	9	33.2	33.2	
	Carroll	9	68.5	68.5	Plymouth	6	36.4	36.4	
	Cerro Gordo	13	44.2	44.2	Sioux	12	46.5	46.5	
	Clinton	9	27.4	27.4	Story	5	7.1	7.1	
	Des Moines	10	38.0	38.0	Wapello	10	42.8	42.8	
	Fayette	6	40.9	40.9	Washington	5	42.6	42.6	
	Jackson	9	67.8	67.8	Webster	5	20.4	20.4	
	Jasper	8	36.6	36.6	Winneshek	4	21.4	21.4	
	Lee	10	42.7	42.7					
	<b>Group Totals</b>								
Number:	163								
Crude:	31.7								
Adjusted:	31.7								

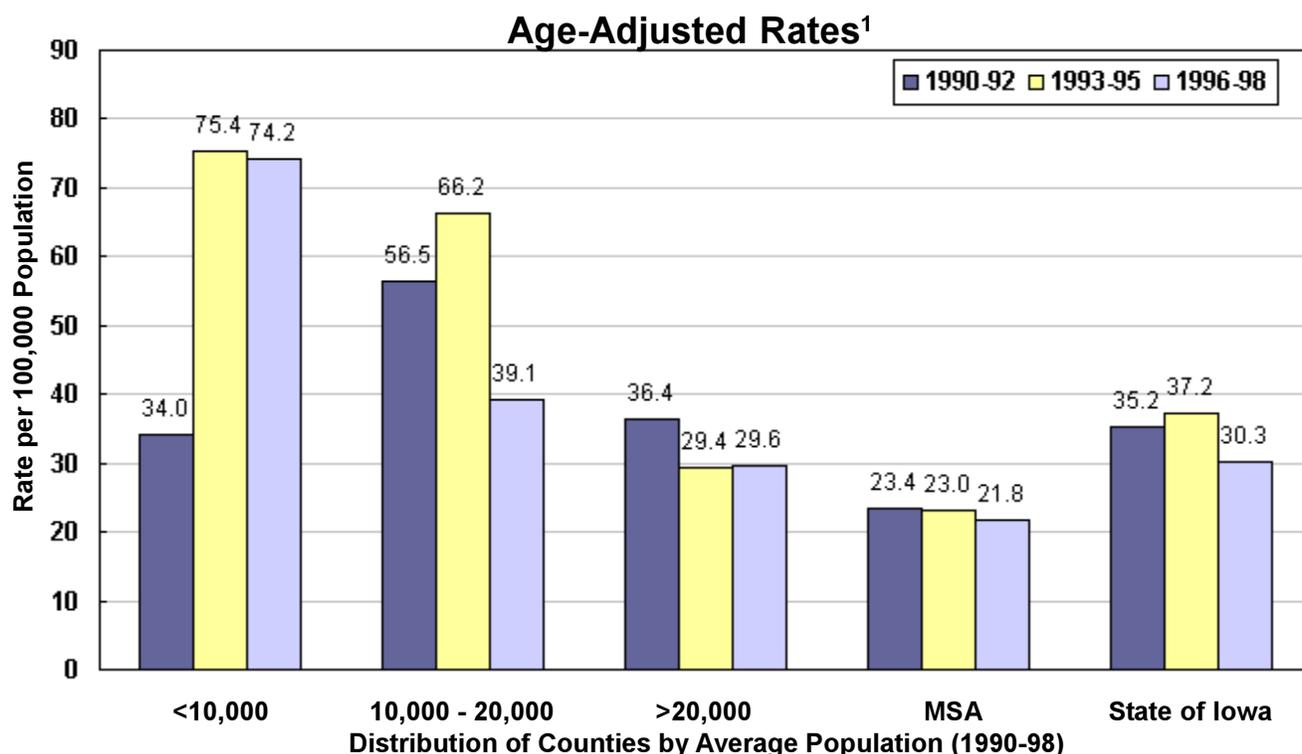
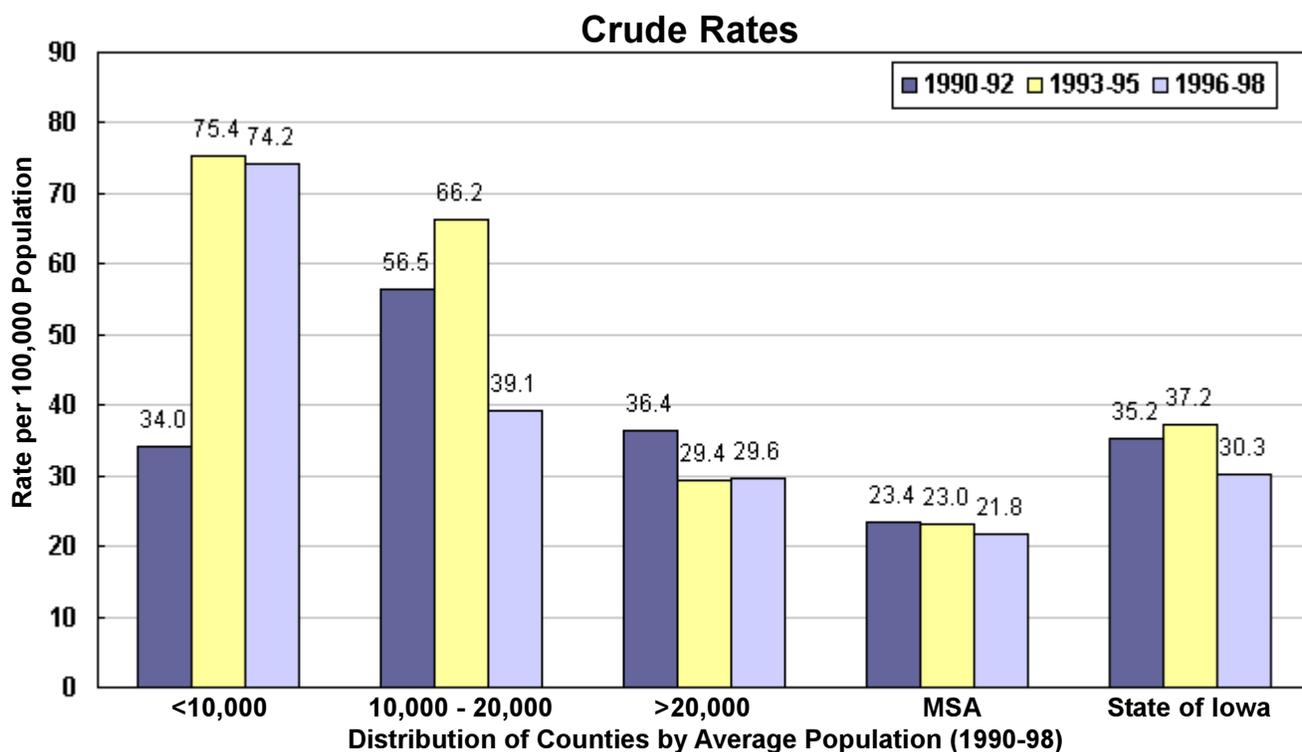
	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	18	20.1	20.1	Polk	47	22.2	22.2	
	Dallas	4	19.8	19.8	Pottawattamie	16	28.9	28.9	
	Dubuque	22	34.1	34.1	Scott	25	24.5	24.5	
	Johnson	13	15.7	15.7	Warren	5	16.9	16.9	
	Linn	24	20.2	20.2	Woodbury	17	24.9	24.9	
	<b>Group Totals</b>								
Number:	191								
Crude:	22.7								
Adjusted:	22.7								

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Number of events is less than 3

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

### Age 15-19: All Transportation Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Age 15-19: Motor Vehicle Traffic Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	628	33.4	33.4

	County				County			
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>		Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	5	107.9	107.9	Lucas	*	*	*
	Adams	*	*	*	Monroe	*	*	*
	Audubon	*	*	*	Osceola	3	65.4	65.4
	Clarke	*	*	*	Pocahontas	*	*	*
	Davis	5	92.4	92.4	Ringgold	*	*	*
	Decatur	2	26.6	26.6	Taylor	*	*	*
	Fremont	6	119.0	119.0	Van Buren	*	*	*
	Howard	*	*	*	Wayne	10	278.8	278.8
	Ida	6	123.0	123.0	Worth	*	*	*
	<b>Group Totals</b>							
Number:	51							
Crude:	60.7							
Adjusted:	60.7							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	7	80.3	80.3	Henry	5	38.6	38.6
	Appanoose	6	67.3	67.3	Humboldt	3	50.8	50.8
	Buena Vista	4	28.6	28.6	Iowa	4	48.9	48.9
	Butler	6	60.5	60.5	Jefferson	7	74.3	74.3
	Calhoun	*	*	*	Jones	11	87.8	87.8
	Cass	7	81.0	81.0	Keokuk	6	86.3	86.3
	Cedar	5	48.9	48.9	Kossuth	10	90.6	90.6
	Cherokee	4	46.9	46.9	Louisa	6	76.5	76.5
	Chickasaw	5	55.8	55.8	Lyon	4	50.8	50.8
	Clay	3	29.2	29.2	Madison	7	77.4	77.4
	Clayton	13	108.8	108.8	Mills	7	72.8	72.8
	Crawford	8	65.4	65.4	Mitchell	6	86.0	86.0
	Delaware	4	33.9	33.9	Monona	6	105.0	105.0
	Dickinson	*	*	*	Montgomery	6	81.0	81.0
	Emmet	*	*	*	O'Brien	7	75.3	75.3
	Floyd	3	28.8	28.8	Page	3	28.1	28.1
	Franklin	4	64.0	64.0	Palo Alto	5	69.3	69.3
	Greene	*	*	*	Poweshiek	5	32.2	32.2
	Grundy	*	*	*	Sac	3	44.8	44.8
	Guthrie	*	*	*	Shelby	3	36.9	36.9
Hamilton	3	31.4	31.4	Tama	9	84.4	84.4	
Hancock	6	78.5	78.5	Union	6	67.2	67.2	
Hardin	*	*	*	Winnebago	*	*	*	
Harrison	5	52.1	52.1	Wright	4	51.8	51.8	
<b>Group Totals</b>								
Number:	232							
Crude:	52.8							
Adjusted:	52.8							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population &gt;20,000</b>	Benton	7	48.0	48.0	Mahaska	3	21.9	21.9
	Boone	*	*	*	Marion	6	27.0	27.0
	Bremer	4	22.6	22.6	Marshall	8	33.3	33.3
	Buchanan	3	20.9	20.9	Muscatine	9	33.2	33.2
	Carroll	9	68.5	68.5	Plymouth	6	36.4	36.4
	Cerro Gordo	13	44.2	44.2	Sioux	12	46.5	46.5
	Clinton	9	27.4	27.4	Story	5	7.1	7.1
	Des Moines	10	38.0	38.0	Wapello	10	42.8	42.8
	Fayette	6	40.9	40.9	Washington	5	42.6	42.6
	Jackson	9	67.8	67.8	Webster	5	20.4	20.4
	Jasper	8	36.6	36.6	Winneshek	4	21.4	21.4
	Lee	10	42.7	42.7				
	<b>Group Totals</b>							
Number:	163							
Crude:	31.7							
Adjusted:	31.7							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>MSA Counties</b>	Black Hawk	18	20.1	20.1	Polk	46	21.8	21.8
	Dallas	4	19.8	19.8	Pottawattamie	15	27.1	27.1
	Dubuque	19	29.5	29.5	Scott	25	24.5	24.5
	Johnson	11	13.3	13.3	Warren	5	16.9	16.9
	Linn	22	18.5	18.5	Woodbury	17	24.9	24.9
	<b>Group Totals</b>							
Number:	182							
Crude:	21.6							
Adjusted:	21.6							

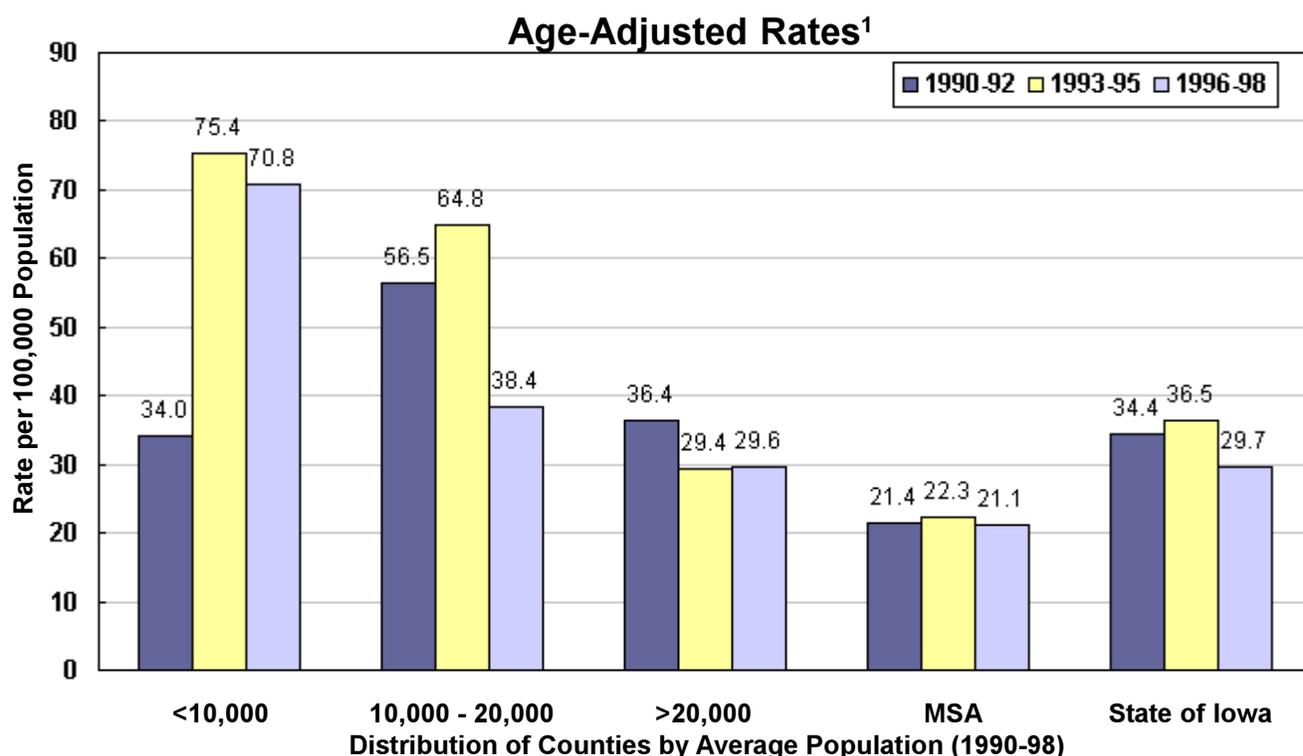
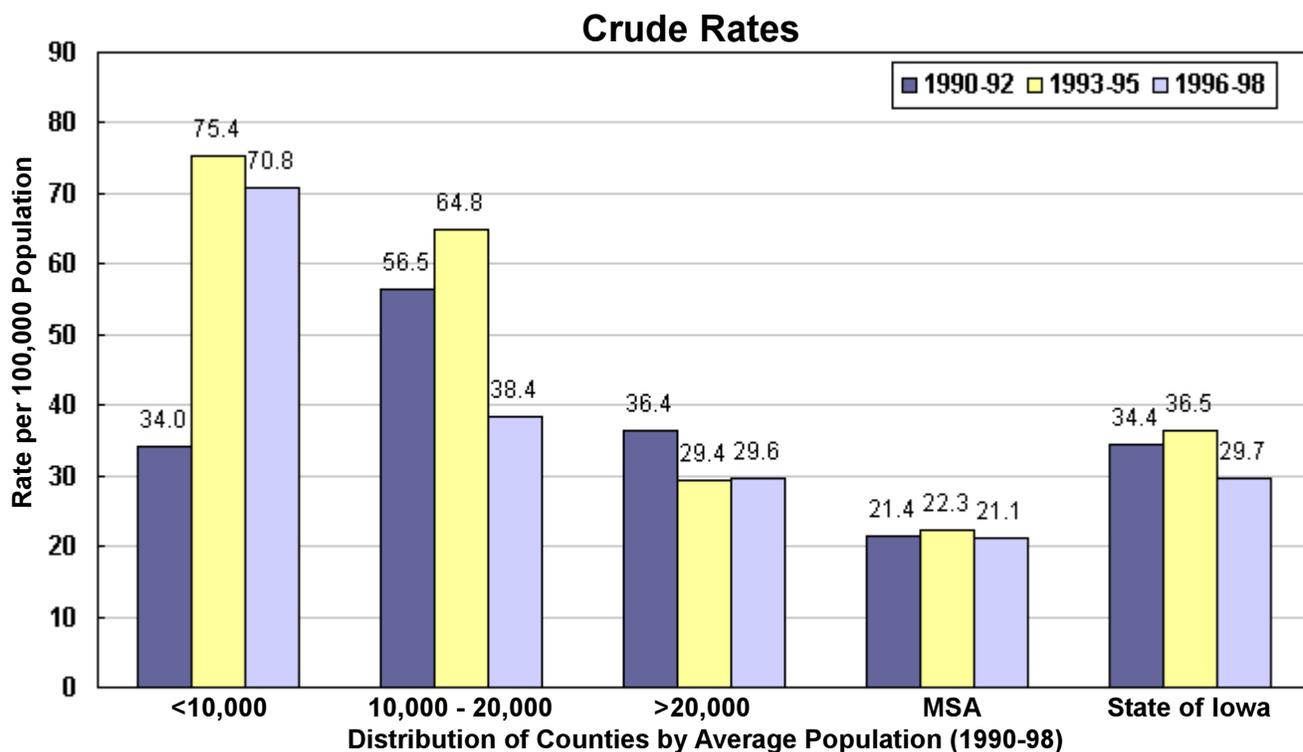
<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Number of events is less than 3

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

<sup>2</sup>Adjusted to Year 2000 US population

## Age 15-19: Motor Vehicle Traffic Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Age 0-14: All Transportation Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	321	6.0	6.0

		County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>		Adair	*	*	*	Lucas	*	*	*
		Adams	*	*	*	Monroe	*	*	*
		Audubon	*	*	*	Osceola	*	*	*
		Clarke	*	*	*	Pocahontas	*	*	*
		Davis	4	24.0	24.9	Ringgold	*	*	*
	<u>Group Totals</u>	Decatur	*	*	*	Taylor	*	*	*
	Number: 22	Fremont	*	*	*	Van Buren	*	*	*
	Crude: 8.4	Howard	*	*	*	Wayne	*	*	*
	Adjusted: 8.4	Ida	*	*	*	Worth	3	20.9	22.4

		County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population 10,000 to 20,000</b>		Allamakee	*	*	*	Henry	4	11.1	11.2
		Appanoose	3	12.0	12.9	Humboldt	*	*	*
		Buena Vista	3	7.9	7.9	Iowa	3	10.4	10.4
		Butler	*	*	*	Jefferson	*	*	*
		Calhoun	*	*	*	Jones	*	*	*
		Cass	*	*	*	Keokuk	3	13.5	15.1
		Cedar	3	8.7	7.8	Kossuth	*	*	*
	<u>Group Totals</u>	Cherokee	*	*	*	Louisa	*	*	*
	Number: 107	Chickasaw	4	14.8	13.5	Lyon	4	15.0	14.3
	Crude: 8.1	Clay	*	*	*	Madison	3	11.3	12.6
	Adjusted: 8.0	Clayton	4	10.6	10.7	Mills	*	*	*
		Crawford	3	9.3	9.3	Mitchell	*	*	*
		Delaware	*	*	*	Monona	*	*	*
		Dickinson	*	*	*	Montgomery	*	*	*
		Emmet	*	*	*	O'Brien	3	10.1	10.4
		Floyd	*	*	*	Page	*	*	*
		Franklin	3	14.3	13.8	Palo Alto	5	25.1	24.2
		Greene	3	16.5	15.6	Poweshiek	*	*	*
		Grundy	*	*	*	Sac	5	21.0	19.7
		Guthrie	*	*	*	Shelby	3	11.7	11.6
	Hamilton	4	13.5	12.8	Tama	*	*	*	
	Hancock	3	12.0	12.6	Union	*	*	*	
	Hardin	*	*	*	Winnebago	6	27.1	26.7	
	Harrison	4	13.6	13.4	Wright	4	15.7	15.5	

		County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>		Benton	4	8.2	8.1	Mahaska	*	*	*
		Boone	9	19.2	19.2	Marion	*	*	*
		Bremer	*	*	*	Marshall	5	7.2	7.1
		Buchanan	*	*	*	Muscatine	11	13.0	12.9
		Carroll	*	*	*	Plymouth	3	5.8	6.0
	<u>Group Totals</u>	Cerro Gordo	4	4.7	4.7	Sioux	7	10.2	10.1
	Number: 87	Clinton	4	4.1	4.2	Story	*	*	*
	Crude: 6.1	Des Moines	5	6.3	6.4	Wapello	9	14.4	14.4
	Adjusted: 6.1	Fayette	*	*	*	Washington	*	*	*
		Jackson	3	7.4	7.2	Webster	5	6.6	6.6
		Jasper	3	4.7	4.5	Winneshek	*	*	*
		Lee	7	9.6	9.6				

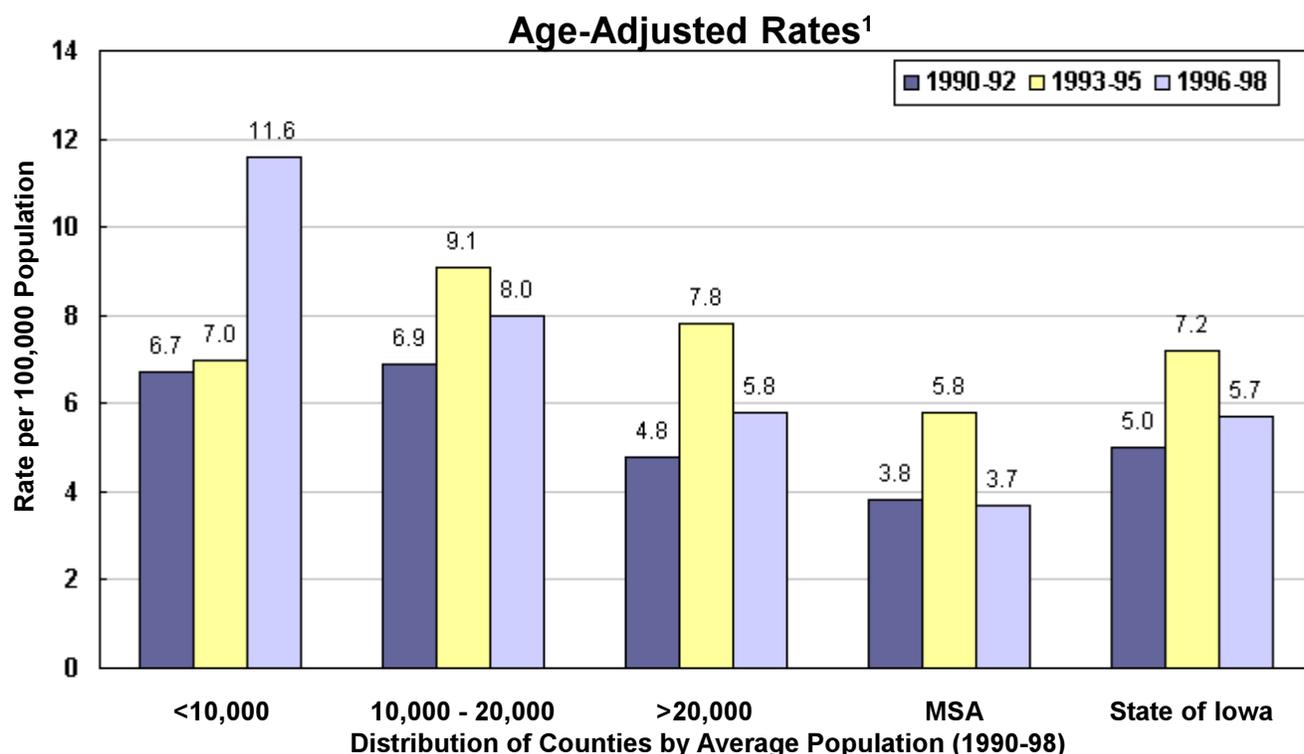
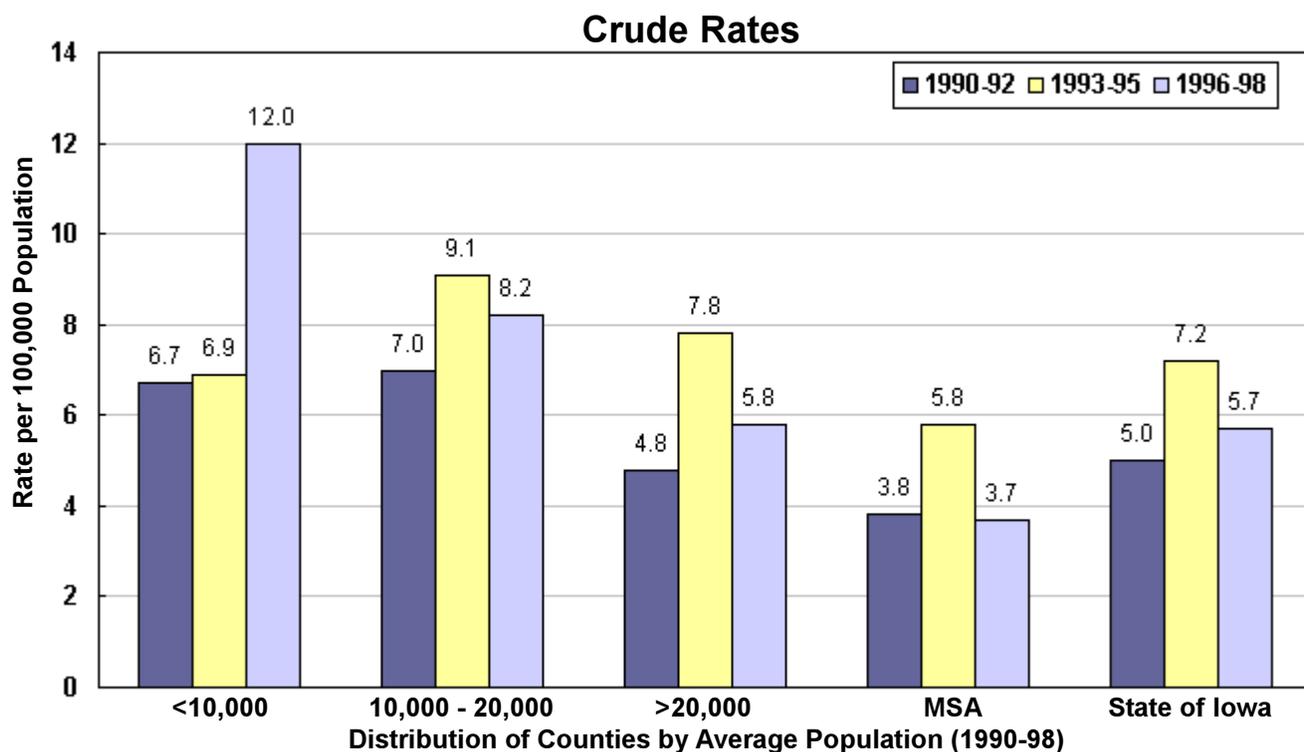
		County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>MSA Counties</b>		Black Hawk	12	5.2	5.2	Polk	26	4.0	4.1
		Dallas	4	5.9	5.9	Pottawattamie	8	4.8	4.8
	<u>Group Totals</u>	Dubuque	7	4.1	4.1	Scott	9	2.8	2.8
	Number: 105	Johnson	5	3.3	3.4	Warren	*	*	*
	Crude: 4.4	Linn	19	5.9	5.8	Woodbury	13	6.2	6.1
	Adjusted: 4.4								

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Number of events is less than 3

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Age 0-14: All Transportation Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Age 0-14: Motor Vehicle Traffic Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	295	5.5	5.5

	Counties with Average Population <10,000				Counties with Average Population 10,000 to 20,000			
	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monroe	*	*	*
	Audubon	*	*	*	Osceola	*	*	*
	Clarke	*	*	*	Pocahontas	*	*	*
	Davis	4	24.0	24.9	Ringgold	*	*	*
	Decatur	*	*	*	Taylor	*	*	*
	Fremont	*	*	*	Van Buren	*	*	*
	Howard	*	*	*	Wayne	*	*	*
	Ida	*	*	*	Worth	*	*	*
	<b>Group Totals</b>							
Number:	19							
Crude:	7.3							
Adjusted:	7.2							

	Counties with Average Population >20,000				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Allamakee	*	*	*	Henry	4	11.1	11.2
	Appanoose	*	*	*	Humboldt	*	*	*
	Buena Vista	3	7.9	7.9	Iowa	3	10.4	10.4
	Butler	*	*	*	Jefferson	*	*	*
	Calhoun	*	*	*	Jones	*	*	*
	Cass	*	*	*	Keokuk	3	13.5	15.1
	Cedar	3	8.7	7.8	Kossuth	*	*	*
	Cherokee	*	*	*	Louisa	*	*	*
	Chickasaw	4	14.8	13.5	Lyon	3	11.3	10.8
	Clay	*	*	*	Madison	3	11.3	12.6
	Clayton	4	10.6	10.7	Mills	*	*	*
	Crawford	3	9.3	9.3	Mitchell	*	*	*
	Delaware	*	*	*	Monona	*	*	*
	Dickinson	*	*	*	Montgomery	*	*	*
	Emmet	*	*	*	O'Brien	3	10.1	10.4
	Floyd	*	*	*	Page	*	*	*
	Franklin	*	*	*	Palo Alto	3	15.1	15.3
	Greene	3	16.5	15.6	Poweshiek	*	*	*
	Grundy	*	*	*	Sac	5	21.0	19.7
	Guthrie	*	*	*	Shelby	*	*	*
Hamilton	4	13.5	12.8	Tama	*	*	*	
Hancock	*	*	*	Union	*	*	*	
Hardin	*	*	*	Winnebago	6	27.1	26.7	
Harrison	4	13.6	13.4	Wright	4	15.7	15.5	

	Counties with Average Population >20,000				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Benton	4	8.2	8.1	Mahaska	*	*	*
	Boone	9	19.2	19.2	Marion	*	*	*
	Bremer	*	*	*	Marshall	5	7.2	7.1
	Buchanan	*	*	*	Muscatine	8	9.5	9.2
	Carroll	*	*	*	Plymouth	*	*	*
	Cerro Gordo	4	4.7	4.7	Sioux	6	8.8	8.5
	Clinton	4	4.1	4.2	Story	*	*	*
	Des Moines	4	5.0	5.1	Wapello	9	14.4	14.4
	Fayette	*	*	*	Washington	*	*	*
	Jackson	3	7.4	7.2	Webster	5	6.6	6.6
	Jasper	*	*	*	Winneshek	*	*	*
	Lee	7	9.6	9.6				

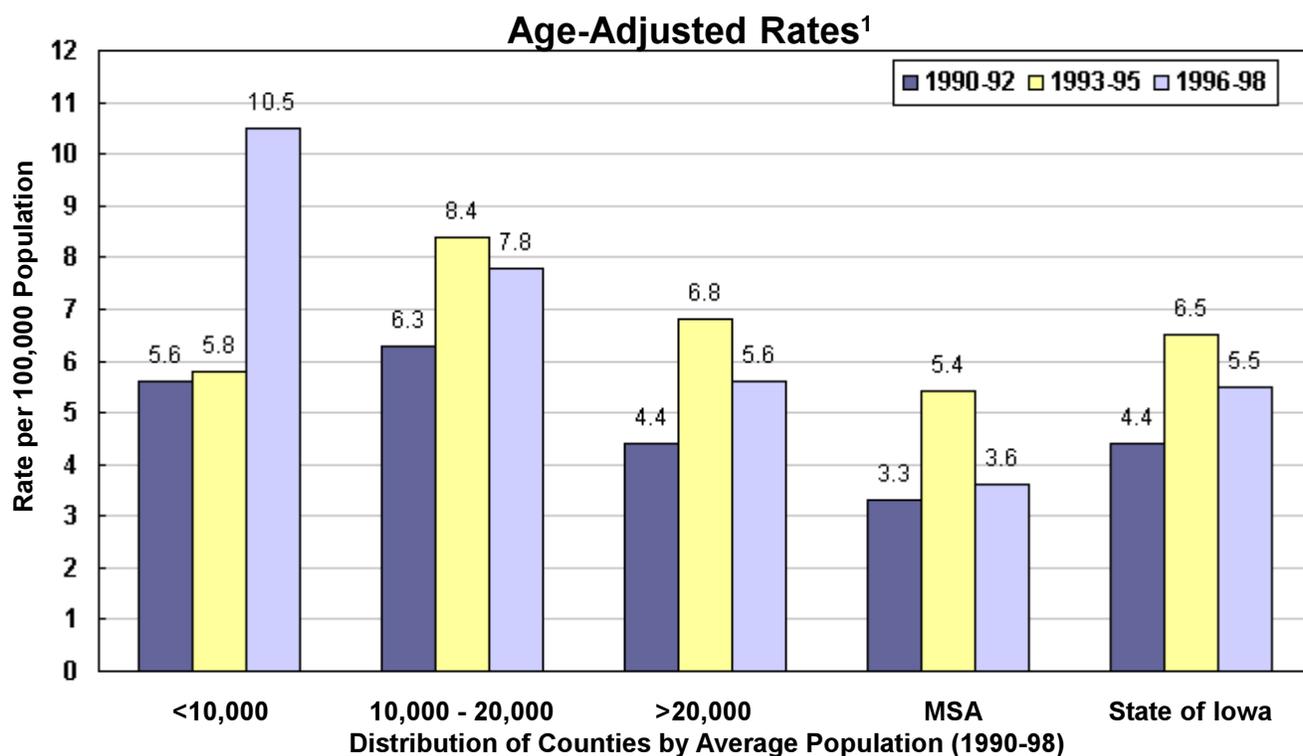
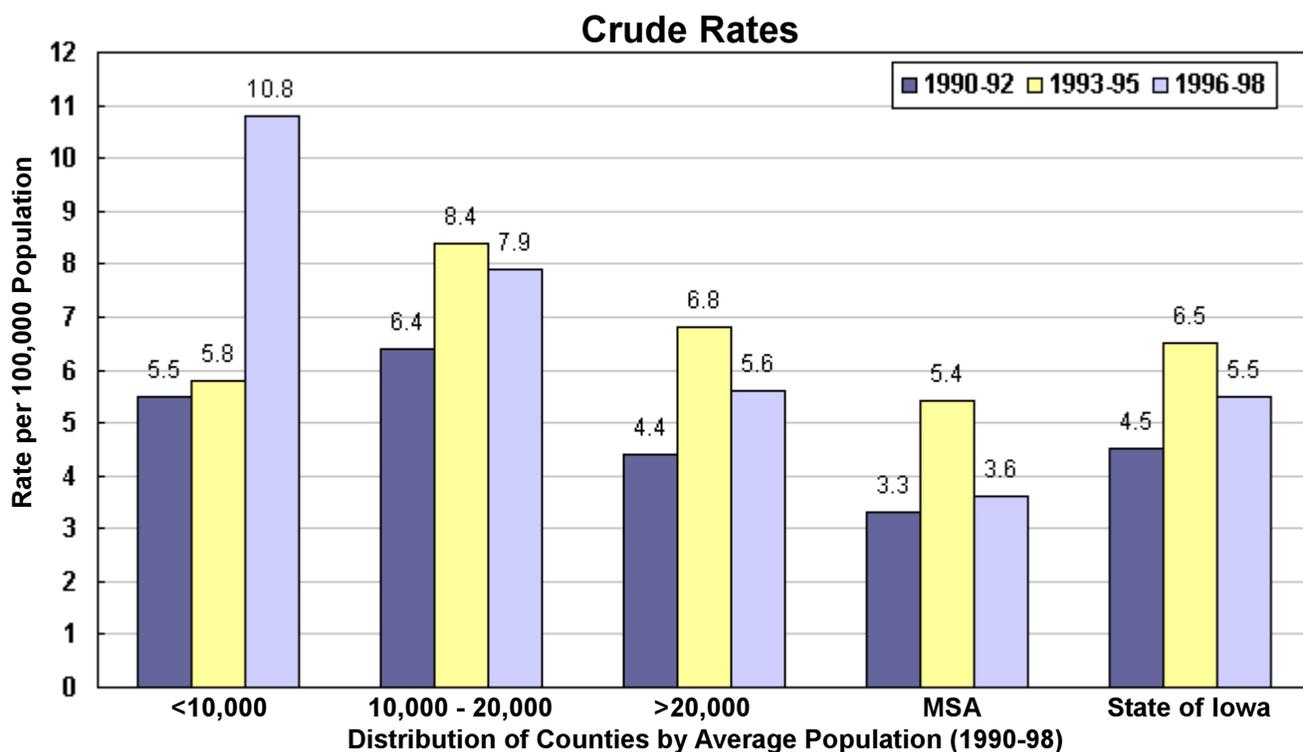
	Counties with Average Population >20,000				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	12	5.2	5.2	Polk	24	3.7	3.7
	Dallas	4	5.9	5.9	Pottawattamie	6	3.6	3.6
	Dubuque	6	3.5	3.5	Scott	8	2.5	2.5
	Johnson	5	3.3	3.4	Warren	*	*	*
	Linn	18	5.5	5.5	Woodbury	13	6.2	6.1
	<b>Group Totals</b>							
Number:	97							
Crude:	4.1							
Adjusted:	4.1							

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Number of events is less than 3

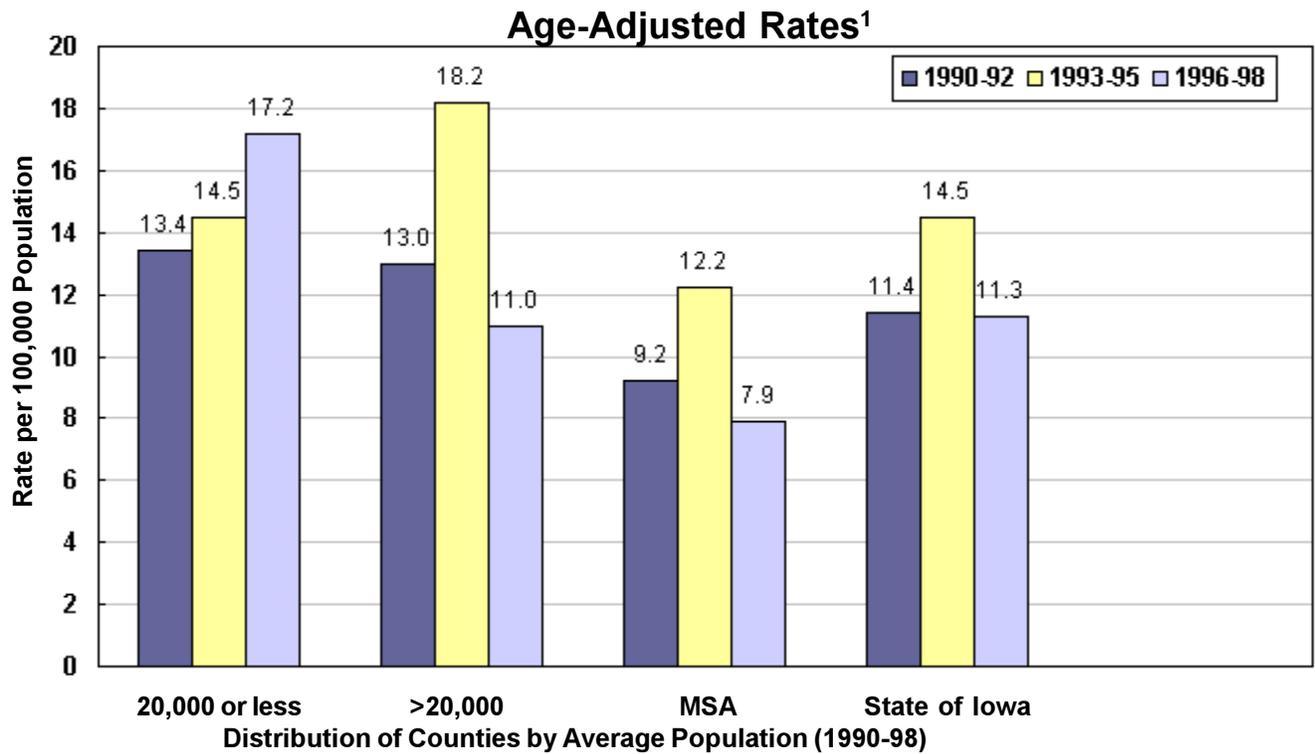
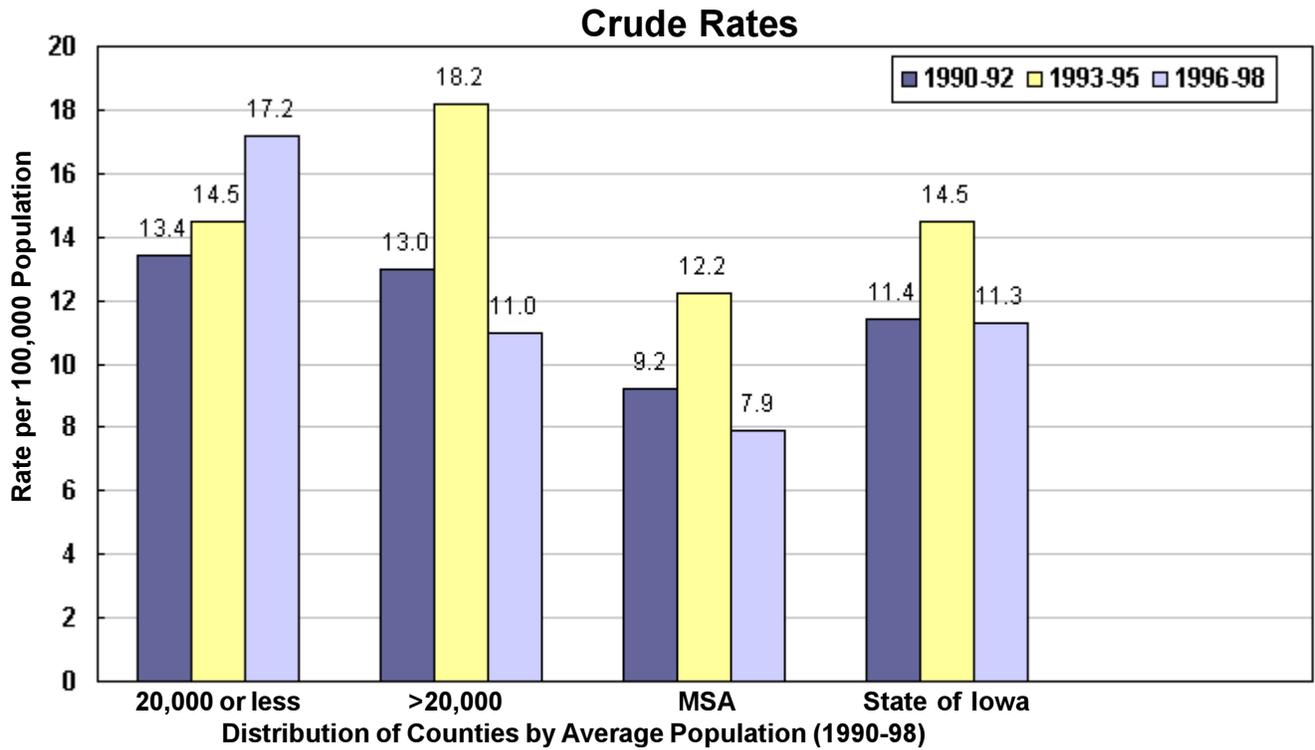
Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Age 0-14: Motor Vehicle Traffic Mortality by County Group 1990-1998

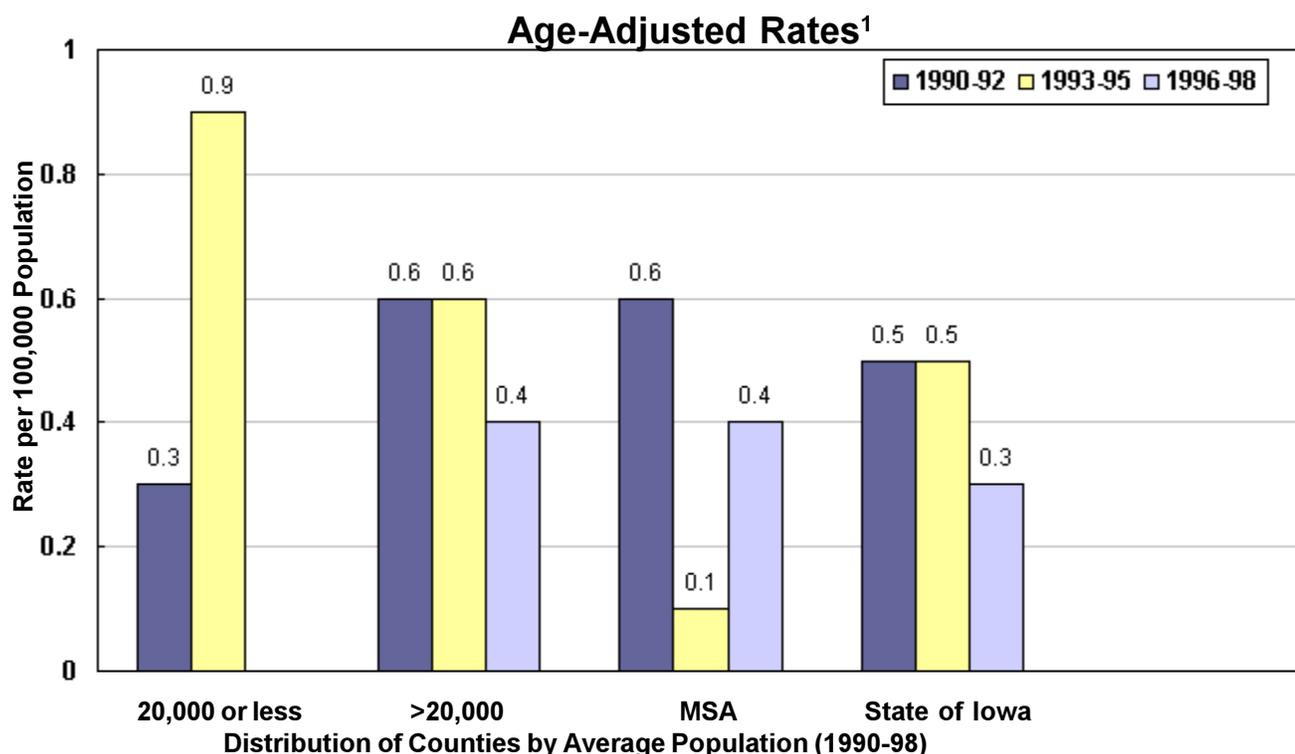
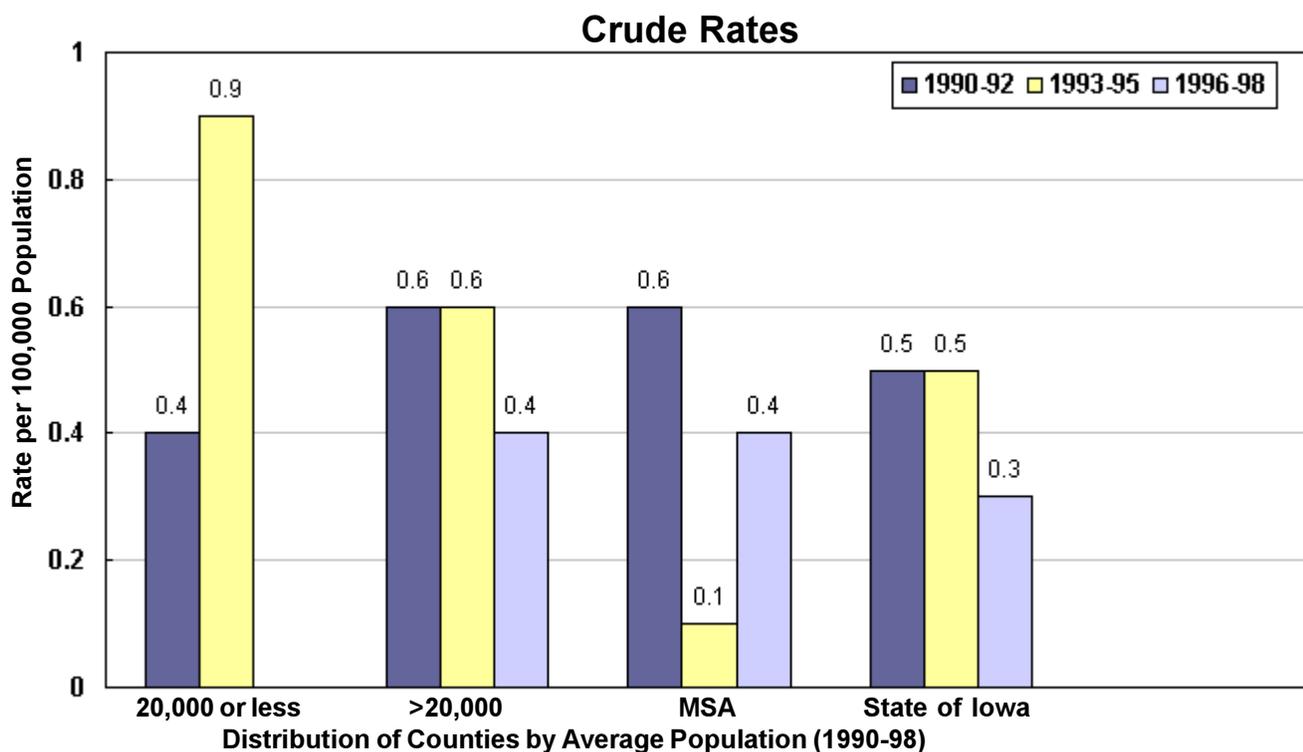


<sup>1</sup>Adjusted to Year 2000 US population

## Age 15-19: Suicide Mortality by County Group 1990-1998

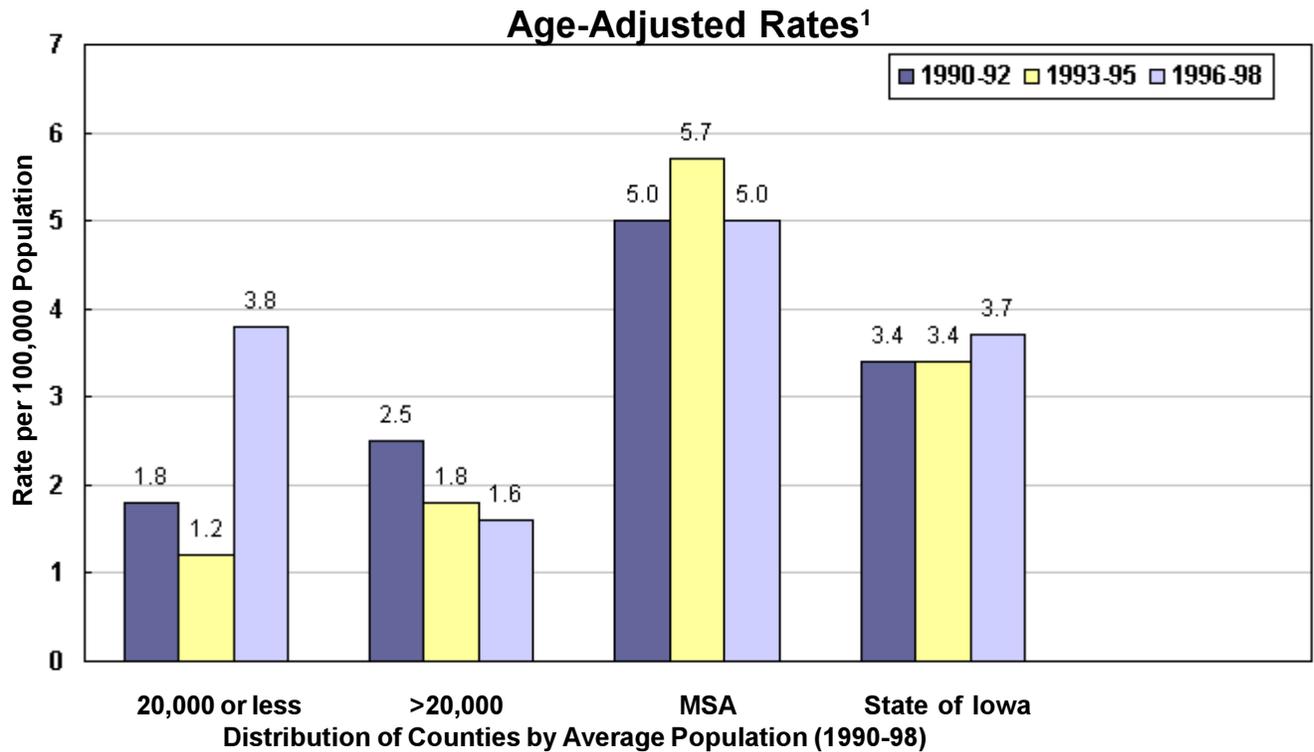
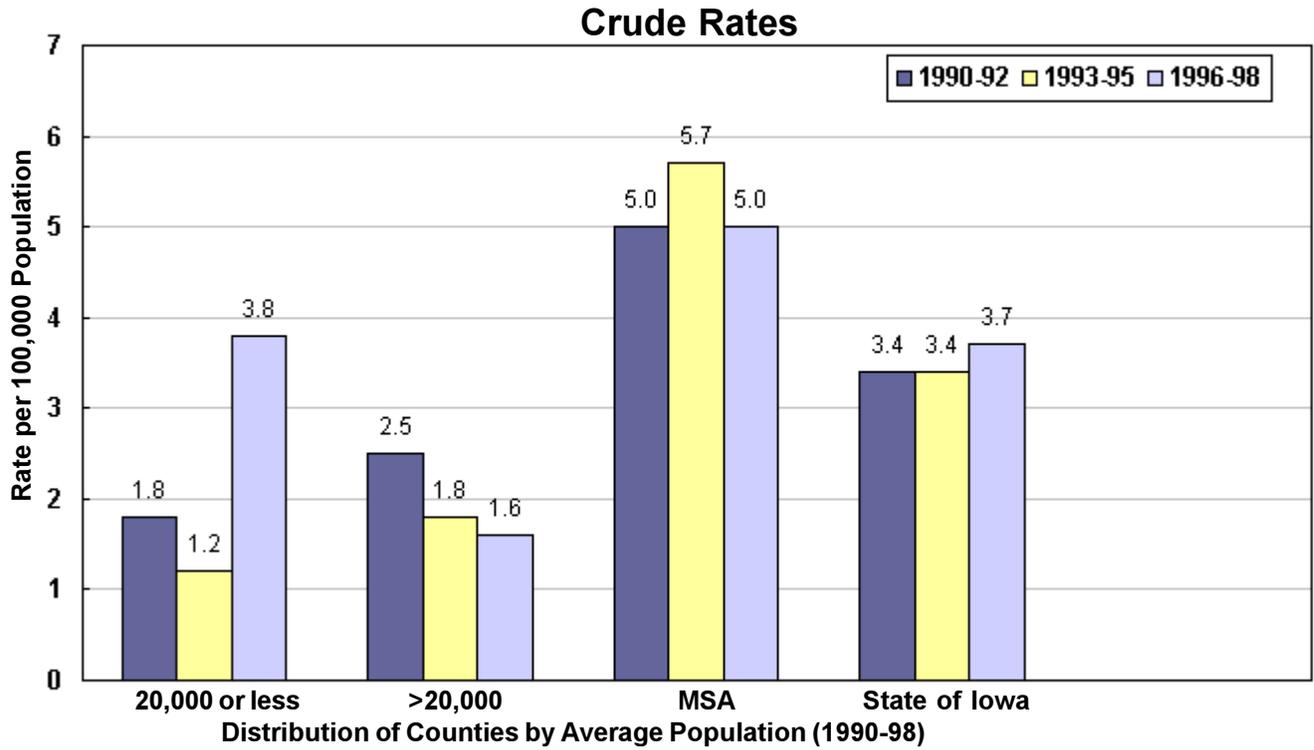


## Age 0-14: Suicide Mortality by County Group 1990-1998

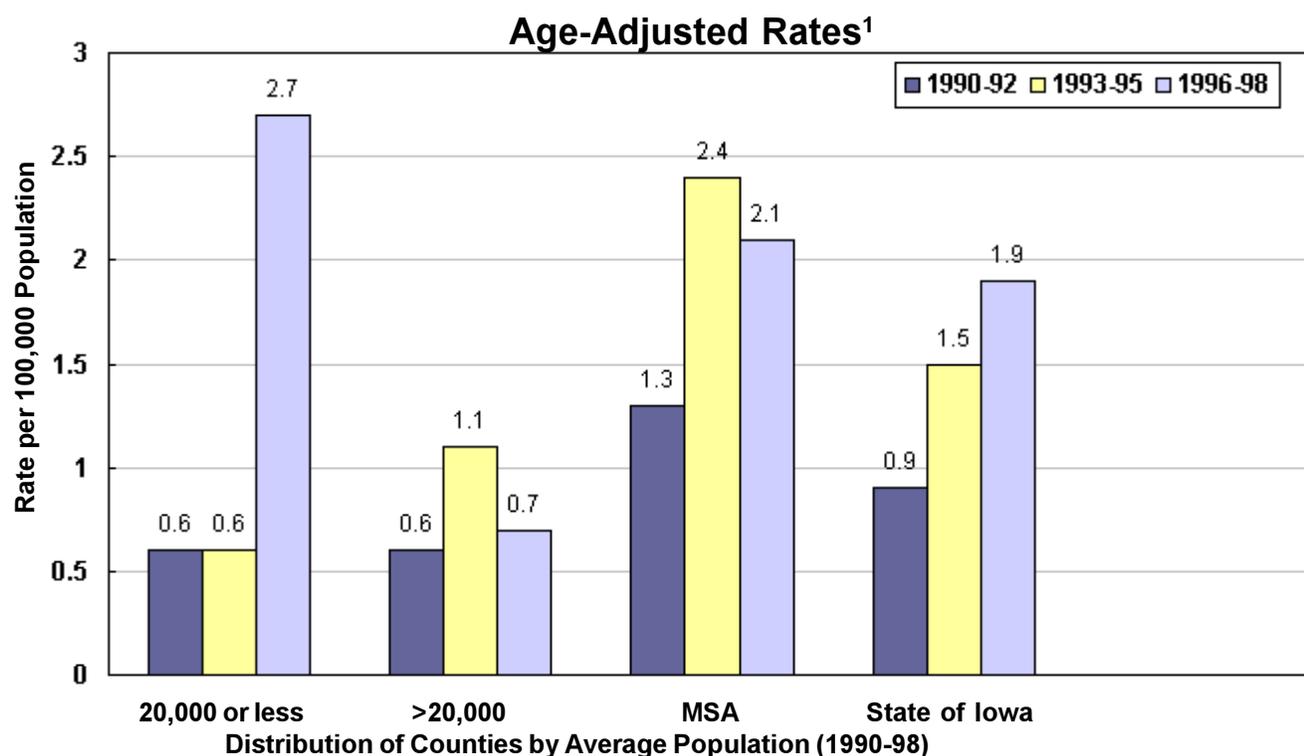
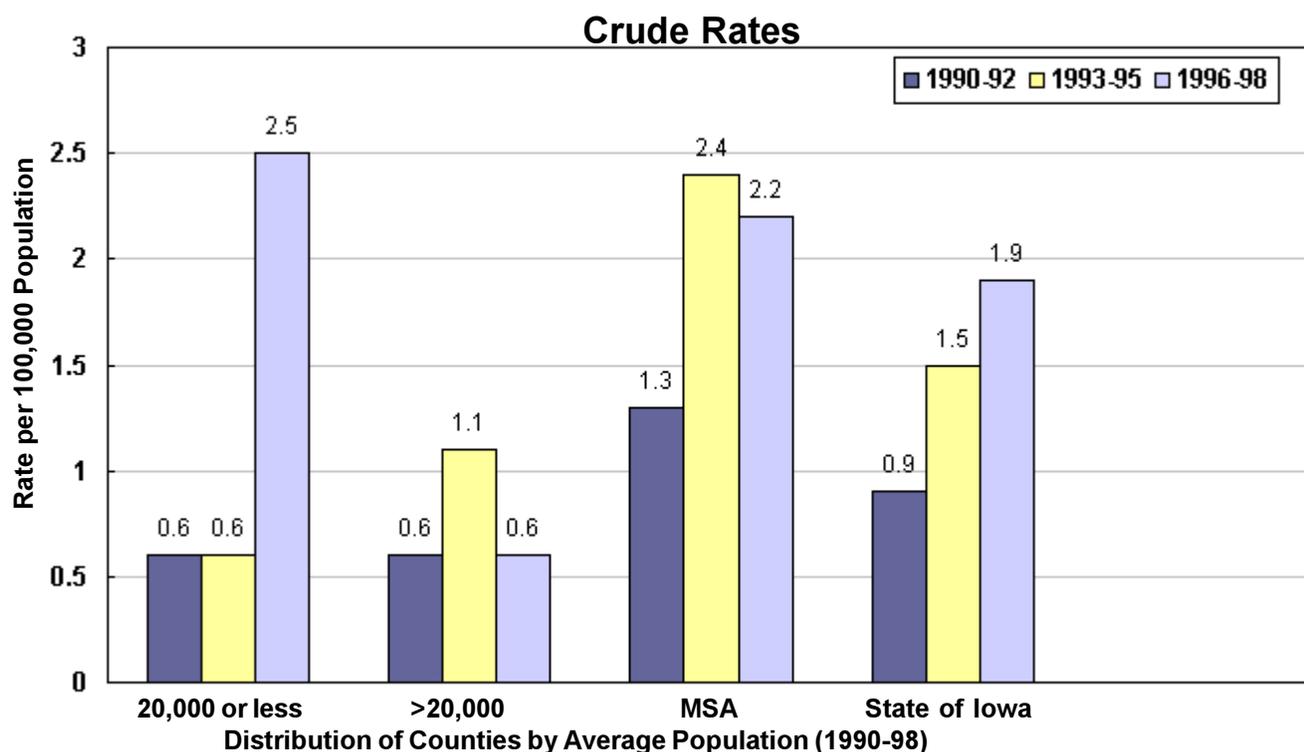


<sup>1</sup>Adjusted to Year 2000 US population

## Age 15-19: Homicide Mortality by County Group 1990-1998



## Age 0-14: Homicide Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

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## Other Mortality

With the population aging, chronic disease has become a major determinant of the health of Iowans and the need for health care services in the state.

Heart disease, still the number one cause of death in Iowa, decreased 5.6% to 320 deaths per 100,000 persons between 1990 and 1998. After age-adjustment, heart disease affects counties of different sizes similarly. This decreasing trend is observed across all strata. There has been no decline for stroke however, and a similar trend is observed in all county groupings. The rates for chronic obstructive pulmonary disease (COPD) have been increasing across time with the larger counties having a higher mortality. In contrast, death from pneumonia and influenza is showing variability across the county levels. Diabetes has continued to increase with the smaller counties showing the largest increases. In general, atherosclerosis as a primary cause of death has been declining. Infectious and parasitic diseases have been increasing as causes of mortality in the more rural counties, but they are showing a decrease in the more urban counties. Nephritis has only shown a slight decline in the urban counties. In general, chronic liver disease was showing decline in the 1993-95 time period, but is now showing an increase for 1996-98 at all county levels. Increasing rates are observed for congenital anomalies. Deaths due to conditions originating in the perinatal period have in general remained stable or declined slightly, except in the most rural counties which are showing a slight increase for the 1996-98 period.

The source of this information is the cause of death data obtained from death certificates filed at the Iowa Department of Public Health. Analysis was done by the State Health Registry of Iowa at The University of Iowa. Age-adjusted rates were calculated using the Year 2000 US population distribution.

### *TOP TEN CAUSES OF DEATH IN IOWA...*

- Heart disease
- Cancer
- Stroke
- Respiratory disease
- Pneumonia/ influenza
- Unintentional injuries
- Diabetes
- Arteriosclerosis
- Infectious/parasitic diseases
- Alzheimer's Disease

## All Causes Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	248,047	975.3	821.9

	County				County			
	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	1,031	1,382.4	774.9	Lucas	1,069	1,311.0	835.3
	Adams	558	1,357.0	824.9	Monroe	947	1,294.3	864.6
	Audubon	872	1,384.0	753.5	Osceola	745	1,160.2	731.7
	Clarke	899	1,209.3	811.5	Pocahontas	1,100	1,338.8	798.0
	Davis	902	1,193.7	824.2	Ringgold	714	1,478.6	774.9
	Decatur	1,021	1,386.5	888.5	Taylor	910	1,422.1	791.7
	Fremont	1,070	1,478.1	960.6	Van Buren	903	1,293.0	874.5
	Howard	1,162	1,319.2	768.9	Wayne	990	1,595.2	843.9
	Ida	984	1,334.0	842.8	Worth	927	1,310.5	802.2
	<b>Group Totals</b>							
Number: 16,804								
Crude: 1,341.6								
Adjusted: 819.3								

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	1,558	1,237.1	829.3	Henry	1,781	1,005.4	785.5
	Appanoose	1,665	1,353.5	863.9	Humboldt	1,149	1,218.3	791.6
	Buena Vista	1,899	1,060.7	757.1	Iowa	1,516	1,119.3	796.6
	Butler	1,702	1,202.6	763.7	Jefferson	1,409	936.3	837.7
	Calhoun	1,478	1,427.3	819.8	Jones	1,611	896.2	733.7
	Cass	1,763	1,310.9	814.0	Keokuk	1,253	1,203.4	773.0
	Cedar	1,543	970.6	729.5	Kossuth	1,857	1,138.9	760.1
	Cherokee	1,482	1,199.8	812.7	Louisa	1,062	1,004.3	845.0
	Chickasaw	1,309	1,089.4	805.3	Lyon	1,118	1,039.8	732.6
	Clay	1,609	1,015.2	771.3	Madison	1,409	1,189.5	895.7
	Clayton	1,981	1,169.7	840.4	Mills	1,152	934.2	884.4
	Crawford	1,521	1,021.7	752.8	Mitchell	1,312	1,325.0	752.6
	Delaware	1,439	872.6	768.1	Monona	1,415	1,562.2	866.5
	Dickinson	1,554	1,112.2	750.3	Montgomery	1,582	1,472.2	870.3
	Emmet	1,237	1,218.8	815.2	O'Brien	1,736	1,265.3	772.2
	Floyd	1,883	1,252.3	838.0	Page	2,066	1,356.1	846.3
	Franklin	1,199	1,200.1	776.4	Palo Alto	1,266	1,362.1	814.8
	Greene	1,216	1,342.3	780.3	Poweshiek	1,817	1,067.2	784.5
	Grundy	1,143	1,046.2	713.3	Sac	1,493	1,374.4	807.5
	Guthrie	1,254	1,236.8	777.8	Shelby	1,419	1,201.3	753.6
Hamilton	1,587	1,097.3	787.5	Tama	1,900	1,199.1	804.6	
Hancock	1,164	1,058.3	751.6	Union	1,455	1,287.4	875.1	
Hardin	2,236	1,328.6	806.2	Winnebago	1,295	1,202.6	790.9	
Harrison	1,808	1,342.0	905.8	Wright	1,699	1,328.8	778.8	

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Benton	1,894	882.3	740.2	Mahaska	2,024	1,036.9	794.9
	Boone	2,678	1,164.1	810.5	Marion	2,907	1,053.3	858.2
	Bremer	2,053	985.9	756.6	Marshall	4,518	1,308.7	998.3
	Buchanan	1,873	986.7	882.3	Muscatine	3,349	912.1	861.3
	Carroll	2,079	1,072.8	768.5	Plymouth	2,114	973.5	748.9
	Cerro Gordo	4,548	1,085.2	823.8	Sioux	2,130	767.6	663.9
	Clinton	4,912	1,075.5	895.4	Story	3,834	572.4	685.5
	Des Moines	3,965	1,035.3	829.2	Wapello	4,054	1,261.0	927.3
	Fayette	2,295	1,163.0	817.8	Washington	2,058	1,123.2	774.9
	Jackson	2,021	1,118.2	884.6	Webster	4,322	1,214.6	879.0
	Jasper	3,159	994.9	809.4	Winneshek	1,636	868.1	702.0
	Lee	3,968	1,135.8	921.6				

	County				County			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	10,399	938.6	893.1	Polk	23,823	766.1	846.6
	Dallas	2,624	886.2	811.0	Pottawattamie	6,963	921.4	883.2
	Dubuque	7,543	955.3	854.8	Scott	11,121	793.6	894.1
	Johnson	4,179	465.7	712.0	Warren	2,621	760.8	829.4
	Linn	11,877	747.8	773.2	Woodbury	8,700	958.8	868.0
	<b>Group Totals</b>							
Number: 89,850								
Crude: 802.4								
Adjusted: 842.9								

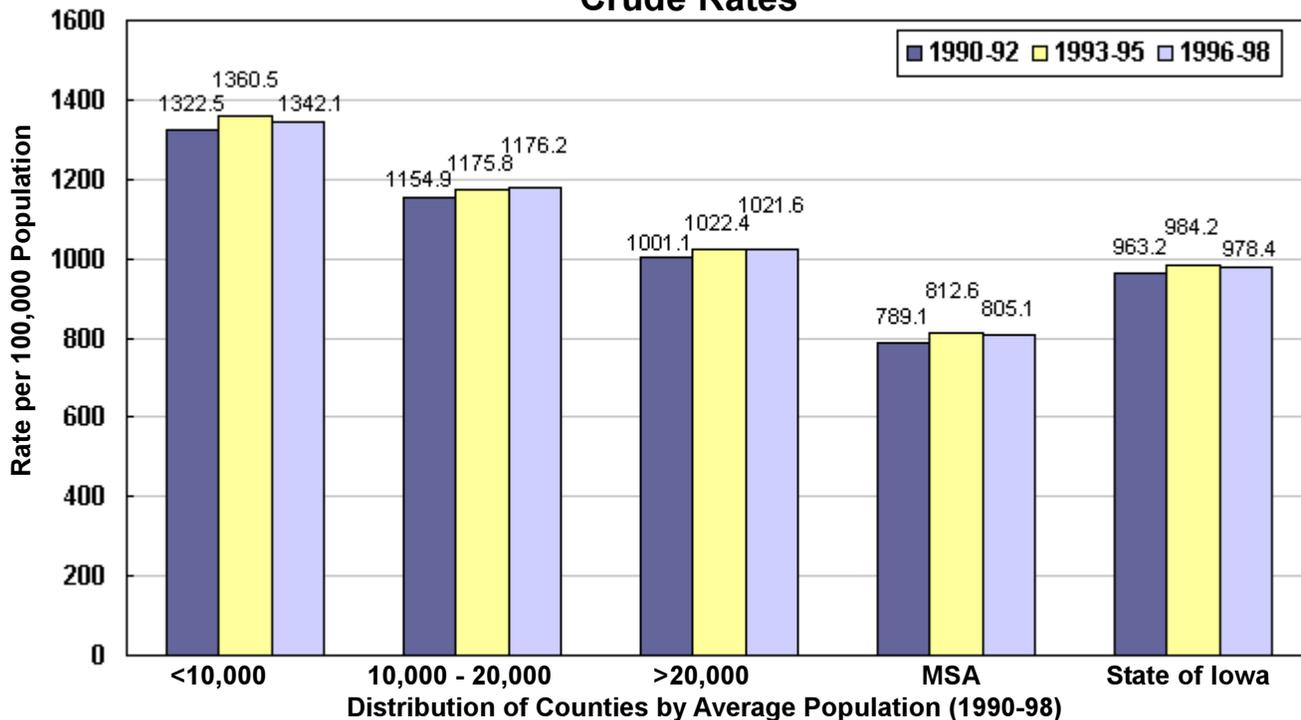
<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

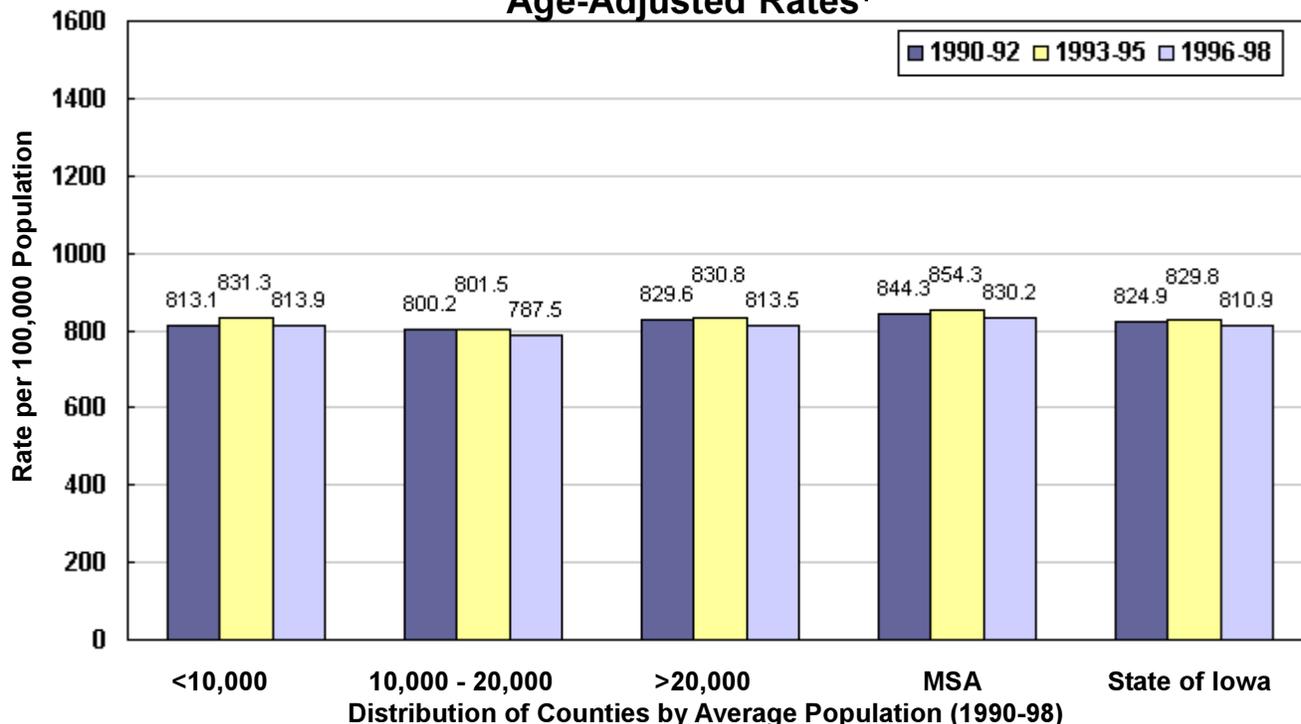
Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## All Causes Mortality by County Group 1990-1998

### Crude Rates



### Age-Adjusted Rates<sup>1</sup>



<sup>1</sup>Adjusted to Year 2000 US population

## Heart Disease Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	84,169	330.9	272.8

	County				County				
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	324	434.4	231.3	Lucas	459	562.9	336.6	
	Adams	188	457.2	261.4	Monroe	337	460.6	291.8	
	Audubon	268	425.4	223.2	Osceola	361	562.2	325.2	
	Clarke	340	457.4	288.2	Pocahontas	352	428.4	241.9	
	Davis	368	487.0	314.8	Ringgold	315	652.3	322.4	
	Decatur	351	476.6	282.8	Taylor	300	468.8	253.8	
	Fremont	368	508.4	316.0	Van Buren	311	445.3	288.2	
	Howard	388	440.5	251.9	Wayne	326	525.3	261.0	
	Ida	408	553.1	325.4	Worth	311	439.6	254.4	
	<b>Group Totals</b>								
Number:	6,075								
Crude:	485.0								
Adjusted:	280.0								

	County				County			
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	470	373.2	240.2	Henry	633	357.3	268.7
	Appanoose	720	585.3	355.5	Humboldt	407	431.6	268.9
	Buena Vista	669	373.7	257.8	Iowa	435	321.2	218.7
	Butler	587	414.8	250.7	Jefferson	479	318.3	277.2
	Calhoun	469	452.9	247.8	Jones	528	293.7	235.2
	Cass	566	420.9	248.3	Keokuk	392	376.5	230.0
	Cedar	441	277.4	204.8	Kossuth	597	366.1	237.0
	Cherokee	549	444.5	282.7	Louisa	386	365.0	298.2
	Chickasaw	569	473.6	338.0	Lyon	415	386.0	260.1
	Clay	539	340.1	252.4	Madison	425	358.8	261.2
	Clayton	564	333.0	235.5	Mills	430	348.7	324.2
	Crawford	573	348.9	272.5	Mitchell	464	468.6	245.0
	Delaware	443	268.6	234.1	Monona	440	485.8	248.9
	Dickinson	551	394.3	256.7	Montgomery	499	464.4	249.4
	Emmet	422	415.8	267.1	O'Brien	590	430.0	246.2
	Floyd	677	450.3	290.0	Page	741	486.4	284.1
	Franklin	440	440.4	273.1	Palo Alto	399	429.3	245.9
	Greene	473	522.1	288.8	Poweshiek	585	343.6	243.0
	Grundy	406	371.6	242.7	Sac	472	434.5	243.3
	Guthrie	298	293.9	182.8	Shelby	601	508.8	296.2
Hamilton	541	374.1	258.0	Tama	655	413.4	259.7	
Hancock	496	450.9	307.4	Union	616	545.0	346.1	
Hardin	807	479.5	274.7	Winnebago	479	444.8	278.0	
Harrison	753	559.0	349.2	Wright	557	435.6	242.6	

	County				County			
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	612	285.1	234.7	Mahaska	695	356.0	264.8
	Boone	998	433.8	283.5	Marion	887	321.4	255.2
	Bremer	772	370.7	276.4	Marshall	1,346	389.9	289.8
	Buchanan	676	356.1	315.2	Muscatine	1,053	286.8	268.8
	Carroll	718	370.5	253.2	Plymouth	790	363.8	270.3
	Cerro Gordo	1,572	375.1	275.7	Sioux	675	243.2	206.9
	Clinton	1,795	393.0	321.2	Story	1,192	178.0	212.7
	Des Moines	1,307	341.3	265.7	Wapello	1,300	404.4	288.7
	Fayette	844	427.7	288.6	Washington	719	392.4	259.9
	Jackson	666	368.5	283.4	Webster	1,611	452.7	316.5
	Jasper	1,125	354.3	283.1	Winneshek	542	287.6	227.3
	Lee	1,479	423.4	334.9				

	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	3,392	306.2	289.3	Polk	8,006	257.5	287.9	
	Dallas	855	288.8	260.3	Pottawattamie	2,523	333.9	319.2	
	Dubuque	2,559	324.1	285.9	Scott	3,657	261.0	297.4	
	Johnson	1,142	127.3	201.2	Warren	853	247.6	270.1	
	Linn	3,469	218.4	226.3	Woodbury	3,016	332.4	296.4	
	<b>Group Totals</b>								
Number:	29,472								
Crude:	263.2								
Adjusted:	277.5								

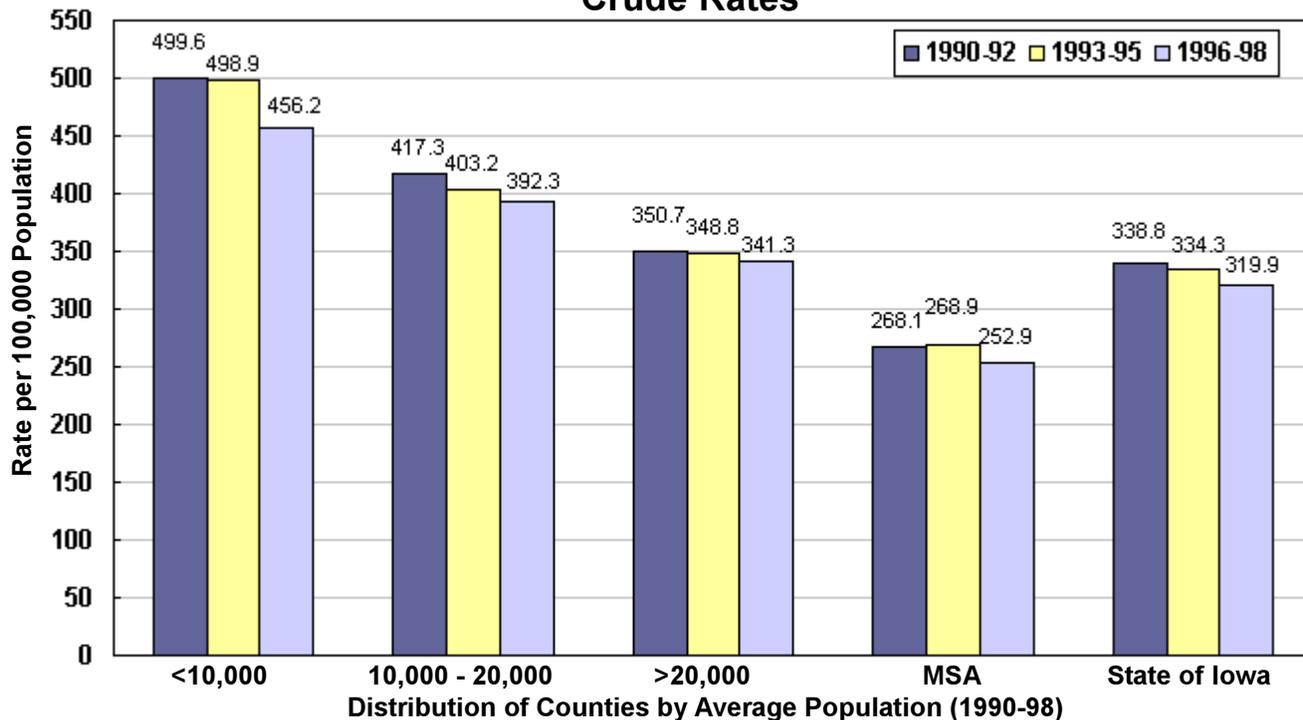
<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

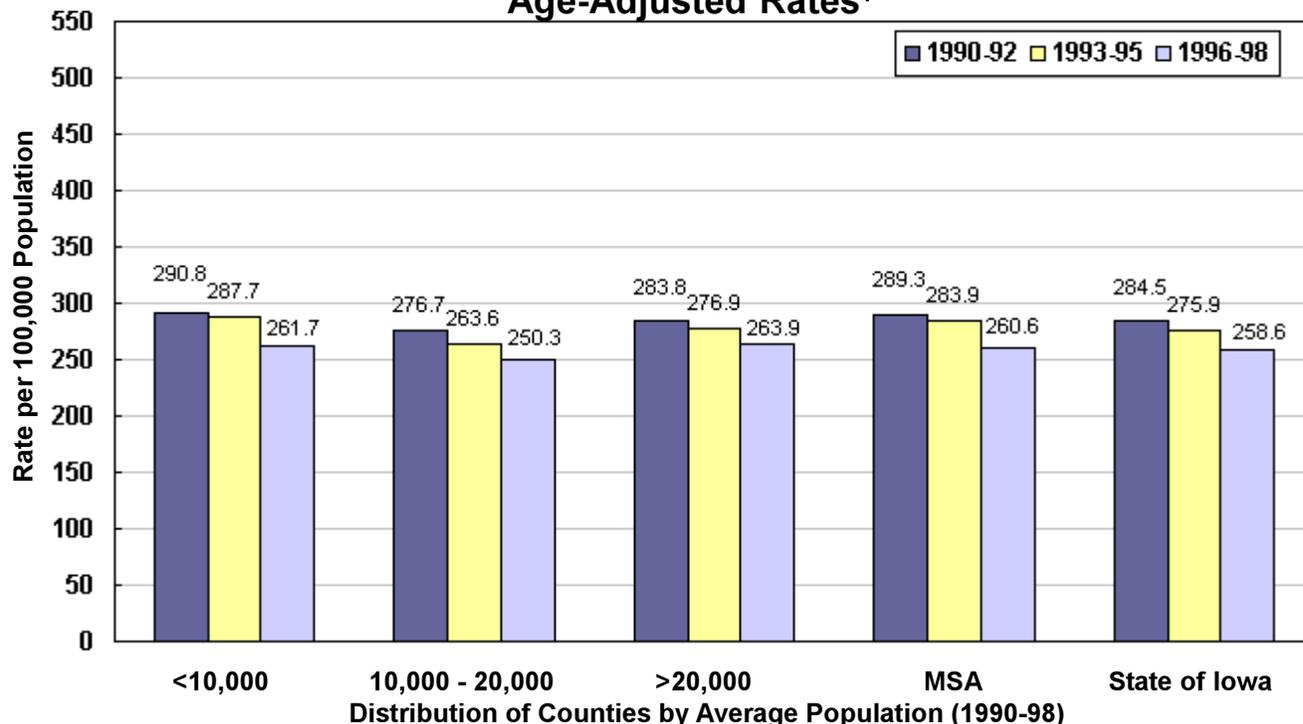
Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Heart Disease Mortality by County Group 1990-1998

### Crude Rates



### Age-Adjusted Rates<sup>1</sup>



<sup>1</sup>Adjusted to Year 2000 US population

## Stroke Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	19,185	75.4	60.6

	County				County							
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>			
<b>Counties with Average Population &lt;10,000</b>	Adair	62	83.1	44.3	Lucas	75	92.0	54.1	Monroe	75	102.5	61.9
	Adams	49	119.2	66.4	Osceola	45	70.1	41.8	Pocahontas	120	146.0	76.0
	Audubon	69	109.5	51.5	Ringgold	46	95.3	45.4	Taylor	74	115.6	59.2
	Clarke	74	99.5	60.6	Van Buren	78	111.7	69.3	Wayne	91	146.6	64.8
	Davis	68	90.0	57.5	Worth	99	140.0	77.2				
	Decatur	81	110.0	60.7								
	Fremont	90	124.3	73.5								
	Howard	88	99.9	48.8								
	Ida	67	90.8	51.9								
	<b>Group Totals</b>											
Number:	1,351											
Crude:	107.9											
Adjusted:	59.1											

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	168	133.4	82.3	Henry	163	92.0	67.1	Humboldt	82	86.9	53.6
	Appanoose	111	90.2	53.8	Iowa	149	110.0	71.4	Jefferson	141	93.7	78.0
	Buena Vista	134	74.8	49.8	Jones	115	64.0	49.3	Keokuk	89	85.5	46.7
	Butler	161	113.8	65.9	Kossuth	177	108.6	65.1	Louisa	70	66.2	51.8
	Calhoun	112	108.2	55.6	Lyon	83	77.2	51.4	Madison	85	71.8	50.2
	Cass	167	124.2	70.1	Madison	85	71.8	50.2	Mills	62	50.3	47.3
	Cedar	147	92.5	64.8	Mitchell	107	108.1	54.1	Monona	84	92.7	44.3
	Cherokee	115	93.1	56.9	Montgomery	153	142.4	75.1	O'Brien	133	96.9	52.5
	Chickasaw	86	71.6	49.7	Page	172	112.9	65.3	Palo Alto	133	143.1	75.3
	Clay	123	77.6	54.1	Poweshiek	194	113.9	77.6	Sac	131	120.6	62.1
	Clayton	191	112.8	73.9	Sac	131	120.6	62.1	Shelby	105	88.9	50.4
	Crawford	87	58.4	41.1	Shelby	105	88.9	50.4	Tama	163	102.9	62.5
	Delaware	140	84.9	71.6	Tama	163	102.9	62.5	Union	85	75.2	46.5
	Dickinson	136	97.3	62.8	Union	85	75.2	46.5	Winnebago	127	117.9	68.8
	Emmet	74	72.9	48.5	Winnebago	127	117.9	68.8	Wright	149	116.5	61.9
	Floyd	142	94.4	59.3	Wright	149	116.5	61.9				
	Franklin	101	101.1	59.5								
	Greene	127	140.2	71.4								
	Grundy	95	87.0	55.6								
	Guthrie	83	81.9	48.7								
Hamilton	85	58.8	41.0									
Hancock	108	98.2	63.4									
Hardin	185	109.9	59.8									
Harrison	80	59.4	37.8									

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population &gt;20,000</b>	Benton	134	62.4	51.1	Mahaska	191	97.8	69.9	Marion	244	88.4	67.7
	Boone	193	83.9	53.3	Marshall	373	108.0	77.1	Muscatine	243	66.2	60.2
	Bremer	192	92.2	65.8	Muscatine	243	66.2	60.2	Plymouth	197	90.7	62.9
	Buchanan	124	65.3	56.8	Plymouth	197	90.7	62.9	Sioux	153	55.1	46.0
	Carroll	150	77.4	50.8	Sioux	153	55.1	46.0	Story	283	42.2	49.3
	Cerro Gordo	399	95.2	67.5	Story	283	42.2	49.3	Wapello	388	120.7	82.4
	Clinton	396	86.7	69.9	Wapello	388	120.7	82.4	Washington	135	73.7	47.1
	Des Moines	277	72.3	55.0	Washington	135	73.7	47.1	Webster	320	89.9	60.6
	Fayette	187	94.8	60.6	Webster	320	89.9	60.6	Winneshiek	127	67.4	51.5
	Jackson	180	99.6	73.7	Winneshiek	127	67.4	51.5				
	Jasper	212	66.8	52.8								
	Lee	269	77.0	59.8								

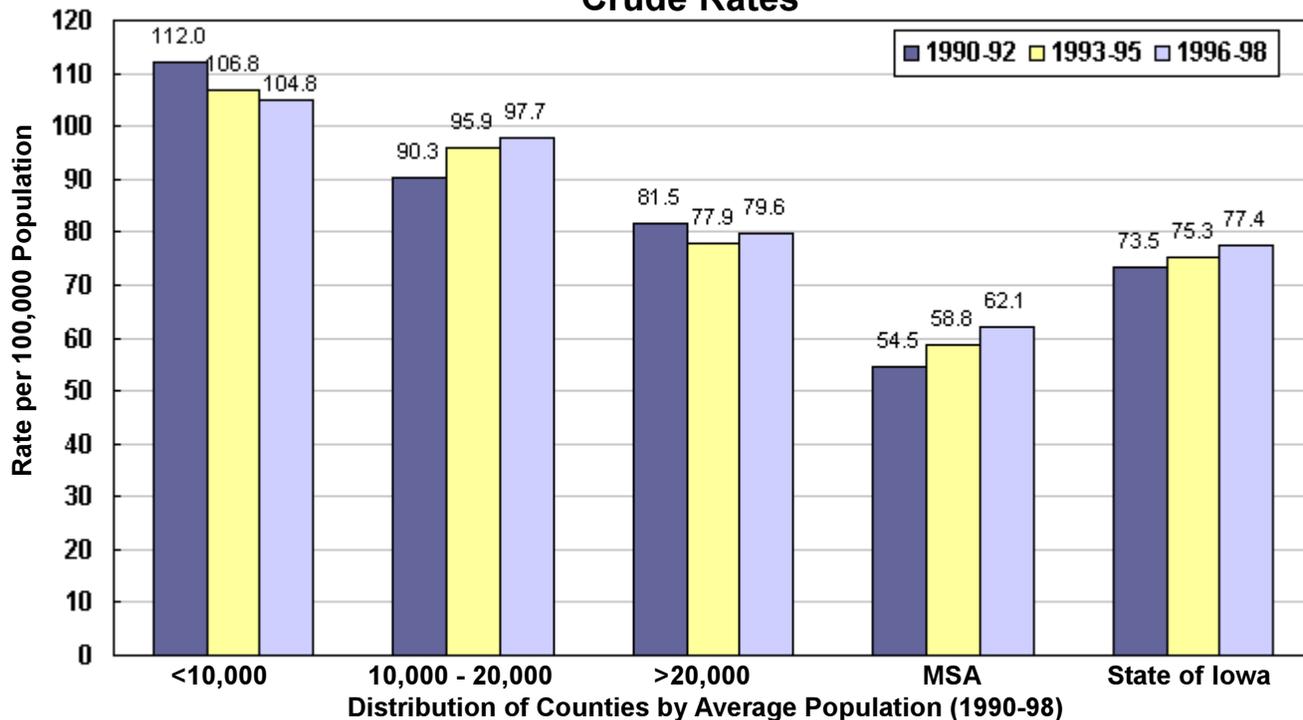
	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>MSA Counties</b>	Black Hawk	921	83.1	78.2	Polk	1,387	44.6	50.0	Pottawattamie	396	52.4	50.4
	Dallas	211	71.3	62.9	Scott	1,032	73.6	85.7	Warren	208	60.4	66.1
	Dubuque	658	83.3	72.4	Warren	208	60.4	66.1	Woodbury	576	63.5	55.6
	Johnson	315	35.1	55.4	Woodbury	576	63.5	55.6				
	Linn	853	53.7	55.6								
	<b>Group Totals</b>											
Number:	6,557											
Crude:	58.6											
Adjusted:	61.6											

<sup>1</sup>Rates per 100,000 population  
<sup>2</sup>Adjusted to Year 2000 US population

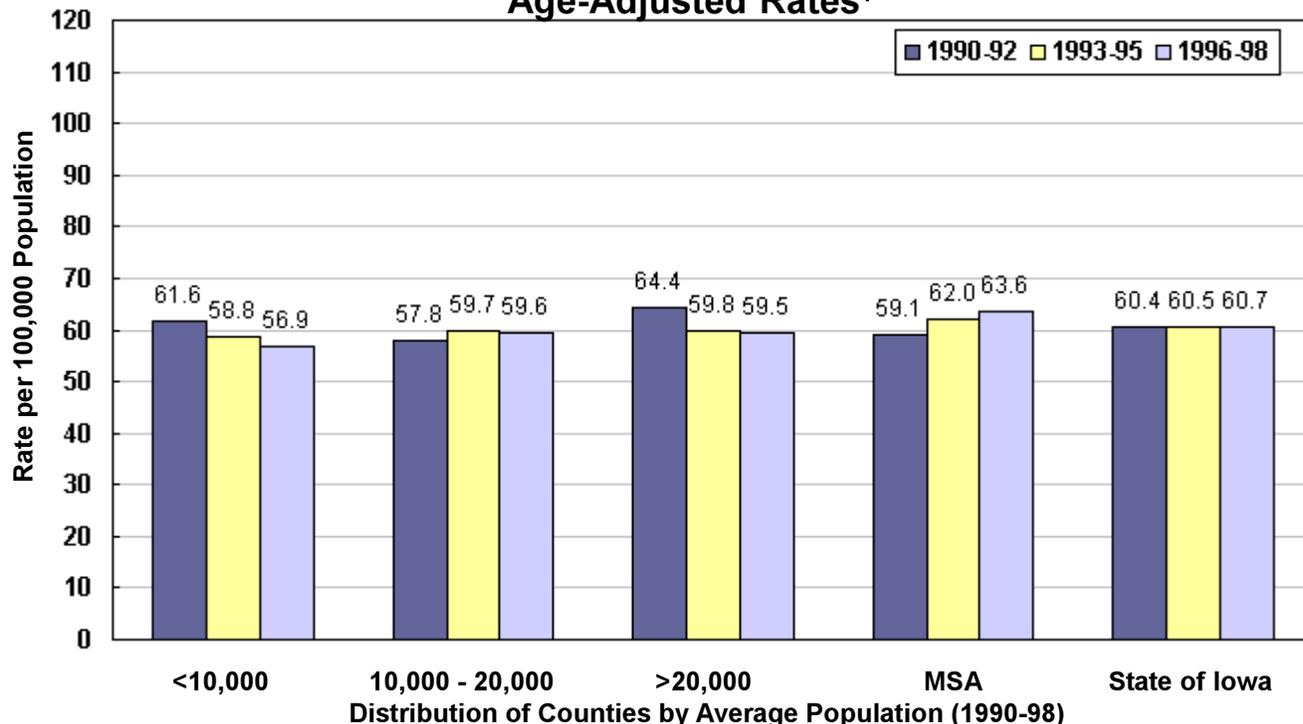
Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Stroke Mortality by County Group 1990-1998

### Crude Rates



### Age-Adjusted Rates<sup>1</sup>



<sup>1</sup>Adjusted to Year 2000 US population

# Chronic Obstructive Pulmonary Disease Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	11,640	45.8	38.3

	County				County				
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	47	63.0	35.2	Lucas	35	42.9	27.8	
	Adams	20	48.6	28.4	Monroe	46	62.9	40.9	
	Audubon	56	88.9	45.2	Osceola	25	38.9	25.6	
	Clarke	34	45.7	29.8	Pocahontas	41	49.9	30.1	
	Davis	23	30.4	19.9	Ringgold	29	60.1	31.3	
	Decatur	35	47.5	32.2	Taylor	51	79.7	41.2	
	Fremont	62	85.6	53.6	Van Buren	36	51.5	33.3	
	Howard	49	55.6	31.1	Wayne	35	56.4	28.5	
	Ida	46	62.4	39.8	Worth	35	49.5	29.9	
	<b>Group Totals</b>								
Number:	705								
Crude:	56.3								
Adjusted:	33.6								

	County				County			
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	53	42.1	28.3	Henry	56	31.6	24.2
	Appanoose	52	42.3	26.9	Humboldt	46	48.8	31.5
	Buena Vista	87	48.6	32.9	Iowa	61	45.0	31.8
	Butler	80	56.5	35.1	Jefferson	69	45.9	40.9
	Calhoun	59	57.0	35.0	Jones	85	47.3	37.7
	Cass	96	71.4	43.3	Keokuk	57	54.7	33.7
	Cedar	80	50.3	37.7	Kossuth	72	44.2	28.3
	Cherokee	80	64.8	42.4	Louisa	36	34.0	29.3
	Chickasaw	74	61.6	44.1	Lyon	34	31.6	21.6
	Clay	76	48.0	35.9	Madison	61	51.5	39.8
	Clayton	91	53.7	37.0	Mills	51	41.4	39.0
	Crawford	65	43.7	30.7	Mitchell	39	39.4	22.5
	Delaware	65	39.4	33.4	Monona	72	79.5	43.3
	Dickinson	61	43.7	27.4	Montgomery	92	85.6	52.7
	Emmet	44	43.4	29.8	O'Brien	78	56.9	32.1
	Floyd	74	49.2	32.6	Page	112	73.5	45.4
	Franklin	34	34.0	22.6	Palo Alto	61	65.6	36.8
	Greene	56	61.8	33.1	Poweshiek	78	45.8	34.8
	Grundy	49	44.9	28.7	Sac	69	63.5	36.2
	Guthrie	60	59.2	36.7	Shelby	47	39.8	25.3
Hamilton	61	42.2	28.9	Tama	78	49.2	31.7	
Hancock	32	29.1	20.4	Union	64	56.6	39.4	
Hardin	78	46.3	27.1	Winnebago	43	39.9	28.1	
Harrison	85	63.1	44.2	Wright	56	43.8	25.2	

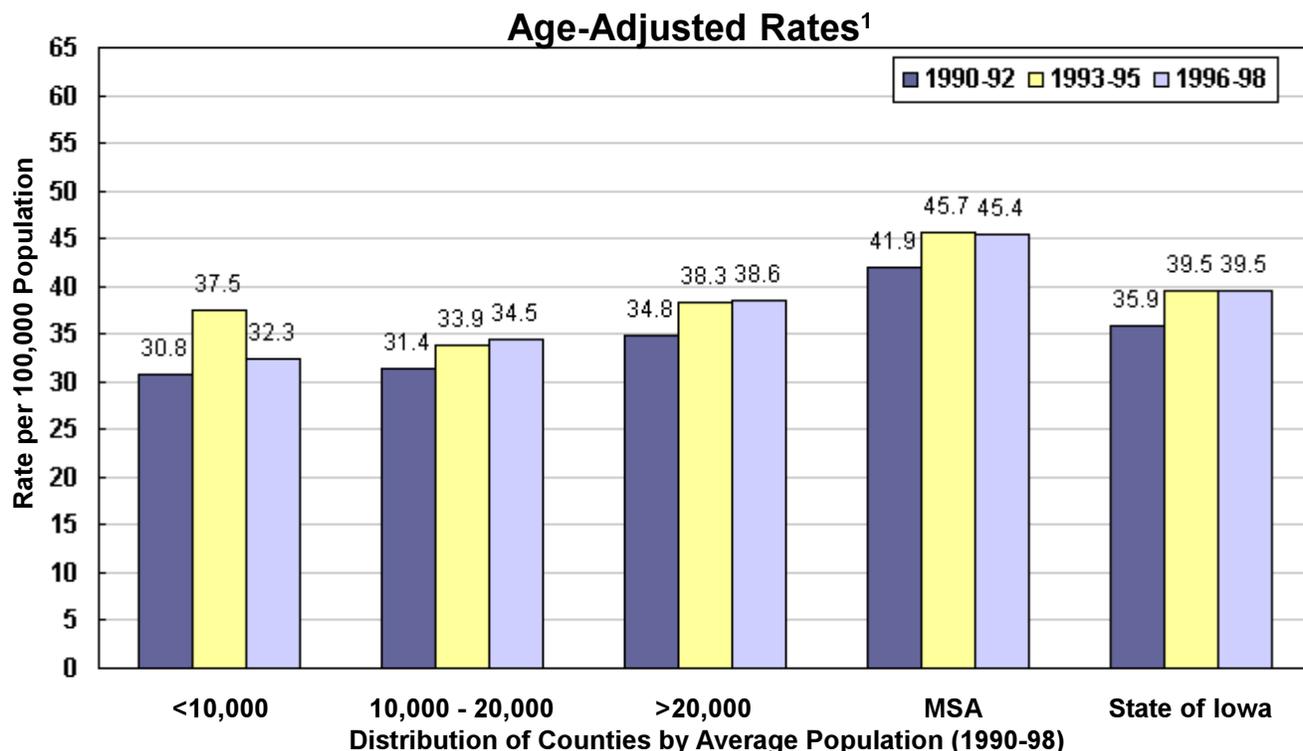
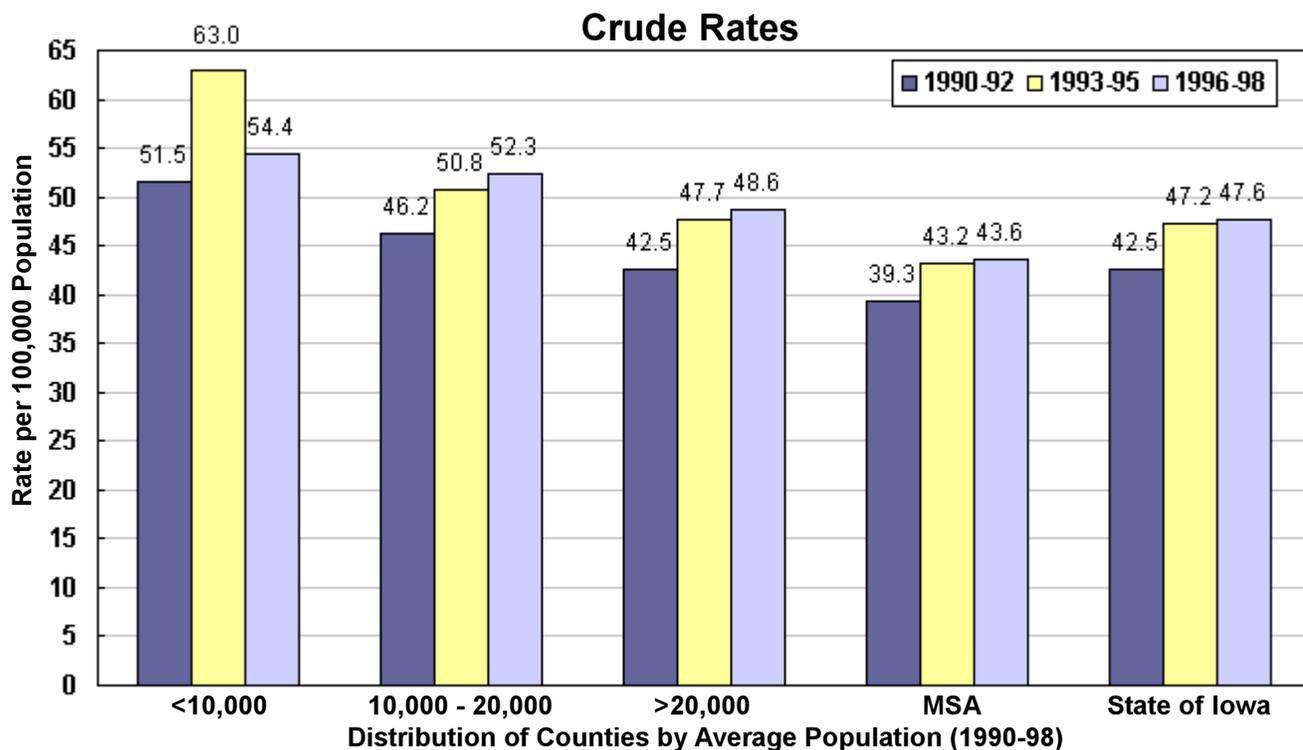
	County				County			
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	103	48.0	38.3	Mahaska	75	38.4	28.4
	Boone	107	46.5	33.1	Marion	134	48.6	38.9
	Bremer	76	36.5	27.8	Marshall	245	71.0	53.9
	Buchanan	91	47.9	41.4	Muscatine	169	46.0	44.0
	Carroll	116	59.9	42.7	Plymouth	85	39.1	29.5
	Cerro Gordo	209	49.9	37.6	Sioux	82	29.5	25.3
	Clinton	265	58.0	47.1	Story	141	21.0	25.4
	Des Moines	172	44.9	36.3	Wapello	226	70.3	50.3
	Fayette	94	47.6	32.1	Washington	117	63.9	43.1
	Jackson	94	52.0	40.0	Webster	167	46.9	34.1
	Jasper	127	40.0	31.6	Winneshek	57	30.2	24.1
	Lee	165	47.2	37.4				

	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	532	48.0	44.9	Polk	1,137	36.6	41.0	
	Dallas	116	39.2	36.0	Pottawattamie	366	48.4	45.3	
	Dubuque	354	44.8	39.9	Scott	654	46.7	52.4	
	Johnson	202	22.5	36.5	Warren	135	39.2	44.7	
	Linn	727	45.8	47.6	Woodbury	486	53.6	48.5	
	<b>Group Totals</b>								
Number:	4,709								
Crude:	42.1								
Adjusted:	44.4								

<sup>1</sup>Rates per 100,000 population  
<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Chronic Obstructive Pulmonary Disease Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Pneumonia/Influenza Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	10,959	43.1	34.1

	County				County							
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>			
<b>Counties with Average Population &lt;10,000</b>	Adair	125	167.6	76.8	Lucas	43	52.7	29.6	Monroe	49	67.0	39.6
	Adams	17	43.1	20.5	Osceola	36	56.1	31.3	Pocahontas	75	91.3	47.2
	Audubon	23	36.5	17.2	Ringgold	16	33.1	17.4	Taylor	43	67.2	32.5
	Clarke	41	55.2	31.2	Van Buren	55	78.8	48.8	Wayne	55	88.6	38.4
	Davis	38	50.3	30.7	Worth	36	50.9	26.4				
	Decatur	74	100.5	54.9								
	Fremont	75	103.6	61.0								
	Howard	73	82.9	41.7								
	Ida	38	51.5	27.9								
	<b>Group Totals</b>											
Number:	912											
Crude:	72.8											
Adjusted:	38.2											

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	71	56.4	33.4	Henry	110	62.1	44.0	Humboldt	68	72.1	42.4
	Appanoose	86	69.9	40.2	Iowa	87	64.2	42.3	Jefferson	44	29.2	25.6
	Buena Vista	96	53.6	35.8	Jones	59	32.8	25.2	Keokuk	49	47.1	25.6
	Butler	68	48.0	27.9	Kossuth	70	42.9	26.6	Louisa	51	48.2	37.2
	Calhoun	80	77.3	38.1	Lyon	31	28.8	18.4	Madison	88	74.3	51.0
	Cass	49	36.4	21.0	Mills	72	58.4	54.2	Mitchell	40	40.4	18.6
	Cedar	64	40.3	27.5	Monona	76	83.9	39.3	Montgomery	72	67.0	35.3
	Cherokee	52	42.1	26.9	O'Brien	87	63.4	32.6	O'Brien	87	63.4	32.6
	Chickasaw	39	32.5	22.5	Page	98	64.3	35.5	Palo Alto	53	57.0	30.6
	Clay	68	42.9	29.9	Poweshiek	67	39.4	26.7	Sac	69	63.5	34.4
	Clayton	103	60.8	39.4	Sac	69	63.5	34.4	Shelby	57	48.3	26.5
	Crawford	35	23.5	15.6	Shelby	57	48.3	26.5	Tama	74	46.7	27.1
	Delaware	73	44.3	36.8	Tama	74	46.7	27.1	Union	46	40.7	23.3
	Dickinson	63	45.1	29.4	Union	46	40.7	23.3	Winnebago	77	71.5	40.2
	Emmet	55	54.2	31.9	Winneshiek	81	43.0	32.8	Wright	99	77.4	40.5
	Floyd	79	52.5	31.7								
	Franklin	44	44.0	26.3								
	Greene	31	34.2	17.1								
	Grundy	54	49.4	31.8								
	Guthrie	42	41.4	23.5								
Hamilton	52	36.0	24.0									
Hancock	55	50.0	33.3									
Hardin	96	57.0	31.2									
Harrison	60	44.5	27.7									

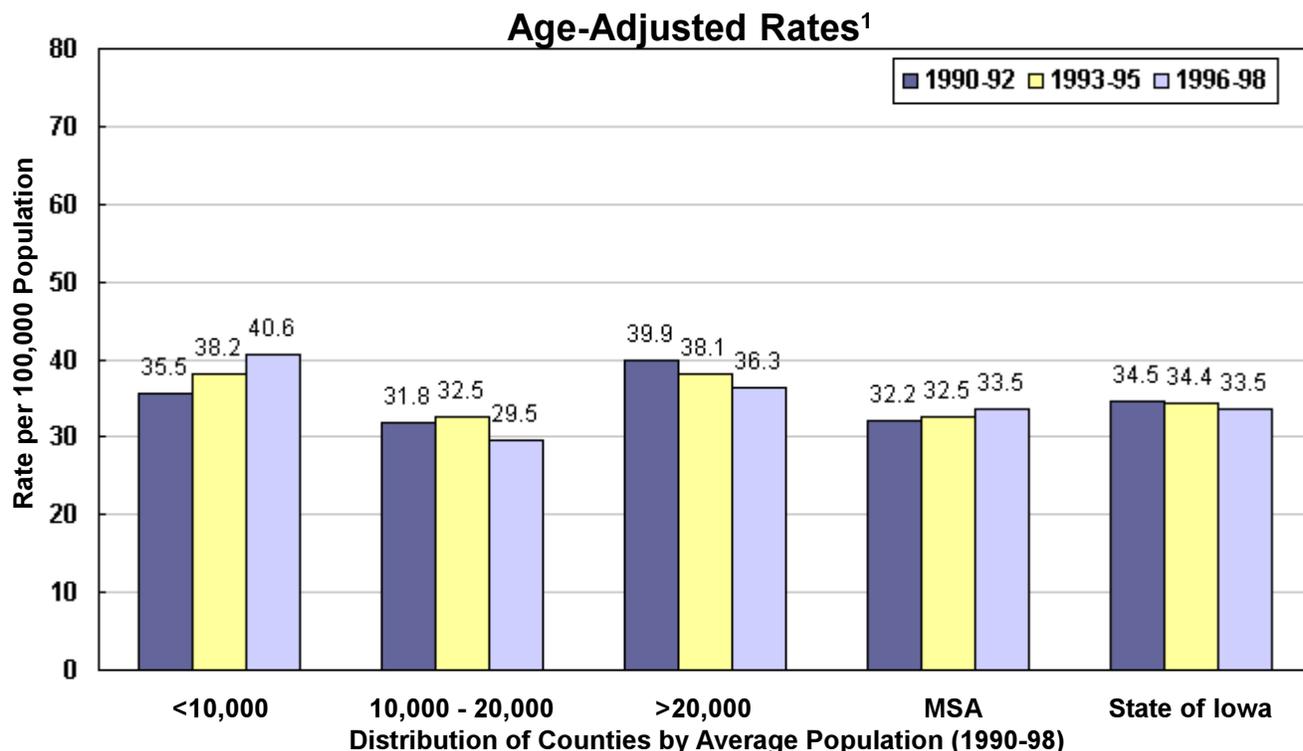
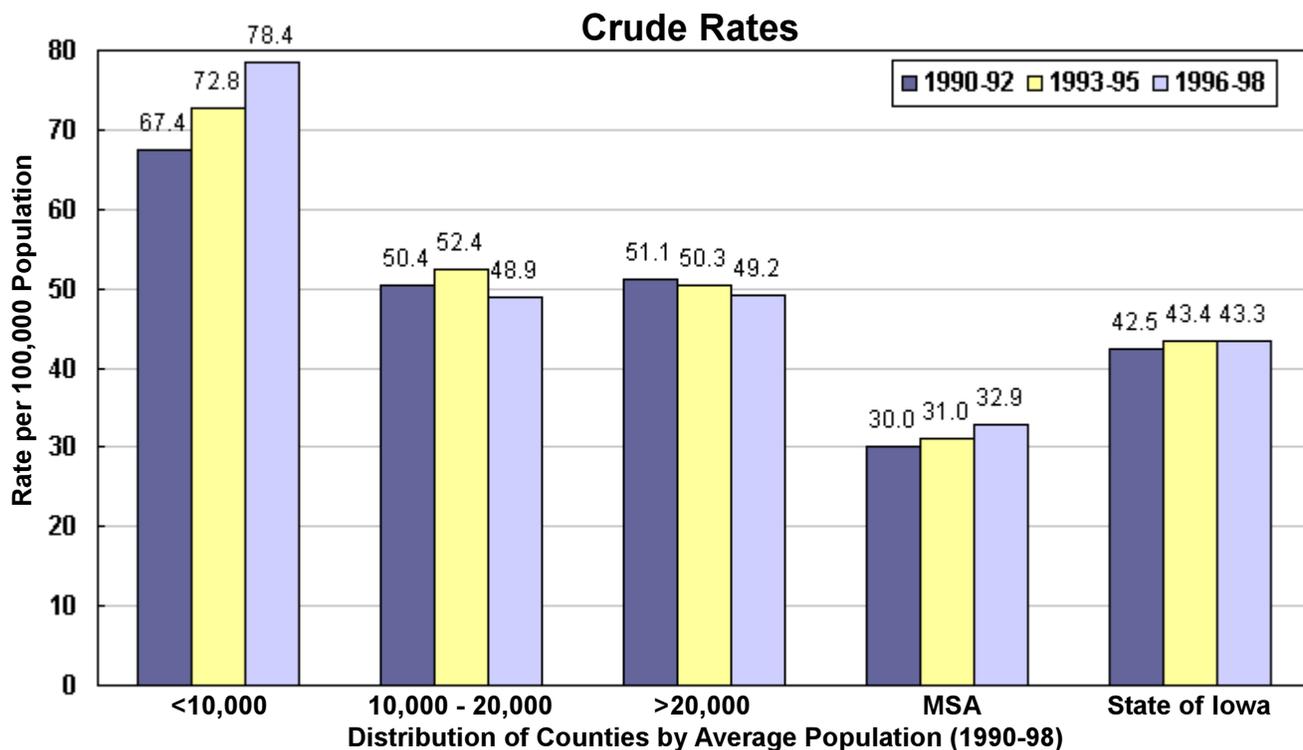
	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population &gt;20,000</b>	Benton	90	41.9	34.1	Mahaska	79	40.5	29.0	Marion	215	77.9	59.8
	Boone	126	54.8	35.3	Marshall	202	58.5	41.1	Muscatine	252	68.6	60.6
	Bremer	78	37.5	25.9	Plymouth	70	32.2	22.6	Sioux	107	38.6	31.7
	Buchanan	60	31.6	27.6	Sioux	107	38.6	31.7	Story	178	26.6	30.4
	Carroll	122	63.0	39.9	Story	178	26.6	30.4	Wapello	213	66.3	45.5
	Cerro Gordo	235	56.1	39.3	Wapello	213	66.3	45.5	Washington	114	62.2	38.5
	Clinton	184	40.3	32.5	Washington	114	62.2	38.5	Webster	309	86.8	55.9
	Des Moines	150	39.2	29.2	Webster	309	86.8	55.9	Winneshiek	81	43.0	32.8
	Fayette	122	61.8	39.7	Winneshiek	81	43.0	32.8				
	Jackson	112	62.0	45.9								
	Jasper	111	35.0	27.3								
	Lee	172	49.2	38.0								

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>MSA Counties</b>	Black Hawk	260	23.5	22.0	Polk	1,010	32.5	36.3	Pottawattamie	252	33.3	32.1
	Dallas	144	48.6	42.2	Scott	367	26.2	30.3	Warren	152	44.1	47.1
	Dubuque	409	51.8	43.9	Warren	152	44.1	47.1	Woodbury	344	37.9	33.0
	Johnson	152	16.9	26.5	Woodbury	344	37.9	33.0				
	Linn	416	26.2	27.0								
	<b>Group Totals</b>											
Number:	3,506											
Crude:	31.3											
Adjusted:	32.7											

<sup>1</sup>Rates per 100,000 population  
<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Pneumonia/Influenza Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Diabetes Mellitus Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	5,420	21.3	18.2

	County				County							
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>			
<b>Counties with Average Population &lt;10,000</b>	Adair	20	26.8	13.5	Lucas	12	14.7	8.6	Monroe	15	20.5	14.9
	Adams	6	14.6	8.9	Osceola	7	10.9	7.7	Pocahontas	16	19.5	12.5
	Audubon	26	41.3	23.0	Ringgold	21	43.5	22.5	Taylor	29	45.3	26.7
	Clarke	14	18.8	11.1	Van Buren	31	44.4	30.1	Wayne	34	54.8	30.3
	Davis	25	33.1	22.5	Worth	17	24.0	12.8				
	Decatur	15	20.4	13.8								
	Fremont	22	30.4	18.5								
	Howard	24	27.2	16.3								
	Ida	35	47.4	29.0								
	<b>Group Totals</b>											
Number:	369											
Crude:	29.5											
Adjusted:	17.8											

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	32	25.4	17.6	Henry	33	18.6	15.5	Humboldt	18	19.1	14.1
	Appanoose	29	23.6	14.6	Iowa	48	35.4	25.2	Jefferson	48	31.9	29.9
	Buena Vista	40	22.3	15.2	Jones	54	30.0	23.7	Keokuk	43	41.3	26.8
	Butler	27	19.1	12.3	Keokuk	43	41.3	26.8	Kossuth	32	19.6	14.6
	Calhoun	28	27.0	15.9	Louisa	21	19.9	15.7	Lyon	21	19.5	13.1
	Cass	53	39.4	23.8	Madison	36	30.4	23.5	Madison	36	30.4	23.5
	Cedar	45	28.3	20.3	Mills	16	13.0	12.1	Mills	16	13.0	12.1
	Cherokee	29	23.5	16.7	Mitchell	25	25.2	15.0	Mitchell	25	25.2	15.0
	Chickasaw	23	19.1	14.2	Monona	48	53.0	29.8	Monona	48	53.0	29.8
	Clay	34	21.5	17.3	Montgomery	45	41.9	24.3	Montgomery	45	41.9	24.3
	Clayton	49	28.9	21.1	O'Brien	41	29.9	18.9	O'Brien	41	29.9	18.9
	Crawford	53	35.6	25.5	Page	57	37.4	24.5	Page	57	37.4	24.5
	Delaware	37	22.4	19.3	Palo Alto	23	24.7	14.5	Palo Alto	23	24.7	14.5
	Dickinson	41	29.3	19.1	Poweshiek	43	25.3	20.0	Poweshiek	43	25.3	20.0
	Emmet	48	47.3	31.0	Sac	28	25.8	15.8	Sac	28	25.8	15.8
	Floyd	26	17.3	11.8	Shelby	20	16.9	11.1	Shelby	20	16.9	11.1
	Franklin	22	22.0	15.0	Tama	45	28.4	18.8	Tama	45	28.4	18.8
	Greene	20	22.1	14.4	Union	35	31.0	21.3	Union	35	31.0	21.3
	Grundy	23	21.1	15.1	Winnebago	23	21.4	15.7	Winnebago	23	21.4	15.7
	Guthrie	18	17.8	11.3	Wright	42	32.8	19.5	Wright	42	32.8	19.5
Hamilton	71	49.1	34.5									
Hancock	21	19.1	13.4									
Hardin	39	23.2	14.9									
Harrison	45	33.4	21.9									

	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>Counties with Average Population &gt;20,000</b>	Benton	46	21.4	18.0	Mahaska	46	23.6	18.7	Marion	63	22.8	18.9
	Boone	67	29.1	21.6	Marshall	103	29.8	23.6	Marshall	103	29.8	23.6
	Bremer	29	13.9	11.1	Muscatine	58	15.8	15.3	Muscatine	58	15.8	15.3
	Buchanan	62	32.7	28.2	Plymouth	49	22.6	17.3	Plymouth	49	22.6	17.3
	Carroll	34	17.5	12.1	Sioux	75	27.0	23.4	Sioux	75	27.0	23.4
	Cerro Gordo	88	21.0	16.9	Story	63	9.4	11.8	Story	63	9.4	11.8
	Clinton	99	21.7	18.0	Wapello	113	35.1	26.1	Wapello	113	35.1	26.1
	Des Moines	71	18.5	15.2	Washington	59	32.2	22.7	Washington	59	32.2	22.7
	Fayette	36	18.2	12.5	Webster	40	11.2	8.9	Webster	40	11.2	8.9
	Jackson	36	19.9	15.9	Winneschik	41	21.8	17.4	Winneschik	41	21.8	17.4
	Jasper	50	15.7	12.8								
	Lee	58	16.6	13.0								

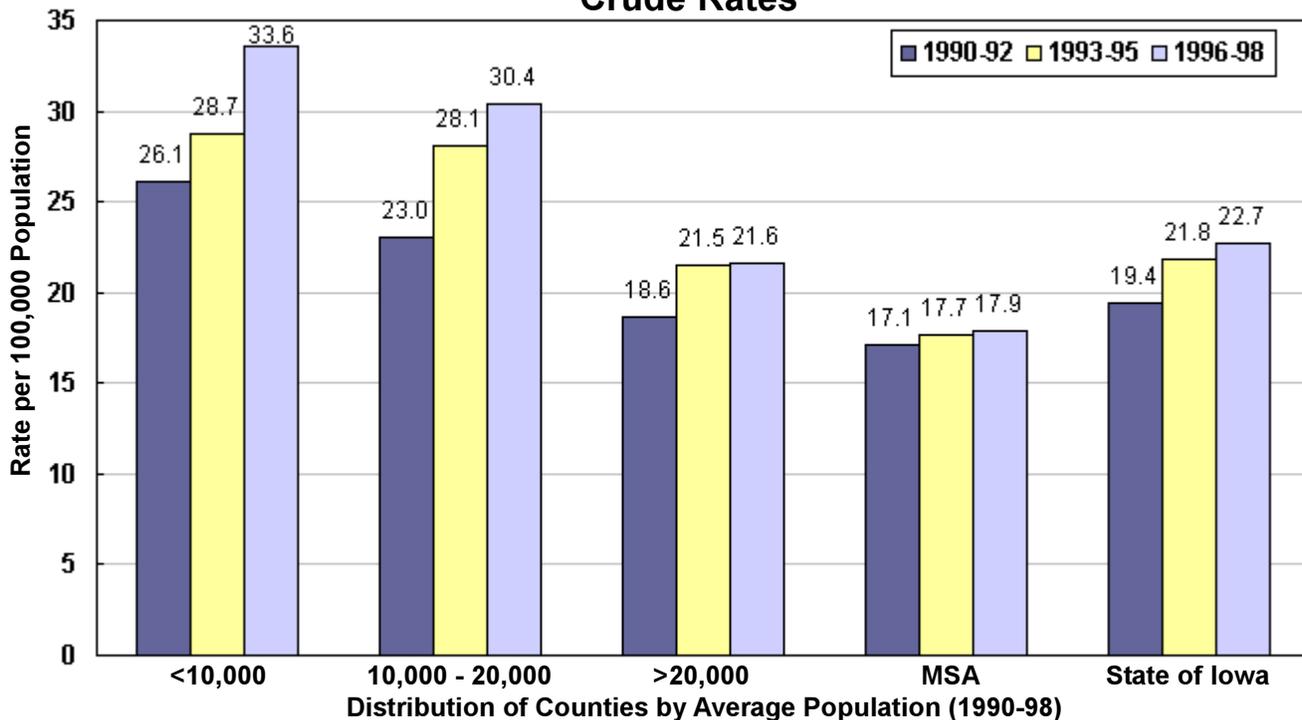
	County				County							
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted			
<b>MSA Counties</b>	Black Hawk	239	21.6	20.4	Polk	483	15.5	17.2	Pottawattamie	162	21.4	20.5
	Dallas	56	18.9	17.1	Scott	198	14.1	15.8	Scott	198	14.1	15.8
	Dubuque	176	22.3	20.0	Warren	58	16.8	18.7	Warren	58	16.8	18.7
	Johnson	111	12.4	19.5	Woodbury	218	24.0	21.8	Woodbury	218	24.0	21.8
	Linn	266	16.7	17.4								
	<b>Group Totals</b>											
Number:	1,967											
Crude:	17.6											
Adjusted:	18.5											

<sup>1</sup>Rates per 100,000 population  
<sup>2</sup>Adjusted to Year 2000 US population

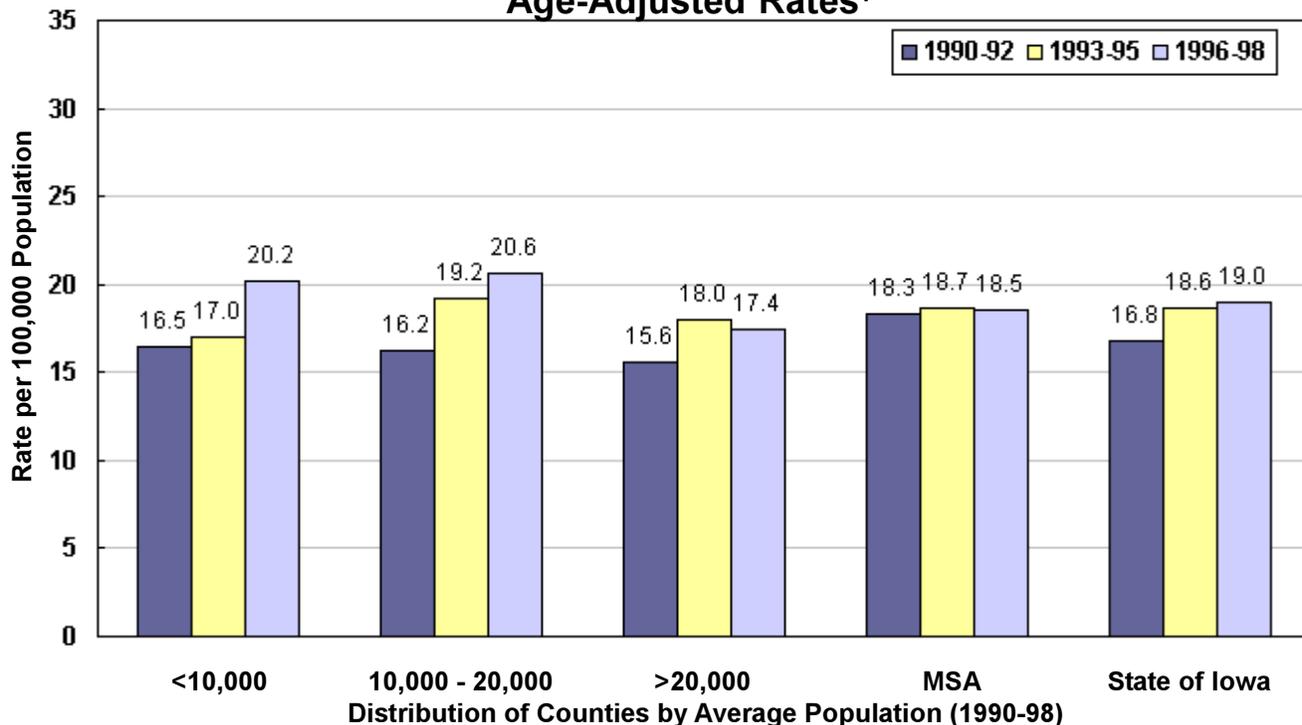
Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Diabetes Mellitus Mortality by County Group 1990-1998

### Crude Rates



### Age-Adjusted Rates<sup>1</sup>



<sup>1</sup>Adjusted to Year 2000 US population

## Atherosclerosis Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	6,688	26.3	21.1

	County				County			
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>		Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	34	45.6	24.7	Lucas	29	35.6	21.7
	Adams	6	14.6	7.7	Monroe	44	60.1	34.2
	Audubon	31	49.2	22.1	Osceola	7	10.9	6.7
	Clarke	12	16.1	9.9	Pocahontas	39	47.5	24.1
	Davis	30	39.7	24.7	Ringgold	13	26.9	13.2
	Decatur	22	29.9	17.1	Taylor	24	37.5	18.2
	Fremont	21	29.0	16.9	Van Buren	37	53.0	32.8
	Howard	25	28.4	13.8	Wayne	52	83.8	37.3
	Ida	19	25.8	14.7	Worth	22	31.1	19.9
	<b>Group Totals</b>							
Number:	467							
Crude:	37.3							
Adjusted:	20.4							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	68	54.0	33.4	Henry	29	16.4	11.6
	Appanoose	47	38.2	22.6	Humboldt	30	31.8	19.1
	Buena Vista	74	41.3	26.4	Iowa	41	30.3	19.9
	Butler	48	33.9	19.9	Jefferson	39	25.9	22.2
	Calhoun	94	90.8	45.7	Jones	37	20.6	15.8
	Cass	102	75.8	41.3	Keokuk	21	20.2	11.6
	Cedar	37	23.3	16.6	Kossuth	108	66.2	40.5
	Cherokee	80	64.8	38.8	Louisa	36	34.0	28.6
	Chickasaw	28	23.3	16.5	Lyon	21	19.5	13.6
	Clay	33	20.8	14.9	Madison	35	29.5	20.1
	Clayton	72	42.5	28.6	Mills	22	17.8	16.2
	Crawford	30	20.2	13.7	Mitchell	37	37.4	19.7
	Delaware	33	20.0	17.0	Monona	39	43.1	20.8
	Dickinson	36	25.8	16.0	Montgomery	47	43.7	21.7
	Emmet	30	29.6	18.4	O'Brien	64	46.6	24.8
	Floyd	142	94.4	56.8	Page	39	25.6	14.9
	Franklin	90	90.1	51.4	Palo Alto	46	49.5	25.1
	Greene	40	44.2	23.6	Poweshiek	41	24.1	16.4
	Grundy	29	26.5	17.7	Sac	118	108.6	53.0
	Guthrie	286	282.1	158.0	Shelby	28	23.7	12.8
Hamilton	47	32.5	21.5	Tama	43	27.1	16.2	
Hancock	24	21.8	14.8	Union	32	28.3	17.3	
Hardin	45	26.7	15.7	Winnebago	22	20.4	12.4	
Harrison	33	24.5	15.8	Wright	34	26.6	14.7	
<b>Group Totals</b>								
Number:	2,557							
Crude:	40.9							
Adjusted:	25.3							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population &gt;20,000</b>	Benton	21	9.8	7.9	Mahaska	77	39.4	28.3
	Boone	84	36.5	23.7	Marion	61	22.1	17.5
	Bremer	39	18.7	14.0	Marshall	106	30.7	21.8
	Buchanan	42	22.1	20.0	Muscatine	66	18.0	16.4
	Carroll	57	29.4	18.7	Plymouth	47	21.6	15.2
	Cerro Gordo	96	22.9	16.5	Sioux	43	15.5	12.9
	Clinton	122	26.7	21.6	Story	94	14.0	16.9
	Des Moines	89	23.2	17.7	Wapello	71	22.1	15.4
	Fayette	57	28.9	19.0	Washington	75	40.9	25.0
	Jackson	97	53.7	39.6	Webster	77	21.6	14.7
	Jasper	91	28.7	22.8	Winneshek	49	26.0	20.0
	Lee	67	19.2	14.7				
	<b>Group Totals</b>							
Number:	1,628							
Crude:	24.2							
Adjusted:	18.7							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>MSA Counties</b>	Black Hawk	244	22.0	20.6	Polk	420	13.5	15.1
	Dallas	72	24.3	21.4	Pottawattamie	142	18.8	17.9
	Dubuque	181	22.9	19.8	Scott	271	19.3	22.2
	Johnson	111	12.4	19.6	Warren	62	18.0	19.3
	Linn	328	20.7	21.2	Woodbury	205	22.6	19.8
<b>Group Totals</b>								
Number:	2,036							
Crude:	18.2							
Adjusted:	19.1							

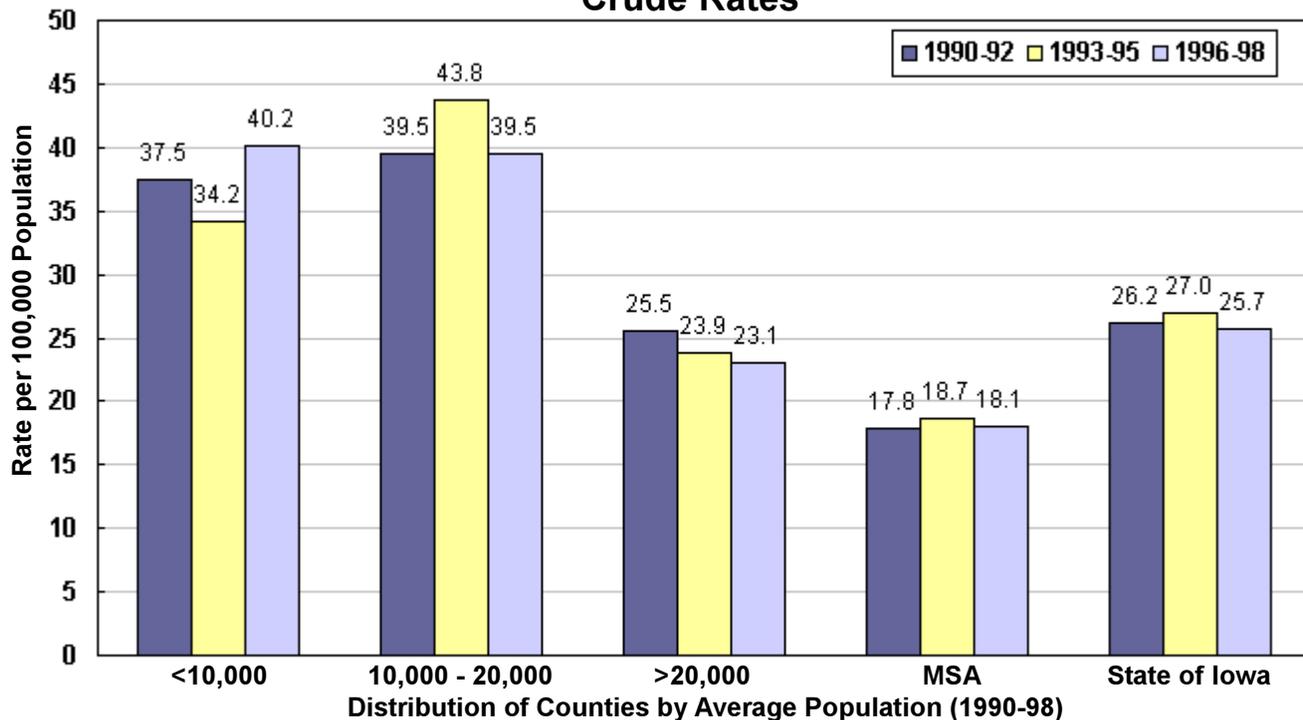
<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Adjusted to Year 2000 US population

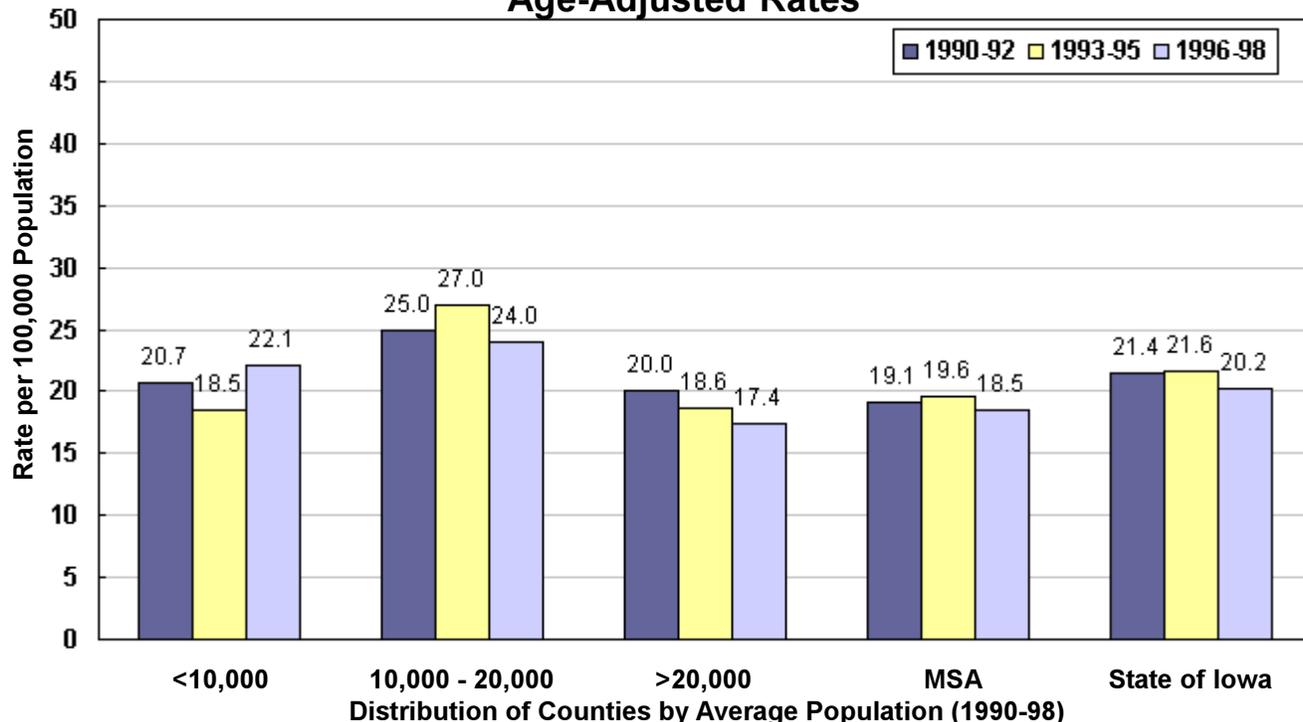
Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Atherosclerosis Mortality by County Group 1990-1998

### Crude Rates



### Age-Adjusted Rates<sup>1</sup>



<sup>1</sup>Adjusted to Year 2000 US population

## Infectious/Parasitic Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	3,129	12.3	11.0

	County				County				
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	11	14.7	9.0	Lucas	10	12.3	8.6	
	Adams	4	9.7	5.3	Monroe	6	8.2	6.2	
	Audubon	6	9.5	4.9	Osceola	8	12.5	9.4	
	Clarke	11	14.8	10.6	Pocahontas	12	14.6	9.6	
	Davis	9	11.9	10.1	Ringgold	7	14.5	8.9	
	Decatur	8	10.9	8.6	Taylor	12	18.8	11.3	
	Fremont	8	11.1	8.1	Van Buren	13	18.6	13.1	
	Howard	8	9.1	7.1	Wayne	7	11.3	6.5	
	Ida	5	6.8	4.5	Worth	9	12.7	7.6	
	<b>Group Totals</b>								
Number:	154								
Crude:	12.3								
Adjusted:	8.4								

	County				County			
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	15	11.9	8.4	Henry	16	9.0	8.1
	Appanoose	23	18.7	14.6	Humboldt	10	10.6	7.4
	Buena Vista	18	10.1	8.6	Iowa	22	16.2	12.9
	Butler	15	10.6	7.4	Jefferson	13	8.6	7.6
	Calhoun	13	12.6	8.5	Jones	10	5.6	4.7
	Cass	15	11.2	9.2	Keokuk	23	22.1	14.5
	Cedar	15	9.4	7.1	Kossuth	19	11.7	7.6
	Cherokee	11	8.9	6.3	Louisa	12	11.3	10.3
	Chickasaw	14	11.7	8.4	Lyon	13	12.1	10.0
	Clay	11	6.9	5.9	Madison	15	12.7	10.3
	Clayton	17	10.0	7.5	Mills	12	9.7	9.2
	Crawford	13	8.7	7.5	Mitchell	10	10.1	6.0
	Delaware	21	12.7	12.0	Monona	13	14.4	8.5
	Dickinson	17	12.2	8.6	Montgomery	18	16.8	8.9
	Emmet	11	10.8	8.1	O'Brien	18	13.1	8.4
	Floyd	19	12.6	9.4	Page	19	12.5	7.5
	Franklin	8	8.0	7.3	Palo Alto	12	12.9	8.5
	Greene	11	12.1	9.4	Poweshiek	17	10.0	7.8
	Grundy	14	12.8	9.4	Sac	12	11.0	8.9
	Guthrie	11	10.8	6.9	Shelby	16	13.5	10.0
Hamilton	27	18.7	13.9	Tama	18	11.4	7.6	
Hancock	13	11.8	8.1	Union	13	11.5	9.2	
Hardin	33	19.6	13.1	Winnebago	20	18.6	13.2	
Harrison	13	9.7	7.3	Wright	12	9.4	5.9	

	County				County			
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	18	8.4	7.7	Mahaska	20	10.2	7.5
	Boone	30	13.0	10.2	Marion	42	15.2	13.1
	Bremer	18	8.6	7.7	Marshall	70	20.3	16.5
	Buchanan	21	11.1	10.0	Muscatine	45	12.3	11.6
	Carroll	16	8.3	7.0	Plymouth	30	13.8	11.0
	Cerro Gordo	72	17.2	14.5	Sioux	29	10.5	8.9
	Clinton	55	12.0	10.6	Story	61	9.1	10.6
	Des Moines	85	22.2	18.2	Wapello	37	11.5	9.3
	Fayette	31	15.7	11.7	Washington	16	8.7	5.5
	Jackson	20	11.1	9.3	Webster	45	12.6	10.1
	Jasper	36	11.3	9.1	Winneshek	12	6.4	5.7
	Lee	67	19.2	16.0				

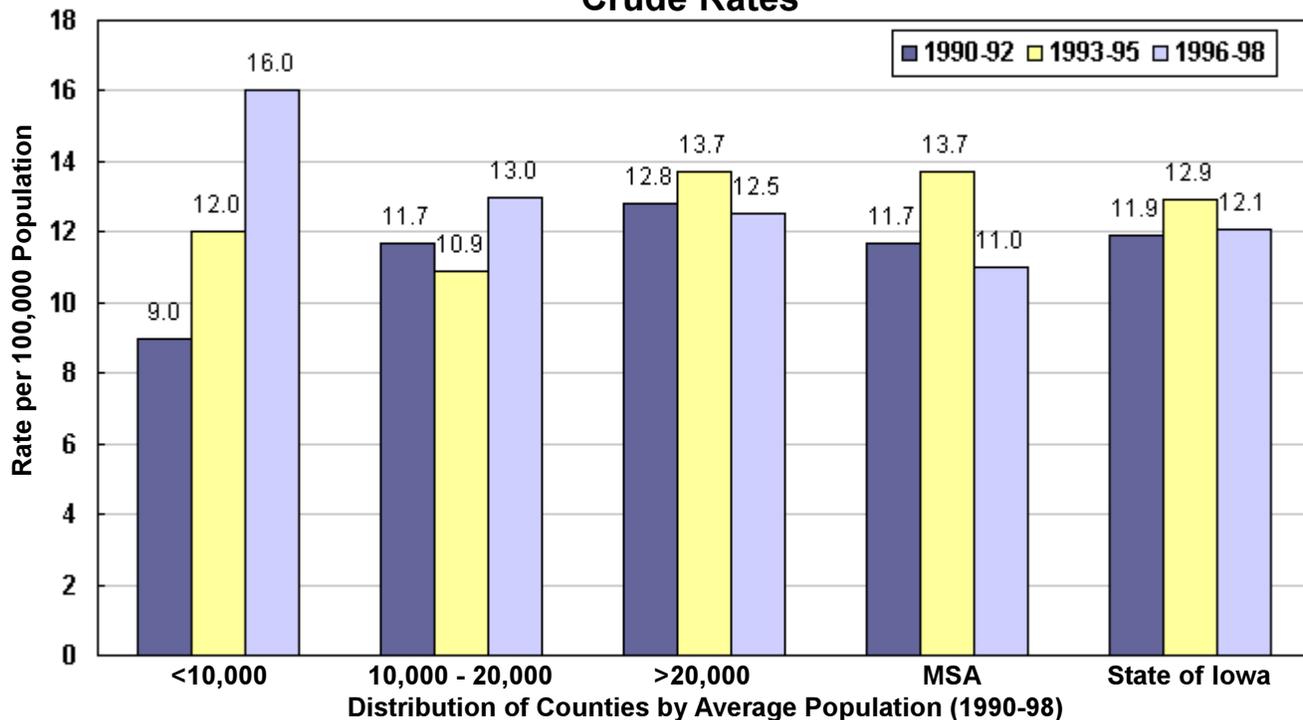
	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	141	12.7	12.6	Polk	446	14.3	15.1	
	Dallas	36	12.2	11.0	Pottawattamie	83	11.0	10.8	
	Dubuque	80	10.1	9.5	Scott	164	11.7	12.8	
	Johnson	98	10.9	14.7	Warren	29	8.4	9.3	
	Linn	175	11.0	11.3	Woodbury	106	11.7	11.2	
	<b>Group Totals</b>								
Number:	1,358								
Crude:	12.1								
Adjusted:	12.6								

<sup>1</sup>Rates per 100,000 population  
<sup>2</sup>Adjusted to Year 2000 US population

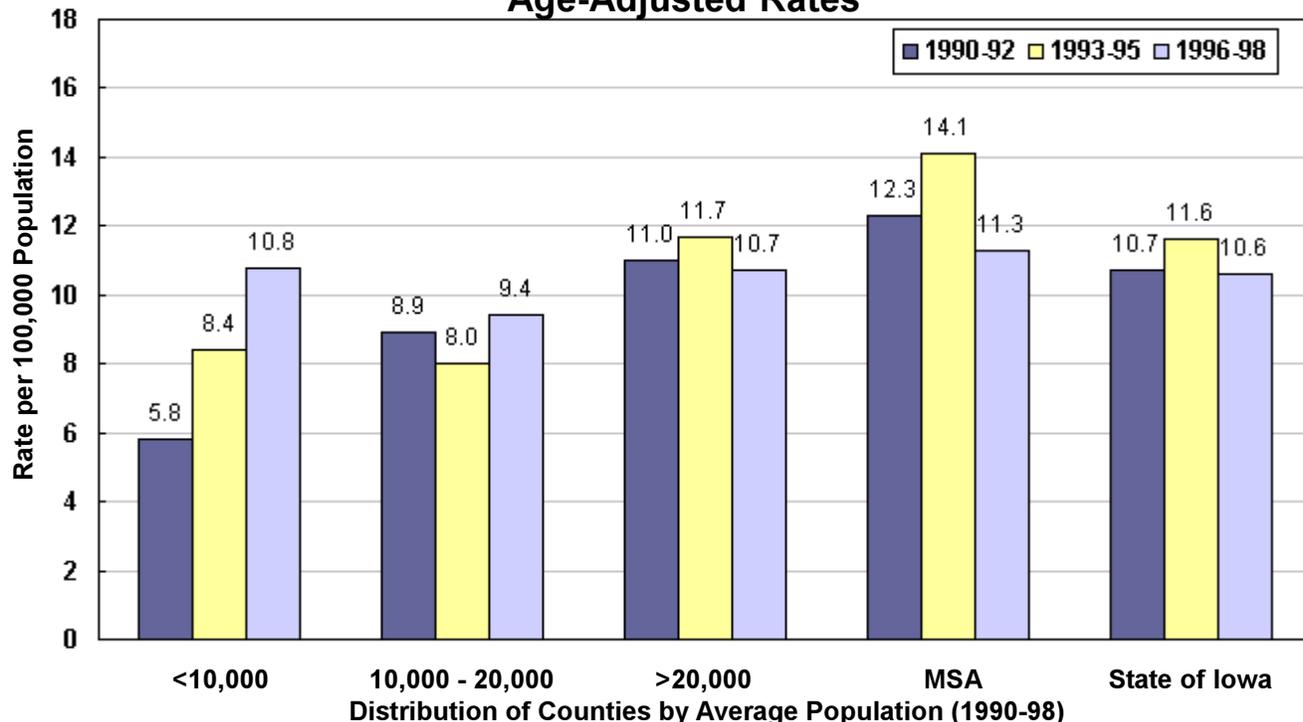
Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Infectious/Parasitic Mortality by County Group 1990-1998

### Crude Rates



### Age-Adjusted Rates<sup>1</sup>



<sup>1</sup>Adjusted to Year 2000 US population

# Nephritis, Nephrotic Syndrome, Nephrosis Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	1,597	6.3	5.1

Counties with Average Population <10,000					Counties with Average Population 10,000 to 20,000				
County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>		
Adair	10	13.4	7.3	Lucas	6	7.4	4.5		
Adams	5	12.2	6.4	Monroe	6	8.2	5.2		
Audubon	10	15.9	7.3	Osceola	5	7.8	5.1		
Clarke	6	8.1	4.7	Pocahontas	8	9.7	4.7		
Davis	9	11.9	7.7	Ringgold	7	14.5	6.6		
Decatur	3	4.1	2.0	Taylor	4	6.3	3.1		
Fremont	10	13.8	8.0	Van Buren	6	8.6	5.8		
Howard	10	11.4	5.9	Wayne	3	4.8	3.4		
Ida	7	9.5	4.8	Worth	5	7.1	3.5		

Counties with Average Population >20,000					MSA Counties				
County	Number	Crude	Adjusted	County	Number	Crude	Adjusted		
Allamakee	13	10.3	6.2	Black Hawk	71	6.4	6.1		
Appanoose	12	9.8	6.3	Dallas	25	8.4	7.5		
Buena Vista	9	5.0	3.1	Dubuque	31	3.9	3.4		
Butler	8	5.7	3.1	Johnson	23	2.6	3.8		
Calhoun	6	5.8	3.0	Linn	60	3.8	3.9		
Cass	14	10.4	5.5						
Cedar	6	3.8	2.8						
Cherokee	10	8.1	4.8						
Chickasaw	5	4.2	2.7						
Clay	8	5.0	3.9						
Clayton	10	5.9	3.9						
Crawford	15	10.1	6.9						
Delaware	6	3.6	2.9						
Dickinson	10	7.2	4.9						
Emmet	16	15.8	10.0						
Floyd	7	4.7	2.8						
Franklin	3	3.0	2.0						
Greene	5	5.5	3.0						
Grundy	4	3.7	2.8						
Guthrie	4	3.9	2.2						
Hamilton	10	6.9	4.8						
Hancock	*	*	*						
Hardin	21	12.5	6.8						
Harrison	6	4.5	2.9						

Counties with Average Population >20,000					Counties with Average Population >20,000				
County	Number	Crude	Adjusted	County	Number	Crude	Adjusted		
Benton	6	2.8	2.2	Mahaska	9	4.6	3.5		
Boone	23	10.0	6.7	Marion	14	5.1	3.8		
Bremer	15	7.2	5.1	Marshall	36	10.4	7.6		
Buchanan	13	6.8	6.1	Muscatine	12	3.3	3.1		
Carroll	8	4.1	3.4	Plymouth	6	2.8	1.9		
Cerro Gordo	19	4.5	3.3	Sioux	22	7.9	7.1		
Clinton	34	7.4	6.0	Story	34	5.1	5.8		
Des Moines	48	12.5	9.5	Wapello	26	8.1	6.1		
Fayette	18	9.1	6.1	Washington	9	4.9	3.0		
Jackson	15	8.3	6.4	Webster	26	7.3	5.3		
Jasper	28	8.8	7.0	Winneshek	13	6.9	5.2		
Lee	29	8.3	6.8						

MSA Counties					MSA Counties				
County	Number	Crude	Adjusted	County	Number	Crude	Adjusted		
Black Hawk	71	6.4	6.1	Polk	168	5.4	6.1		
Dallas	25	8.4	7.5	Pottawattamie	60	7.9	7.7		
Dubuque	31	3.9	3.4	Scott	49	3.5	4.0		
Johnson	23	2.6	3.8	Warren	10	2.9	3.2		
Linn	60	3.8	3.9	Woodbury	56	6.2	5.4		

<sup>1</sup>Rates per 100,000 population

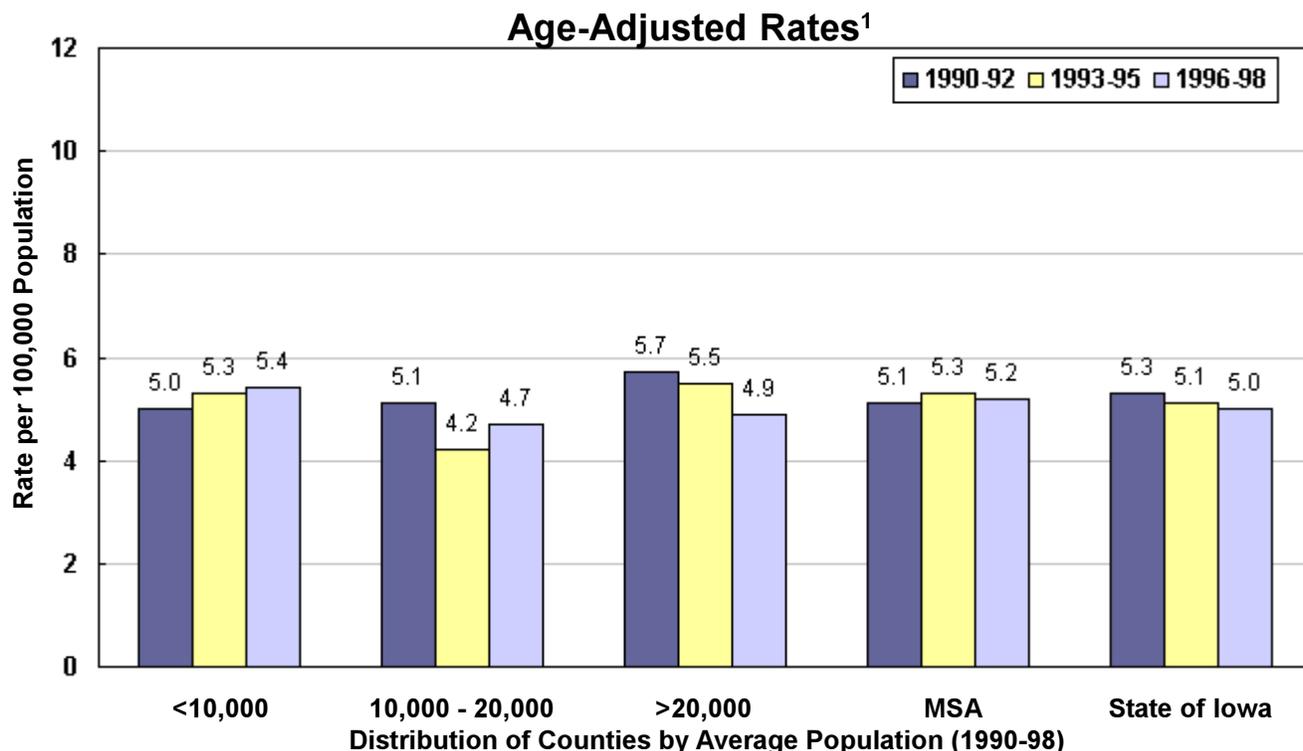
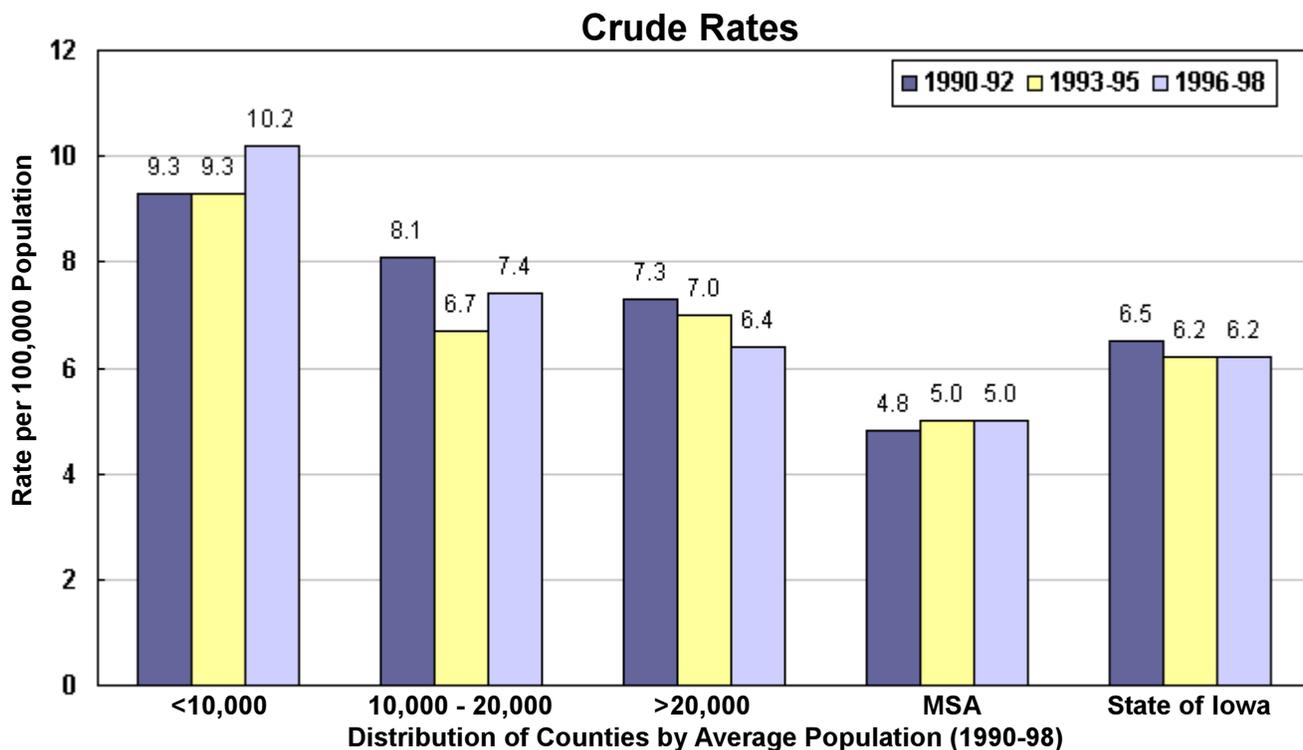
\*Number of events is less than 3

Source: IDPH Vital Records via

<sup>2</sup>Adjusted to Year 2000 US population

Iowa Cancer Registry, The University of Iowa

## Nephritis, Nephrotic Syndrome, Nephrosis Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

## Chronic Liver Disease & Cirrhosis Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	1,563	6.1	5.8

	County				County				
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	6	8.0	6.6	Lucas	6	7.4	4.7	
	Adams	9	21.9	17.6	Monroe	6	8.2	6.2	
	Audubon	5	7.9	5.9	Osceola	*	*	*	
	Clarke	4	5.4	4.4	Pocahontas	6	7.3	4.9	
	Davis	4	5.3	4.1	Ringgold	4	8.3	5.7	
	Decatur	3	4.1	3.9	Taylor	5	7.8	4.2	
	Fremont	*	*	*	Van Buren	5	7.2	5.4	
	Howard	7	7.9	5.5	Wayne	*	*	*	
	Ida	3	4.1	2.3	Worth	7	9.9	8.3	
	<b>Group Totals</b>								
Number:	85								
Crude:	6.8								
Adjusted:	5.1								

	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	14	11.1	8.6	Henry	4	2.3	2.1	
	Appanoose	12	9.8	7.7	Humboldt	4	4.2	2.6	
	Buena Vista	13	7.3	7.0	Iowa	9	6.6	5.4	
	Butler	10	7.1	5.0	Jefferson	*	*	*	
	Calhoun	7	6.8	3.4	Jones	10	5.6	5.0	
	Cass	10	7.4	6.0	Keokuk	8	7.7	6.5	
	Cedar	14	8.8	7.2	Kossuth	14	8.6	6.6	
	Cherokee	9	7.3	5.8	Louisa	9	8.5	8.2	
	Chickasaw	8	6.7	6.0	Lyon	6	5.6	4.3	
	Clay	7	4.4	4.2	Madison	4	3.4	2.8	
	Clayton	14	8.3	6.5	Mills	5	4.1	4.1	
	Crawford	10	6.7	5.8	Mitchell	7	7.1	5.4	
	Delaware	8	4.9	4.6	Monona	8	8.8	5.7	
	Dickinson	6	4.3	3.5	Montgomery	12	11.2	8.4	
	Emmet	8	7.9	6.0	O'Brien	14	10.2	7.6	
	Floyd	9	6.0	4.4	Page	3	2.0	2.0	
	Franklin	5	5.0	3.2	Palo Alto	9	9.7	6.9	
	Greene	6	6.6	3.7	Poweshiek	9	5.3	5.4	
	Grundy	8	7.3	4.7	Sac	9	8.3	5.0	
	Guthrie	4	3.9	3.1	Shelby	7	5.9	4.2	
Hamilton	8	5.5	4.5	Tama	11	6.9	5.9		
Hancock	7	6.4	5.8	Union	12	10.6	9.6		
Hardin	13	7.7	6.2	Winnebago	13	12.1	10.3		
Harrison	7	5.2	4.3	Wright	11	8.6	5.1		
<b>Group Totals</b>									
Number:	416								
Crude:	6.7								
Adjusted:	5.3								

	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>Counties with Average Population &gt;20,000</b>	Benton	11	5.1	4.7	Mahaska	7	3.6	2.8	
	Boone	18	7.8	6.8	Marion	14	5.1	5.0	
	Bremer	11	5.3	4.5	Marshall	24	7.0	5.7	
	Buchanan	5	2.6	2.4	Muscatine	17	4.6	4.6	
	Carroll	10	5.2	4.4	Plymouth	16	7.4	6.9	
	Cerro Gordo	42	10.0	8.7	Sioux	11	4.0	3.8	
	Clinton	24	5.3	4.7	Story	22	3.3	4.4	
	Des Moines	22	5.7	5.2	Wapello	15	4.7	3.7	
	Fayette	13	6.6	5.8	Washington	6	3.3	2.5	
	Jackson	14	7.7	6.7	Webster	23	6.5	6.3	
	Jasper	13	4.1	3.4	Winneshek	7	3.7	3.8	
	Lee	23	6.6	5.8					
	<b>Group Totals</b>								
Number:	368								
Crude:	5.5								
Adjusted:	5.0								

	County				County				
	Number	Crude	Adjusted	Number	Crude	Adjusted	Number	Crude	Adjusted
<b>MSA Counties</b>	Black Hawk	66	6.0	5.9	Polk	233	7.5	8.2	
	Dallas	13	4.4	4.3	Pottawattamie	40	5.3	5.3	
	Dubuque	46	5.8	5.6	Scott	60	4.3	4.7	
	Johnson	30	3.3	4.9	Warren	18	5.2	5.7	
	Linn	109	6.9	7.1	Woodbury	79	8.7	8.6	
<b>Group Totals</b>									
Number:	694								
Crude:	6.2								
Adjusted:	6.6								

<sup>1</sup>Rates per 100,000 population

\*Number of events is less than 3

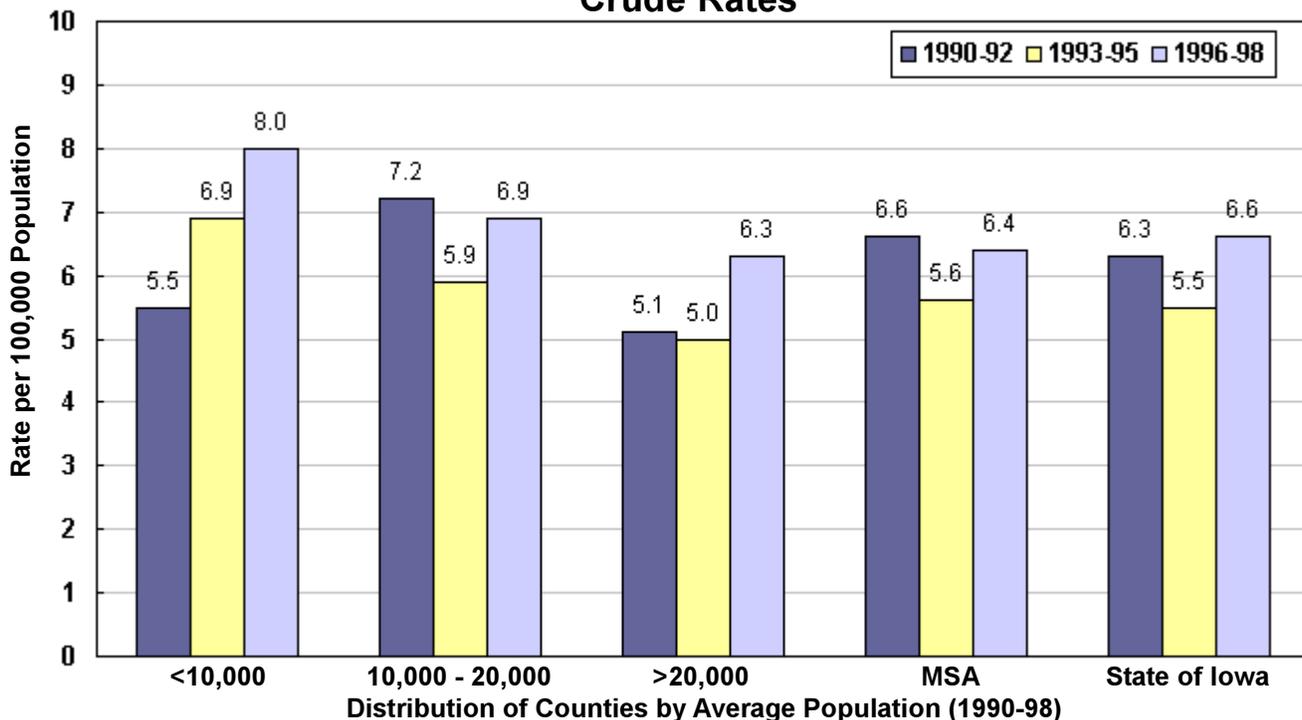
Source: IDPH Vital Records via

<sup>2</sup>Adjusted to Year 2000 US population

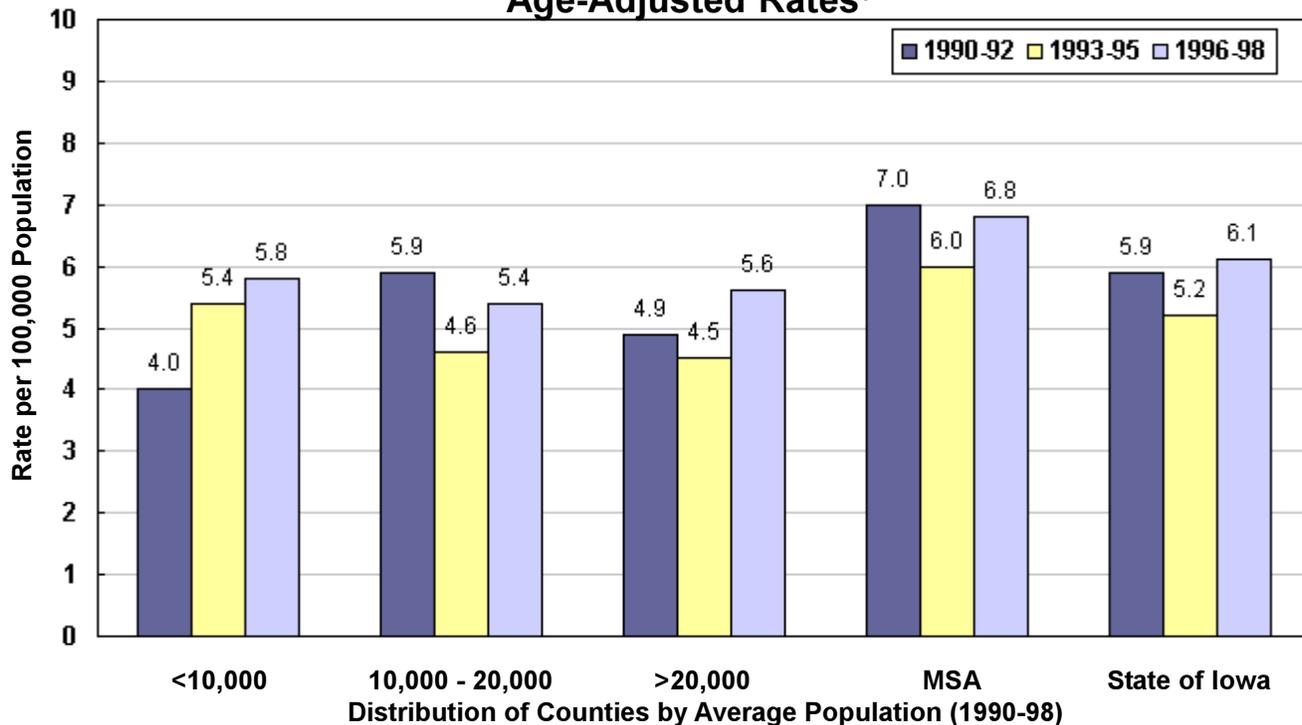
Iowa Cancer Registry, The University of Iowa

## Chronic Liver Disease & Cirrhosis Mortality by County Group 1990-1998

### Crude Rates



### Age-Adjusted Rates<sup>1</sup>



<sup>1</sup>Adjusted to Year 2000 US population

## Congenital Anomalies Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	1,168	4.6	4.6

	Counties with Average Population <10,000				Counties with Average Population 10,000 to 20,000			
	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	County	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
<b>Group Totals</b>								
Number:	49				279			
Crude:	3.9				4.5			
Adjusted:	4.0				4.4			

	Counties with Average Population >20,000				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Group Totals</b>								
Number:	304				536			
Crude:	4.5				4.8			
Adjusted:	4.6				4.8			

	Counties with Average Population >20,000				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Group Totals</b>								
Number:	304				536			
Crude:	4.5				4.8			
Adjusted:	4.6				4.8			

	Counties with Average Population >20,000				MSA Counties			
	County	Number	Crude	Adjusted	County	Number	Crude	Adjusted
<b>Group Totals</b>								
Number:	304				536			
Crude:	4.5				4.8			
Adjusted:	4.6				4.8			

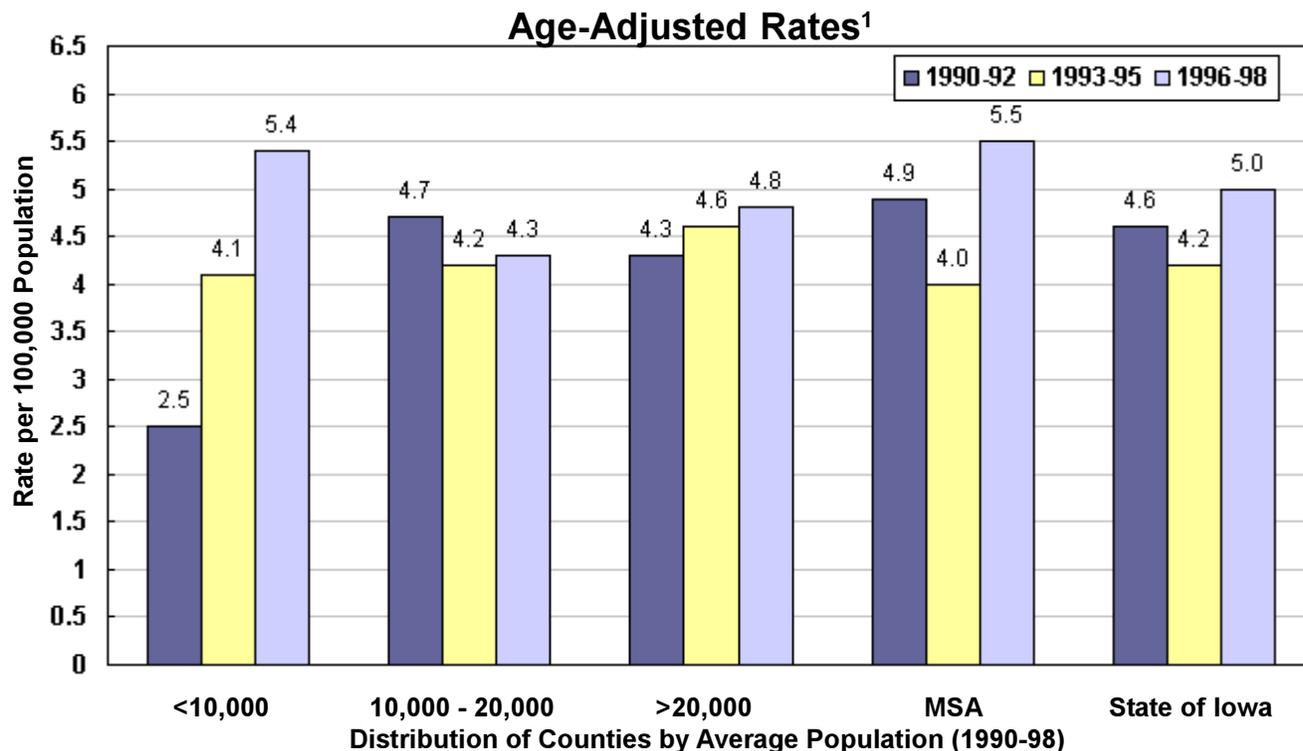
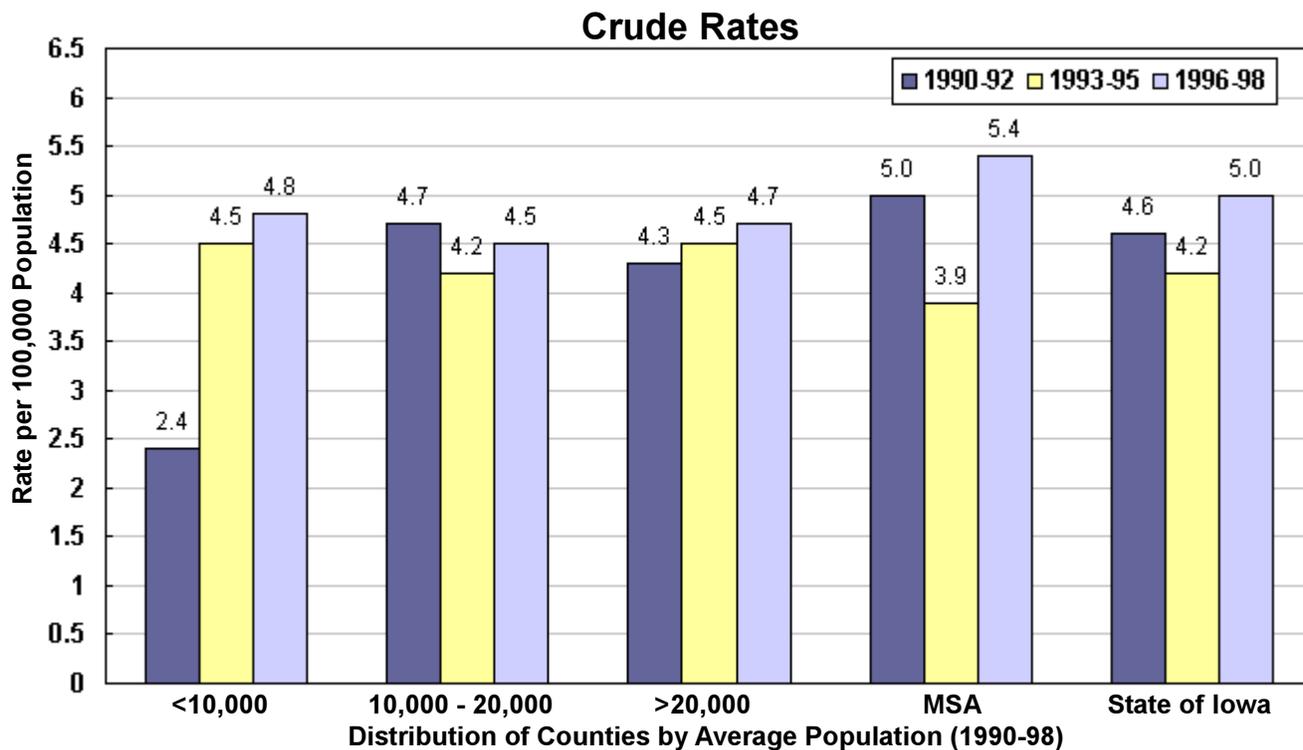
<sup>1</sup>Rates per 100,000 population

\*Number of events is less than 3

<sup>2</sup>Adjusted to Year 2000 US population

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Congenital Anomalies Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

# Conditions Originating in Perinatal Period Mortality 1990-1998

TOTAL	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>
State of Iowa	1,015	4.0	4.2

	County				County			
	Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>		Number	Crude <sup>1</sup>	Adjusted <sup>1,2</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	*	*	*	Lucas	*	*	*
	Adams	*	*	*	Monroe	*	*	*
	Audubon	*	*	*	Osceola	*	*	*
	Clarke	*	*	*	Pocahontas	*	*	*
	Davis	*	*	*	Ringgold	*	*	*
	Decatur	5	6.8	8.0	Taylor	*	*	*
	Fremont	*	*	*	Van Buren	4	5.7	5.8
	Howard	*	*	*	Wayne	*	*	*
	Ida	6	8.1	8.0	Worth	*	*	*
	<b>Group Totals</b>							
Number:	34							
Crude:	2.7							
Adjusted:	3.0							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	4	3.2	3.3	Henry	5	2.8	3.1
	Appanoose	7	5.7	6.5	Humboldt	3	3.2	3.6
	Buena Vista	3	1.7	1.7	Iowa	3	2.2	2.2
	Butler	3	2.1	2.5	Jefferson	7	4.7	5.2
	Calhoun	*	*	*	Jones	10	5.6	6.3
	Cass	*	*	*	Keokuk	*	*	*
	Cedar	5	3.1	3.6	Kossuth	4	2.5	2.6
	Cherokee	5	4.0	4.1	Louisa	4	3.8	4.0
	Chickasaw	3	2.5	2.7	Lyon	*	*	*
	Clay	*	*	*	Madison	*	*	*
	Clayton	*	*	*	Mills	5	4.1	4.4
	Crawford	4	2.7	2.8	Mitchell	4	4.0	4.5
	Delaware	3	1.8	1.7	Monona	*	*	*
	Dickinson	3	2.1	2.8	Montgomery	5	4.7	5.5
	Emmet	*	*	*	O'Brien	7	5.1	5.7
	Floyd	3	2.0	2.3	Page	7	4.6	5.8
	Franklin	3	3.0	3.4	Palo Alto	7	7.5	8.7
	Greene	3	3.3	3.9	Poweshiek	*	*	*
	Grundy	*	*	*	Sac	*	*	*
	Guthrie	4	3.9	5.1	Shelby	8	6.8	7.5
Hamilton	6	4.1	4.6	Tama	3	1.9	2.1	
Hancock	*	*	*	Union	3	2.7	3.1	
Hardin	3	1.8	2.2	Winnebago	4	3.7	4.1	
Harrison	4	3.0	3.1	Wright	4	3.1	3.4	
<b>Group Totals</b>								
Number:	179							
Crude:	2.9							
Adjusted:	3.2							

	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>Counties with Average Population &gt;20,000</b>	Benton	11	5.1	5.0	Mahaska	3	1.5	1.6
	Boone	6	2.6	2.8	Marion	8	2.9	3.2
	Bremer	6	2.9	3.5	Marshall	15	4.3	4.9
	Buchanan	7	3.7	3.4	Muscatine	19	5.2	5.0
	Carroll	6	3.1	2.9	Plymouth	5	2.3	2.3
	Cerro Gordo	8	1.9	2.1	Sioux	12	4.3	4.1
	Clinton	11	2.4	2.5	Story	21	3.1	3.8
	Des Moines	15	3.9	4.3	Wapello	8	2.5	2.8
	Fayette	6	3.0	3.2	Washington	11	6.0	5.9
	Jackson	7	3.9	4.0	Webster	15	4.2	4.2
	Jasper	11	3.5	4.0	Winnesiek	*	*	*
	Lee	14	4.0	4.4				
	<b>Group Totals</b>							
Number:	226							
Crude:	3.4							
Adjusted:	3.6							

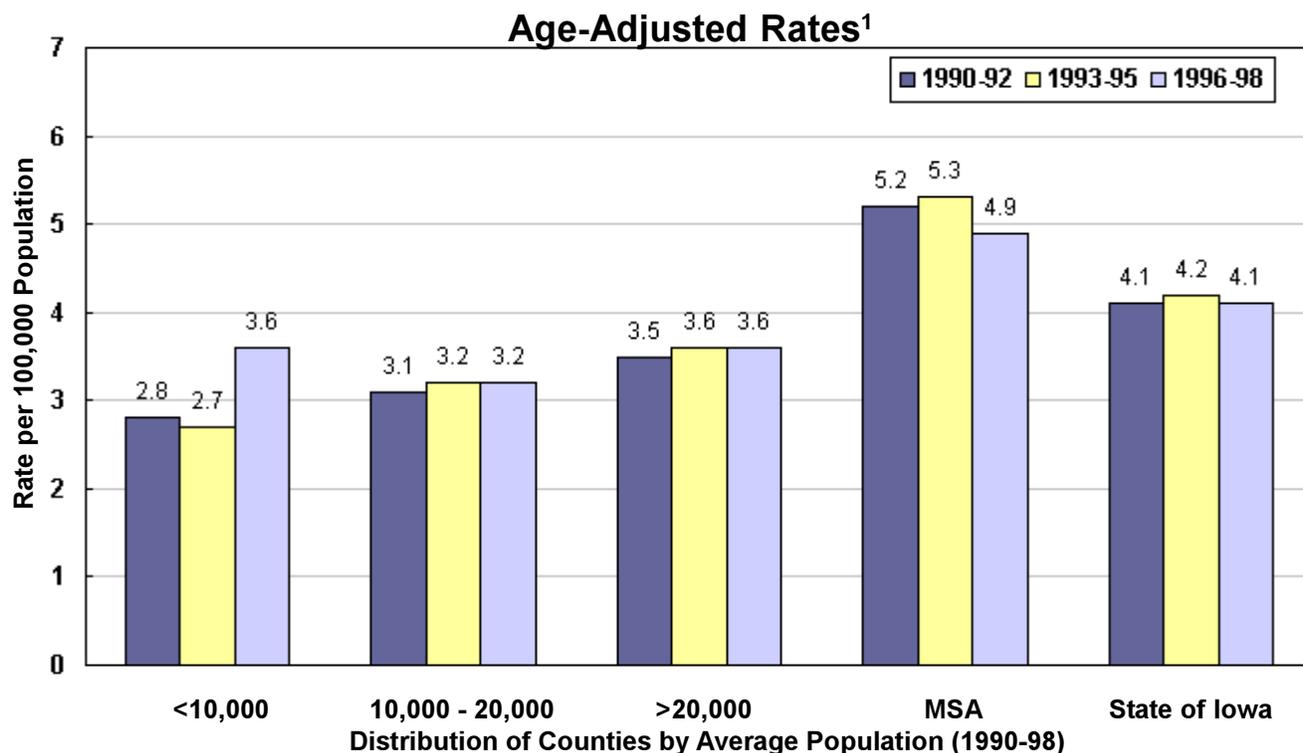
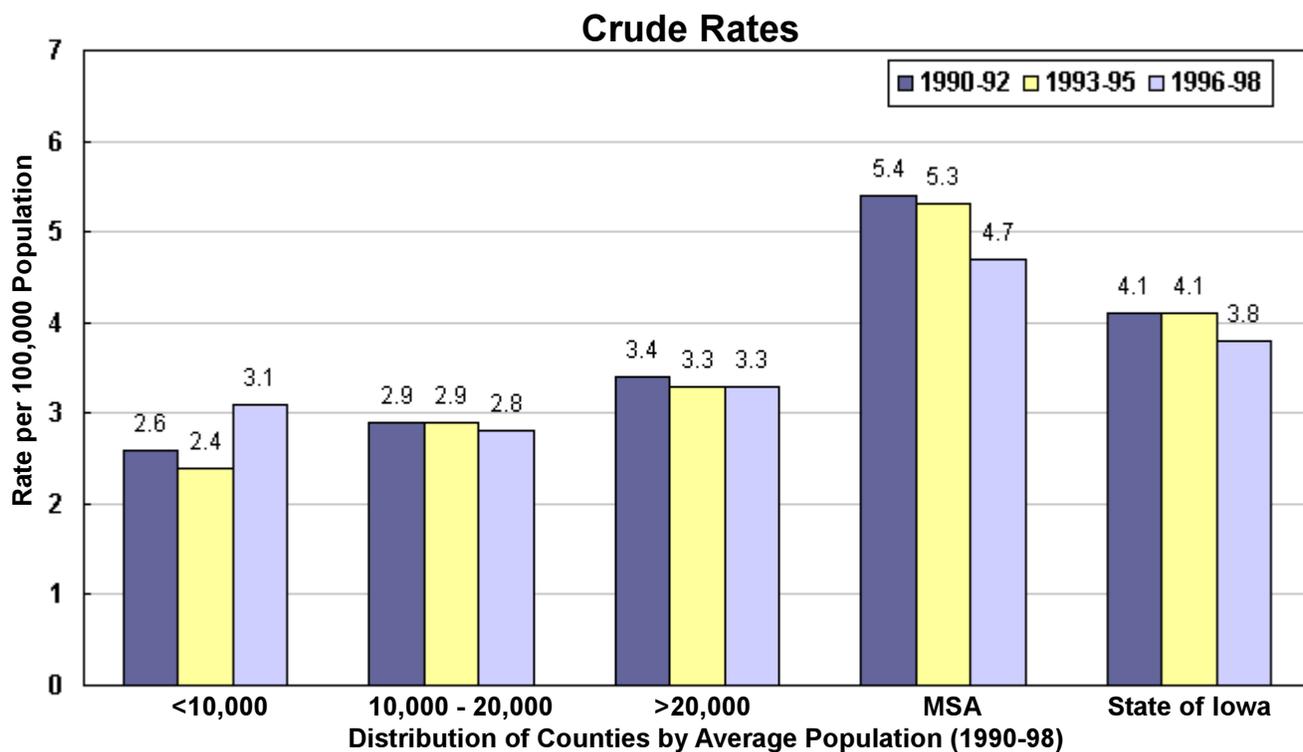
	County				County			
	Number	Crude	Adjusted		Number	Crude	Adjusted	
<b>MSA Counties</b>	Black Hawk	53	4.8	5.2	Polk	177	5.7	5.4
	Dallas	11	3.7	3.8	Pottawattamie	35	4.6	4.5
	Dubuque	29	3.7	3.8	Scott	72	5.1	4.8
	Johnson	40	4.5	5.0	Warren	21	6.1	6.2
	Linn	85	5.4	5.5	Woodbury	53	5.8	5.5
	<b>Group Totals</b>							
Number:	576							
Crude:	5.1							
Adjusted:	5.1							

<sup>1</sup>Rates per 100,000 population

<sup>2</sup>Number of events is less than 3

Source: IDPH Vital Records via Iowa Cancer Registry, The University of Iowa

## Conditions Originating in Perinatal Period Mortality by County Group 1990-1998



<sup>1</sup>Adjusted to Year 2000 US population

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## Health Care Providers

Health care provider data come from the Office of Statewide Clinical Education Programs (OSCEP) at The University of Iowa College of Medicine and from the Iowa Department of Public Health, Board of Nursing, and Bureau of Emergency Medical Services. OSCEP provides an up-to-date inventory of physicians, physician assistants, nurse practitioners, pharmacists, and dentists to follow trends in health professionals practicing in the state and to provide the health science colleges information on progress of their programs.

The Board of Nursing enforces and regulates nursing education, nursing practice, and continuing education for nurses. The board sets standards, provides evaluation and licensing, and investigates complaints about licensed practical nurses, registered nurses, and advanced registered nurse practitioners. Its mission is “to protect the public health, safety and welfare of Iowans by ensuring that nursing is practiced by competent licensed individuals within their practice field.” Data about the nursing supply are housed within the Board of Nursing.

The Bureau of Emergency Medical Services is a regulatory agency that establishes initial training, continuing education, and renewal requirements leading towards certification of emergency medical care providers including those presented in the Iowa Health Fact Book. The EMS Bureau is also responsible for the implementation of a statewide system of emergency care dealing with children and for the development of a statewide trauma system.

Seventeen other licensing boards are housed at the Iowa Department of Public Health and collect data about practice, licensing/certification as well as other supply information.

### *CRUDE RATE TRENDS IN LOCATION OF IOWA HEALTH CARE PROVIDERS...*

#### Higher crude rates in **urban** counties:

- Primary Care Physicians
- Internal Medicine Physicians
- Pediatric Physicians
- Obstetrics/Gynecology Physicians
- General Surgeons
- Other Specialty Physicians
- Registered Nurses
- Pharmacists
- Dentists
- Chiropractors
- Emergency Medical Technicians - Paramedic Specialists
- Public Access Defibrillation Provider
- Iowa Law Enforcement Emergency Care Provider

#### Higher crude rates in **rural** counties:

- Family Practice Physicians
- Physician Assistants (10,000 - 20,000 population counties)
- Nurse Practitioners (<10,000 population counties)
- Licensed Practical Nurses
- First Responders
- Emergency Medical Technicians - Basic
- Emergency Medical Technicians - Intermediate
- Emergency Medical Technicians - Paramedic (slightly higher)

## Primary Care Physicians<sup>2</sup> Practicing - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	2,009	6.9

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	1	1.2	Lucas	4	4.2
	Adams	3	6.7	Monroe	4	5.0
	Audubon	3	4.4	Osceola	4	5.7
	Clarke	4	4.4	Pocahontas	5	5.8
	Davis	3	3.5	Ringgold	4	7.3
	Decatur	3	3.5	Taylor	1	1.4
	Fremont	3	3.7	Van Buren	5	6.4
	Howard	5	5.0	Wayne	6	8.9
	Ida	4	5.1	Worth	3	3.8
	<b>Group Totals</b>					
Number:	65					
Crude:	4.7					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	5	3.4	Henry	14	6.9
	Appanoose	9	6.6	Humboldt	6	5.8
	Buena Vista	11	5.4	Iowa	9	5.7
	Butler	3	2.0	Jefferson	11	6.8
	Calhoun	7	6.3	Jones	9	4.5
	Cass	9	6.1	Keokuk	4	3.5
	Cedar	7	3.8	Kossuth	7	4.1
	Cherokee	7	5.4	Louisa	3	2.5
	Chickasaw	6	4.6	Lyon	3	2.6
	Clay	11	6.3	Madison	6	4.3
	Clayton	11	5.9	Mills	8	5.5
	Crawford	8	4.7	Mitchell	4	3.7
	Delaware	7	3.8	Monona	8	8.0
	Dickinson	10	6.1	Montgomery	11	9.3
	Emmet	6	5.4	O'Brien	8	5.3
	Floyd	8	4.7	Page	15	8.8
	Franklin	5	4.7	Palo Alto	6	5.9
	Greene	6	5.8	Poweshiek	15	8.0
	Grundy	6	4.9	Sac	4	3.5
	Guthrie	6	5.3	Shelby	7	5.3
Hamilton	11	6.7	Tama	6	3.3	
Hancock	3	2.5	Union	10	8.1	
Hardin	14	7.4	Winnebago	5	4.3	
Harrison	4	2.6	Wright	11	7.7	

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	7	2.8	Mahaska	15	6.7
	Boone	14	5.3	Marion	23	7.2
	Bremer	11	4.7	Marshall	27	6.9
	Buchanan	8	3.8	Muscatine	17	4.1
	Carroll	16	7.5	Plymouth	10	4.0
	Cerro Gordo	56	12.1	Sioux	24	7.6
	Clinton	27	5.4	Story	58	7.3
	Des Moines	25	5.9	Wapello	32	8.9
	Fayette	9	4.1	Washington	13	6.3
	Jackson	11	5.4	Webster	28	7.0
	Jasper	19	5.1	Winneshek	14	6.6
	Lee	28	7.4			

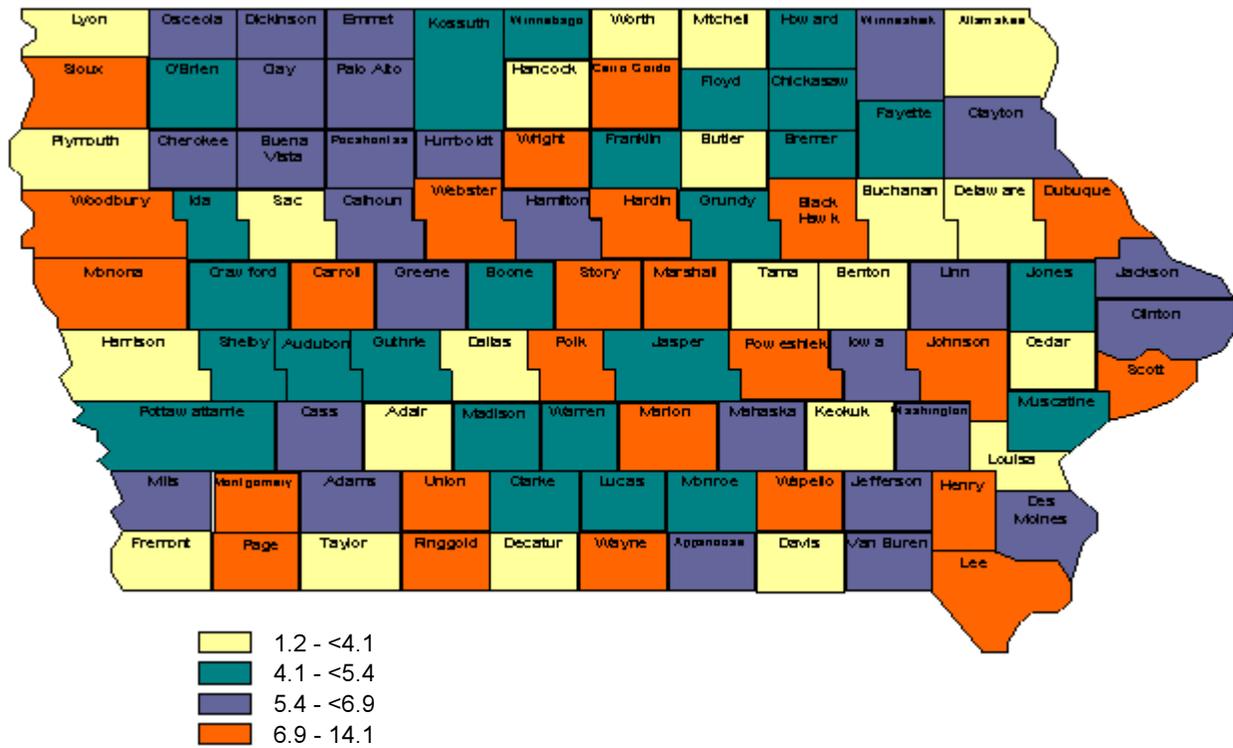
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	110	8.6	Polk	345	9.2
	Dallas	12	2.9	Pottawattamie	44	5.0
	Dubuque	74	8.3	Scott	118	7.4
	Johnson	157	14.1	Warren	18	4.4
	Linn	130	6.8	Woodbury	74	7.1
	<b>Group Totals</b>					
Number:	1,082					
Crude:	8.2					

<sup>1</sup>Rates per 10,000 population<sup>2</sup>Includes Family Practice, Internal Medicine, Pediatric and Obstetrics/Gynecology Physicians

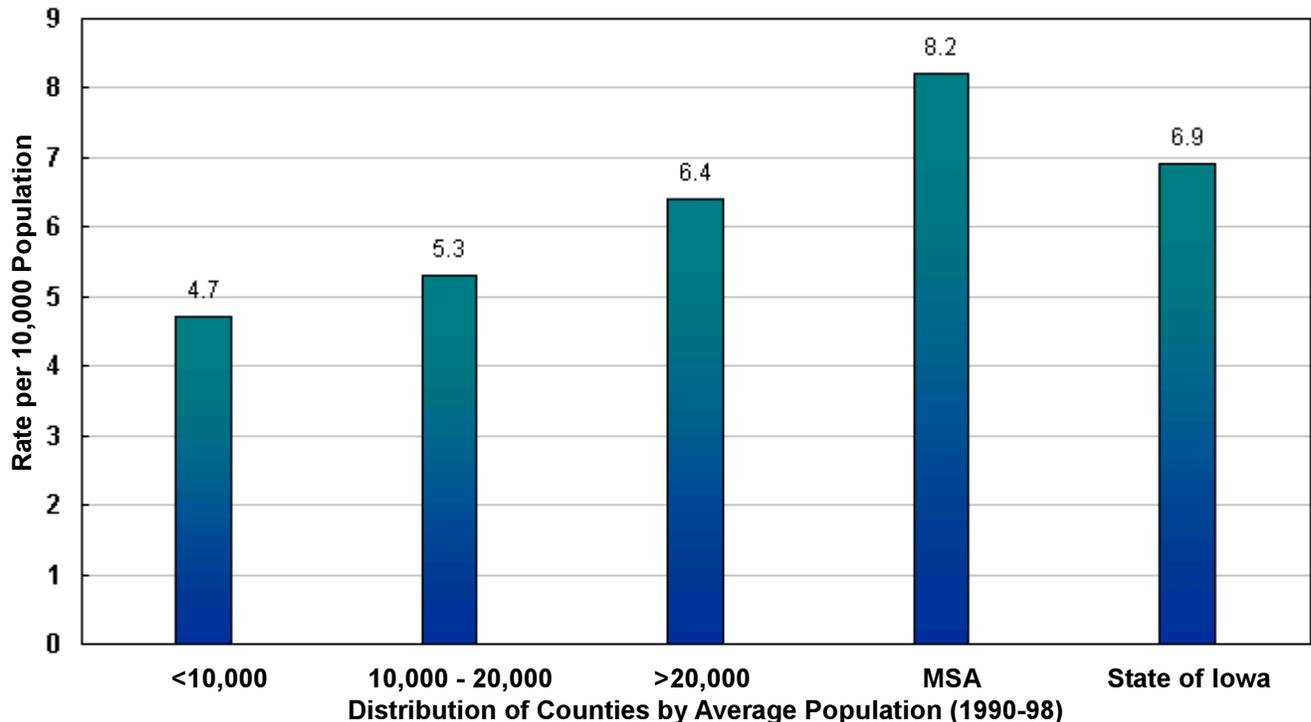
Source: Office of Statewide Clinical Education Programs, UI College of Medicine

## Primary Care Physicians Practicing - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Family Practice Physicians Practicing - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	1,233	4.2

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	1	1.2	Lucas	4	4.2
	Adams	2	4.5	Monroe	4	5.0
	Audubon	3	4.4	Osceola	4	5.7
	Clarke	4	4.4	Pocahontas	5	5.8
	Davis	3	3.5	Ringgold	3	5.5
	Decatur	3	3.5	Taylor	1	1.4
	Fremont	3	3.7	Van Buren	4	5.1
	Howard	5	5.0	Wayne	6	8.9
	Ida	4	5.1	Worth	3	3.8
	<u>Group Totals</u>					
Number:	62					
Crude:	4.4					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	4	2.7	Henry	12	5.9
	Appanoose	7	5.1	Humboldt	5	4.8
	Buena Vista	10	4.9	Iowa	7	4.5
	Butler	3	2.0	Jefferson	10	6.2
	Calhoun	7	6.3	Jones	9	4.5
	Cass	9	6.1	Keokuk	4	3.5
	Cedar	7	3.8	Kossuth	6	3.5
	Cherokee	7	5.4	Louisa	2	1.6
	Chickasaw	6	4.6	Lyon	2	1.7
	Clay	11	6.3	Madison	5	3.6
	Clayton	11	5.9	Mills	6	4.1
	Crawford	7	4.1	Mitchell	4	3.7
	Delaware	7	3.8	Monona	6	6.0
	Dickinson	9	5.5	Montgomery	5	4.2
	Emmet	6	5.4	O'Brien	7	4.6
	Floyd	8	4.7	Page	12	7.1
	Franklin	5	4.7	Palo Alto	6	5.9
	Greene	5	4.8	Poweshiek	12	6.4
	Grundy	6	4.9	Sac	3	2.6
	Guthrie	5	4.4	Shelby	7	5.3
Hamilton	8	4.9	Tama	5	2.8	
Hancock	3	2.5	Union	8	6.5	
Hardin	13	6.9	Winnebago	5	4.3	
Harrison	4	2.6	Wright	11	7.7	
<u>Group Totals</u>						
Number:	327					
Crude:	4.7					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	5	2.0	Mahaska	12	5.4
	Boone	12	4.6	Marion	15	4.7
	Bremer	10	4.3	Marshall	16	4.1
	Buchanan	6	2.8	Muscatine	9	2.2
	Carroll	9	4.2	Plymouth	10	4.0
	Cerro Gordo	27	5.8	Sioux	24	7.6
	Clinton	13	2.6	Story	29	3.6
	Des Moines	11	2.6	Wapello	10	2.8
	Fayette	8	3.6	Washington	11	5.3
	Jackson	11	5.4	Webster	11	2.7
	Jasper	15	4.0	Winneshek	14	6.6
	Lee	14	3.7			
	<u>Group Totals</u>					
	Number:	302				
Crude:	4.0					

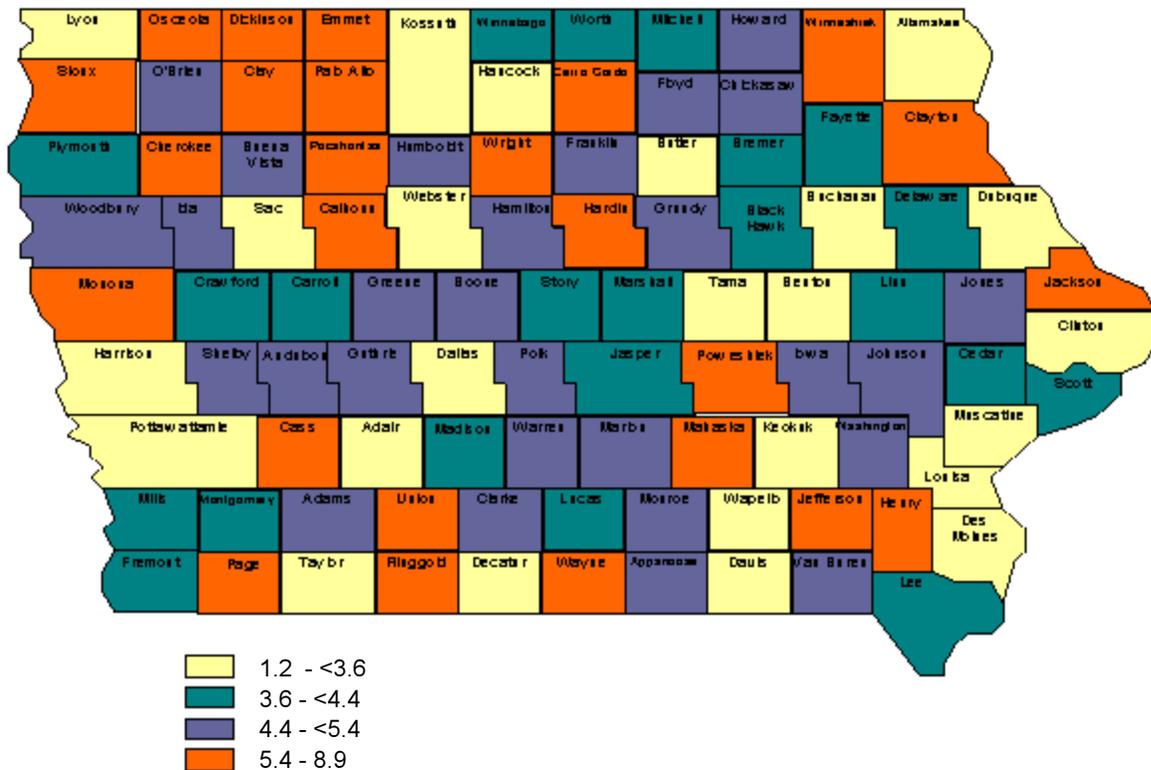
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	54	4.2	Polk	177	4.7
	Dallas	12	2.9	Pottawattamie	20	2.3
	Dubuque	20	2.2	Scott	63	4.0
	Johnson	51	4.6	Warren	18	4.4
	Linn	80	4.2	Woodbury	47	4.5
	<u>Group Totals</u>					
Number:	542					
Crude:	4.1					

<sup>1</sup>Rates per 10,000 population

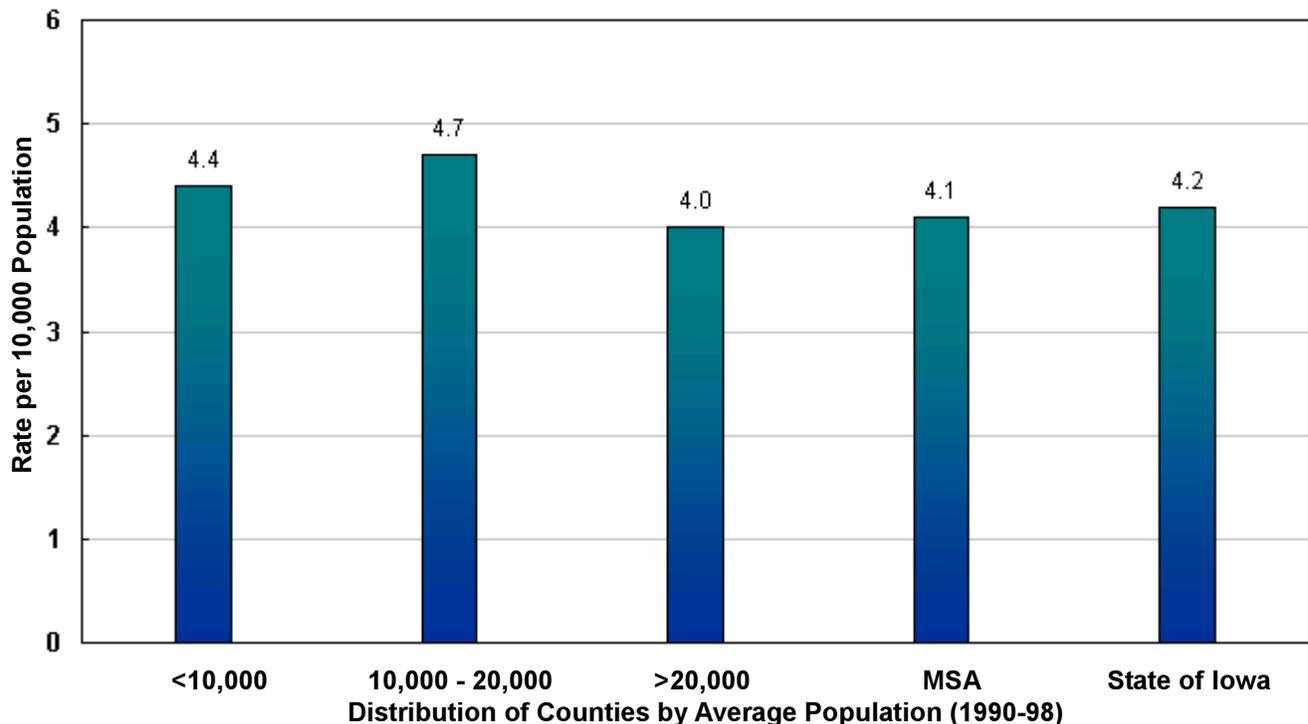
Source: Office of Statewide Clinical Education Programs, UI College of Medicine

## Family Practice Physicians Practicing - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Internal Medicine Physicians Practicing - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	362	1.2

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	1	2.2	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	0	*	Ringgold	1	1.8
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	1	1.3
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	3					
Crude:	0.2					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	1	0.7	Henry	1	0.5
	Appanoose	2	1.5	Humboldt	1	1.0
	Buena Vista	1	0.5	Iowa	2	1.3
	Butler	0	*	Jefferson	0	*
	Calhoun	0	*	Jones	0	*
	Cass	0	*	Keokuk	0	*
	Cedar	0	*	Kossuth	1	0.6
	Cherokee	0	*	Louisa	1	0.8
	Chickasaw	0	*	Lyon	1	0.9
	Clay	0	*	Madison	1	0.7
	Clayton	0	*	Mills	1	0.7
	Crawford	1	0.6	Mitchell	0	*
	Delaware	0	*	Monona	1	1.0
	Dickinson	1	0.6	Montgomery	4	3.4
	Emmet	0	*	O'Brien	1	0.7
	Floyd	0	*	Page	3	1.8
	Franklin	0	*	Palo Alto	0	*
	Greene	1	1.0	Poweshiek	3	1.6
	Grundy	0	*	Sac	1	0.9
	Guthrie	1	0.9	Shelby	0	*
Hamilton	2	1.2	Tama	1	0.6	
Hancock	0	*	Union	2	1.6	
Hardin	0	*	Winnebago	0	*	
Harrison	0	*	Wright	0	*	

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	2	0.8	Mahaska	2	0.9
	Boone	1	0.4	Marion	7	2.2
	Bremer	1	0.4	Marshall	5	1.3
	Buchanan	1	0.5	Muscatine	4	1.0
	Carroll	6	2.8	Plymouth	0	*
	Cerro Gordo	14	3	Sioux	0	*
	Clinton	6	1.2	Story	12	1.5
	Des Moines	5	1.2	Wapello	9	2.5
	Fayette	1	0.5	Washington	2	1.0
	Jackson	0	*	Webster	8	2.0
	Jasper	1	0.3	Winneshek	0	*
	Lee	8	2.1			

	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	30	2.3	Polk	73	1.9
	Dallas	0	*	Pottawattamie	12	1.4
	Dubuque	29	3.3	Scott	26	1.6
	Johnson	38	3.4	Warren	0	*
	Linn	12	0.6	Woodbury	9	0.9
	<b>Group Totals</b>					
Number:	229					
Crude:	1.7					

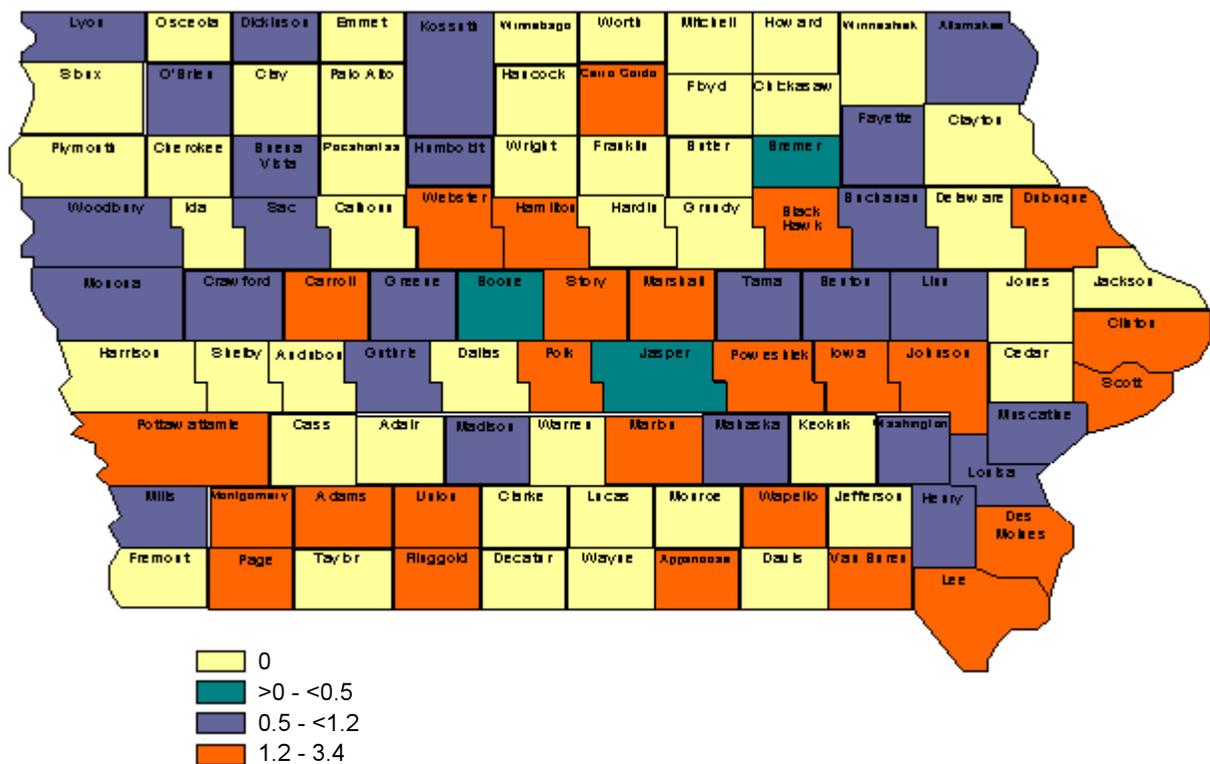
<sup>1</sup>Rates per 10,000 population

\*Crude rate less than 0.05

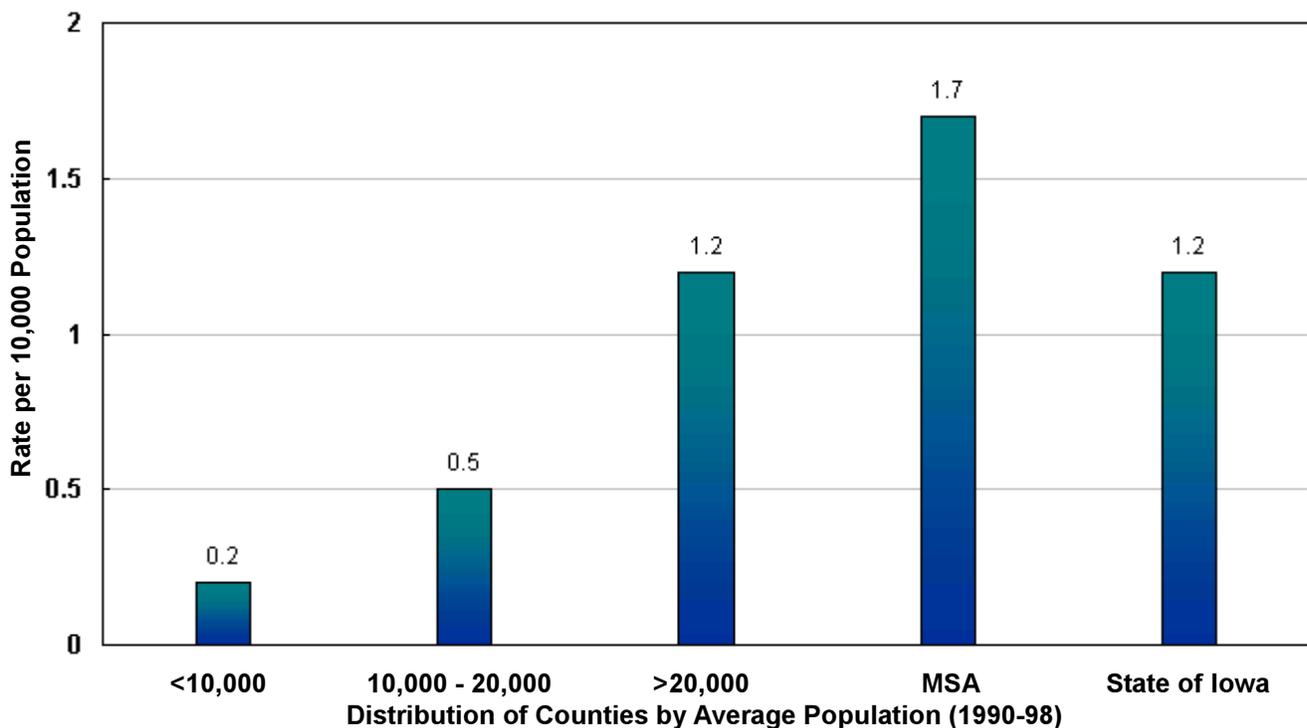
Source: Office of Statewide Clinical Education Programs, UI College of Medicine

## Internal Medicine Physicians Practicing - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Pediatric Physicians Practicing - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	197	0.7

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	0	*	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	0	*	Ringgold	0	*
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	0					
Crude:	*					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	1	0.5
	Appanoose	0	*	Humboldt	0	*
	Buena Vista	0	*	Iowa	0	*
	Butler	0	*	Jefferson	1	0.6
	Calhoun	0	*	Jones	0	*
	Cass	0	*	Keokuk	0	*
	Cedar	0	*	Kossuth	0	*
	Cherokee	0	*	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	0	*	Madison	0	*
	Clayton	0	*	Mills	1	0.7
	Crawford	0	*	Mitchell	0	*
	Delaware	0	*	Monona	1	1.0
	Dickinson	0	*	Montgomery	0	*
	Emmet	0	*	O'Brien	0	*
	Floyd	0	*	Page	0	*
	Franklin	0	*	Palo Alto	0	*
	Greene	0	*	Poweshiek	0	*
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	0	*
Hamilton	1	0.6	Tama	0	*	
Hancock	0	*	Union	0	*	
Hardin	0	*	Winnebago	0	*	
Harrison	0	*	Wright	0	*	
<b>Group Totals</b>						
Number:	5					
Crude:	0.1					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	1	0.4
	Boone	0	*	Marion	0	*
	Bremer	0	*	Marshall	2	0.5
	Buchanan	1	0.5	Muscatine	1	0.2
	Carroll	0	*	Plymouth	0	*
	Cerro Gordo	8	1.7	Sioux	0	*
	Clinton	4	0.8	Story	8	1.0
	Des Moines	4	0.9	Wapello	7	1.9
	Fayette	0	*	Washington	0	*
	Jackson	0	*	Webster	4	1.0
	Jasper	2	0.5	Winneshek	0	*
	Lee	1	0.3			
	<b>Group Totals</b>					
Number:	43					
Crude:	0.6					

	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	12	0.9	Polk	46	1.2
	Dallas	0	*	Pottawattamie	4	0.5
	Dubuque	13	1.5	Scott	12	0.8
	Johnson	31	2.8	Warren	0	*
	Linn	21	1.1	Woodbury	10	1.0
	<b>Group Totals</b>					
Number:	149					
Crude:	1.1					

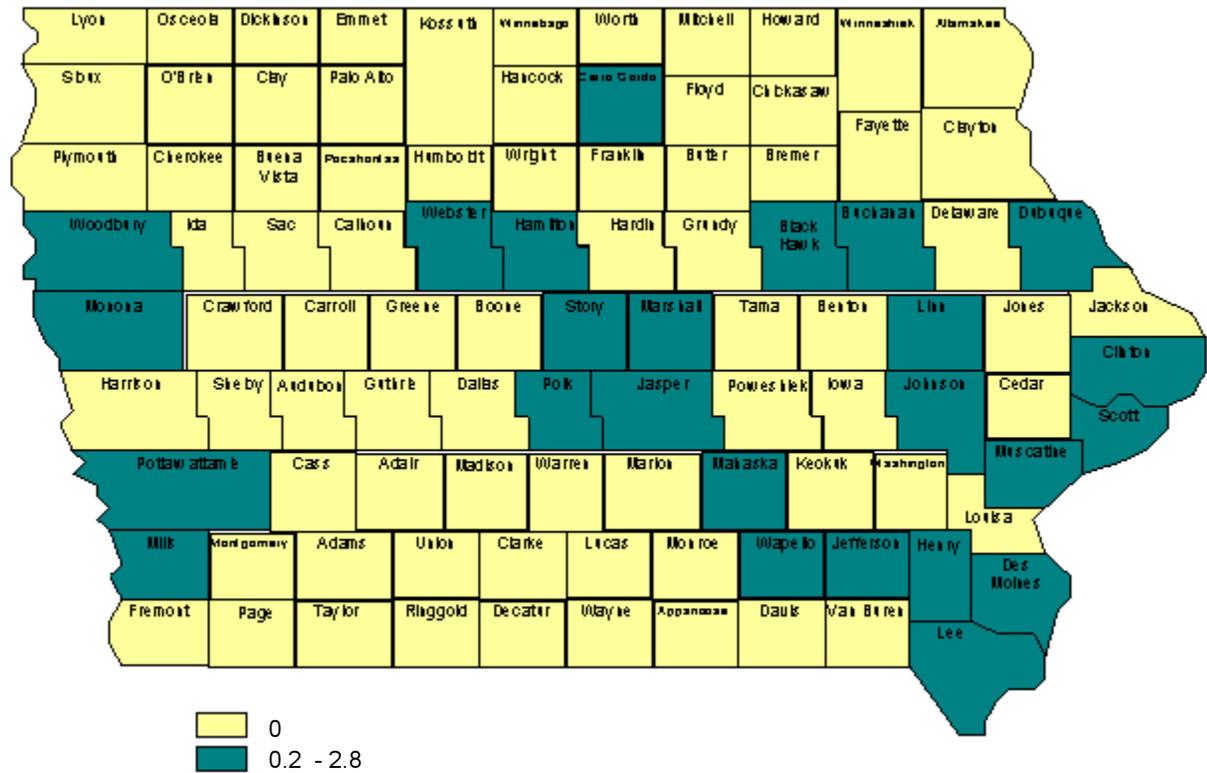
<sup>1</sup>Rates per 10,000 population

\*Crude rate less than 0.05

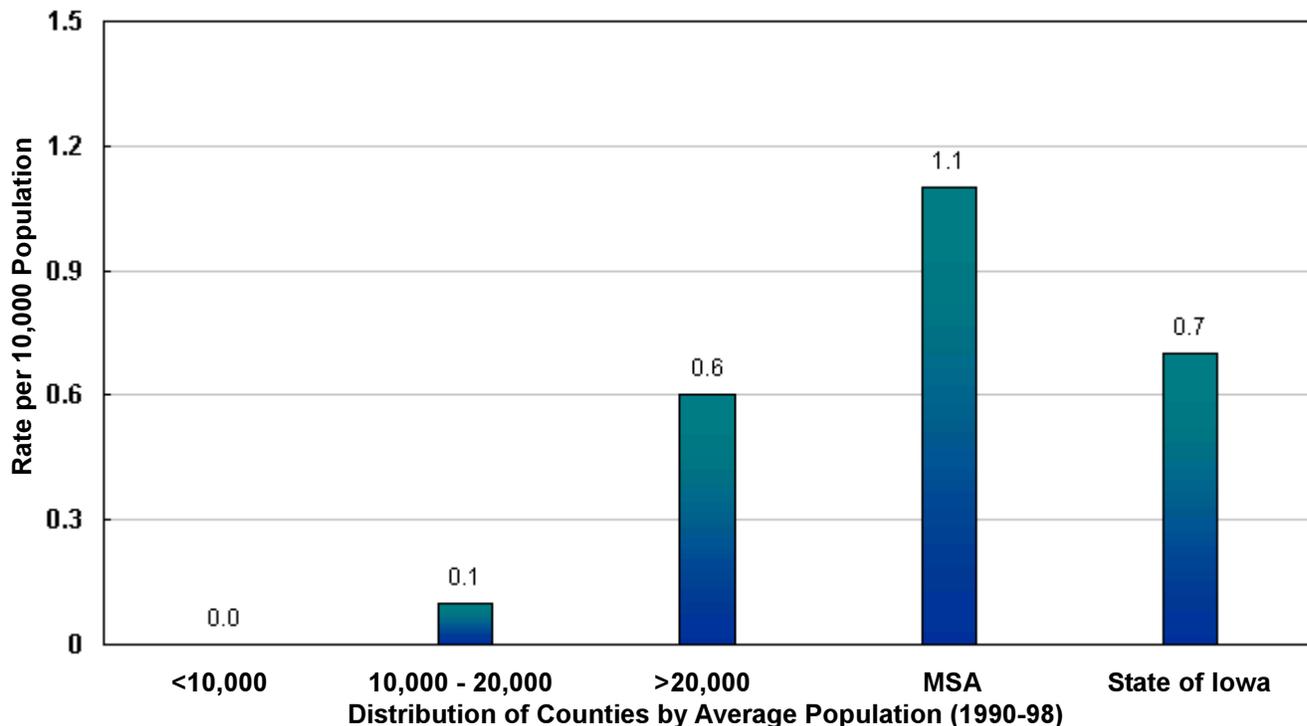
Source: Office of Statewide Clinical Education Programs, UI College of Medicine

## Pediatric Physicians Practicing - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Obstetrics/Gynecology Physicians Practicing - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	217	0.7

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	0	*	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	0	*	Ringgold	0	*
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	0					
Crude:	*					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	0	*
	Appanoose	0	*	Humboldt	0	*
	Buena Vista	0	*	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	0	*	Jones	0	*
	Cass	0	*	Keokuk	0	*
	Cedar	0	*	Kossuth	0	*
	Cherokee	0	*	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	0	*	Madison	0	*
	Clayton	0	*	Mills	0	*
	Crawford	0	*	Mitchell	0	*
	Delaware	0	*	Monona	0	*
	Dickinson	0	*	Montgomery	2	1.7
	Emmet	0	*	O'Brien	0	*
	Floyd	0	*	Page	0	*
	Franklin	0	*	Palo Alto	0	*
	Greene	0	*	Poweshiek	0	*
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	0	*
Hamilton	0	*	Tama	0	*	
Hancock	0	*	Union	0	*	
Hardin	1	0.5	Winnebago	0	*	
Harrison	0	*	Wright	0	*	
<b>Group Totals</b>						
Number:	3					
Crude:	*					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	0	*
	Boone	1	0.4	Marion	1	0.3
	Bremer	0	*	Marshall	4	1.0
	Buchanan	0	*	Muscatine	3	0.7
	Carroll	1	0.5	Plymouth	0	*
	Cerro Gordo	7	1.5	Sioux	0	*
	Clinton	4	0.8	Story	9	1.1
	Des Moines	5	1.2	Wapello	6	1.7
	Fayette	0	*	Washington	0	*
	Jackson	0	*	Webster	5	1.2
	Jasper	1	0.3	Winneshek	0	*
	Lee	5	1.3			
	<b>Group Totals</b>					
Number:	52					
Crude:	0.7					

	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	14	1.1	Polk	49	1.3
	Dallas	0	*	Pottawattamie	8	0.9
	Dubuque	12	1.3	Scott	17	1.1
	Johnson	37	3.3	Warren	0	*
	Linn	17	0.9	Woodbury	8	0.8
	<b>Group Totals</b>					
Number:	162					
Crude:	1.2					

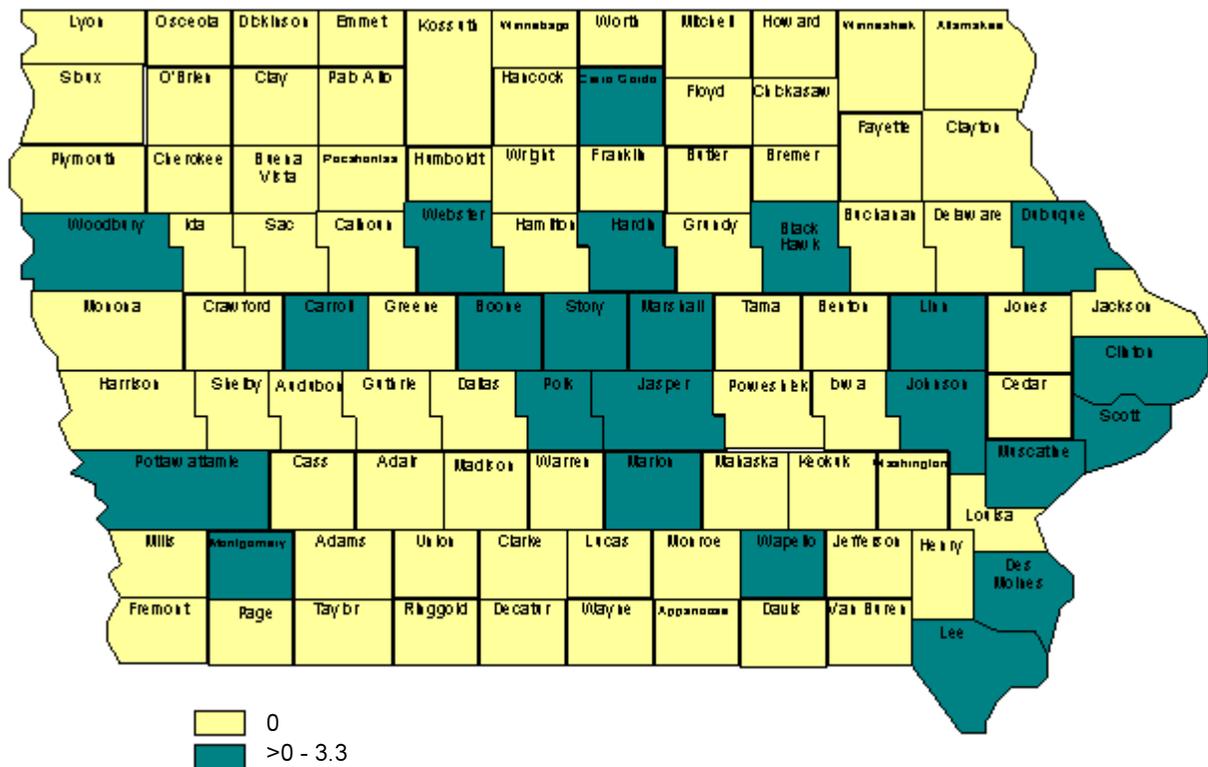
<sup>1</sup>Rates per 10,000 population

\*Crude rate less than 0.05

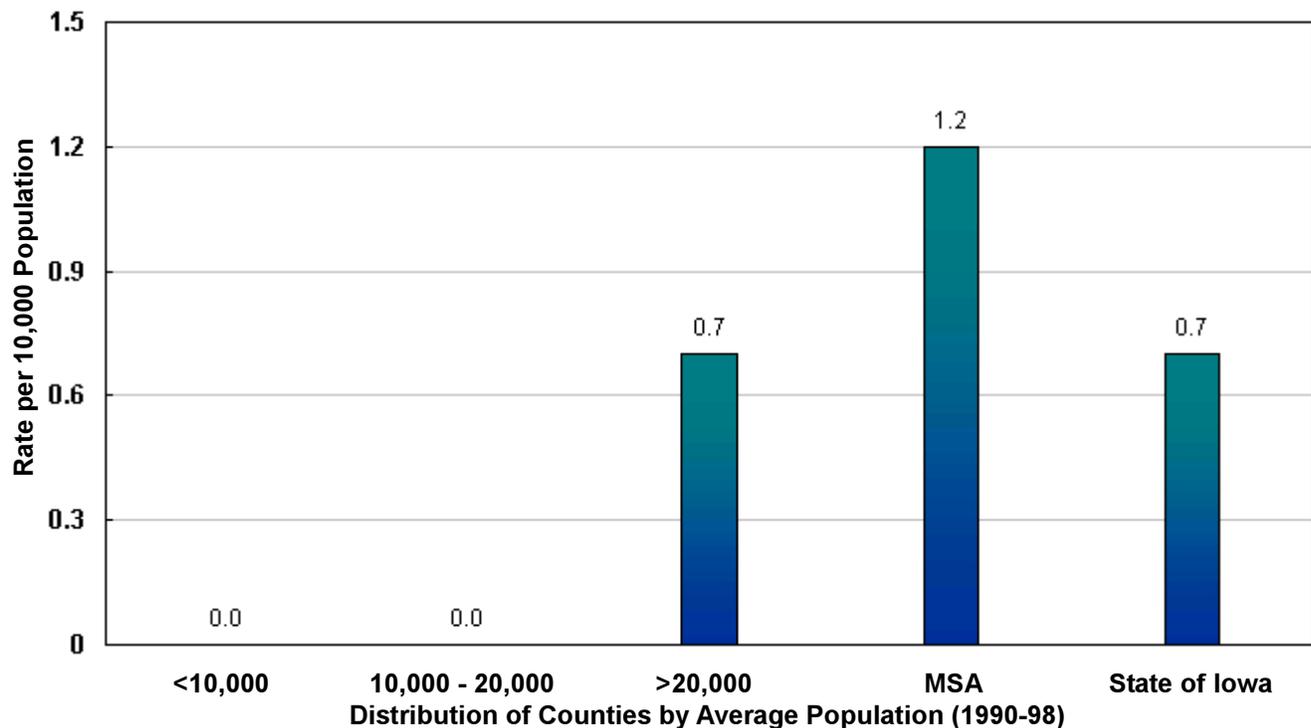
Source: Office of Statewide Clinical Education Programs, UI College of Medicine

## Obstetrics/Gynecology Physicians Practicing - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## General Surgeons Practicing - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	212	0.7

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	1	1.1
	Adams	0	*	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	1	1.2	Ringgold	1	1.8
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	1	1.3
	Howard	1	1.0	Wayne	0	*
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	5					
Crude:	0.4					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	2	1.0
	Appanoose	2	1.5	Humboldt	0	*
	Buena Vista	2	1.0	Iowa	0	*
	Butler	0	*	Jefferson	1	0.6
	Calhoun	2	1.8	Jones	0	*
	Cass	1	0.7	Keokuk	0	*
	Cedar	0	*	Kossuth	1	0.6
	Cherokee	1	0.8	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	5	2.9	Madison	0	*
	Clayton	1	0.5	Mills	0	*
	Crawford	1	0.6	Mitchell	1	0.9
	Delaware	0	*	Monona	2	2.0
	Dickinson	0	*	Montgomery	1	0.8
	Emmet	0	*	O'Brien	3	2.0
	Floyd	1	0.6	Page	2	1.2
	Franklin	0	*	Palo Alto	0	*
	Greene	1	1.0	Poweshiek	3	1.6
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	1	0.8
Hamilton	2	1.2	Tama	0	*	
Hancock	0	*	Union	2	1.6	
Hardin	1	0.5	Winnebago	0	*	
Harrison	0	*	Wright	0	*	
<b>Group Totals</b>						
Number:	39					
Crude:	0.6					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	1	0.4
	Boone	3	1.1	Marion	2	0.6
	Bremer	2	0.9	Marshall	2	0.5
	Buchanan	0	*	Muscatine	2	0.5
	Carroll	4	1.9	Plymouth	0	*
	Cerro Gordo	5	1.1	Sioux	3	0.9
	Clinton	3	0.6	Story	4	0.5
	Des Moines	4	0.9	Wapello	3	0.8
	Fayette	1	0.5	Washington	1	0.5
	Jackson	1	0.5	Webster	2	0.5
	Jasper	2	0.5	Winneshek	2	0.9
	Lee	7	1.8			

	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	11	0.9	Polk	37	1.0
	Dallas	0	*	Pottawattamie	7	0.8
	Dubuque	8	0.9	Scott	11	0.7
	Johnson	28	2.5	Warren	0	*
	Linn	6	0.3	Woodbury	6	0.6
	<b>Group Totals</b>					
Number:	114					
Crude:	0.9					

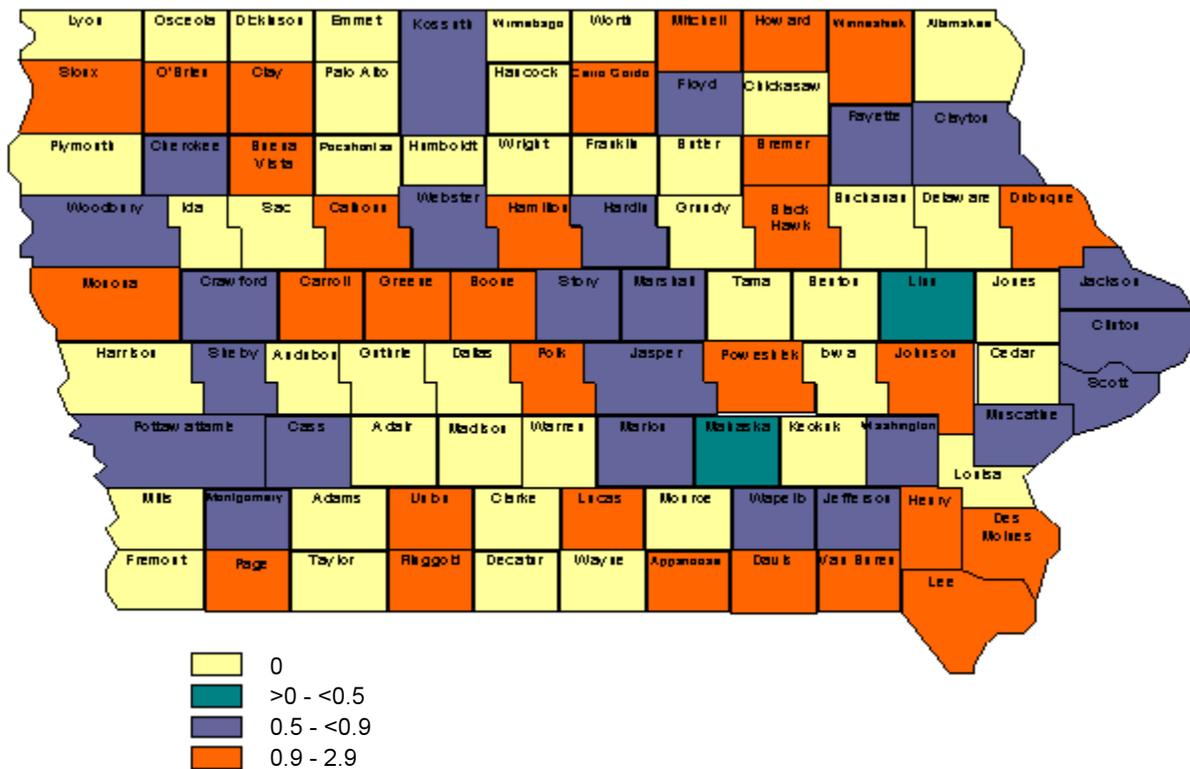
<sup>1</sup>Rates per 10,000 population

\*Crude rate less than 0.05

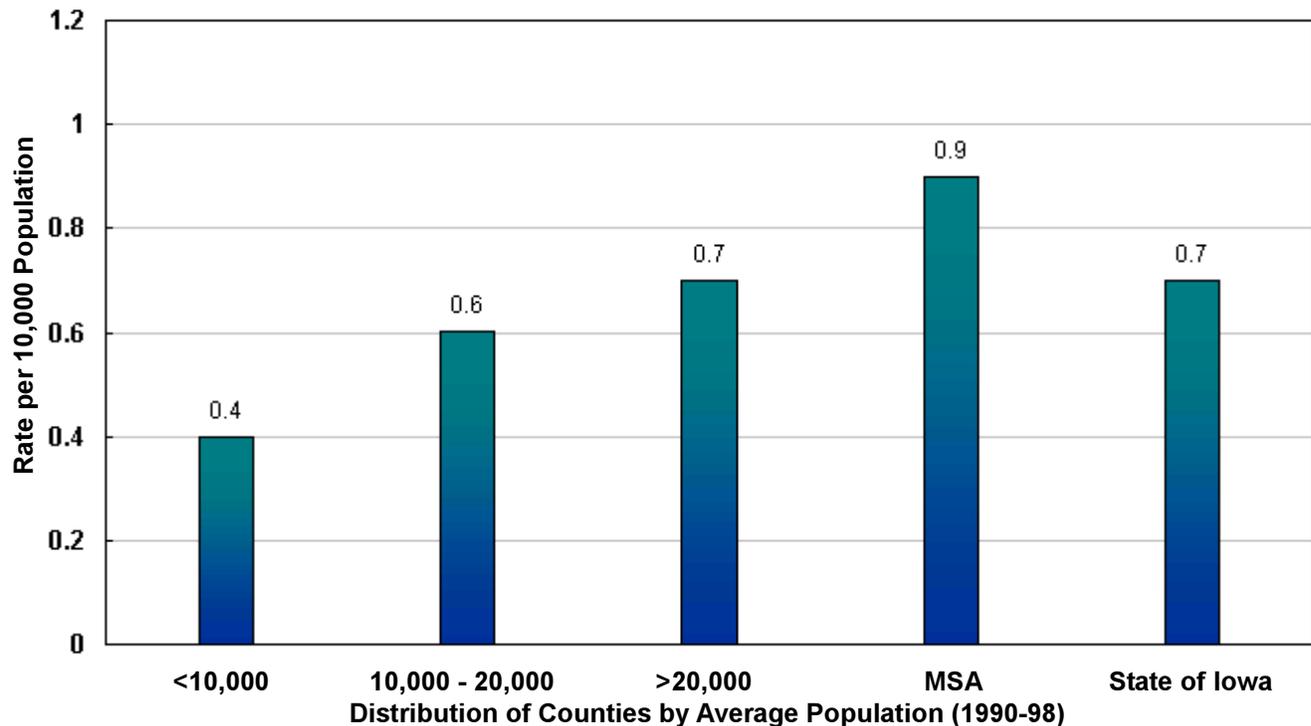
Source: Office of Statewide Clinical Education Programs, UI College of Medicine

## General Surgeons Practicing - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Other Specialty Physicians Practicing - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	2,521	8.6

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	1	2.2	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	2	2.3	Ringgold	0	*
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	3					
Crude:	0.2					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	8	3.9
	Appanoose	1	0.7	Humboldt	0	*
	Buena Vista	2	1.0	Iowa	0	*
	Butler	0	*	Jefferson	4	2.5
	Calhoun	0	*	Jones	0	*
	Cass	3	2.0	Keokuk	0	*
	Cedar	0	*	Kossuth	0	*
	Cherokee	10	7.7	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	21	12.1	Madison	0	*
	Clayton	0	*	Mills	2	1.4
	Crawford	0	*	Mitchell	0	*
	Delaware	1	0.5	Monona	2	2.0
	Dickinson	4	2.4	Montgomery	0	*
	Emmet	0	*	O'Brien	1	0.7
	Floyd	1	0.6	Page	3	1.8
	Franklin	0	*	Palo Alto	1	1.0
	Greene	1	1.0	Poweshiek	14	7.4
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	0	*
	Hamilton	2	1.2	Tama	0	*
Hancock	0	*	Union	1	0.8	
Hardin	1	0.5	Winnebago	0	*	
Harrison	0	*	Wright	0	*	
<b>Group Totals</b>						
Number:	83					
Crude:	1.2					

	County	Number	Crude	County	Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	1	0.4	
	Boone	4	1.5	Marion	18	5.6	
	Bremer	2	0.9	Marshall	26	6.6	
	Buchanan	6	2.8	Muscatine	9	2.2	
	Carroll	10	4.7	Plymouth	2	0.8	
	Cerro Gordo	81	17.4	Sioux	1	0.3	
	Clinton	33	6.6	Story	84	10.5	
	Des Moines	55	13.0	Wapello	42	11.7	
	Fayette	0	*	Washington	1	0.5	
	Jackson	0	*	Webster	44	10.9	
	Jasper	4	1.1	Winneshek	5	2.3	
	Lee	14	3.7				
	<b>Group Totals</b>						
	Number:	442					
Crude:	5.8						

	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	146	11.4	Polk	573	15.3
	Dallas	4	1.0	Pottawattamie	55	6.3
	Dubuque	115	12.9	Scott	185	11.7
	Johnson	566	51.0	Warren	0	*
	Linn	210	11.0	Woodbury	139	13.4
	<b>Group Totals</b>					
Number:	1,993					
Crude:	15.0					

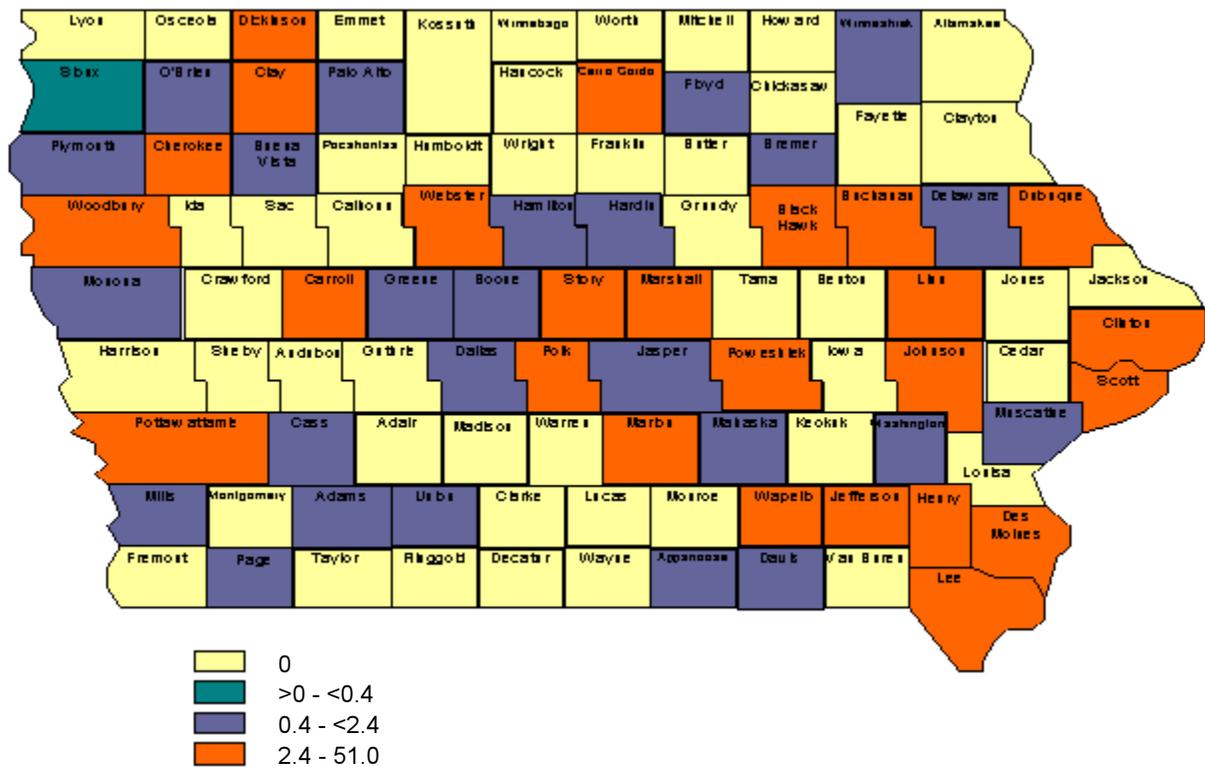
<sup>1</sup>Rates per 10,000 population

\*Crude rate less than 0.05

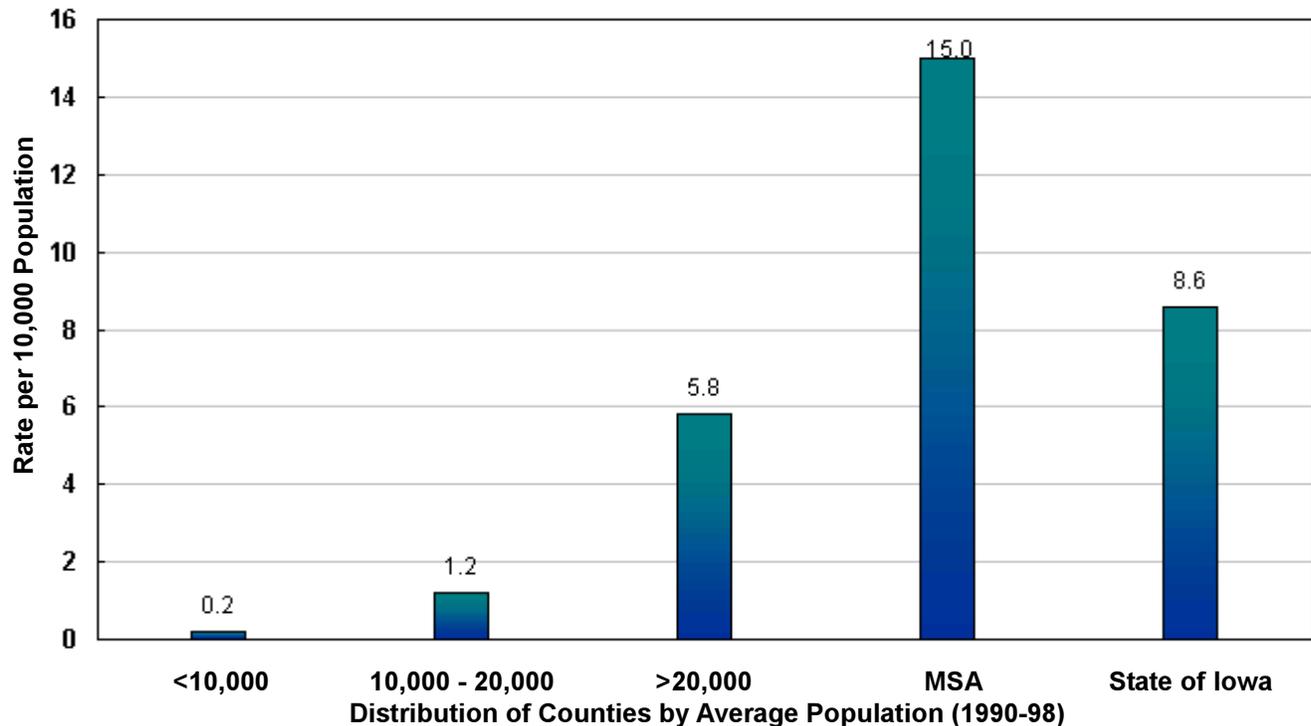
Source: Office of Statewide Clinical Education Programs, UI College of Medicine

## Other Specialty Physicians Practicing - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Total Physicians Practicing - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	4,742	16.2

	County			County		
	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	1	1.2	Lucas	5	5.3
	Adams	4	8.9	Monroe	4	5.0
	Audubon	3	4.4	Osceola	4	5.7
	Clarke	4	4.4	Pocahontas	5	5.8
	Davis	6	7.0	Ringgold	5	9.1
	Decatur	3	3.5	Taylor	1	1.4
	Fremont	3	3.7	Van Buren	6	7.7
	Howard	6	6.0	Wayne	6	8.9
	Ida	4	5.1	Worth	3	3.8
	<b>Group Totals</b>					
Number:	73					
Crude:	5.2					

	County			County		
	Number	Crude	Number	Crude	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	5	3.4	Henry	24	11.8
	Appanoose	12	8.7	Humboldt	6	5.8
	Buena Vista	15	7.3	Iowa	9	5.7
	Butler	3	2.0	Jefferson	16	9.9
	Calhoun	9	8.1	Jones	9	4.5
	Cass	13	8.9	Keokuk	4	3.5
	Cedar	7	3.8	Kossuth	8	4.7
	Cherokee	18	13.8	Louisa	3	2.5
	Chickasaw	6	4.6	Lyon	3	2.6
	Clay	37	21.3	Madison	6	4.3
	Clayton	12	6.4	Mills	10	6.9
	Crawford	9	5.3	Mitchell	5	4.6
	Delaware	8	4.3	Monona	12	12.0
	Dickinson	14	8.5	Montgomery	12	10.2
	Emmet	6	5.4	O'Brien	12	7.9
	Floyd	10	5.9	Page	20	11.8
	Franklin	5	4.7	Palo Alto	7	6.9
	Greene	8	7.7	Poweshiek	32	17.0
	Grundy	6	4.9	Sac	4	3.5
	Guthrie	6	5.3	Shelby	8	6.1
	Hamilton	15	9.1	Tama	6	3.3
	Hancock	3	2.5	Union	13	10.6
	Hardin	16	8.5	Winnebago	5	4.3
	Harrison	4	2.6	Wright	11	7.7
<b>Group Totals</b>						
Number:	492					
Crude:	7.1					

	County			County			
	Number	Crude	Number	Crude	Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	7	2.8	Mahaska	17	7.6	
	Boone	21	8.0	Marion	43	13.4	
	Bremer	15	6.4	Marshall	55	14.0	
	Buchanan	14	6.6	Muscatine	28	6.7	
	Carroll	30	14.0	Plymouth	12	4.8	
	Cerro Gordo	142	30.6	Sioux	28	8.9	
	Clinton	63	12.6	Story	146	18.3	
	Des Moines	84	19.8	Wapello	77	21.4	
	Fayette	10	4.5	Washington	15	7.3	
	Jackson	12	5.9	Webster	74	18.4	
	Jasper	25	6.7	Winneshek	21	9.9	
	Lee	49	12.9				
	<b>Group Totals</b>						
	Number:	988					
Crude:	12.9						

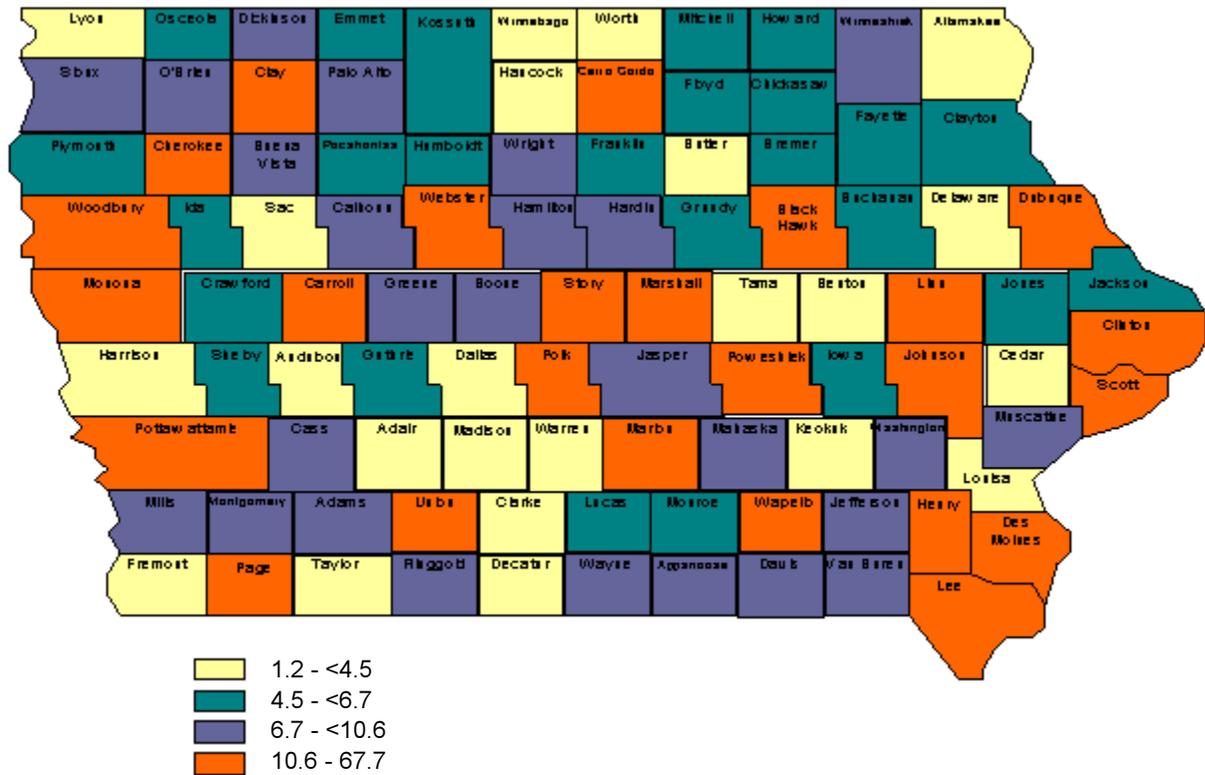
	County			County		
	Number	Crude	Number	Crude	Number	Crude
<b>MSA Counties</b>	Black Hawk	267	20.9	Polk	955	25.5
	Dallas	16	3.9	Pottawattamie	106	12.1
	Dubuque	197	22.1	Scott	314	19.8
	Johnson	751	67.7	Warren	18	4.4
	Linn	346	18.0	Woodbury	219	21.1
<b>Group Totals</b>						
Number:	3,189					
Crude:	24.0					

<sup>1</sup>Rates per 10,000 population

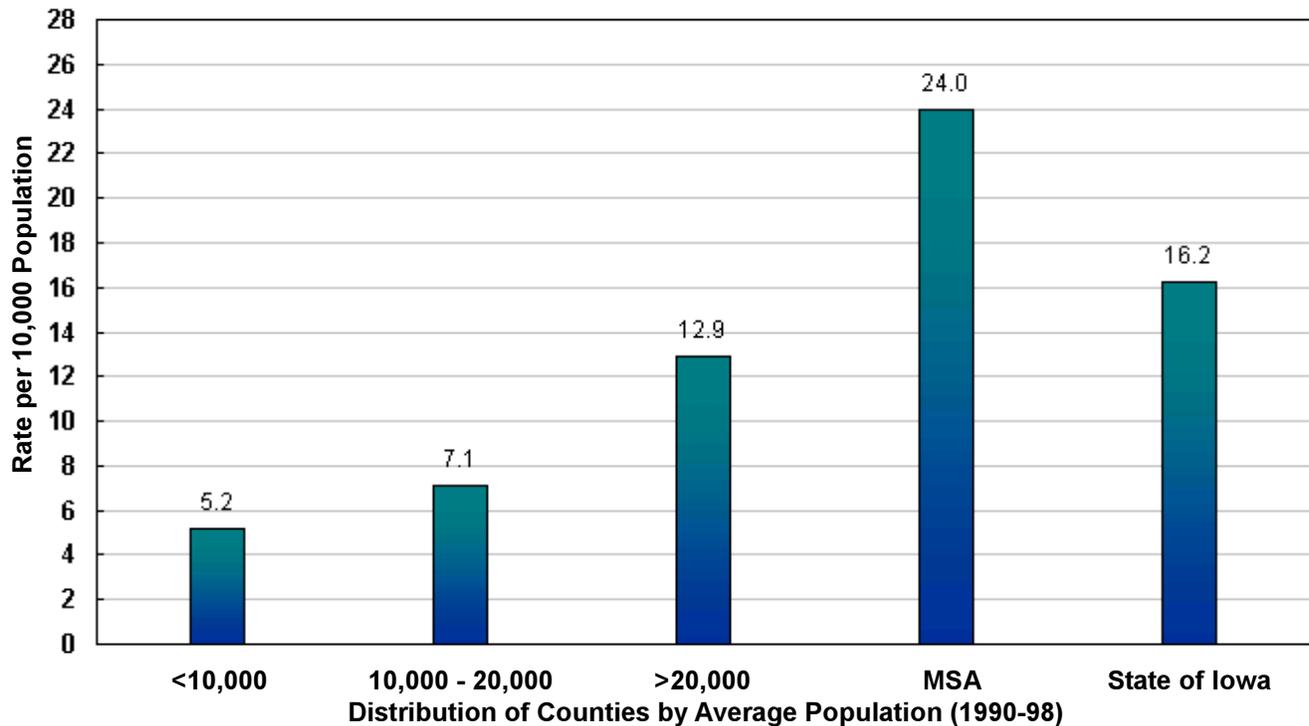
Source: Office of Statewide Clinical Education Programs, UI College of Medicine

## Total Physicians Practicing - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Physician Assistants Practicing - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	446	1.5

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	2	2.1
	Adams	1	2.2	Monroe	0	*
	Audubon	2	2.9	Osceola	0	*
	Clarke	1	1.1	Pocahontas	0	*
	Davis	0	*	Ringgold	1	1.8
	Decatur	0	*	Taylor	0	*
	Fremont	2	2.5	Van Buren	1	1.3
	Howard	1	1.0	Wayne	2	3.0
	Ida	2	2.6	Worth	0	*
	<b>Group Totals</b>					
Number:	15					
Crude:	1.1					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	3	2.0	Henry	0	*
	Appanoose	2	1.5	Humboldt	1	1.0
	Buena Vista	0	*	Iowa	6	3.8
	Butler	3	2.0	Jefferson	2	1.2
	Calhoun	4	3.6	Jones	0	*
	Cass	1	0.7	Keokuk	2	1.8
	Cedar	5	2.7	Kossuth	4	2.3
	Cherokee	5	3.8	Louisa	3	2.5
	Chickasaw	0	*	Lyon	3	2.6
	Clay	3	1.7	Madison	5	3.6
	Clayton	3	1.6	Mills	1	0.7
	Crawford	1	0.6	Mitchell	4	3.7
	Delaware	4	2.2	Monona	5	5.0
	Dickinson	1	0.6	Montgomery	1	0.8
	Emmet	2	1.8	O'Brien	4	2.6
	Floyd	4	2.4	Page	2	1.2
	Franklin	2	1.9	Palo Alto	3	3.0
	Greene	1	1.0	Poweshiek	2	1.1
	Grundy	4	3.2	Sac	3	2.6
	Guthrie	2	1.8	Shelby	2	1.5
Hamilton	3	1.8	Tama	5	2.8	
Hancock	2	1.7	Union	1	0.8	
Hardin	2	1.1	Winnebago	2	1.7	
Harrison	1	0.6	Wright	3	2.1	

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	7	2.8	Mahaska	2	0.9
	Boone	0	*	Marion	7	2.2
	Bremer	3	1.3	Marshall	9	2.3
	Buchanan	3	1.4	Muscatine	5	1.2
	Carroll	3	1.4	Plymouth	3	1.2
	Cerro Gordo	6	1.3	Sioux	2	0.6
	Clinton	2	0.4	Story	10	1.3
	Des Moines	6	1.4	Wapello	7	1.9
	Fayette	8	3.6	Washington	1	0.5
	Jackson	2	1.0	Webster	5	1.2
	Jasper	3	0.8	Winneshek	2	0.9
	Lee	1	0.3			

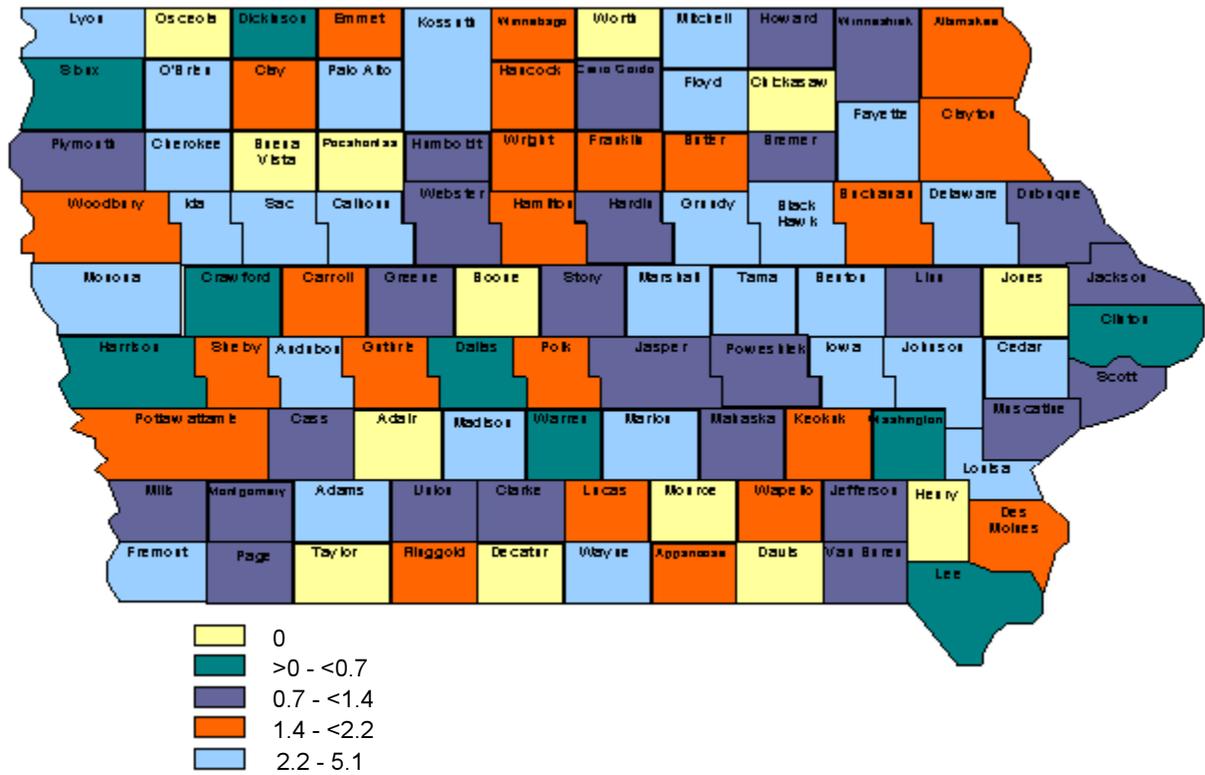
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	28	2.2	Polk	60	1.6
	Dallas	2	0.5	Pottawattamie	13	1.5
	Dubuque	7	0.8	Scott	13	0.8
	Johnson	57	5.1	Warren	1	0.2
	Linn	14	0.7	Woodbury	17	1.6
	<b>Group Totals</b>					
Number:	212					
Crude:	1.6					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

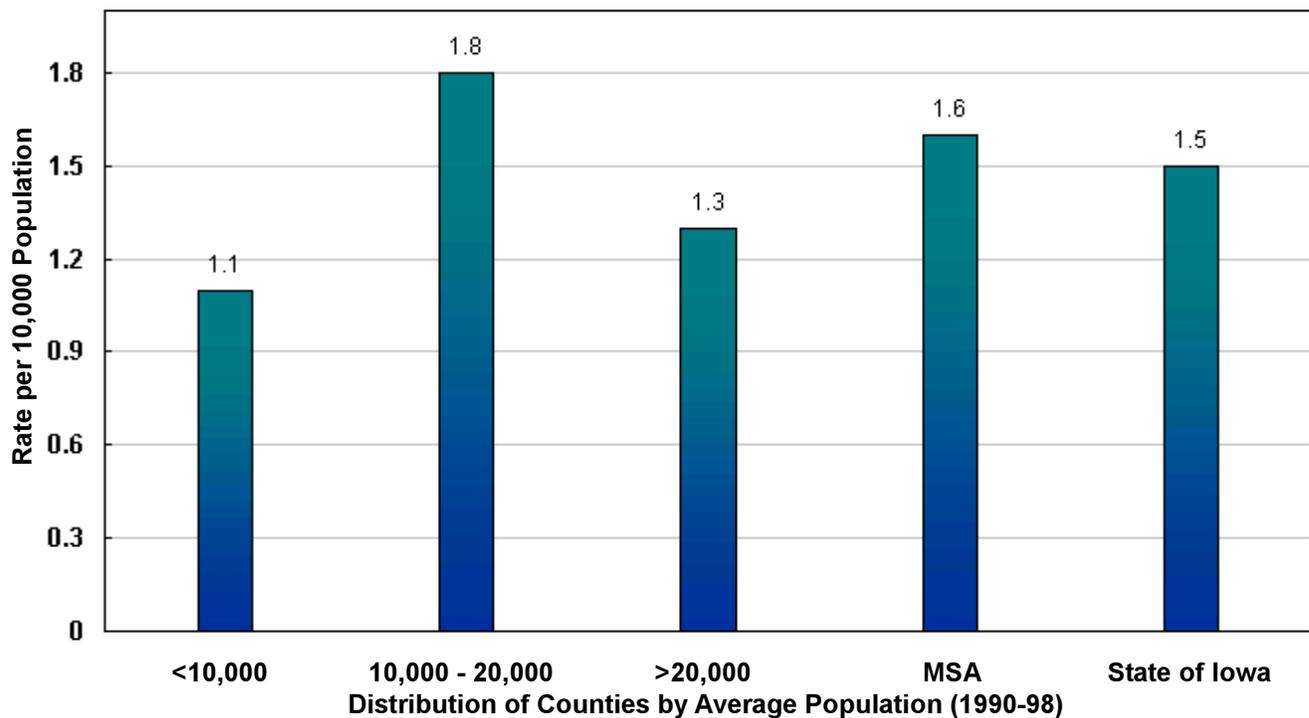
Source: Office of Statewide Clinical  
Education Programs, UI College of Medicine

## Physician Assistants Practicing - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Nurse Practitioners Practicing - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	423	1.4

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	1	1.2	Lucas	0	*
	Adams	2	4.5	Monroe	1	1.2
	Audubon	2	2.9	Osceola	0	*
	Clarke	1	1.1	Pocahontas	1	1.2
	Davis	5	5.9	Ringgold	3	5.5
	Decatur	3	3.5	Taylor	3	4.3
	Fremont	1	1.2	Van Buren	2	2.6
	Howard	1	1.0	Wayne	1	1.5
	Ida	1	1.3	Worth	4	5.1
	<u>Group Totals</u>					
Number:	32					
Crude:	2.3					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	1	0.7	Henry	0	*
	Appanoose	1	0.7	Humboldt	0	*
	Buena Vista	1	0.5	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	0	*	Jones	0	*
	Cass	7	4.8	Keokuk	0	*
	Cedar	1	0.5	Kossuth	1	0.6
	Cherokee	7	5.4	Louisa	0	*
	Chickasaw	1	0.8	Lyon	1	0.9
	Clay	1	0.6	Madison	0	*
	Clayton	2	1.1	Mills	0	*
	Crawford	2	1.2	Mitchell	0	*
	Delaware	0	*	Monona	3	3.0
	Dickinson	2	1.2	Montgomery	2	1.7
	Emmet	0	*	O'Brien	1	0.7
	Floyd	1	0.6	Page	3	1.8
	Franklin	2	1.9	Palo Alto	3	3.0
	Greene	0	*	Poweshiek	1	0.5
	Grundy	1	0.8	Sac	3	2.6
	Guthrie	2	1.8	Shelby	1	0.8
Hamilton	1	0.6	Tama	0	*	
Hancock	2	1.7	Union	1	0.8	
Hardin	3	1.6	Winnebago	1	0.9	
Harrison	2	1.3	Wright	1	0.7	
<u>Group Totals</u>						
Number:	62					
Crude:	0.9					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	0	*
	Boone	0	*	Marion	5	1.6
	Bremer	1	0.4	Marshall	11	2.8
	Buchanan	0	*	Muscatine	0	*
	Carroll	0	*	Plymouth	1	0.4
	Cerro Gordo	9	1.9	Sioux	7	2.2
	Clinton	6	1.2	Story	12	1.5
	Des Moines	6	1.4	Wapello	10	2.8
	Fayette	1	0.5	Washington	1	0.5
	Jackson	1	0.5	Webster	3	0.7
	Jasper	4	1.1	Winneshek	3	1.4
	Lee	4	1.1			
	<u>Group Totals</u>					
Number:	85					
Crude:	1.1					

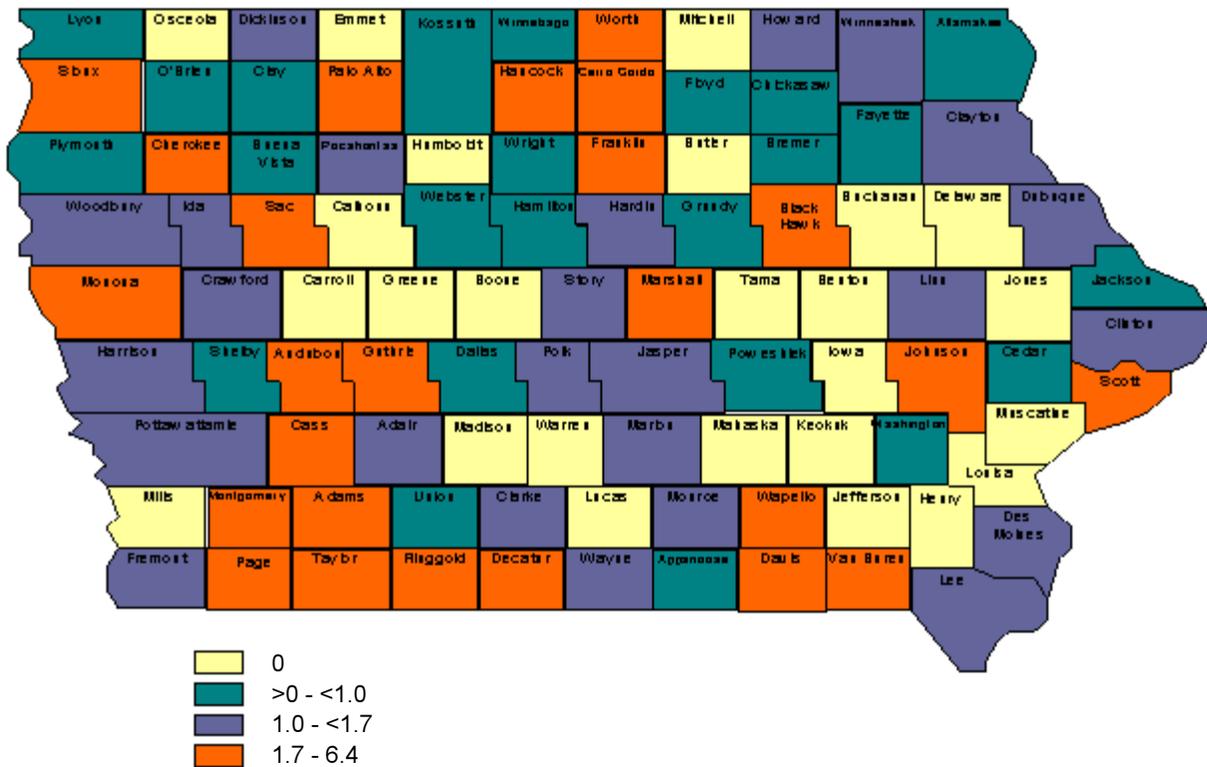
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	28	2.2	Polk	52	1.4
	Dallas	2	0.5	Pottawattamie	11	1.3
	Dubuque	13	1.5	Scott	35	2.2
	Johnson	71	6.4	Warren	0	*
	Linn	19	1.0	Woodbury	13	1.3
	<u>Group Totals</u>					
Number:	244					
Crude:	1.8					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

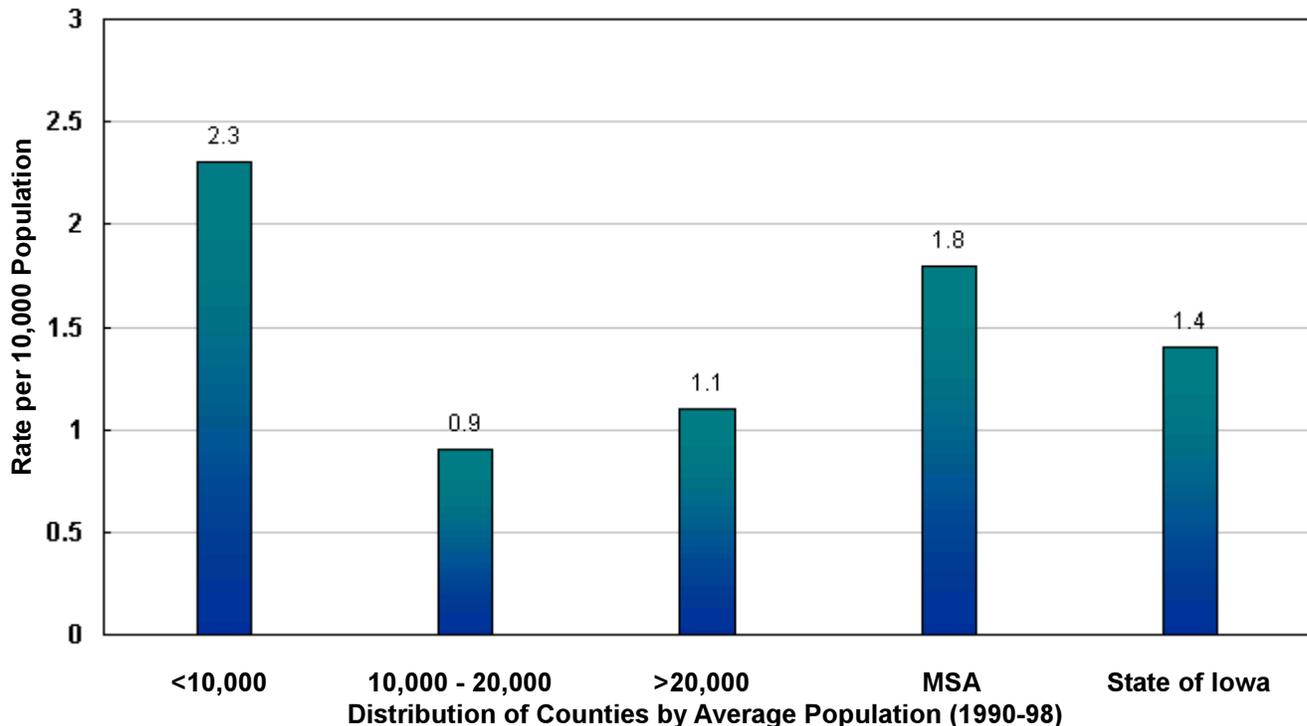
Source: Office of Statewide Clinical  
Education Programs, UI College of Medicine

## Nurse Practitioners Practicing - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Registered Nurses Licensed - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	33,649	115.0

	County			County		
	Number	Crude <sup>1</sup>		Number	Crude <sup>1</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	59	71.6	Lucas	76	80.7
	Adams	38	84.8	Monroe	90	112.3
	Audubon	74	108.3	Osceola	61	87.1
	Clarke	64	70.1	Pocahontas	90	103.9
	Davis	123	144.0	Ringgold	64	117.0
	Decatur	64	73.7	Taylor	76	109.2
	Fremont	74	92.4	Van Buren	92	117.8
	Howard	109	109.7	Wayne	54	80.2
	Ida	75	95.7	Worth	80	101.2
	<b>Group Totals</b>					
Number:	1,363					
Crude:	97.6					

	County			County		
	Number	Crude		Number	Crude	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	128	87.2	Henry	193	94.9
	Appanoose	110	80.2	Humboldt	131	126.2
	Buena Vista	198	97.0	Iowa	209	133.4
	Butler	173	113.0	Jefferson	120	74.2
	Calhoun	172	154.7	Jones	164	81.1
	Cass	149	101.5	Keokuk	174	152.6
	Cedar	206	113.3	Kossuth	139	81.0
	Cherokee	179	137.3	Louisa	95	78.0
	Chickasaw	151	115.3	Lyon	136	115.6
	Clay	197	113.4	Madison	149	106.3
	Clayton	172	92.1	Mills	157	107.9
	Crawford	110	64.9	Mitchell	103	94.7
	Delaware	181	98.3	Monona	105	104.8
	Dickinson	192	116.9	Montgomery	138	117.2
	Emmet	104	94.3	O'Brien	151	100.0
	Floyd	198	117.2	Page	170	100.1
	Franklin	99	92.5	Palo Alto	128	126.1
	Greene	130	125.4	Poweshiek	165	87.7
	Grundy	138	111.6	Sac	137	118.8
	Guthrie	114	100.4	Shelby	171	129.8
Hamilton	215	130.8	Tama	153	84.5	
Hancock	117	96.7	Union	133	108.1	
Hardin	245	130.2	Winnebago	108	92.1	
Harrison	172	109.8	Wright	175	122.1	

	County			County		
	Number	Crude		Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	223	88.1	Mahaska	167	74.8
	Boone	346	131.9	Marion	432	134.8
	Bremer	273	117.0	Marshall	417	106.1
	Buchanan	236	111.9	Muscatine	313	75.0
	Carroll	266	124.2	Plymouth	328	132.0
	Cerro Gordo	649	139.7	Sioux	318	100.7
	Clinton	515	102.7	Story	751	93.9
	Des Moines	460	108.6	Wapello	395	109.6
	Fayette	158	71.8	Washington	305	147.6
	Jackson	194	95.6	Webster	562	139.7
	Jasper	345	92.7	Winneshek	203	95.3
	Lee	354	93.0			

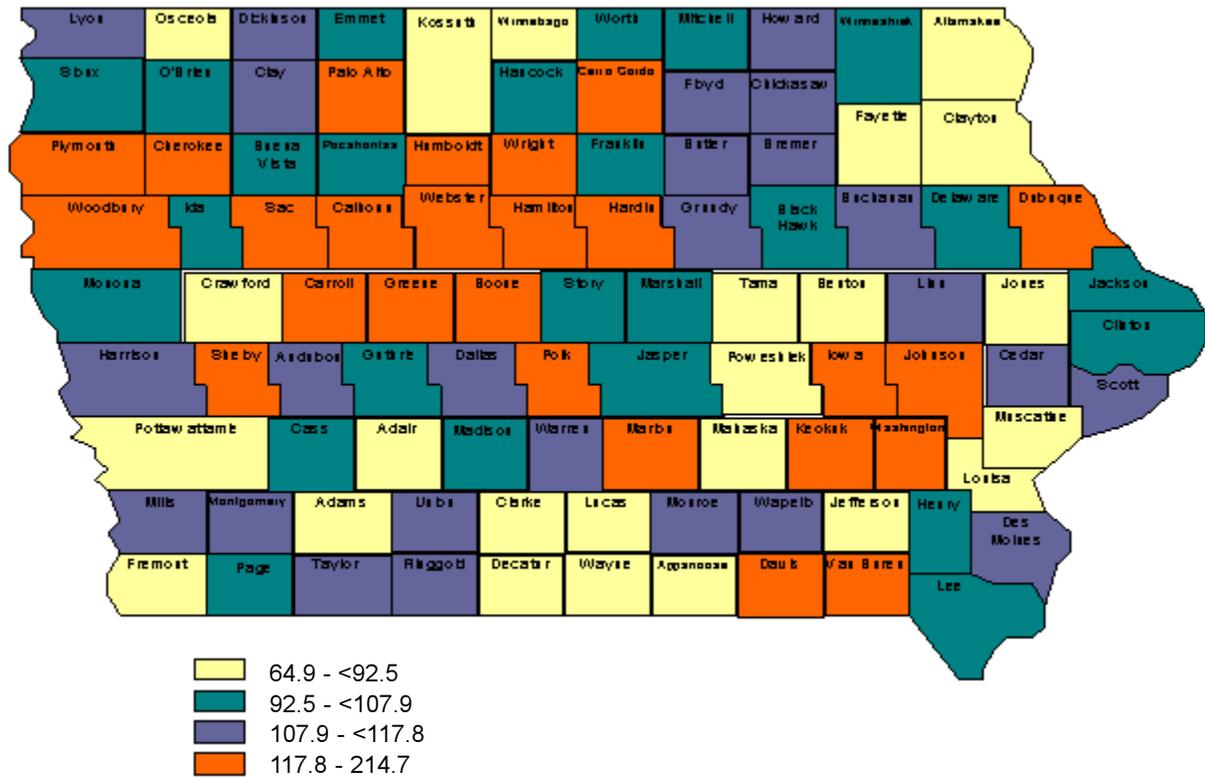
	County			County		
	Number	Crude		Number	Crude	
<b>MSA Counties</b>	Black Hawk	1,228	95.9	Polk	4,790	127.9
	Dallas	446	109.4	Pottawattamie	769	87.7
	Dubuque	1,289	144.6	Scott	1,738	109.5
	Johnson	2,383	214.7	Warren	466	114.6
	Linn	2,235	116.6	Woodbury	1,378	132.7
<b>Group Totals</b>						
Number:	16,722					
Crude:	126.1					

<sup>1</sup>Rates per 10,000 population

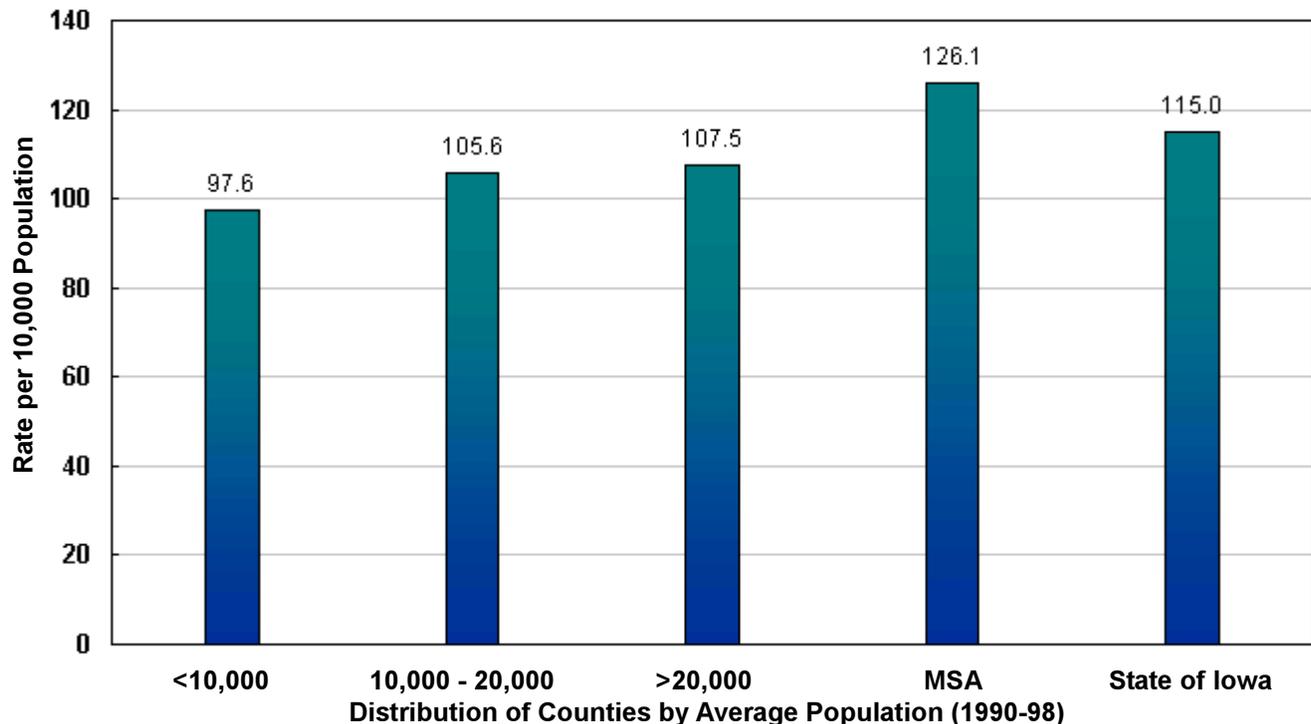
Source: Iowa Department of Public Health, Board of Nursing

## Registered Nurses Licensed - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Licensed Practical Nurses Licensed - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	8,609	29.4

	County			County		
	Number	Crude <sup>1</sup>		Number	Crude <sup>1</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	28	34.0	Lucas	37	39.3
	Adams	29	64.7	Monroe	45	56.1
	Audubon	50	73.2	Osceola	24	34.3
	Clarke	36	39.4	Pocahontas	39	45.0
	Davis	44	51.5	Ringgold	29	53.0
	Decatur	37	42.6	Taylor	43	61.8
	Fremont	53	66.2	Van Buren	24	30.7
	Howard	32	32.2	Wayne	43	63.9
	Ida	33	42.1	Worth	32	40.5
	<b>Group Totals</b>					
Number:	658					
Crude:	47.1					

	County			County			
	Number	Crude		Number	Crude		
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	57	38.8	Henry	50	24.6	
	Appanoose	94	68.5	Humboldt	35	33.7	
	Buena Vista	49	24.0	Iowa	47	30.0	
	Butler	97	63.4	Jefferson	26	16.1	
	Calhoun	48	43.2	Jones	48	23.7	
	Cass	74	50.4	Keokuk	35	30.7	
	Cedar	27	14.8	Kossuth	37	21.6	
	Cherokee	80	61.4	Louisa	46	37.8	
	Chickasaw	46	35.1	Lyon	52	44.2	
	Clay	62	35.7	Madison	45	32.1	
	Clayton	48	25.7	Mills	63	43.3	
	Crawford	98	57.8	Mitchell	49	45.1	
	Delaware	41	22.3	Monona	43	42.9	
	Dickinson	52	31.7	Montgomery	70	59.5	
	Emmet	35	31.7	O'Brien	79	52.3	
	Floyd	70	41.4	Page	129	76.0	
	Franklin	33	30.8	Palo Alto	47	46.3	
	Greene	37	35.7	Poweshiek	61	32.4	
	Grundy	54	43.7	Sac	43	37.3	
	Guthrie	35	30.8	Shelby	71	53.9	
	Hamilton	45	27.4	Tama	87	48.1	
	Hancock	36	29.8	Union	70	56.9	
	Hardin	86	45.7	Winnebago	34	29.0	
	Harrison	50	31.9	Wright	47	32.8	
	<b>Group Totals</b>						
	Number:	2,668					
Crude:	38.3						

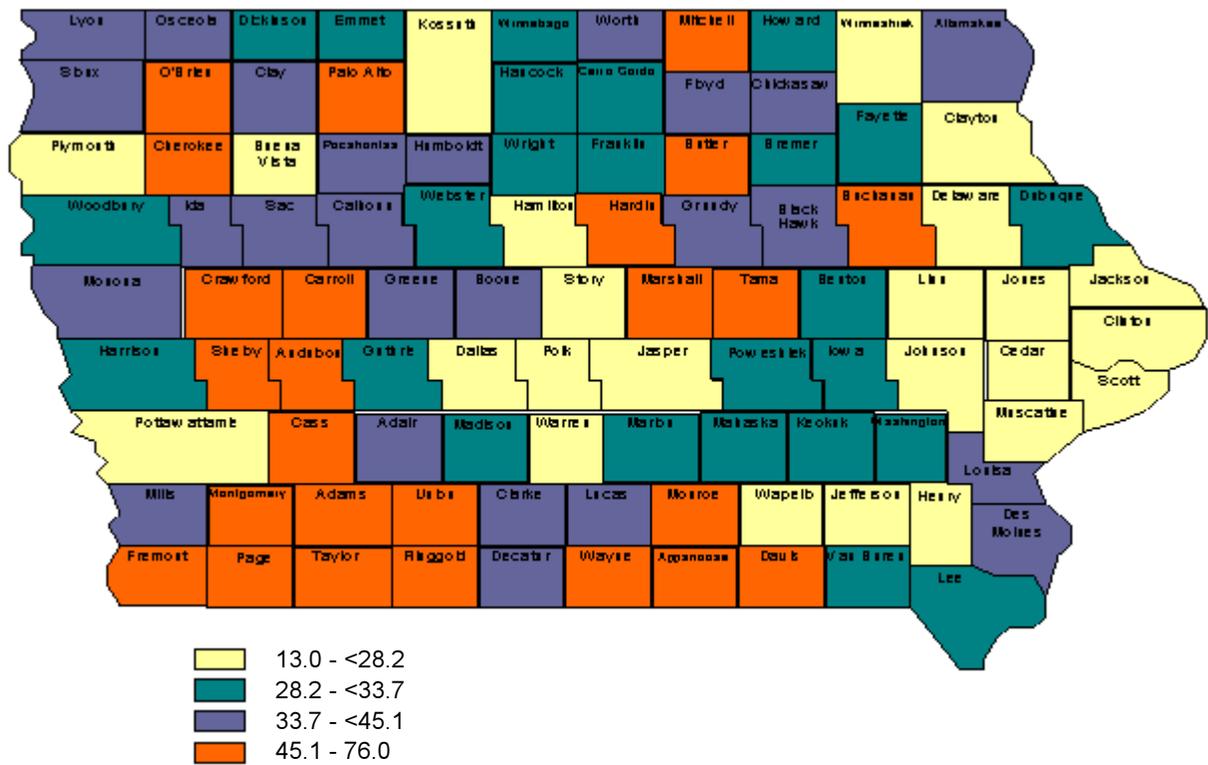
	County			County			
	Number	Crude		Number	Crude		
<b>Counties with Average Population &gt;20,000</b>	Benton	79	31.2	Mahaska	63	28.2	
	Boone	97	37.0	Marion	106	33.1	
	Bremer	74	31.7	Marshall	243	61.8	
	Buchanan	111	52.6	Muscatine	84	20.1	
	Carroll	127	59.3	Plymouth	67	27.0	
	Cerro Gordo	139	29.9	Sioux	131	41.5	
	Clinton	110	21.9	Story	150	18.8	
	Des Moines	149	35.2	Wapello	100	27.7	
	Fayette	73	33.2	Washington	67	32.4	
	Jackson	40	19.7	Webster	135	33.6	
	Jasper	74	19.9	Winneshek	50	23.5	
	Lee	110	28.9				
	<b>Group Totals</b>						
	Number:	2,379					
Crude:	31.1						

	County			County		
	Number	Crude		Number	Crude	
<b>MSA Counties</b>	Black Hawk	478	37.3	Polk	637	17.0
	Dallas	81	19.9	Pottawattamie	188	21.4
	Dubuque	296	33.2	Scott	266	16.8
	Johnson	144	13.0	Warren	93	22.9
	Linn	420	21.9	Woodbury	301	29.0
	<b>Group Totals</b>					
Number:	2,904					
Crude:	21.9					

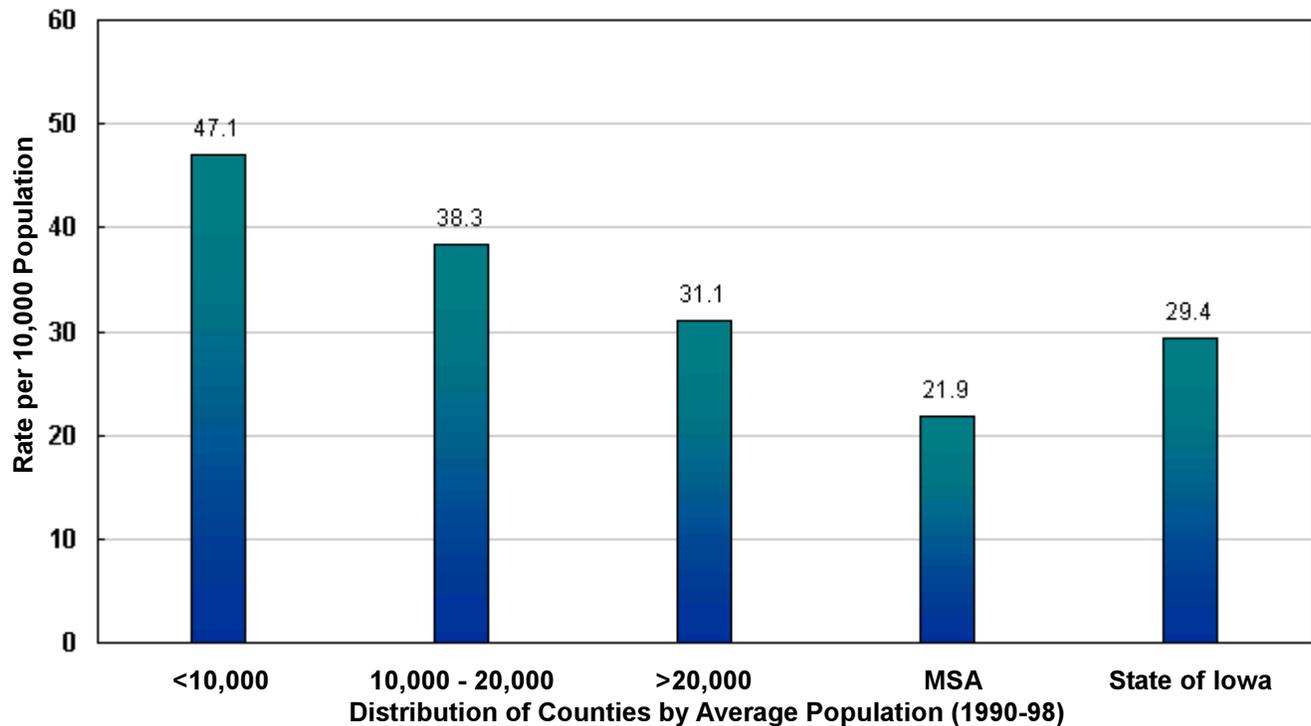
<sup>1</sup>Rates per 10,000 populationSource: Iowa Department of Public Health,  
Board of Nursing

## Licensed Practical Nurses Licensed - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Pharmacists Practicing - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	2,416	8.3

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	5	6.1	Lucas	5	5.3
	Adams	4	8.9	Monroe	6	7.5
	Audubon	4	5.9	Osceola	3	4.3
	Clarke	5	5.5	Pocahontas	4	4.6
	Davis	3	3.5	Ringgold	3	5.5
	Decatur	6	6.9	Taylor	3	4.3
	Fremont	9	11.2	Van Buren	2	2.6
	Howard	5	5.0	Wayne	3	4.5
	Ida	5	6.4	Worth	2	2.5
	<u>Group Totals</u>					
Number:	77					
Crude:	5.5					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	5	3.4	Henry	16	7.9
	Appanoose	11	8.0	Humboldt	8	7.7
	Buena Vista	10	4.9	Iowa	11	7.0
	Butler	5	3.3	Jefferson	10	6.2
	Calhoun	11	9.9	Jones	8	4.0
	Cass	13	8.9	Keokuk	4	3.5
	Cedar	6	3.3	Kossuth	15	8.7
	Cherokee	7	5.4	Louisa	1	0.8
	Chickasaw	6	4.6	Lyon	4	3.4
	Clay	14	8.1	Madison	9	6.4
	Clayton	8	4.3	Mills	11	7.6
	Crawford	8	4.7	Mitchell	6	5.5
	Delaware	10	5.4	Monona	11	11.0
	Dickinson	15	9.1	Montgomery	11	9.3
	Emmet	11	10.0	O'Brien	14	9.3
	Floyd	10	5.9	Page	20	11.8
	Franklin	7	6.5	Palo Alto	7	6.9
	Greene	4	3.9	Poweshiek	11	5.8
	Grundy	9	7.3	Sac	3	2.6
	Guthrie	6	5.3	Shelby	11	8.4
Hamilton	9	5.5	Tama	5	2.8	
Hancock	4	3.3	Union	10	8.1	
Hardin	10	5.3	Winnebago	8	6.8	
Harrison	10	6.4	Wright	10	7.0	
<u>Group Totals</u>						
Number:	433					
Crude:	6.2					

	County	Number	Crude	County	Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	7	2.8	Mahaska	12	5.4	
	Boone	15	5.7	Marion	27	8.4	
	Bremer	13	5.6	Marshall	28	7.1	
	Buchanan	11	5.2	Muscatine	23	5.5	
	Carroll	20	9.3	Plymouth	9	3.6	
	Cerro Gordo	51	11.0	Sioux	25	7.9	
	Clinton	40	8.0	Story	53	6.6	
	Des Moines	29	6.8	Wapello	25	6.9	
	Fayette	10	4.5	Washington	16	7.7	
	Jackson	13	6.4	Webster	30	7.5	
	Jasper	18	4.8	Winneshek	9	4.2	
	Lee	30	7.9				
	<u>Group Totals</u>						
	Number:	514					
Crude:	6.7						

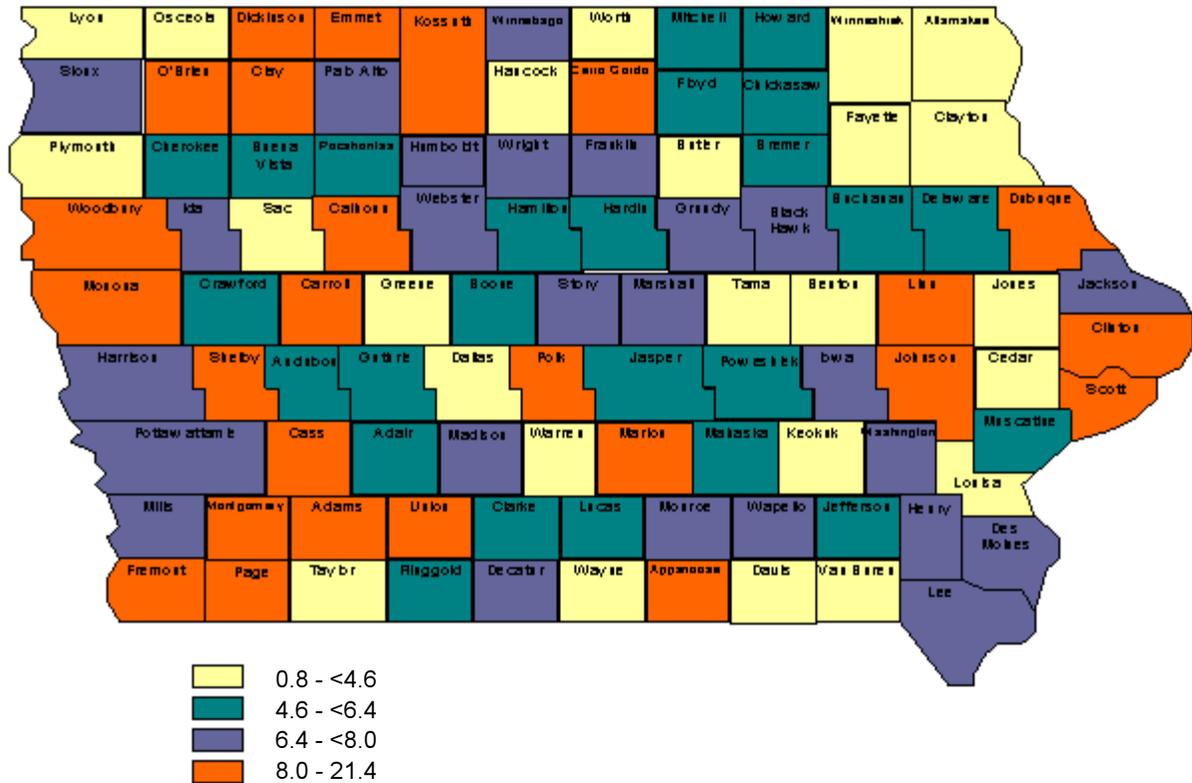
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	94	7.3	Polk	480	12.8
	Dallas	17	4.2	Pottawattamie	64	7.3
	Dubuque	78	8.7	Scott	141	8.9
	Johnson	238	21.4	Warren	14	3.4
	Linn	183	9.5	Woodbury	83	8.0
	<u>Group Totals</u>					
Number:	1,392					
Crude:	10.5					

<sup>1</sup>Rates per 10,000 population

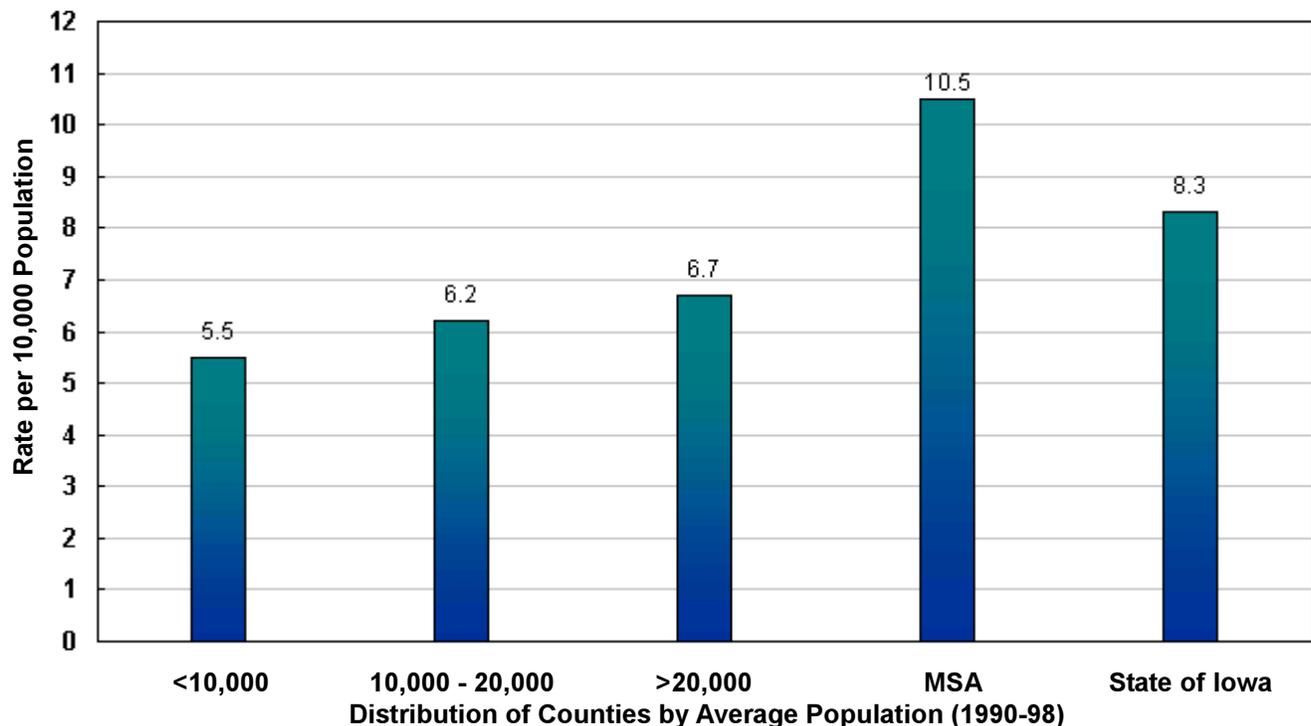
Source: Office of Statewide Clinical Education Programs, UI College of Medicine

## Pharmacists Practicing - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Dentists Practicing - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	1,423	4.9

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	2	2.4	Lucas	3	3.2
	Adams	2	4.5	Monroe	2	2.5
	Audubon	3	4.4	Osceola	2	2.9
	Clarke	2	2.2	Pocahontas	4	4.6
	Davis	1	1.2	Ringgold	1	1.8
	Decatur	3	3.5	Taylor	2	2.9
	Fremont	1	1.2	Van Buren	1	1.3
	Howard	3	3.0	Wayne	1	1.5
	Ida	3	3.8	Worth	1	1.3
	<b>Group Totals</b>					
Number:	37					
Crude:	2.6					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	5	3.4	Henry	10	4.9
	Appanoose	4	2.9	Humboldt	5	4.8
	Buena Vista	8	3.9	Iowa	4	2.6
	Butler	2	1.3	Jefferson	8	4.9
	Calhoun	3	2.7	Jones	8	4.0
	Cass	7	4.8	Keokuk	2	1.8
	Cedar	6	3.3	Kossuth	7	4.1
	Cherokee	4	3.1	Louisa	4	3.3
	Chickasaw	4	3.1	Lyon	4	3.4
	Clay	14	8.1	Madison	4	2.9
	Clayton	7	3.7	Mills	5	3.4
	Crawford	4	2.4	Mitchell	5	4.6
	Delaware	6	3.3	Monona	3	3.0
	Dickinson	8	4.9	Montgomery	5	4.2
	Emmet	4	3.6	O'Brien	8	5.3
	Floyd	7	4.1	Page	14	8.2
	Franklin	4	3.7	Palo Alto	2	2.0
	Greene	3	2.9	Poweshiek	8	4.3
	Grundy	3	2.4	Sac	3	2.6
	Guthrie	3	2.6	Shelby	5	3.8
Hamilton	7	4.3	Tama	5	2.8	
Hancock	5	4.1	Union	5	4.1	
Hardin	7	3.7	Winnebago	9	7.7	
Harrison	3	1.9	Wright	6	4.2	

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	6	2.4	Mahaska	4	1.8
	Boone	8	3.1	Marion	14	4.4
	Bremer	8	3.4	Marshall	18	4.6
	Buchanan	5	2.4	Muscatine	15	3.6
	Carroll	9	4.2	Plymouth	10	4.0
	Cerro Gordo	28	6.0	Sioux	11	3.5
	Clinton	27	5.4	Story	34	4.3
	Des Moines	20	4.7	Wapello	19	5.3
	Fayette	8	3.6	Washington	6	2.9
	Jackson	8	3.9	Webster	26	6.5
	Jasper	14	3.8	Winneshek	14	6.6
	Lee	16	4.2			

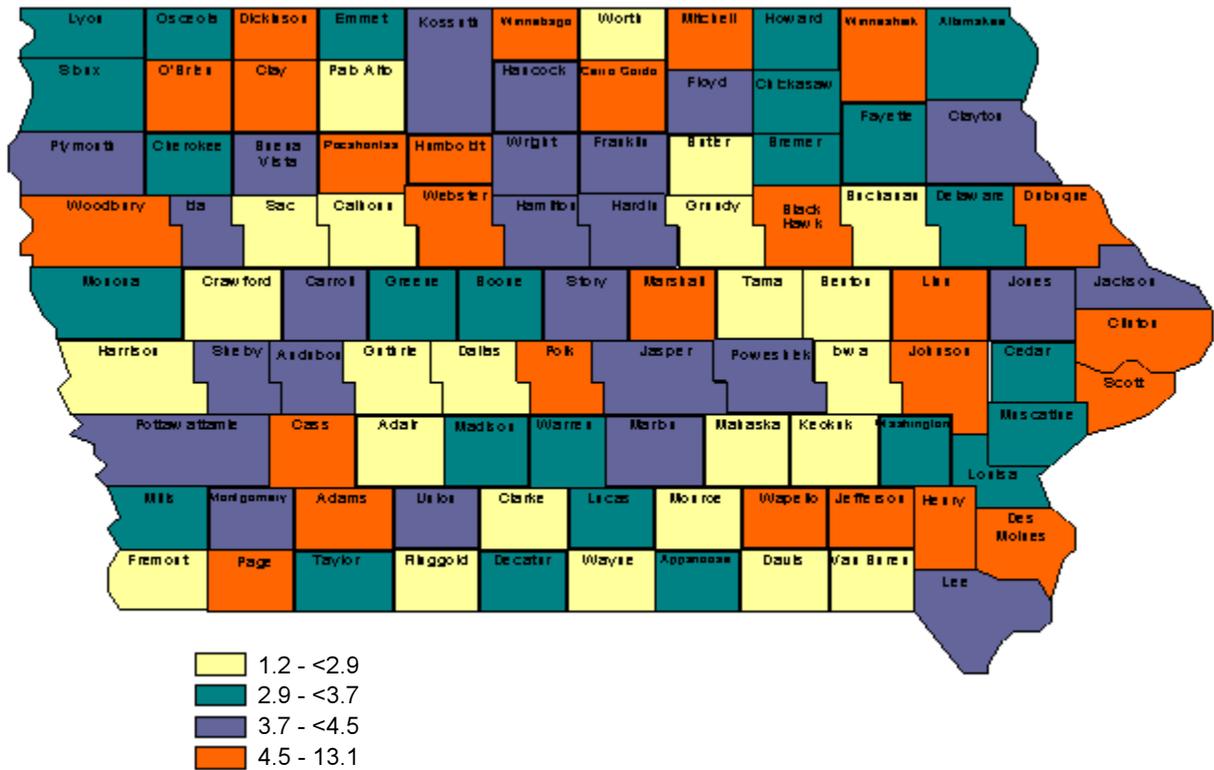
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	62	4.8	Polk	218	5.8
	Dallas	8	2.0	Pottawattamie	38	4.3
	Dubuque	50	5.6	Scott	98	6.2
	Johnson	145	13.1	Warren	14	3.4
	Linn	111	5.8	Woodbury	47	4.5
	<b>Group Totals</b>					
Number:	791					
Crude:	6.0					

<sup>1</sup>Rates per 10,000 population

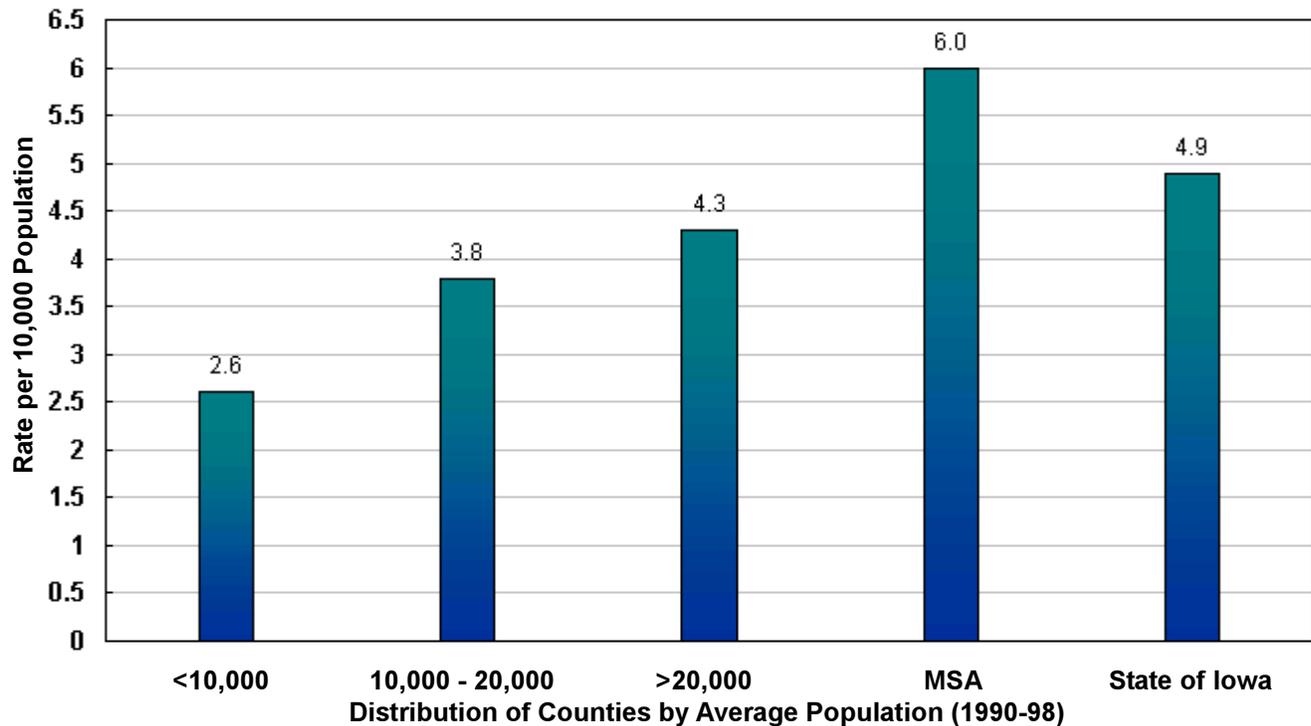
Source: Office of Statewide Clinical Education Programs, UI College of Medicine

## Dentists Practicing - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Chiropractors Licensed - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	1,089	3.7

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	2	2.4	Lucas	3	3.2
	Adams	2	4.5	Monroe	3	3.7
	Audubon	2	2.9	Osceola	2	2.9
	Clarke	2	2.2	Pocahontas	3	3.5
	Davis	2	2.3	Ringgold	1	1.8
	Decatur	3	3.5	Taylor	0	*
	Fremont	1	1.2	Van Buren	1	1.3
	Howard	2	2.0	Wayne	1	1.5
	Ida	2	2.6	Worth	2	2.5
	<b>Group Totals</b>					
Number:	34					
Crude:	2.4					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	6	4.1	Henry	7	3.4
	Appanoose	4	2.9	Humboldt	3	2.9
	Buena Vista	10	4.9	Iowa	6	3.8
	Butler	7	4.6	Jefferson	10	6.2
	Calhoun	4	3.6	Jones	7	3.5
	Cass	3	2.0	Keokuk	1	0.9
	Cedar	14	7.7	Kossuth	6	3.5
	Cherokee	6	4.6	Louisa	3	2.5
	Chickasaw	4	3.1	Lyon	6	5.1
	Clay	11	6.3	Madison	3	2.1
	Clayton	10	5.4	Mills	4	2.7
	Crawford	7	4.1	Mitchell	3	2.8
	Delaware	5	2.7	Monona	2	2.0
	Dickinson	14	8.5	Montgomery	3	2.5
	Emmet	6	5.4	O'Brien	8	5.3
	Floyd	7	4.1	Page	5	2.9
	Franklin	4	3.7	Palo Alto	8	7.9
	Greene	3	2.9	Poweshiek	5	2.7
	Grundy	3	2.4	Sac	6	5.2
	Guthrie	1	0.9	Shelby	2	1.5
Hamilton	6	3.7	Tama	7	3.9	
Hancock	3	2.5	Union	3	2.4	
Hardin	5	2.7	Winnebago	4	3.4	
Harrison	5	3.2	Wright	3	2.1	

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	3	1.2	Mahaska	7	3.1
	Boone	6	2.3	Marion	10	3.1
	Bremer	5	2.1	Marshall	10	2.5
	Buchanan	5	2.4	Muscatine	20	4.8
	Carroll	13	6.1	Plymouth	9	3.6
	Cerro Gordo	13	2.8	Sioux	10	3.2
	Clinton	37	7.4	Story	19	2.4
	Des Moines	20	4.7	Wapello	8	2.2
	Fayette	11	5.0	Washington	11	5.3
	Jackson	6	3.0	Webster	13	3.2
	Jasper	10	2.7	Winneshek	6	2.8
	Lee	10	2.6			

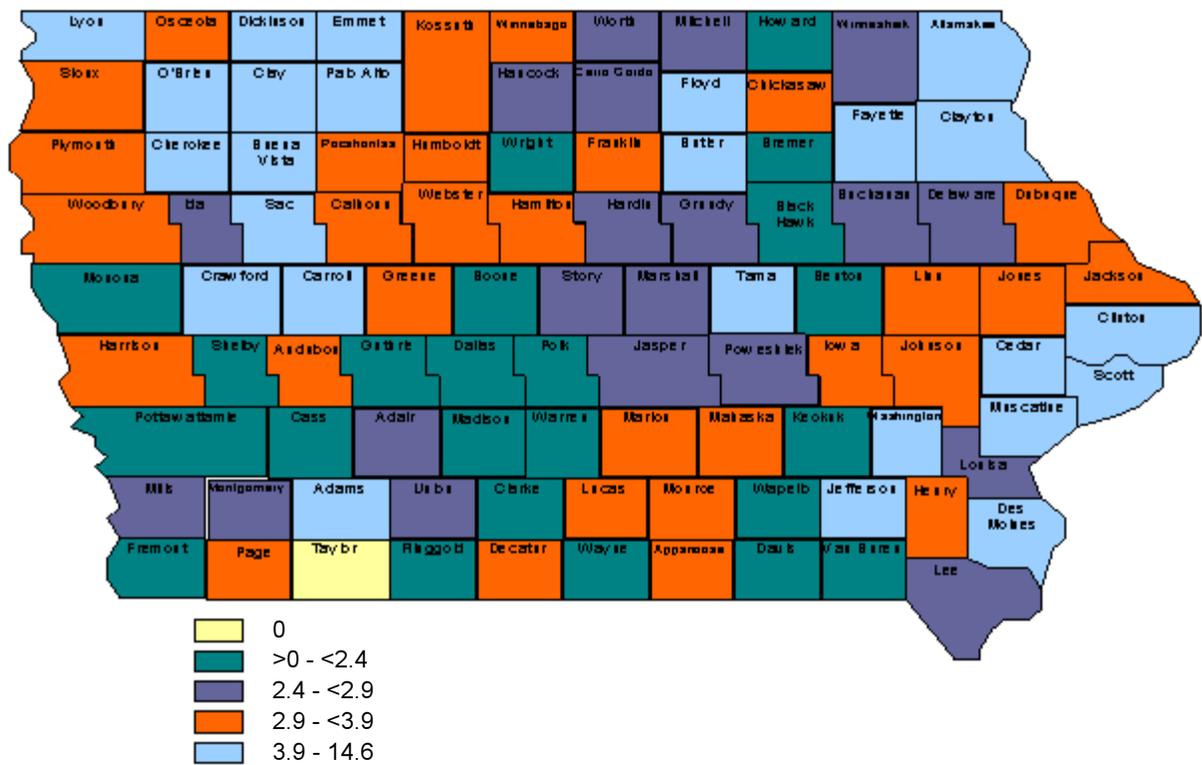
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	23	1.8	Polk	78	2.1
	Dallas	8	2.0	Pottawattamie	13	1.5
	Dubuque	33	3.7	Scott	232	14.6
	Johnson	35	3.2	Warren	8	2.0
	Linn	63	3.3	Woodbury	37	3.6
	<b>Group Totals</b>					
Number:	530					
Crude:	4.0					

<sup>1</sup>Rates per 10,000 population

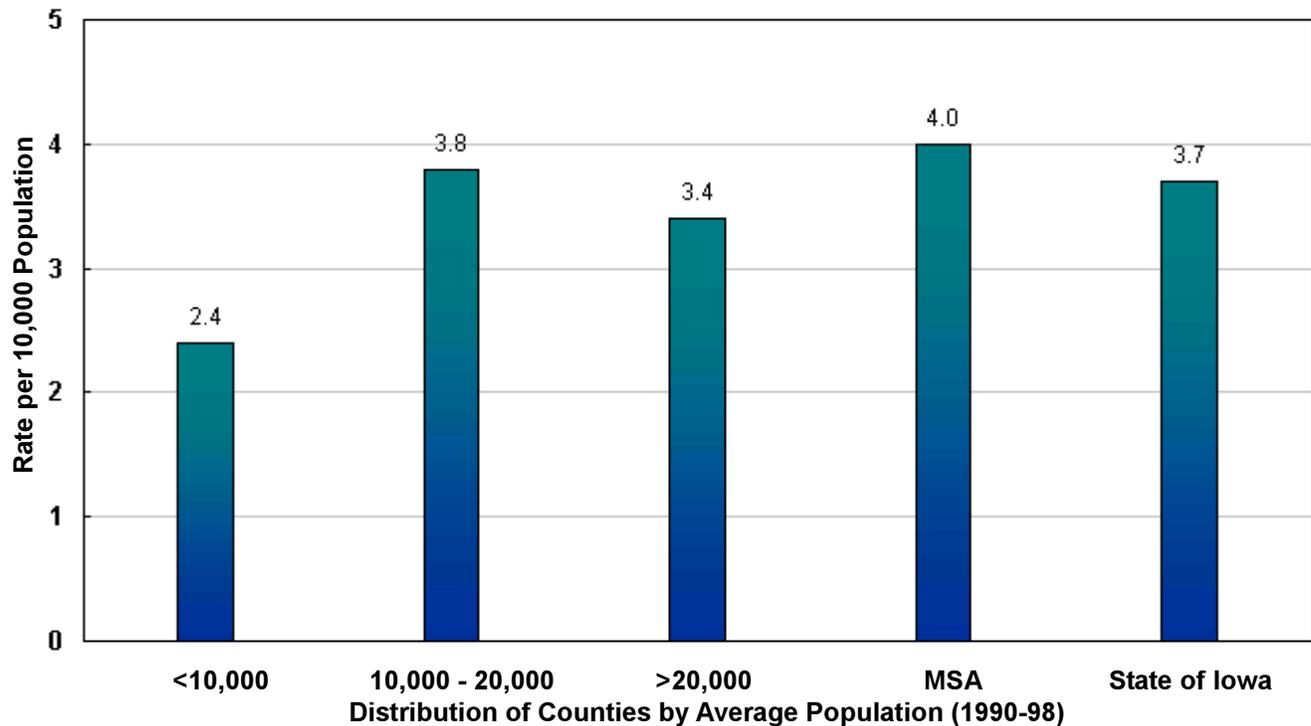
Source: Iowa Department of Public Health

## Chiropractors Licensed - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## First Responders Licensed - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	2,725	9.3

	County			County		
	Number	Crude <sup>1</sup>		Number	Crude <sup>1</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	7	8.5	Lucas	18	19.1
	Adams	9	20.1	Monroe	19	23.7
	Audubon	6	8.8	Osceola	11	15.7
	Clarke	4	4.4	Pocahontas	11	12.7
	Davis	9	10.5	Ringgold	18	32.9
	Decatur	17	19.6	Taylor	9	12.9
	Fremont	19	23.7	Van Buren	14	17.9
	Howard	10	10.1	Wayne	37	55.0
	Ida	26	33.2	Worth	24	30.3
	<b>Group Totals</b>					
Number:	268					
Crude:	19.2					

	County			County			
	Number	Crude		Number	Crude		
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	9	6.1	Henry	50	24.6	
	Appanoose	34	24.8	Humboldt	4	3.9	
	Buena Vista	15	7.3	Iowa	38	24.2	
	Butler	5	3.3	Jefferson	12	7.4	
	Calhoun	4	3.6	Jones	9	4.5	
	Cass	26	17.7	Keokuk	31	27.2	
	Cedar	17	9.3	Kossuth	48	28.0	
	Cherokee	18	13.8	Louisa	7	5.7	
	Chickasaw	30	22.9	Lyon	54	45.9	
	Clay	22	12.7	Madison	6	4.3	
	Clayton	42	22.5	Mills	4	2.7	
	Crawford	44	26.0	Mitchell	8	7.4	
	Delaware	56	30.4	Monona	8	8.0	
	Dickinson	16	9.7	Montgomery	7	5.9	
	Emmet	7	6.3	O'Brien	36	23.8	
	Floyd	16	9.5	Page	4	2.4	
	Franklin	22	20.6	Palo Alto	19	18.7	
	Greene	6	5.8	Poweshiek	16	8.5	
	Grundy	9	7.3	Sac	18	15.6	
	Guthrie	14	12.3	Shelby	18	13.7	
	Hamilton	35	21.3	Tama	16	8.8	
	Hancock	19	15.7	Union	18	14.6	
	Hardin	35	18.6	Winnebago	25	21.3	
	Harrison	28	17.9	Wright	2	1.4	
	<b>Group Totals</b>						
	Number:	987					
Crude:	14.2						

	County			County			
	Number	Crude		Number	Crude		
<b>Counties with Average Population &gt;20,000</b>	Benton	47	18.6	Mahaska	23	10.3	
	Boone	11	4.2	Marion	17	5.3	
	Bremer	23	9.9	Marshall	45	11.4	
	Buchanan	30	14.2	Muscatine	30	7.2	
	Carroll	52	24.3	Plymouth	29	11.7	
	Cerro Gordo	54	11.6	Sioux	28	8.9	
	Clinton	28	5.6	Story	101	12.6	
	Des Moines	9	2.1	Wapello	13	3.6	
	Fayette	48	21.8	Washington	17	8.2	
	Jackson	29	14.3	Webster	16	4.0	
	Jasper	12	3.2	Winneshek	27	12.7	
	Lee	63	16.6				
	<b>Group Totals</b>						
	Number:	752					
Crude:	9.8						

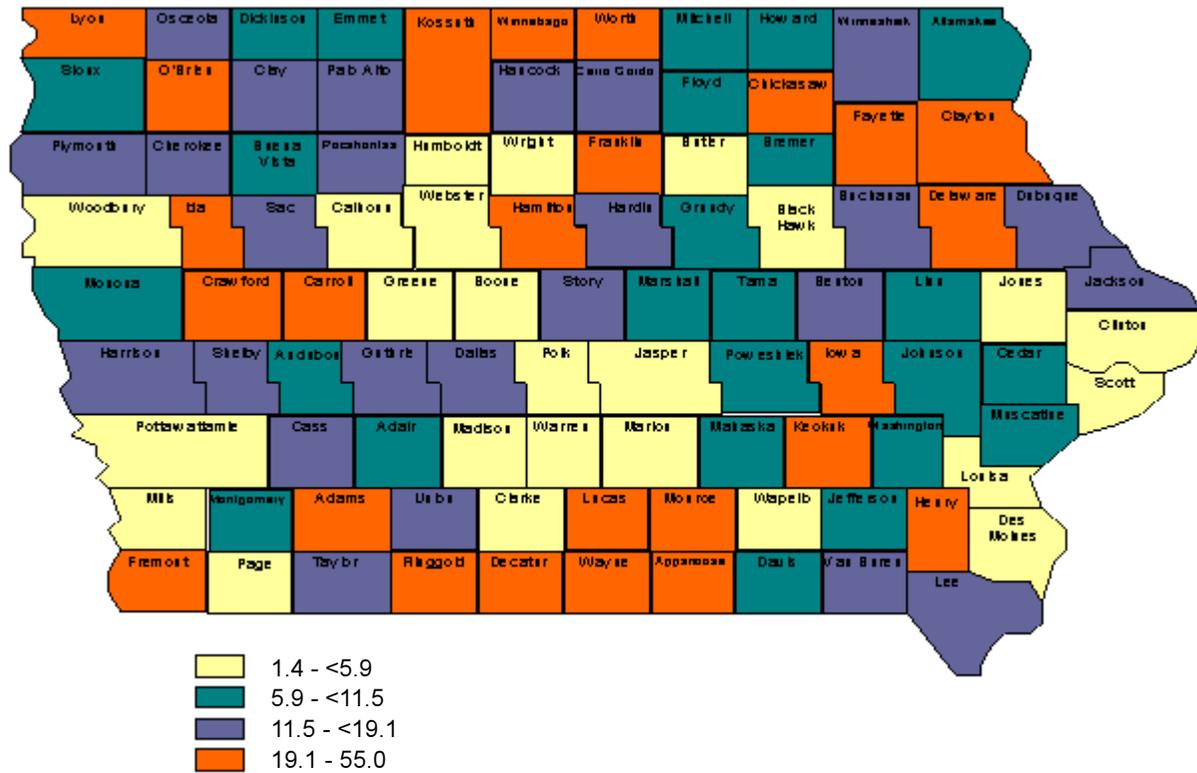
	County			County		
	Number	Crude		Number	Crude	
<b>MSA Counties</b>	Black Hawk	73	5.7	Polk	68	1.8
	Dallas	47	11.5	Pottawattamie	43	4.9
	Dubuque	160	17.9	Scott	31	2.0
	Johnson	89	8.0	Warren	14	3.4
	Linn	119	6.2	Woodbury	50	4.8
<b>Group Totals</b>						
Number:	694					
Crude:	5.2					

<sup>1</sup>Rates per 10,000 population

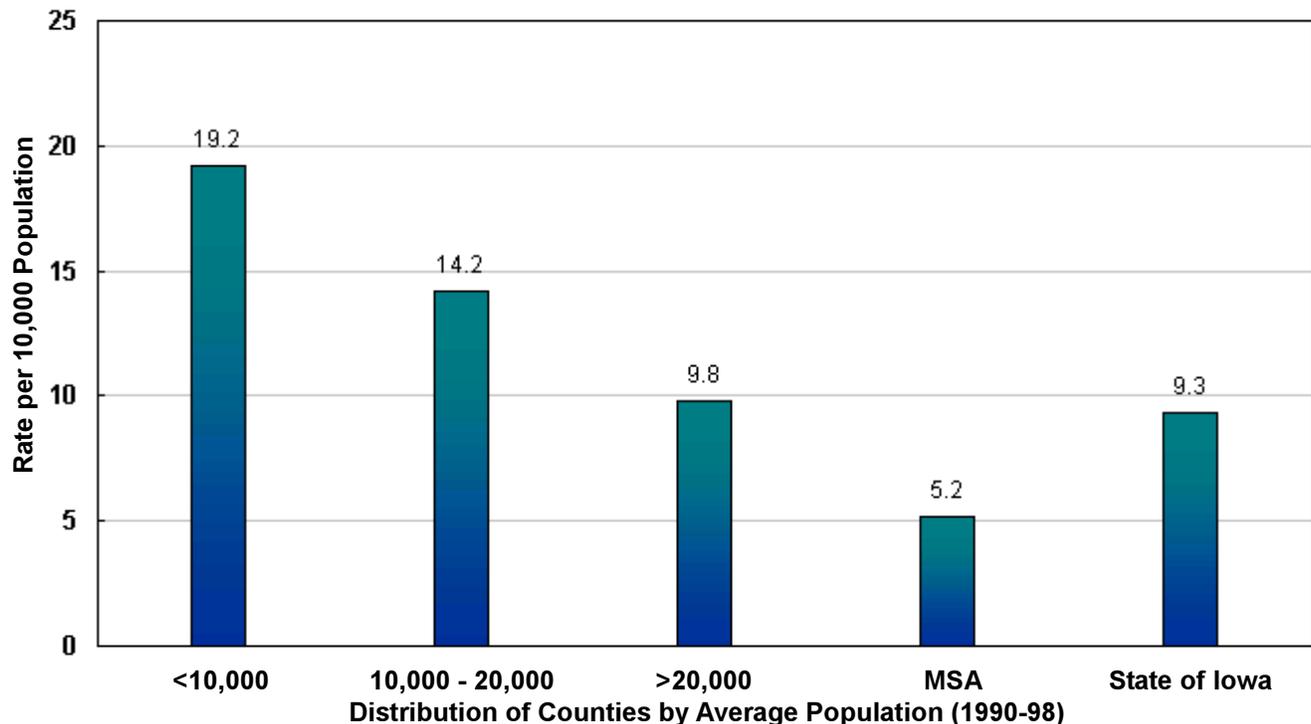
Source: Iowa Department of Public Health,  
Bureau of Emergency Medical Services

## First Responders Licensed - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Emergency Medical Technicians - Basic Licensed - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	6,283	21.5

	County			County		
	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	32	38.8	Lucas	17	18.0
	Adams	8	17.8	Monroe	1	1.2
	Audubon	20	29.3	Osceola	30	42.8
	Clarke	14	15.3	Pocahontas	33	38.1
	Davis	17	19.9	Ringgold	20	36.6
	Decatur	26	29.9	Taylor	39	56.1
	Fremont	47	58.7	Van Buren	32	41.0
	Howard	14	14.1	Wayne	7	10.4
	Ida	26	33.2	Worth	14	17.7
	<u>Group Totals</u>					
Number:	397					
Crude:	28.4					

	County			County		
	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	86	58.6	Henry	43	21.1
	Appanoose	19	13.8	Humboldt	38	36.6
	Buena Vista	48	23.5	Iowa	21	13.4
	Butler	94	61.4	Jefferson	13	8.0
	Calhoun	57	51.3	Jones	63	31.2
	Cass	44	30.0	Keokuk	6	5.3
	Cedar	97	53.3	Kossuth	68	39.6
	Cherokee	48	36.8	Louisa	28	23.0
	Chickasaw	19	14.5	Lyon	55	46.8
	Clay	34	19.6	Madison	28	20.0
	Clayton	76	40.7	Mills	53	36.4
	Crawford	34	20.1	Mitchell	30	27.6
	Delaware	59	32.1	Monona	44	43.9
	Dickinson	26	15.8	Montgomery	35	29.7
	Emmet	24	21.8	O'Brien	94	62.2
	Floyd	32	18.9	Page	61	35.9
	Franklin	20	18.7	Palo Alto	21	20.7
	Greene	43	41.5	Poweshiek	35	18.6
	Grundy	44	35.6	Sac	23	19.9
	Guthrie	42	37.0	Shelby	43	32.6
Hamilton	50	30.4	Tama	79	43.6	
Hancock	38	31.4	Union	16	13.0	
Hardin	66	35.1	Winnebago	61	52.0	
Harrison	70	44.7	Wright	69	48.1	
<u>Group Totals</u>						
Number:	2,197					
Crude:	31.5					

	County			County		
	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	99	39.1	Mahaska	54	24.2
	Boone	32	12.2	Marion	75	23.4
	Bremer	59	25.3	Marshall	55	14.0
	Buchanan	57	27.0	Muscatine	82	19.7
	Carroll	47	21.9	Plymouth	85	34.2
	Cerro Gordo	47	10.1	Sioux	141	44.6
	Clinton	123	24.5	Story	89	11.1
	Des Moines	66	15.6	Wapello	10	2.8
	Fayette	57	25.9	Washington	22	10.6
	Jackson	82	40.4	Webster	95	23.6
	Jasper	114	30.6	Winneshek	27	12.7
	Lee	41	10.8			
	<u>Group Totals</u>					
	Number:	1,559				
Crude:	20.4					

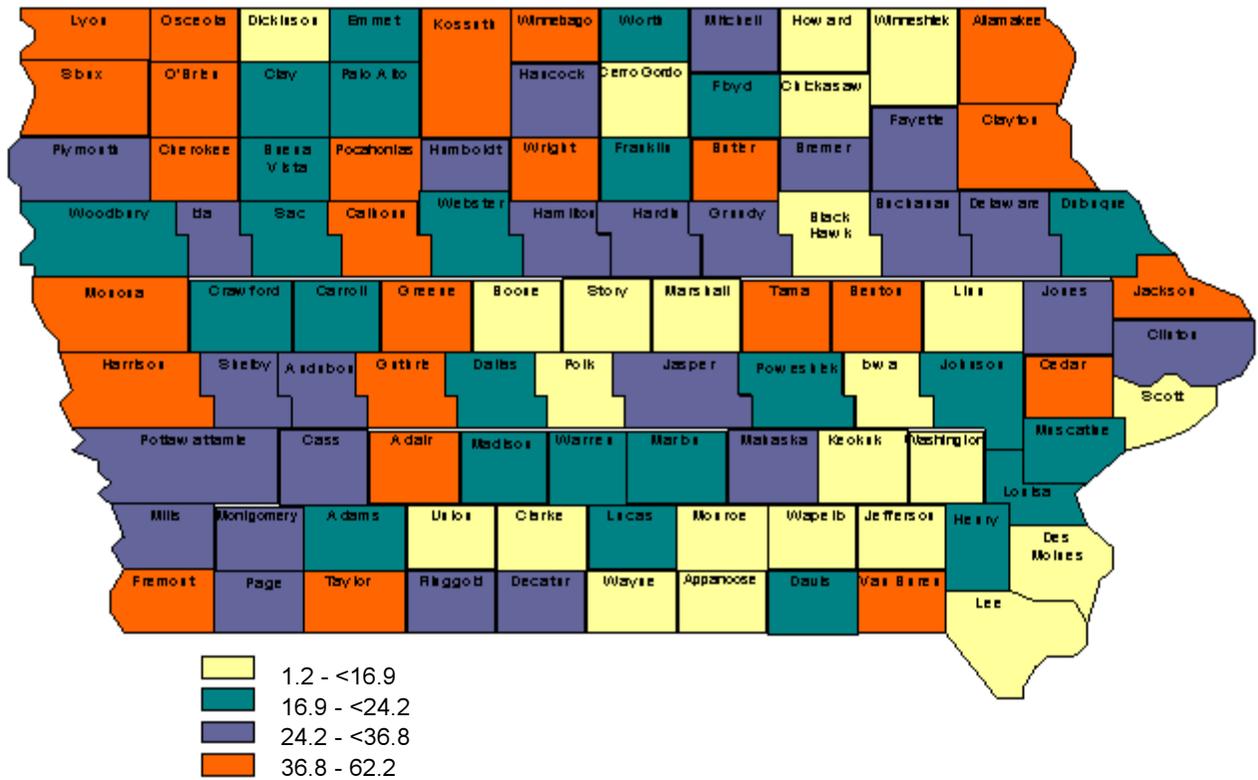
	County			County		
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	96	7.5	Polk	493	13.2
	Dallas	74	18.2	Pottawattamie	240	27.4
	Dubuque	151	16.9	Scott	135	8.5
	Johnson	223	20.1	Warren	92	22.6
	Linn	260	13.6	Woodbury	212	20.4
<u>Group Totals</u>						
Number:	1,976					
Crude:	14.9					

<sup>1</sup>Rates per 10,000 population

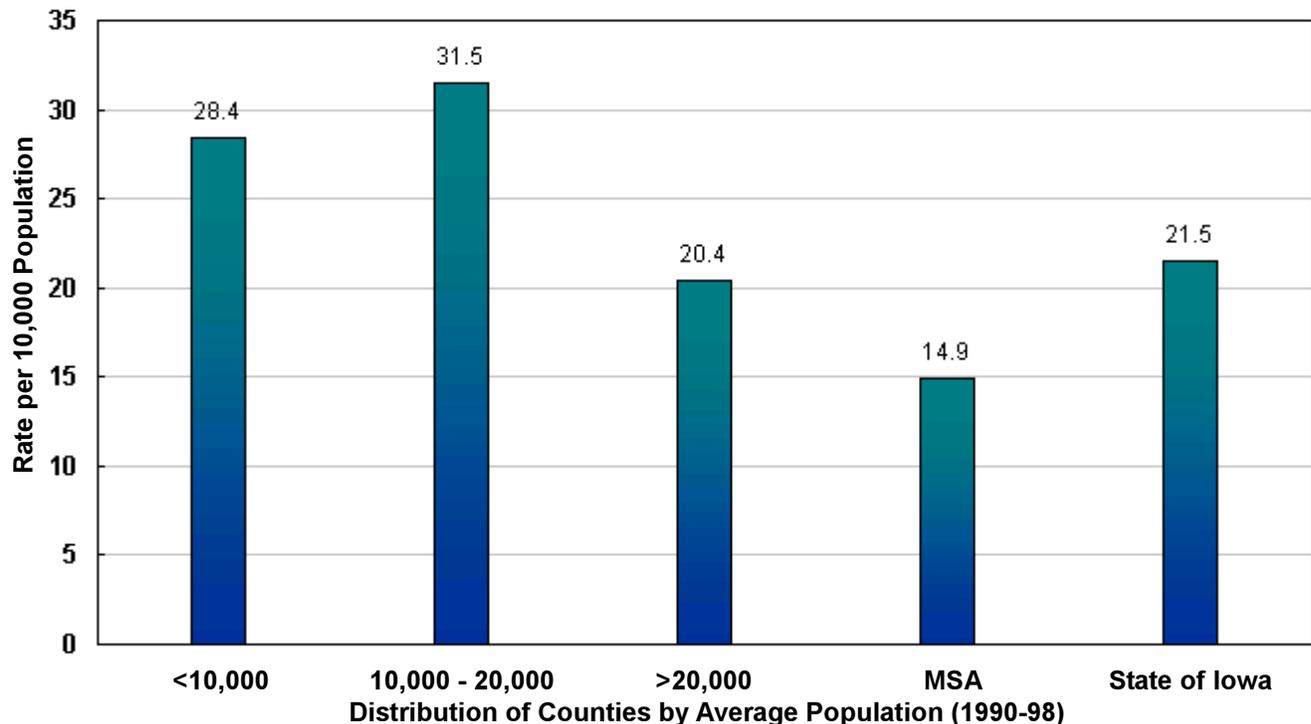
Source: Iowa Department of Public Health,  
Bureau of Emergency Medical Services

## Emergency Medical Technicians - Basic Licensed - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Emergency Medical Technicians - Intermediate Licensed - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	1,319	4.5

	County			County		
	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	9	10.9	Lucas	2	2.1
	Adams	4	8.9	Monroe	4	5.0
	Audubon	4	5.9	Osceola	0	*
	Clarke	5	5.5	Pocahontas	8	9.2
	Davis	2	2.3	Ringgold	6	11.0
	Decatur	14	16.1	Taylor	6	8.6
	Fremont	7	8.7	Van Buren	6	7.7
	Howard	10	10.1	Wayne	6	8.9
	Ida	15	19.1	Worth	3	3.8
	<b>Group Totals</b>					
Number:	111					
Crude:	7.9					

	County			County		
	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	3	2.0	Henry	6	3.0
	Appanoose	10	7.3	Humboldt	3	2.9
	Buena Vista	9	4.4	Iowa	5	3.2
	Butler	11	7.2	Jefferson	8	4.9
	Calhoun	10	9.0	Jones	15	7.4
	Cass	17	11.6	Keokuk	8	7.0
	Cedar	21	11.5	Kossuth	13	7.6
	Cherokee	10	7.7	Louisa	18	14.8
	Chickasaw	5	3.8	Lyon	0	*
	Clay	7	4.0	Madison	8	5.7
	Clayton	11	5.9	Mills	11	7.6
	Crawford	10	5.9	Mitchell	7	6.4
	Delaware	22	12.0	Monona	12	12.0
	Dickinson	17	10.4	Montgomery	5	4.2
	Emmet	12	10.9	O'Brien	1	0.7
	Floyd	4	2.4	Page	10	5.9
	Franklin	9	8.4	Palo Alto	5	4.9
	Greene	9	8.7	Poweshiek	6	3.2
	Grundy	6	4.9	Sac	7	6.1
	Guthrie	5	4.4	Shelby	8	6.1
Hamilton	5	3.0	Tama	15	8.3	
Hancock	5	4.1	Union	3	2.4	
Hardin	7	3.7	Winnebago	10	8.5	
Harrison	8	5.1	Wright	6	4.2	

	County			County		
	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	24	9.5	Mahaska	5	2.2
	Boone	5	1.9	Marion	22	6.9
	Bremer	11	4.7	Marshall	15	3.8
	Buchanan	17	8.1	Muscatine	21	5.0
	Carroll	5	2.3	Plymouth	23	9.3
	Cerro Gordo	7	1.5	Sioux	6	1.9
	Clinton	26	5.2	Story	2	0.3
	Des Moines	13	3.1	Wapello	9	2.5
	Fayette	15	6.8	Washington	9	4.4
	Jackson	10	4.9	Webster	21	5.2
	Jasper	8	2.1	Winneshek	4	1.9
	Lee	13	3.4			

	County			County		
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	34	2.7	Polk	91	2.4
	Dallas	13	3.2	Pottawattamie	14	1.6
	Dubuque	30	3.4	Scott	97	6.1
	Johnson	17	1.5	Warren	30	7.4
	Linn	60	3.1	Woodbury	82	7.9
<b>Group Totals</b>						
Number:	468					
Crude:	3.5					

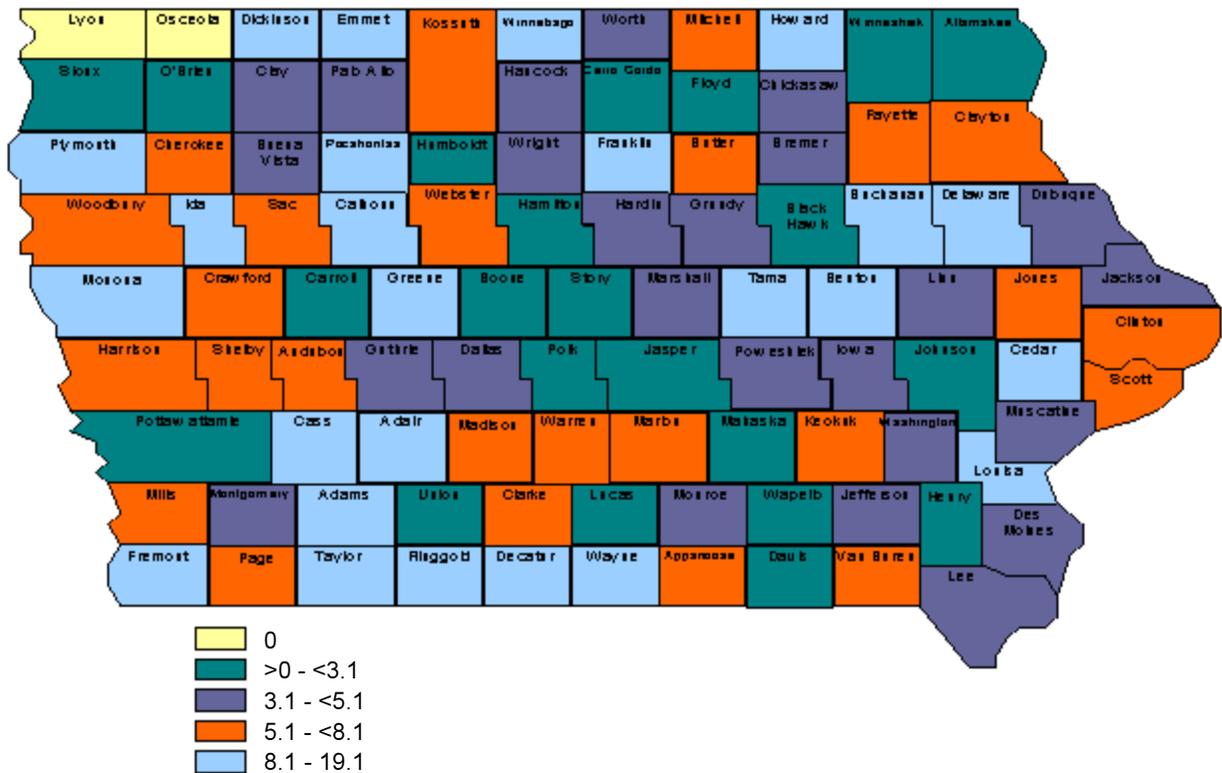
<sup>1</sup>Rates per 10,000 population

\*Crude rate less than 0.05

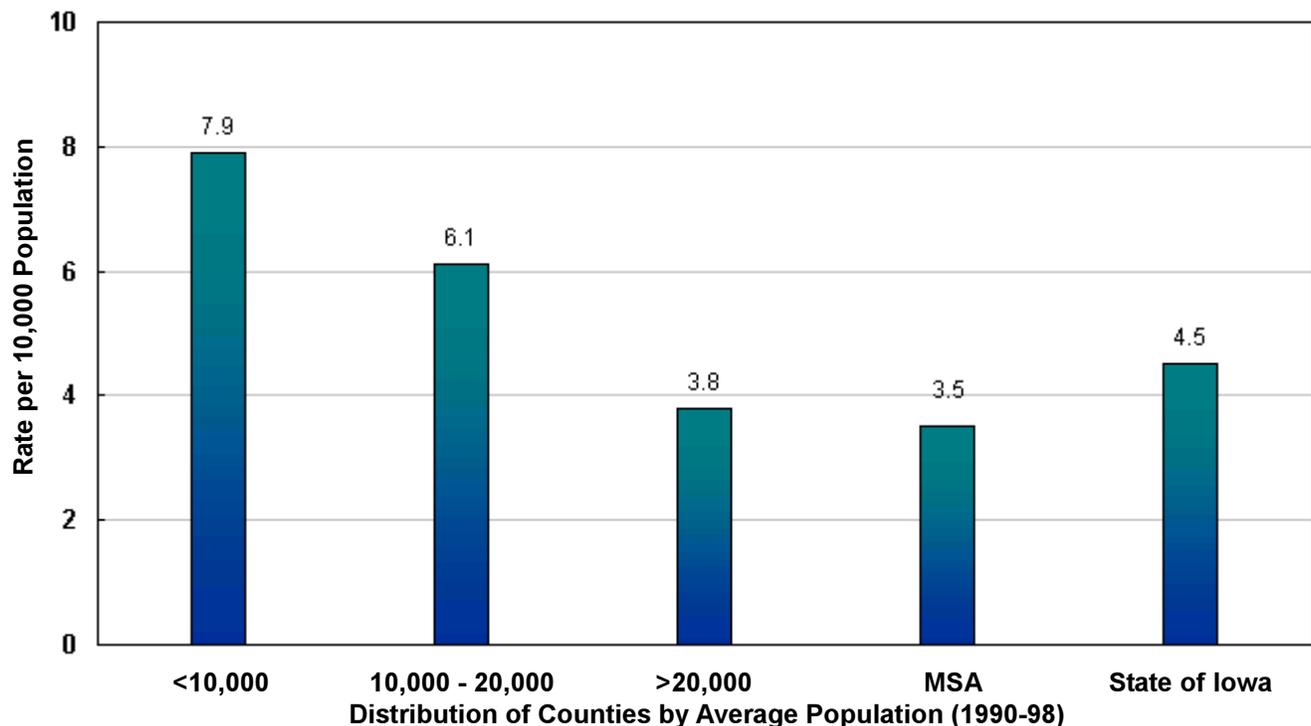
Source: Iowa Department of Public Health,  
Bureau of Emergency Medical Services

## Emergency Medical Technicians - Intermediate Licensed - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Emergency Medical Technicians - Paramedic Licensed - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	1,446	4.9

	County			County		
	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	1	1.2	Lucas	10	10.6
	Adams	0	*	Monroe	9	11.2
	Audubon	2	2.9	Osceola	1	1.4
	Clarke	2	2.2	Pocahontas	1	1.2
	Davis	4	4.7	Ringgold	5	9.1
	Decatur	4	4.6	Taylor	7	10.1
	Fremont	3	3.7	Van Buren	6	7.7
	Howard	0	*	Wayne	8	11.9
	Ida	1	1.3	Worth	4	5.1
	<b>Group Totals</b>					
Number:	68					
Crude:	4.9					

	County			County		
	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	5	3.4	Henry	17	8.4
	Appanoose	14	10.2	Humboldt	1	1.0
	Buena Vista	3	1.5	Iowa	5	3.2
	Butler	6	3.9	Jefferson	6	3.7
	Calhoun	1	0.9	Jones	16	7.9
	Cass	5	3.4	Keokuk	5	4.4
	Cedar	15	8.2	Kossuth	6	3.5
	Cherokee	8	6.1	Louisa	20	16.4
	Chickasaw	8	6.1	Lyon	1	0.9
	Clay	8	4.6	Madison	5	3.6
	Clayton	8	4.3	Mills	6	4.1
	Crawford	9	5.3	Mitchell	4	3.7
	Delaware	5	2.7	Monona	5	5.0
	Dickinson	3	1.8	Montgomery	8	6.8
	Emmet	1	0.9	O'Brien	5	3.3
	Floyd	6	3.6	Page	9	5.3
	Franklin	4	3.7	Palo Alto	5	4.9
	Greene	1	1.0	Poweshiek	2	1.1
	Grundy	4	3.2	Sac	3	2.6
	Guthrie	4	3.5	Shelby	8	6.1
Hamilton	9	5.5	Tama	11	6.1	
Hancock	9	7.4	Union	9	7.3	
Hardin	6	3.2	Winnebago	9	7.7	
Harrison	4	2.6	Wright	2	1.4	
<b>Group Totals</b>						
Number:	314					
Crude:	4.5					

	County			County		
	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	12	4.7	Mahaska	1	0.4
	Boone	14	5.3	Marion	9	2.8
	Bremer	20	8.6	Marshall	11	2.8
	Buchanan	6	2.8	Muscatine	19	4.6
	Carroll	5	2.3	Plymouth	7	2.8
	Cerro Gordo	21	4.5	Sioux	8	2.5
	Clinton	30	6.0	Story	30	3.8
	Des Moines	21	5.0	Wapello	18	5.0
	Fayette	18	8.2	Washington	13	6.3
	Jackson	16	7.9	Webster	6	1.5
	Jasper	21	5.6	Winneshek	7	3.3
	Lee	25	6.6			
	<b>Group Totals</b>					
Number:	338					
Crude:	4.4					

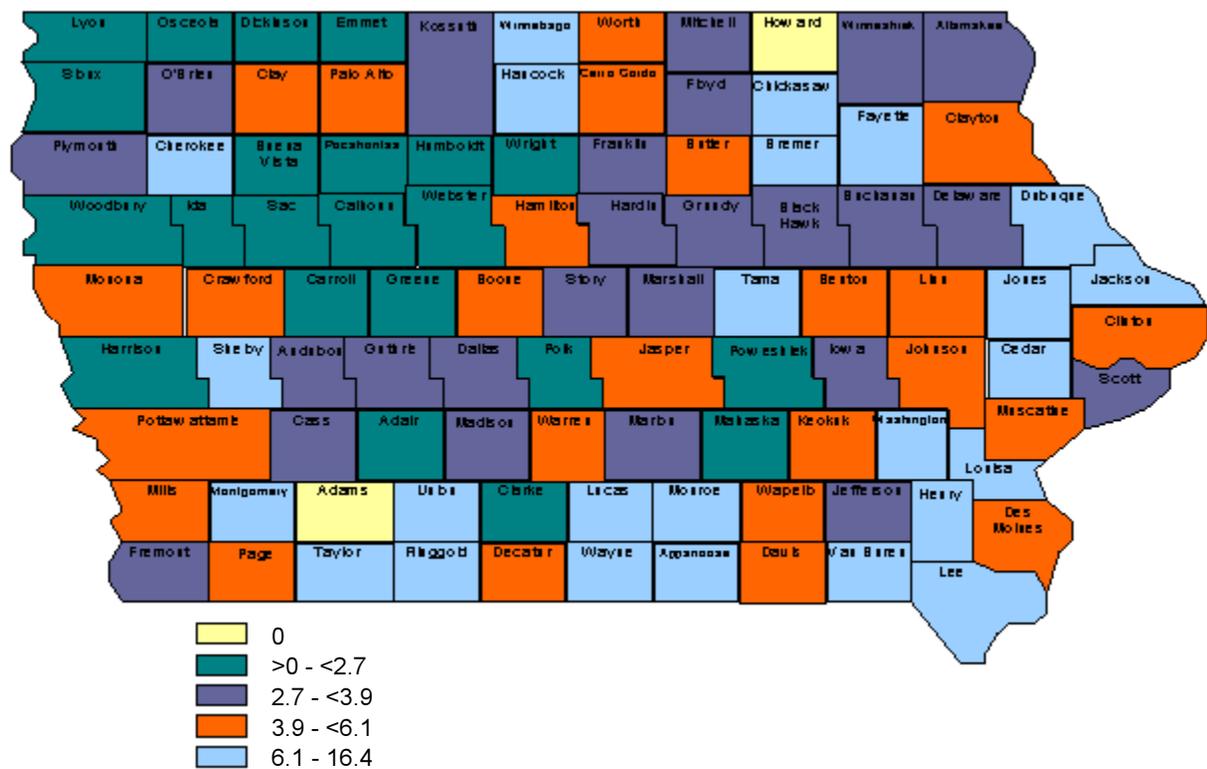
	County			County		
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	41	3.2	Polk	99	2.6
	Dallas	12	2.9	Pottawattamie	37	4.2
	Dubuque	81	9.1	Scott	51	3.2
	Johnson	55	5.0	Warren	23	5.7
	Linn	93	4.9	Woodbury	24	2.3
<b>Group Totals</b>						
Number:	516					
Crude:	3.9					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

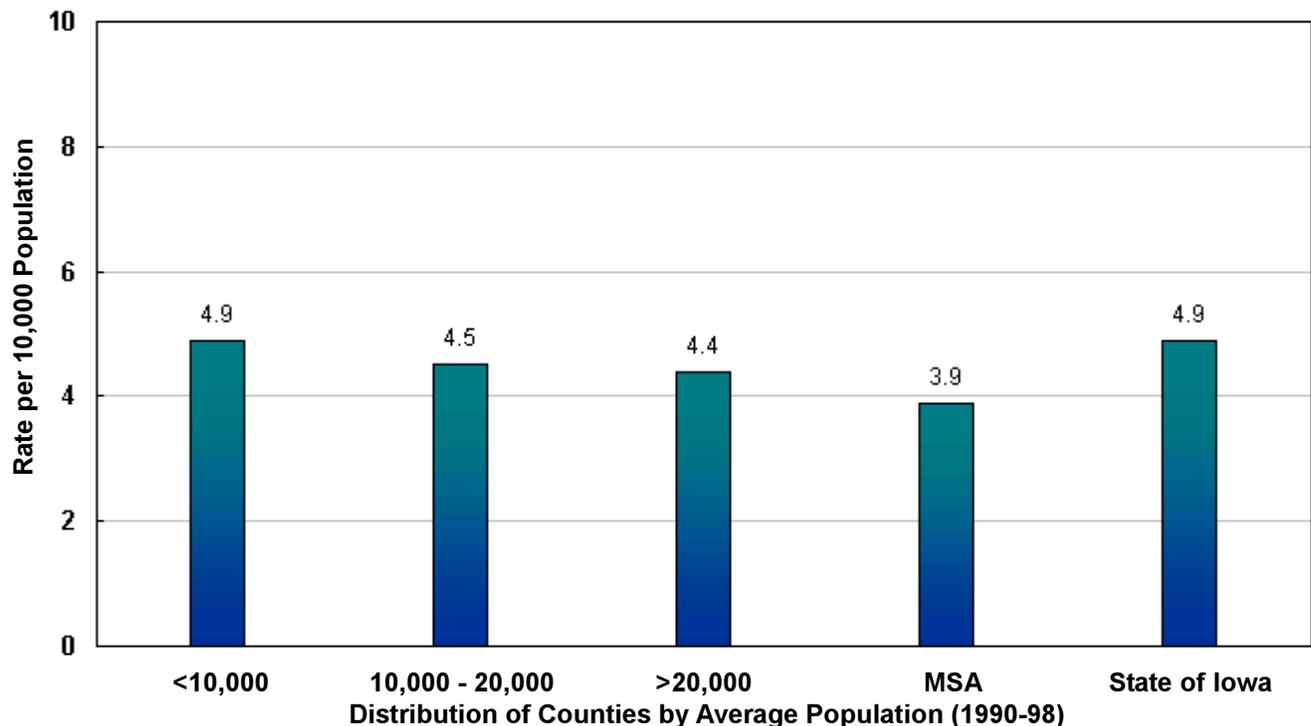
Source: Iowa Department of Public Health,  
Bureau of Emergency Medical Services

## Emergency Medical Technicians - Paramedic Licensed - 2001

### Crude Rates per 10,000 Population



### Crude Rates



### Emergency Medical Technicians - Paramedic Specialist Licensed - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	536	1.8

	County			County		
	Number	Crude <sup>1</sup>		Number	Crude <sup>1</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	1	1.1
	Adams	0	*	Monroe	4	5.0
	Audubon	0	*	Osceola	0	*
	Clarke	2	2.2	Pocahontas	0	*
	Davis	0	*	Ringgold	0	*
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	7					
Crude:	0.5					

	County			County		
	Number	Crude		Number	Crude	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	2	1.0
	Appanoose	2	1.5	Humboldt	2	1.9
	Buena Vista	5	2.4	Iowa	5	3.2
	Butler	2	1.3	Jefferson	0	*
	Calhoun	3	2.7	Jones	7	3.5
	Cass	0	*	Keokuk	4	3.5
	Cedar	2	1.1	Kossuth	1	0.6
	Cherokee	1	0.8	Louisa	2	1.6
	Chickasaw	0	*	Lyon	0	*
	Clay	1	0.6	Madison	0	*
	Clayton	3	1.6	Mills	0	*
	Crawford	0	*	Mitchell	1	0.9
	Delaware	0	*	Monona	0	*
	Dickinson	13	7.9	Montgomery	1	0.8
	Emmet	1	0.9	O'Brien	1	0.7
	Floyd	5	3.0	Page	3	1.8
	Franklin	3	2.8	Palo Alto	1	1.0
	Greene	2	1.9	Poweshiek	7	3.7
	Grundy	1	0.8	Sac	4	3.5
	Guthrie	4	3.5	Shelby	3	2.3
Hamilton	6	3.7	Tama	1	0.6	
Hancock	1	0.8	Union	0	*	
Hardin	5	2.7	Winnebago	1	0.9	
Harrison	0	*	Wright	3	2.1	
<b>Group Totals</b>						
Number:	109					
Crude:	1.6					

	County			County		
	Number	Crude		Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	3	1.2	Mahaska	0	*
	Boone	3	1.1	Marion	7	2.2
	Bremer	4	1.7	Marshall	3	0.8
	Buchanan	1	0.5	Muscatine	7	1.7
	Carroll	9	4.2	Plymouth	3	1.2
	Cerro Gordo	0	*	Sioux	2	0.6
	Clinton	4	0.8	Story	22	2.8
	Des Moines	21	5.0	Wapello	2	0.6
	Fayette	4	1.8	Washington	10	4.8
	Jackson	4	2.0	Webster	12	3.0
	Jasper	2	0.5	Winneshek	4	1.9
	Lee	3	0.8			
	<b>Group Totals</b>					
Number:	130					
Crude:	1.7					

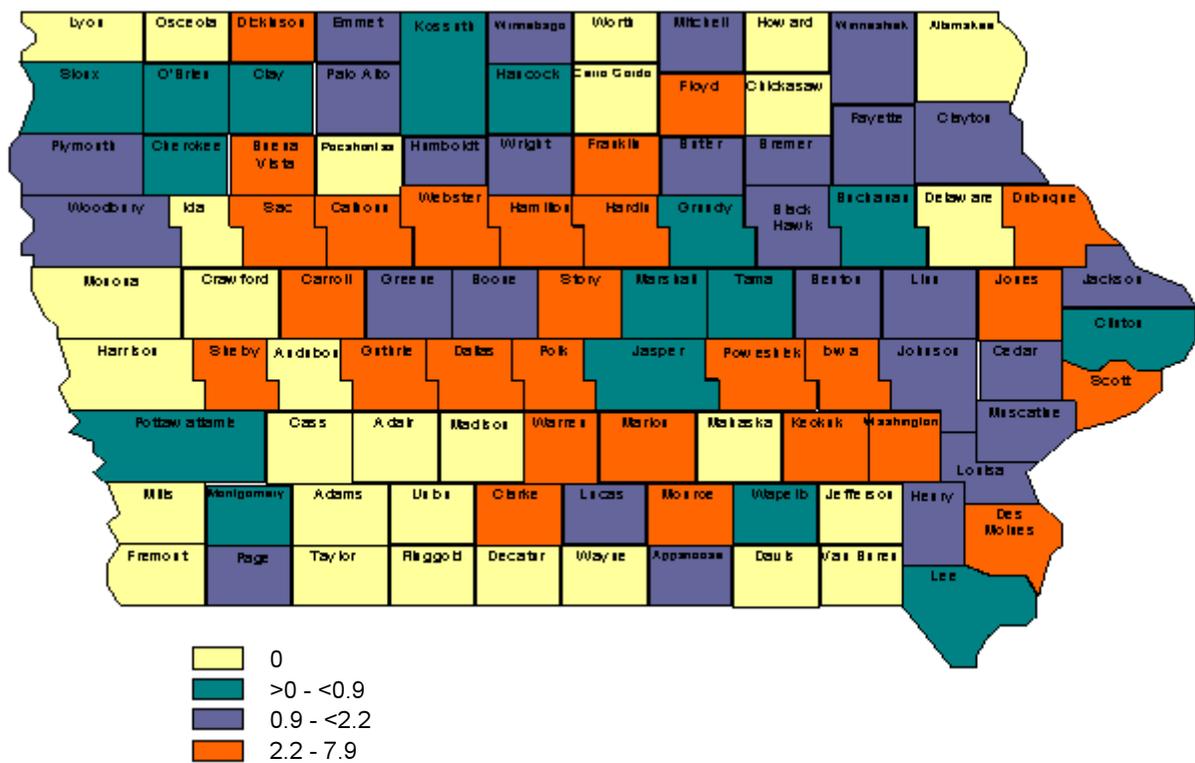
	County			County		
	Number	Crude		Number	Crude	
<b>MSA Counties</b>	Black Hawk	11	0.9	Polk	96	2.6
	Dallas	13	3.2	Pottawattamie	2	0.2
	Dubuque	20	2.2	Scott	40	2.5
	Johnson	20	1.8	Warren	26	6.4
	Linn	17	0.9	Woodbury	21	2.0
	<b>Group Totals</b>					
Number:	266					
Crude:	2.0					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

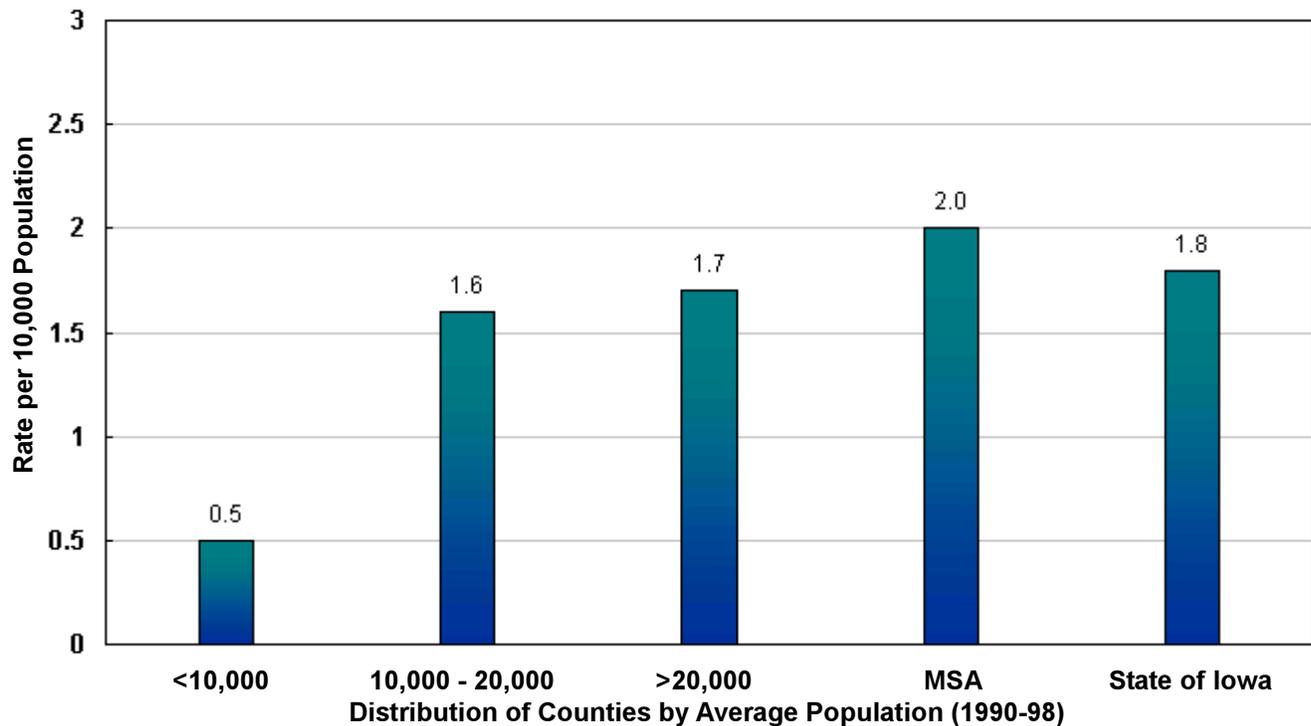
Source: Iowa Department of Public Health,  
Bureau of Emergency Medical Services

## Emergency Medical Technicians - Paramedic Specialist Licensed - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Emergency Medical Technicians - Total Licensed - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	14,867	50.8

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	51	61.9	Lucas	54	57.3
	Adams	23	51.3	Monroe	42	52.4
	Audubon	36	52.7	Osceola	47	67.1
	Clarke	48	52.6	Pocahontas	55	63.5
	Davis	36	42.1	Ringgold	54	98.7
	Decatur	65	74.8	Taylor	64	92.0
	Fremont	77	96.1	Van Buren	59	75.6
	Howard	40	40.3	Wayne	61	90.6
	Ida	71	90.6	Worth	49	62.0
	<u>Group Totals</u>					
Number:	932					
Crude:	66.7					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	107	72.9	Henry	147	72.3
	Appanoose	85	61.9	Humboldt	54	52.0
	Buena Vista	102	50.0	Iowa	89	56.8
	Butler	126	82.3	Jefferson	42	26.0
	Calhoun	81	72.9	Jones	136	67.3
	Cass	103	70.1	Keokuk	61	53.5
	Cedar	181	99.5	Kossuth	137	79.8
	Cherokee	94	72.1	Louisa	83	68.1
	Chickasaw	68	51.9	Lyon	116	98.6
	Clay	80	46.1	Madison	57	40.7
	Clayton	145	77.6	Mills	82	56.4
	Crawford	109	64.3	Mitchell	52	47.8
	Delaware	148	80.4	Monona	77	76.8
	Dickinson	82	49.9	Montgomery	64	54.4
	Emmet	49	44.4	O'Brien	144	95.4
	Floyd	73	43.2	Page	95	56.0
	Franklin	66	61.7	Palo Alto	60	59.1
	Greene	67	64.6	Poweshiek	85	45.2
	Grundy	75	60.6	Sac	63	54.6
	Guthrie	75	66.1	Shelby	86	65.3
Hamilton	116	70.6	Tama	130	71.8	
Hancock	76	62.8	Union	54	43.9	
Hardin	132	70.2	Winnebago	113	96.4	
Harrison	118	75.3	Wright	85	59.3	

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	205	81.0	Mahaska	99	44.3
	Boone	78	29.7	Marion	170	53.0
	Bremer	133	57.0	Marshall	152	38.7
	Buchanan	123	58.3	Muscatine	209	50.1
	Carroll	134	62.6	Plymouth	155	62.4
	Cerro Gordo	184	39.6	Sioux	193	61.1
	Clinton	231	46.1	Story	309	38.6
	Des Moines	155	36.6	Wapello	66	18.3
	Fayette	148	67.2	Washington	92	44.5
	Jackson	160	78.8	Webster	162	40.3
	Jasper	190	51.1	Winneshek	70	32.8
	Lee	178	46.8			

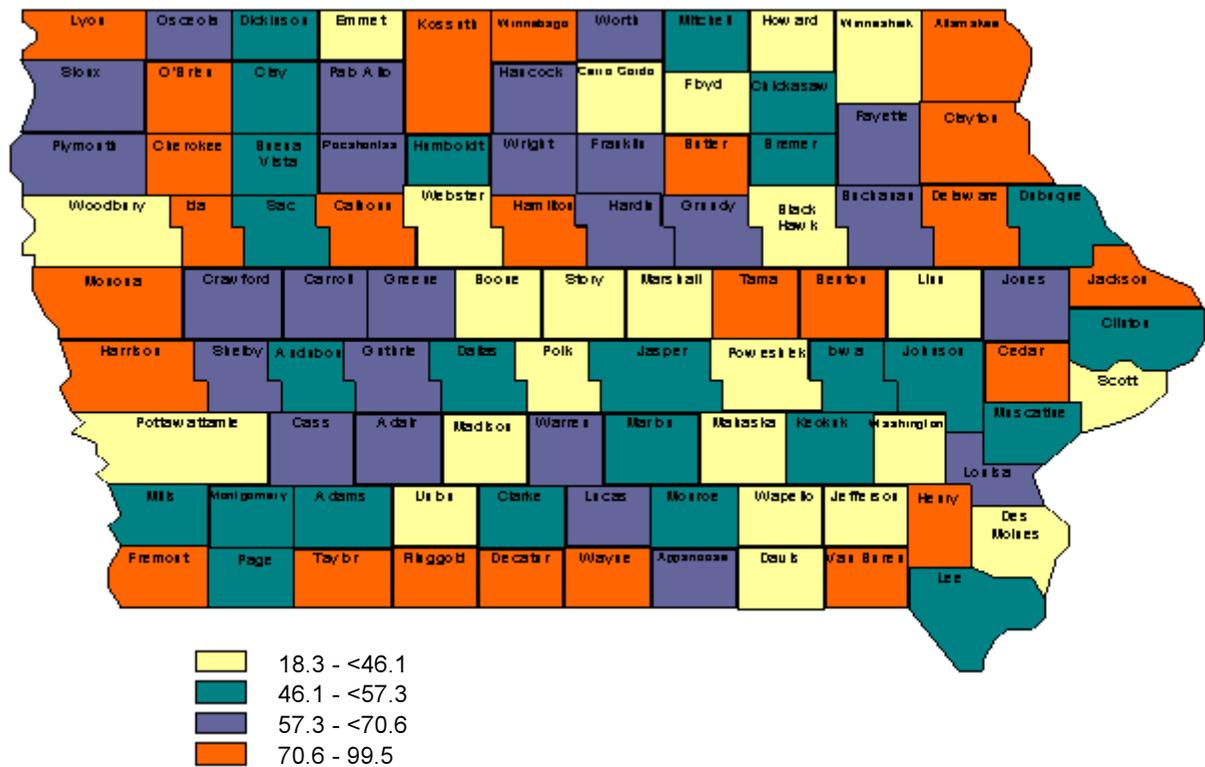
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	394	30.8	Polk	1,436	38.3
	Dallas	194	47.6	Pottawattamie	368	42.0
	Dubuque	489	54.9	Scott	428	27.0
	Johnson	561	50.5	Warren	241	59.3
	Linn	875	45.6	Woodbury	415	40.0
	<u>Group Totals</u>					
Number:	5,401					
Crude:	40.7					

<sup>1</sup>Rates per 10,000 population

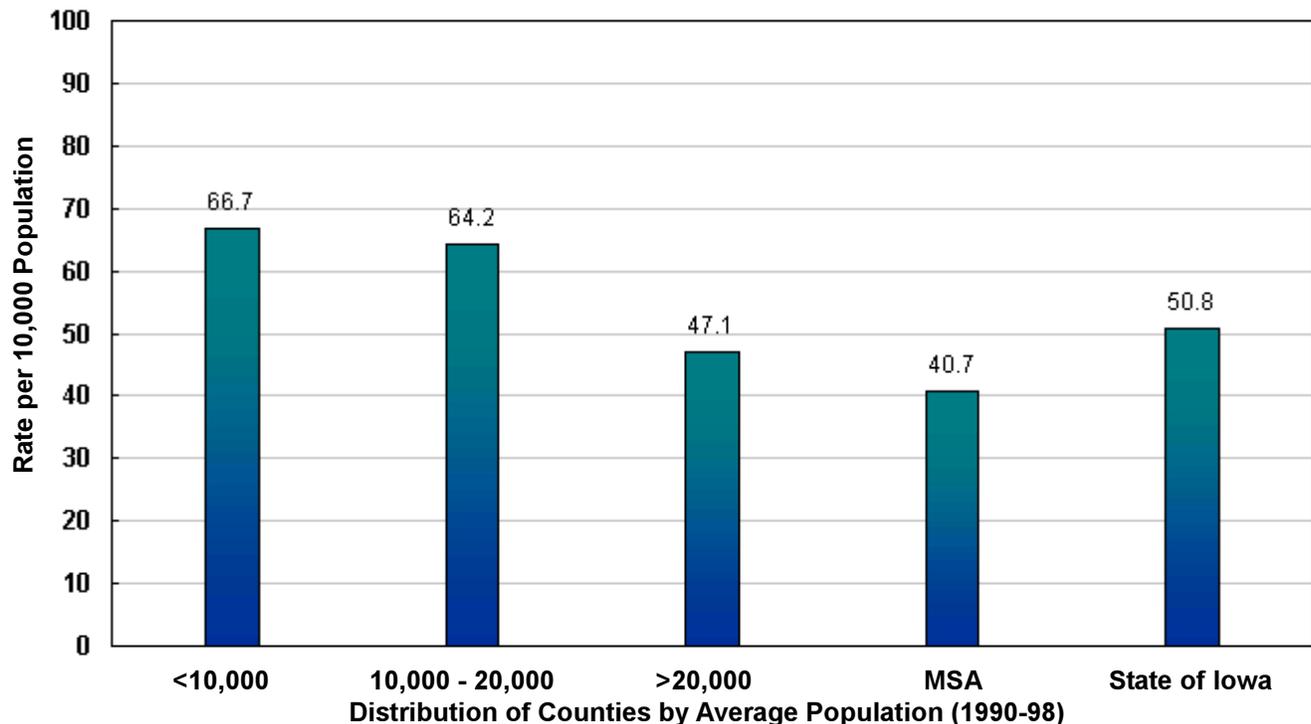
Source: Iowa Department of Public Health,  
Bureau of Emergency Medical Services

## Emergency Medical Technicians - Total Licensed - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Public Access Defibrillation Provider Licensed - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	929	3.2

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	1	1.2	Lucas	0	*
	Adams	0	*	Monroe	2	2.5
	Audubon	1	1.5	Osceola	0	*
	Clarke	2	2.2	Pocahontas	0	*
	Davis	0	*	Ringgold	0	*
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	1	1.3
	<b>Group Totals</b>					
Number:	7					
Crude:	0.5					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	13	6.4
	Appanoose	1	0.7	Humboldt	0	*
	Buena Vista	11	5.4	Iowa	5	3.2
	Butler	0	*	Jefferson	0	*
	Calhoun	0	*	Jones	6	3.0
	Cass	0	*	Keokuk	1	0.9
	Cedar	17	9.3	Kossuth	0	*
	Cherokee	0	*	Louisa	6	4.9
	Chickasaw	0	*	Lyon	0	*
	Clay	0	*	Madison	5	3.6
	Clayton	0	*	Mills	1	0.7
	Crawford	0	*	Mitchell	0	*
	Delaware	1	0.5	Monona	0	*
	Dickinson	0	*	Montgomery	0	*
	Emmet	0	*	O'Brien	0	*
	Floyd	2	1.2	Page	0	*
	Franklin	0	*	Palo Alto	0	*
	Greene	0	*	Poweshiek	9	4.8
	Grundy	1	0.8	Sac	1	0.9
	Guthrie	2	1.8	Shelby	0	*
Hamilton	1	0.6	Tama	1	0.6	
Hancock	0	*	Union	0	*	
Hardin	2	1.1	Winnebago	0	*	
Harrison	0	*	Wright	0	*	
<b>Group Totals</b>						
Number:	86					
Crude:	1.2					

	County	Number	Crude	County	Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	2	0.8	Mahaska	12	5.4	
	Boone	8	3.1	Marion	18	5.6	
	Bremer	0	*	Marshall	13	3.3	
	Buchanan	1	0.5	Muscatine	34	8.1	
	Carroll	9	4.2	Plymouth	0	*	
	Cerro Gordo	36	7.8	Sioux	0	*	
	Clinton	6	1.2	Story	37	4.6	
	Des Moines	2	0.5	Wapello	1	0.3	
	Fayette	0	*	Washington	12	5.8	
	Jackson	11	5.4	Webster	0	*	
	Jasper	9	2.4	Winneshek	0	*	
	Lee	15	3.9				
	<b>Group Totals</b>						
	Number:	226					
Crude:	3.0						

	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	0	*	Polk	321	8.6
	Dallas	21	5.2	Pottawattamie	0	*
	Dubuque	15	1.7	Scott	23	1.4
	Johnson	118	10.6	Warren	22	5.4
	Linn	83	4.3	Woodbury	0	*
	<b>Group Totals</b>					
Number:	603					
Crude:	4.5					

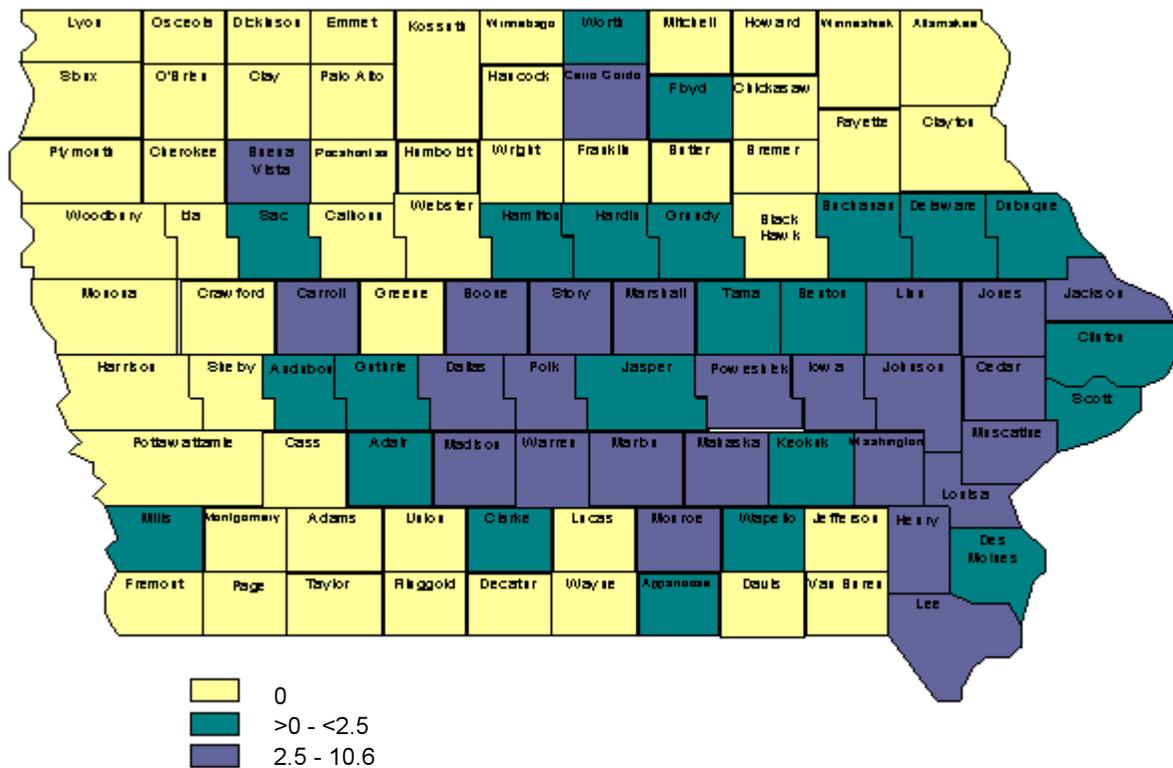
<sup>1</sup>Rates per 10,000 population

\*Crude rate less than 0.05

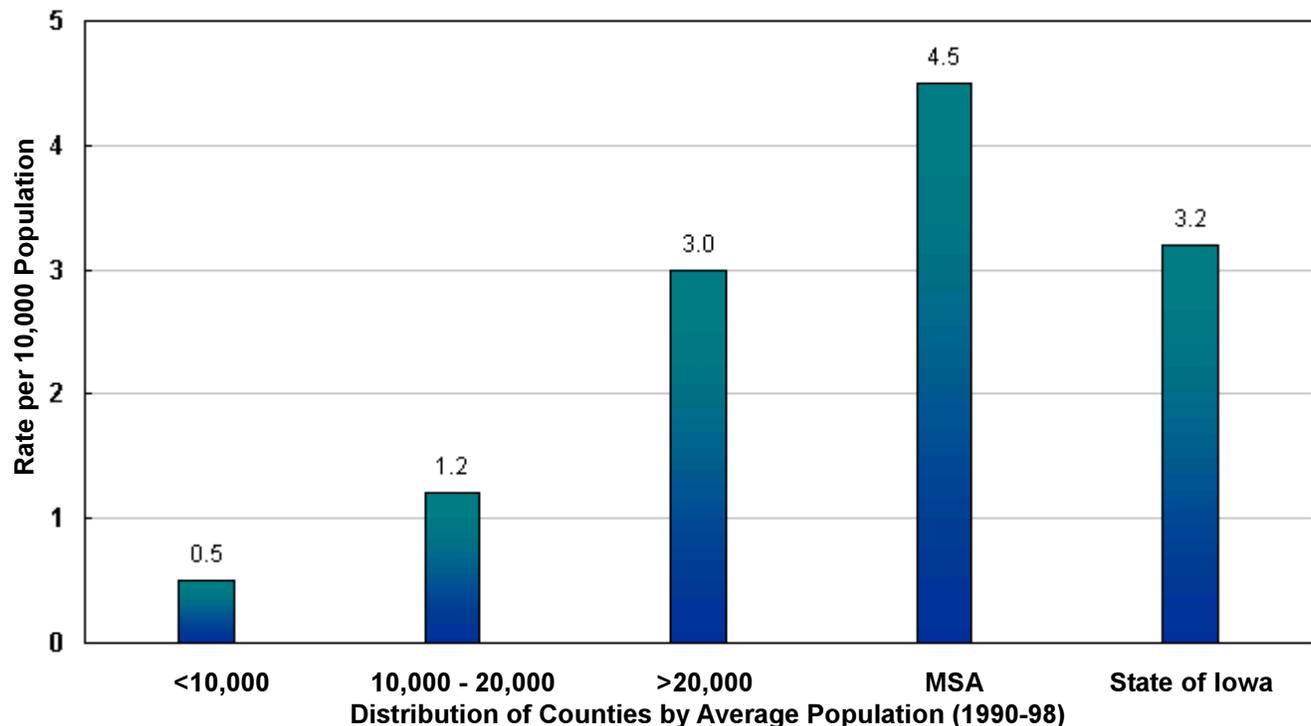
Source: Iowa Department of Public Health,  
Bureau of Emergency Medical Services

## Public Access Defibrillation Provider Licensed - 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Iowa Law Enforcement Emergency Care Provider Licensed - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	1,629	5.6

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	1	1.2	Lucas	6	6.4
	Adams	2	4.5	Monroe	3	3.7
	Audubon	3	4.4	Osceola	5	7.1
	Clarke	19	20.8	Pocahontas	2	2.3
	Davis	4	4.7	Ringgold	5	9.1
	Decatur	4	4.6	Taylor	3	4.3
	Fremont	1	1.2	Van Buren	1	1.3
	Howard	6	6.0	Wayne	3	4.5
	Ida	3	3.8	Worth	3	3.8
	<b>Group Totals</b>					
Number:	74					
Crude:	5.3					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	4	2.7	Henry	16	7.9
	Appanoose	5	3.6	Humboldt	6	5.8
	Buena Vista	11	5.4	Iowa	10	6.4
	Butler	8	5.2	Jefferson	3	1.9
	Calhoun	6	5.4	Jones	20	9.9
	Cass	11	7.5	Keokuk	6	5.3
	Cedar	12	6.6	Kossuth	1	0.6
	Cherokee	9	6.9	Louisa	2	1.6
	Chickasaw	6	4.6	Lyon	6	5.1
	Clay	8	4.6	Madison	5	3.6
	Clayton	5	2.7	Mills	7	4.8
	Crawford	12	7.1	Mitchell	2	1.8
	Delaware	5	2.7	Monona	8	8.0
	Dickinson	7	4.3	Montgomery	8	6.8
	Emmet	4	3.6	O'Brien	7	4.6
	Floyd	8	4.7	Page	8	4.7
	Franklin	8	7.5	Palo Alto	9	8.9
	Greene	6	5.8	Poweshiek	10	5.3
	Grundy	10	8.1	Sac	7	6.1
	Guthrie	4	3.5	Shelby	6	4.6
Hamilton	10	6.1	Tama	7	3.9	
Hancock	4	3.3	Union	8	6.5	
Hardin	11	5.8	Winnebago	7	6.0	
Harrison	8	5.1	Wright	3	2.1	
<b>Group Totals</b>						
Number:	354					
Crude:	5.1					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	18	7.1	Mahaska	4	1.8
	Boone	5	1.9	Marion	22	6.9
	Bremer	16	6.9	Marshall	10	2.5
	Buchanan	11	5.2	Muscatine	16	3.8
	Carroll	7	3.3	Plymouth	8	3.2
	Cerro Gordo	19	4.1	Sioux	8	2.5
	Clinton	14	2.8	Story	28	3.5
	Des Moines	23	5.4	Wapello	13	3.6
	Fayette	6	2.7	Washington	9	4.4
	Jackson	8	3.9	Webster	12	3.0
	Jasper	24	6.4	Winneshek	1	0.5
	Lee	18	4.7			
	<b>Group Totals</b>					
Number:	300					
Crude:	3.9					

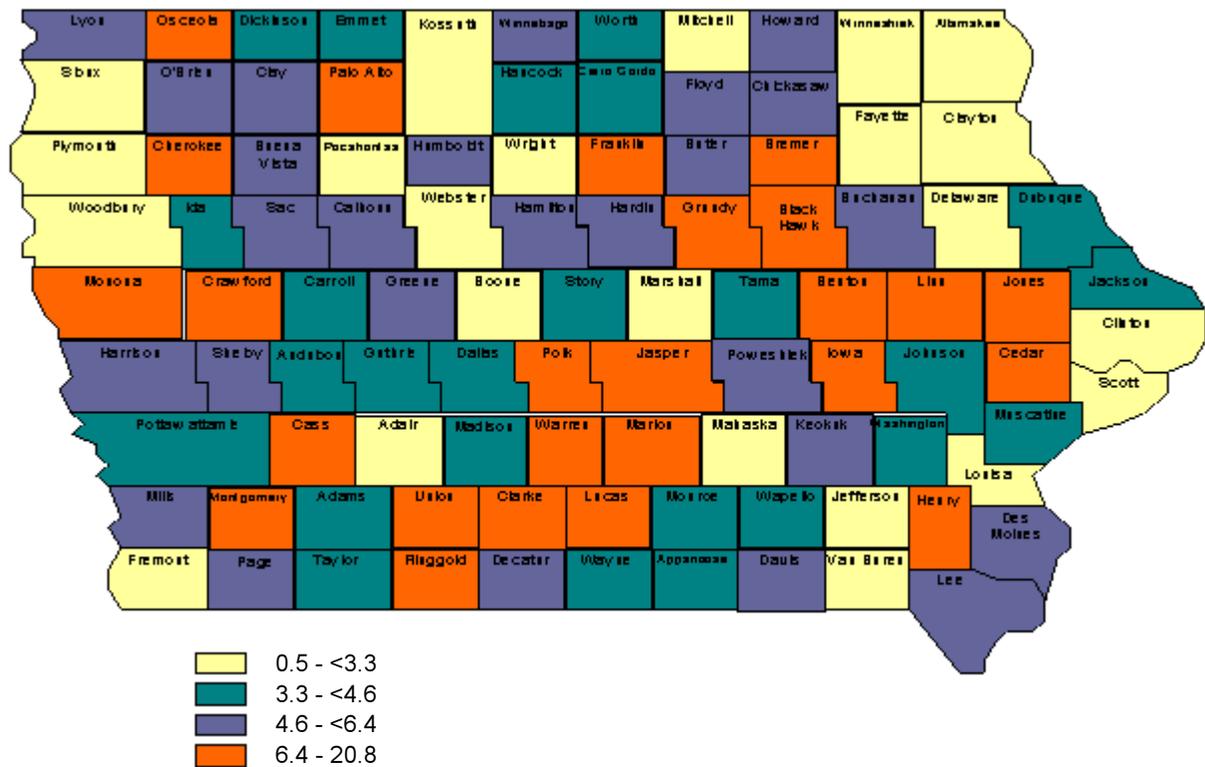
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	139	10.9	Polk	268	7.2
	Dallas	14	3.4	Pottawattamie	32	3.6
	Dubuque	32	3.6	Scott	51	3.2
	Johnson	39	3.5	Warren	34	8.4
	Linn	243	12.7	Woodbury	26	2.5
	<b>Group Totals</b>					
Number:	878					
Crude:	6.6					

<sup>1</sup>Rates per 10,000 population

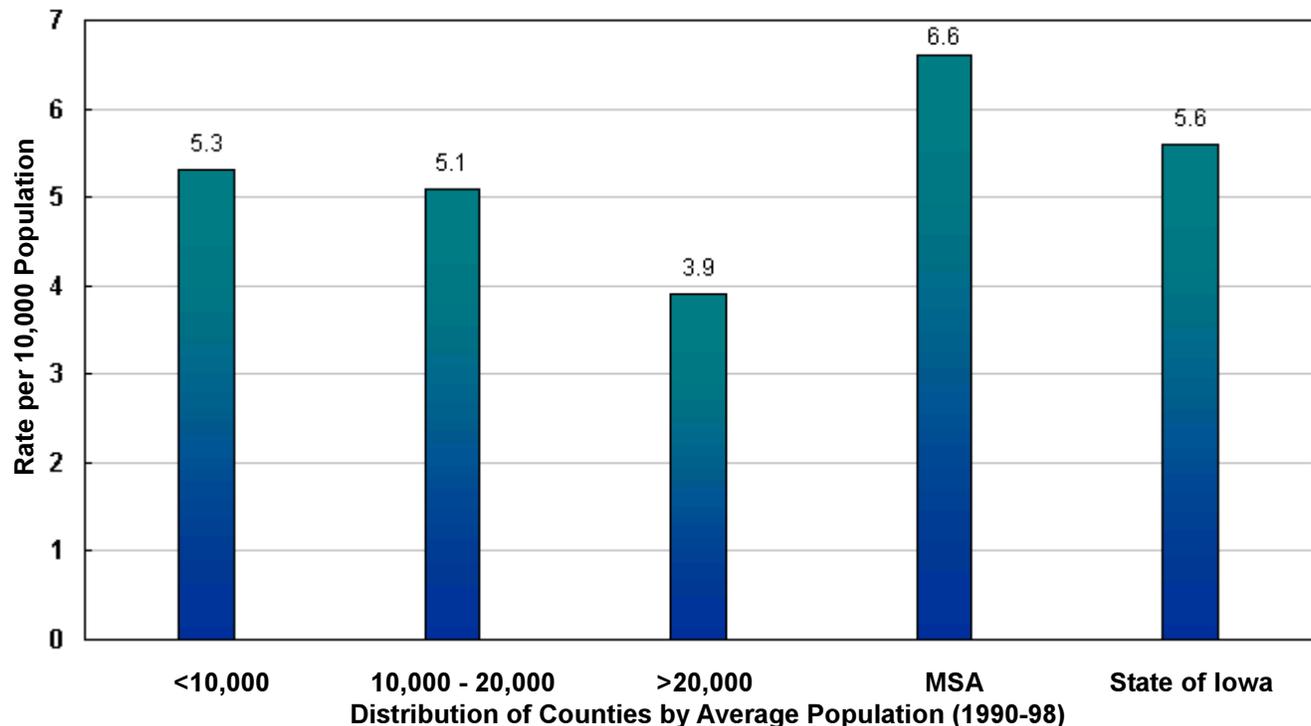
Source: Iowa Department of Public Health,  
Bureau of Emergency Medical Services

## Iowa Law Enforcement Emergency Care Provider Licensed - 2001

### Crude Rates per 10,000 Population



### Crude Rates



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# Health Care Facilities

The information presented on health care facilities comes from the Division of Health Facilities in the Iowa Department of Inspections and Appeals (DIA). This state agency is responsible for inspection of all Chapter 135C licensed health care facilities in Iowa, including those presented in the 2001 Iowa Health Fact Book. Also, under state law we are responsible for the inspection and licensure of Hospitals (135B), Birth Centers (135G), Hospices (135J) and Psychiatric Medical Institutes for Children (135H). This agency also conducts inspections of various Medicare/Medicaid entities (e.g., skilled nursing facilities, home health agencies, hospices, hospitals, CLIA labs, etc.) through contract with the Health Care Financing Administration (HCFA), and investigates complaints of sub-standard care or services in these entities. Additional information may be accessed through their web site at <http://www.dia-hfd.state.ia.us/>.

New to this section in 2001 is the addition of information on trauma care facilities in the state including community, area, regional, and resource facilities.

## ***Facility Types Regulated by the State of Iowa Division of Health Facilities...***

Ambulatory Surgical Centers  
 Birthing Centers  
 Chronic Confusion or Dementing Illness Units  
 Community Mental Health Centers  
 Comprehensive Out-Patient Rehabilitation Facilities  
 Critical Access Hospitals  
 End-Stage Renal Disease Facilities  
 Home Health Agencies  
 Hospices  
 Hospital Based (Distinct-Part) Nursing Facility Units  
 (Covered by Medicaid)  
 Hospital Based (Distinct-Part) Skilled Nursing Facility Units  
 (Covered by Medicaid)  
 Hospital Based (Distinct-Part) Skilled Nursing Facility /  
 Nursing Facility Units (Covered by Medicare and Medicaid)  
 Hospital Based Intermediate Care Facilities for the  
 Mentally Retarded (Covered by Medicaid)  
 Hospitals  
 Hospitals with Psychiatric Units excluded under the  
 Medicare Prospective Payment System  
 Hospitals with Rehabilitation Units excluded under the  
 Medicare Prospective Payment System  
 Hospitals with Swing-Beds  
 Intermediate Care Facilities for Persons with Mental Illness  
 Intermediate Care Facilities for the Mentally Retarded  
 Laboratories Covered under the (Federal) Clinical Laboratories  
 Improvement Amendments 1988 (CLIA '88)  
 Nursing Facilities  
 Organ Procurement Organizations  
 Portable X-Ray Service Suppliers  
 Psychiatric Medical Institutions for Children  
 Rehabilitation Agencies with Out-Patient Physical Therapy/Out-Patient  
 Speech Pathology/Out-Patient Occupational Therapy Providers  
 Residential Care Facilities  
 Residential Care Facilities for Persons with Mental Illness  
 Residential Care Facilities for the Mentally Retarded  
 Rural Health Clinics  
 Specialized 3-5 Bed Facilities

Source: DIA website <http://www.dia-hfd.state.ia.us/>

## Hospitals 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	123	0.4

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	1	1.2	Lucas	1	1.1
	Adams	1	2.2	Monroe	1	1.2
	Audubon	1	1.5	Osceola	1	1.4
	Clarke	1	1.1	Pocahontas	1	1.2
	Davis	1	1.2	Ringgold	1	1.8
	Decatur	1	1.2	Taylor	0	*
	Fremont	1	1.2	Van Buren	1	1.3
	Howard	1	1.0	Wayne	1	1.5
	Ida	1	1.3	Worth	0	*
	<b>Group Totals</b>					
Number:	16					
Crude:	1.1					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	1	0.7	Henry	2	1.0
	Appanoose	1	0.7	Humboldt	1	1.0
	Buena Vista	1	0.5	Iowa	1	0.6
	Butler	0	*	Jefferson	1	0.6
	Calhoun	1	0.9	Jones	1	0.5
	Cass	1	0.7	Keokuk	1	0.9
	Cedar	0	*	Kossuth	1	0.6
	Cherokee	2	1.5	Louisa	0	*
	Chickasaw	1	0.8	Lyon	1	0.9
	Clay	1	0.6	Madison	1	0.7
	Clayton	2	1.1	Mills	1	0.7
	Crawford	1	0.6	Mitchell	1	0.9
	Delaware	1	0.5	Monona	1	1.0
	Dickinson	1	0.6	Montgomery	1	0.8
	Emmet	1	0.9	O'Brien	2	1.3
	Floyd	1	0.6	Page	3	1.8
	Franklin	1	0.9	Palo Alto	1	1.0
	Greene	1	1.0	Poweshiek	1	0.5
	Grundy	1	0.8	Sac	1	0.9
	Guthrie	1	0.9	Shelby	1	0.8
Hamilton	1	0.6	Tama	0	*	
Hancock	1	0.8	Union	1	0.8	
Hardin	1	0.5	Winnebago	0	*	
Harrison	1	0.6	Wright	2	1.4	
<b>Group Totals</b>						
Number:	50					
Crude:	0.7					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	1	0.4	Mahaska	1	0.4
	Boone	2	0.8	Marion	2	0.6
	Bremer	2	0.9	Marshall	1	0.3
	Buchanan	2	0.9	Muscatine	1	0.2
	Carroll	2	0.9	Plymouth	1	0.4
	Cerro Gordo	1	0.2	Sioux	4	1.3
	Clinton	2	0.4	Story	2	0.3
	Des Moines	1	0.2	Wapello	1	0.3
	Fayette	2	0.9	Washington	1	0.5
	Jackson	1	0.5	Webster	1	0.2
	Jasper	1	0.3	Winneshek	1	0.5
	Lee	2	0.5			
	<b>Group Totals</b>					
Number:	35					
Crude:	0.5					

	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	3	0.2	Polk	5	0.1
	Dallas	1	0.2	Pottawattamie	2	0.2
	Dubuque	2	0.2	Scott	2	0.1
	Johnson	3	0.3	Warren	0	*
	Linn	2	0.1	Woodbury	2	0.2
	<b>Group Totals</b>					
Number:	22					
Crude:	0.2					

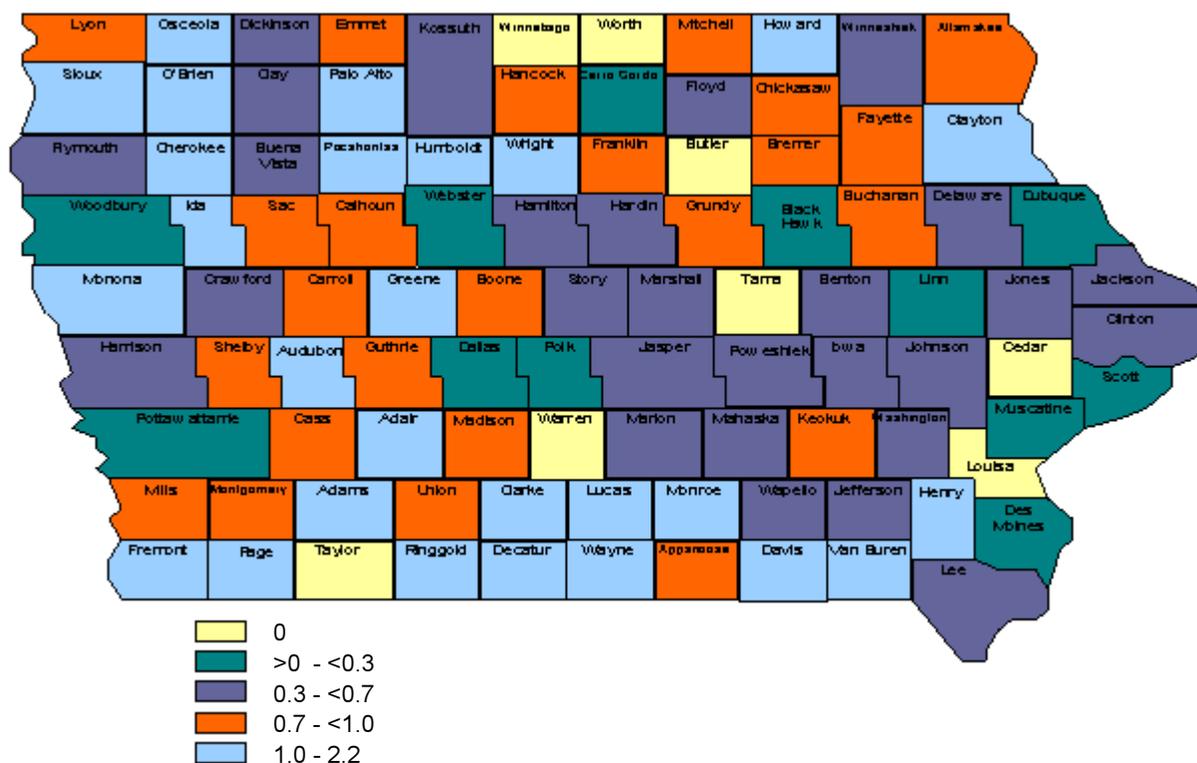
<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

<sup>2</sup>Includes Family Practice, Internal Medicine,  
Pediatric and Obstetrics/Gynecology Physicians

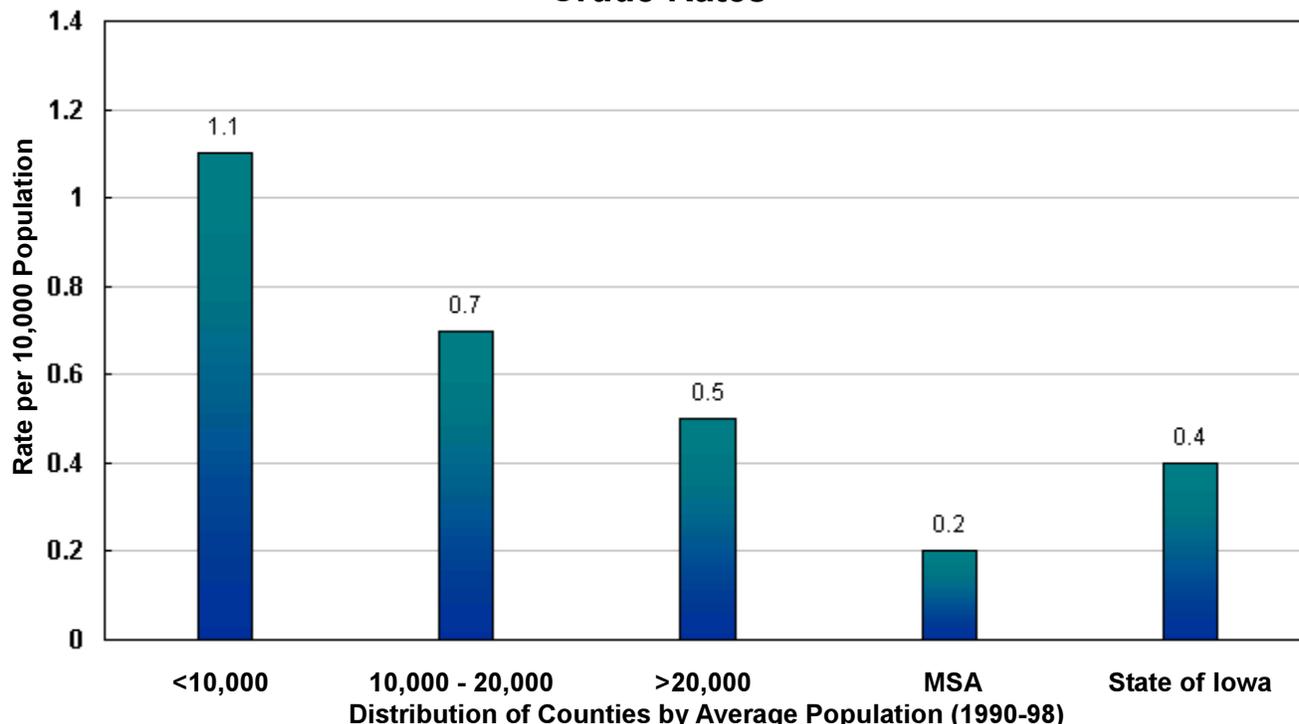
Source: Iowa Department of  
Inspections and Appeals

# Hospitals 2001

## Crude Rates per 10,000 Population



## Crude Rates



## Hospital Beds 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	14,671	50.1

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	25	30.3	Lucas	22	23.3
	Adams	22	49.1	Monroe	38	47.4
	Audubon	29	42.5	Osceola	32	45.7
	Clarke	48	52.6	Pocahontas	25	28.9
	Davis	80	93.7	Ringgold	22	40.2
	Decatur	49	56.4	Taylor	0	*
	Fremont	25	31.2	Van Buren	40	51.2
	Howard	32	32.2	Wayne	28	41.6
	Ida	36	45.9	Worth	0	*
	<b>Group Totals</b>					
Number:	553					
Crude:	39.6					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	25	17.0	Henry <sup>2</sup>	139	68.4
	Appanoose	54	39.4	Humboldt	49	47.2
	Buena Vista	54	26.5	Iowa	25	16.0
	Butler	0	*	Jefferson	67	41.4
	Calhoun	49	44.1	Jones	25	12.4
	Cass	69	47.0	Keokuk	25	21.9
	Cedar	0	*	Kossuth	40	23.3
	Cherokee <sup>2</sup>	122	93.6	Louisa	0	*
	Chickasaw	22	16.8	Lyon	30	25.5
	Clay	99	57.0	Madison	21	15.0
	Clayton	54	28.9	Mills <sup>3</sup>	851	585.0
	Crawford	72	42.5	Mitchell	25	23.0
	Delaware	37	20.1	Monona	48	47.9
	Dickinson	49	29.8	Montgomery	40	34.0
	Emmet	58	52.6	O'Brien	112	74.2
	Floyd	35	20.7	Page <sup>2</sup>	155	91.3
	Franklin	77	71.9	Palo Alto	54	53.2
	Greene	127	122.5	Poweshiek	46	24.4
	Grundy	80	64.7	Sac	54	46.8
	Guthrie	25	22.0	Shelby	49	37.2
Hamilton	40	24.3	Tama	0	*	
Hancock	25	20.7	Union	53	43.1	
Hardin	42	22.3	Winnebago	0	*	
Harrison	25	16.0	Wright	47	32.8	

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	97	38.3	Mahaska	57	25.5
	Boone <sup>3</sup>	696	265.4	Marion	194	60.5
	Bremer	70	30.0	Marshall	124	31.5
	Buchanan <sup>2</sup>	260	123.3	Muscatine	80	19.2
	Carroll	229	106.9	Plymouth	44	17.7
	Cerro Gordo	350	75.4	Sioux	216	68.4
	Clinton	253	50.4	Story	342	42.8
	Des Moines	313	73.9	Wapello	235	65.2
	Fayette	89	40.4	Washington	40	19.4
	Jackson	61	30.1	Webster	151	37.5
	Jasper	68	18.3	Winneshek	57	26.7
	Lee	175	46.0			

	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	610	47.7	Polk	2,134	57.0
	Dallas	49	12.0	Pottawattamie	306	34.9
	Dubuque	649	72.8	Scott	652	41.1
	Johnson	1,070	96.4	Warren	0	*
	Linn	803	41.9	Woodbury	449	43.2
	<b>Group Totals</b>					
Number:	6,722					
Crude:	50.7					

<sup>1</sup>Rates per 10,000 population<sup>2</sup>Includes beds at Mental Health Institute located in this county.

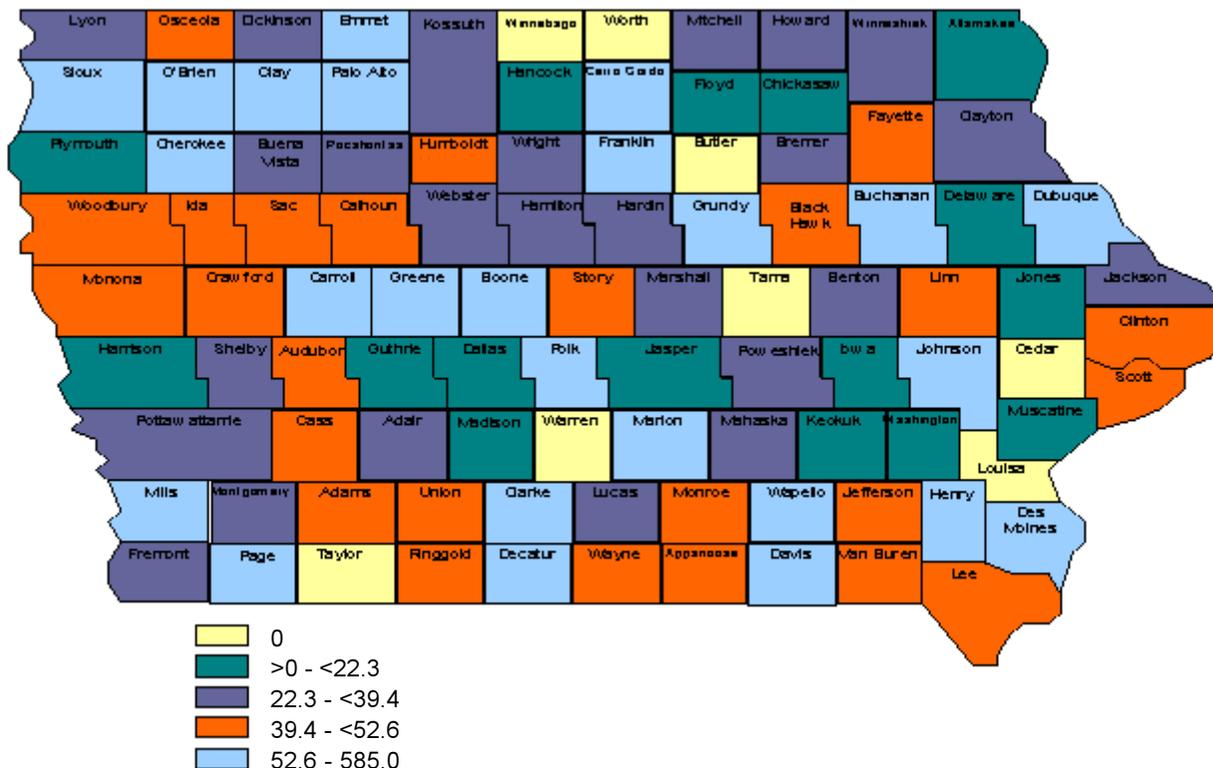
Source: Iowa Department of Inspections and Appeals

\*Crude rate less than 0.05

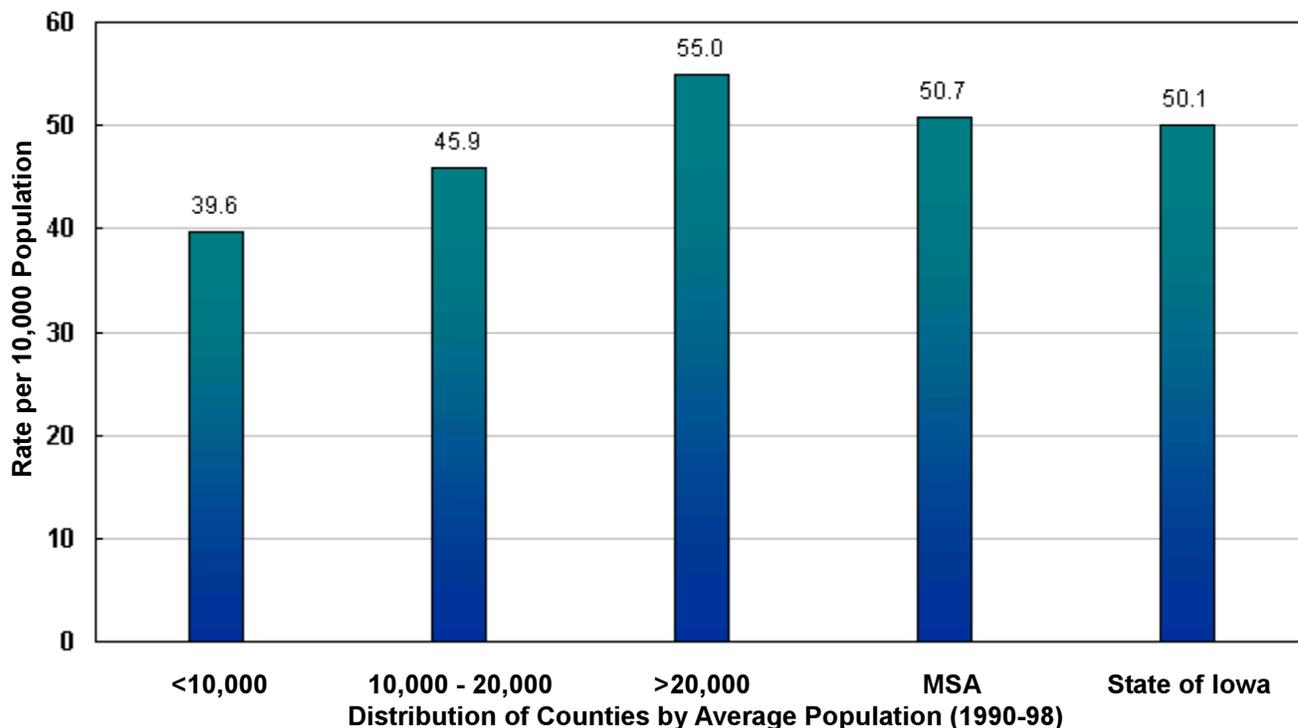
<sup>3</sup>Includes beds at Resource Center located in this county.

## Hospital Beds 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Nursing Facilities 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	426	1.5

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	3	3.6	Lucas	1	1.1
	Adams	1	2.2	Monroe	2	2.5
	Audubon	2	2.9	Osceola	2	2.9
	Clarke	1	1.1	Pocahontas	4	4.6
	Davis	1	1.2	Ringgold	2	3.7
	Decatur	2	2.3	Taylor	3	4.3
	Fremont	2	2.5	Van Buren	1	1.3
	Howard	4	4.0	Wayne	2	3.0
	Ida	3	3.8	Worth	2	2.5
	<u>Group Totals</u>					
Number:	38					
Crude:	2.7					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	4	2.7	Henry	5	2.5
	Appanoose	2	1.5	Humboldt	2	1.9
	Buena Vista	5	2.4	Iowa	4	2.6
	Butler	6	3.9	Jefferson	2	1.2
	Calhoun	4	3.6	Jones	2	1.0
	Cass	4	2.7	Keokuk	3	2.6
	Cedar	4	2.2	Kossuth	4	2.3
	Cherokee	5	3.8	Louisa	3	2.5
	Chickasaw	3	2.3	Lyon	4	3.4
	Clay	2	1.2	Madison	4	2.9
	Clayton	4	2.1	Mills	3	2.1
	Crawford	3	1.8	Mitchell	5	4.6
	Delaware	2	1.1	Monona	3	3.0
	Dickinson	3	1.8	Montgomery	4	3.4
	Emmet	3	2.7	O'Brien	5	3.3
	Floyd	5	3.0	Page	4	2.4
	Franklin	2	1.9	Palo Alto	4	3.9
	Greene	1	1.0	Poweshiek	5	2.7
	Grundy	3	2.4	Sac	4	3.5
	Guthrie	4	3.5	Shelby	3	2.3
Hamilton	3	1.8	Tama	5	2.8	
Hancock	3	2.5	Union	3	2.4	
Hardin	6	3.2	Winnebago	3	2.6	
Harrison	4	2.6	Wright	4	2.8	
<u>Group Totals</u>						
Number:	173					
Crude:	2.5					

	County	Number	Crude	County	Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	3	1.2	Mahaska	3	1.3	
	Boone	5	1.9	Marion	3	0.9	
	Bremer	4	1.7	Marshall	5	1.3	
	Buchanan	2	0.9	Muscatine	5	1.2	
	Carroll	3	1.4	Plymouth	6	2.4	
	Cerro Gordo	6	1.3	Sioux	3	0.9	
	Clinton	4	0.8	Story	7	0.9	
	Des Moines	5	1.2	Wapello	4	1.1	
	Fayette	4	1.8	Washington	5	2.4	
	Jackson	3	1.5	Webster	7	1.7	
	Jasper	7	1.9	Winneshek	4	1.9	
	Lee	6	1.6				
	<u>Group Totals</u>						
	Number:	104					
Crude:	1.4						

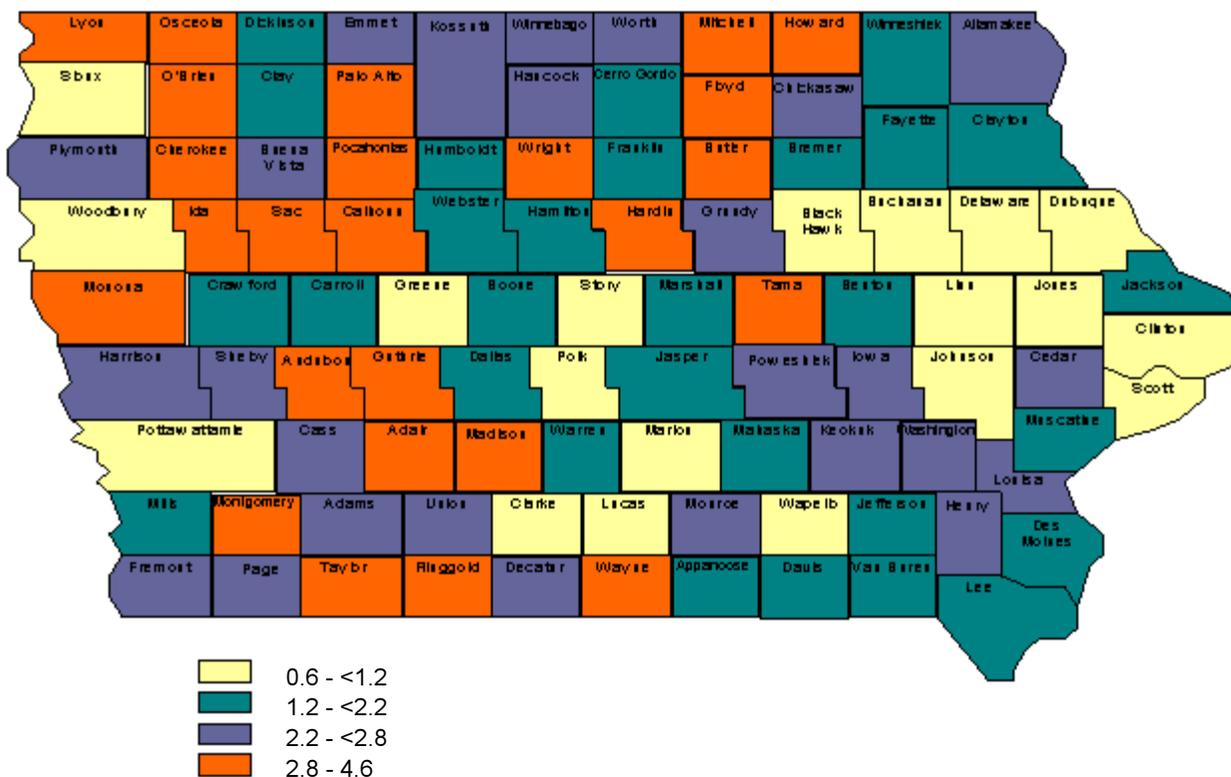
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	11	0.9	Polk	27	0.7
	Dallas	7	1.7	Pottawattamie	7	0.8
	Dubuque	9	1.0	Scott	11	0.7
	Johnson	7	0.6	Warren	7	1.7
	Linn	14	0.7	Woodbury	11	1.1
	<u>Group Totals</u>					
Number:	111					
Crude:	0.8					

<sup>1</sup>Rates per 10,000 population

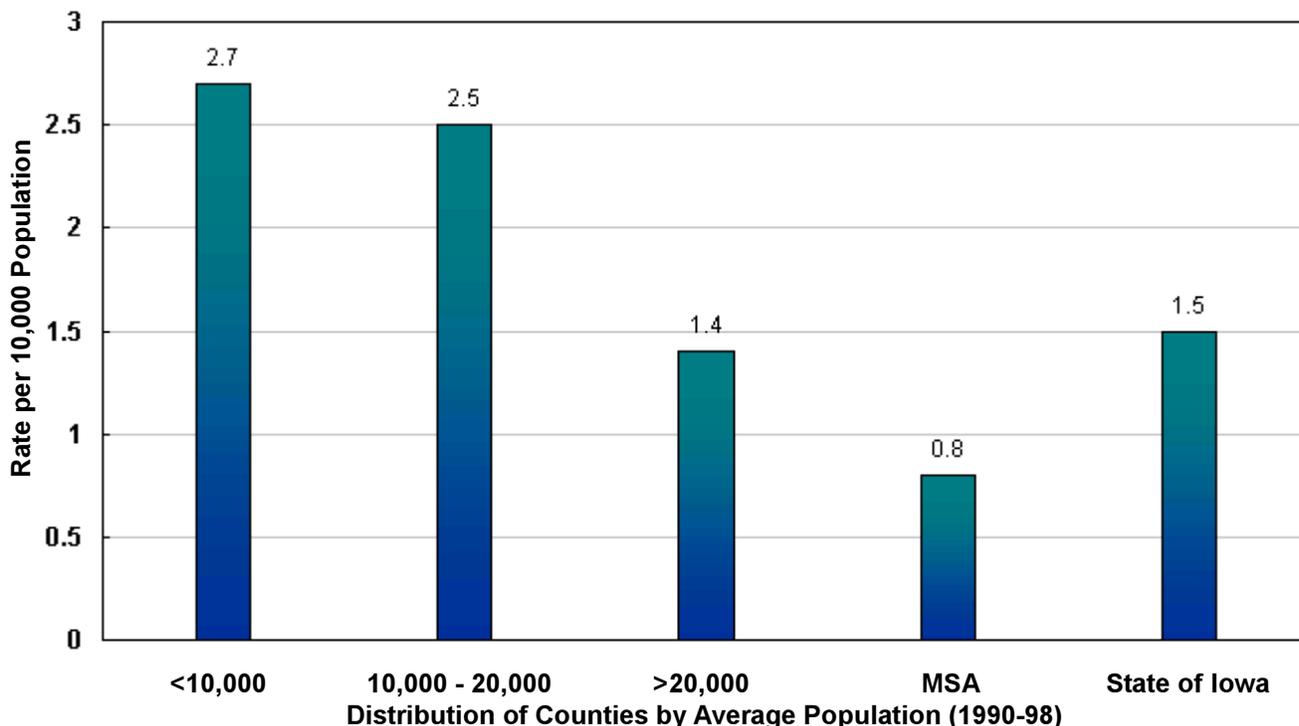
Source: Iowa Department of Inspections and Appeals

## Nursing Facilities 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Nursing Facility Beds 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	33,397	114.1

	County			County		
	Number	Crude <sup>1</sup>		Number	Crude <sup>1</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	185	224.4	Lucas	130	138.0
	Adams	64	142.8	Monroe	154	192.1
	Audubon	156	228.4	Osceola	119	169.9
	Clarke	101	110.6	Pocahontas	189	218.2
	Davis	104	121.8	Ringgold	150	274.3
	Decatur	142	163.4	Taylor	149	214.1
	Fremont	163	203.5	Van Buren	75	96.0
	Howard	224	225.5	Wayne	124	184.2
	Ida	193	246.3	Worth	149	188.4
	<u>Group Totals</u>					
Number:	2,571					
Crude:	184.1					

	County			County			
	Number	Crude		Number	Crude		
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	279	190.1	Henry	261	128.3	
	Appanoose	197	143.6	Humboldt	150	144.5	
	Buena Vista	323	158.2	Iowa	229	146.1	
	Butler	315	205.8	Jefferson	175	108.2	
	Calhoun	256	230.3	Jones	209	103.4	
	Cass	294	200.2	Keokuk	193	169.3	
	Cedar	240	132.0	Kossuth	267	155.6	
	Cherokee	242	185.7	Louisa	174	142.8	
	Chickasaw	215	164.2	Lyon	216	183.6	
	Clay	254	146.2	Madison	248	176.9	
	Clayton	292	156.3	Mills	173	118.9	
	Crawford	225	132.8	Mitchell	285	262.1	
	Delaware	180	97.8	Monona	297	296.4	
	Dickinson	238	144.9	Montgomery	296	251.5	
	Emmet	243	220.4	O'Brien	254	168.2	
	Floyd	325	192.3	Page	319	187.9	
	Franklin	161	150.4	Palo Alto	252	248.3	
	Greene	93	89.7	Poweshiek	326	173.3	
	Grundy	141	114.0	Sac	267	231.6	
	Guthrie	267	235.2	Shelby	229	173.8	
	Hamilton	242	147.2	Tama	343	189.5	
	Hancock	189	156.2	Union	186	151.1	
	Hardin	434	230.7	Winnebago	223	190.2	
	Harrison	370	236.2	Wright	279	194.6	
	<u>Group Totals</u>						
	Number:	11,866					
Crude:	170.4						

	County			County			
	Number	Crude		Number	Crude		
<b>Counties with Average Population &gt;20,000</b>	Benton	176	69.5	Mahaska	192	86.0	
	Boone	468	178.5	Marion	230	71.8	
	Bremer	310	132.9	Marshall	1,096	278.8	
	Buchanan	156	74.0	Muscatine	490	117.4	
	Carroll	246	114.8	Plymouth	381	153.3	
	Cerro Gordo	716	154.2	Sioux	164	51.9	
	Clinton	434	86.5	Story	509	63.6	
	Des Moines	373	88.1	Wapello	377	104.6	
	Fayette	285	129.5	Washington	368	178.0	
	Jackson	235	115.8	Webster	726	180.4	
	Jasper	427	114.7	Winneshek	281	131.9	
	Lee	505	132.7				
	<u>Group Totals</u>						
	Number:	9,145					
Crude:	119.7						

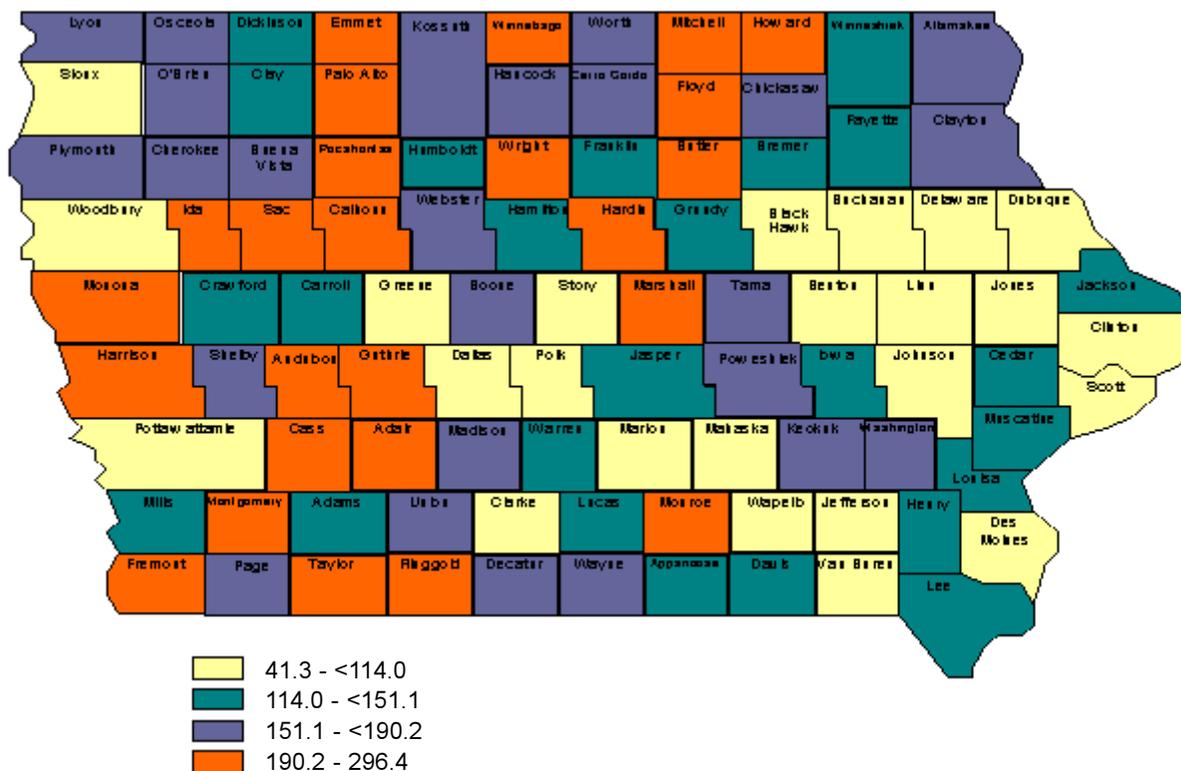
	County			County		
	Number	Crude		Number	Crude	
<b>MSA Counties</b>	Black Hawk	1,189	92.9	Polk	2,264	60.4
	Dallas	423	103.8	Pottawattamie	674	76.8
	Dubuque	872	97.8	Scott	1,114	70.2
	Johnson	458	41.3	Warren	523	128.6
	Linn	1,205	62.9	Woodbury	1,093	105.2
<u>Group Totals</u>						
Number:	9,815					
Crude:	74.0					

<sup>1</sup>Rates per 10,000 population

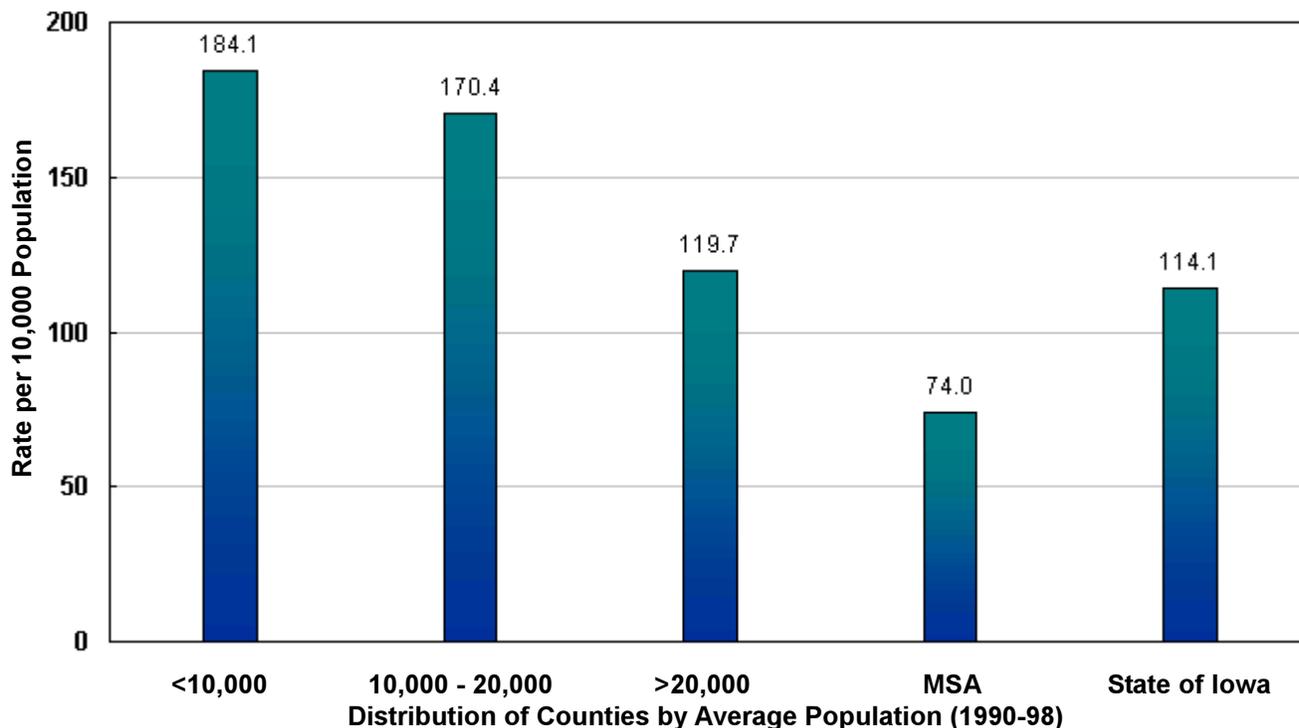
Source: Iowa Department of Inspections and Appeals

## Nursing Facility Beds 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Chronic Confusion or Dementing Illness Units - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	90	0.3

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	0	*	Monroe	0	*
	Audubon	2	2.9	Osceola	0	*
	Clarke	1	1.1	Pocahontas	0	*
	Davis	0	*	Ringgold	1	1.8
	Decatur	0	*	Taylor	1	1.4
	Fremont	0	*	Van Buren	1	1.3
	Howard	1	1.0	Wayne	0	*
	Ida	1	1.3	Worth	1	1.3
	<b>Group Totals</b>					
Number:	9					
Crude:	0.6					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	2	1.4	Henry	1	0.5
	Appanoose	0	*	Humboldt	1	1.0
	Buena Vista	0	*	Iowa	0	*
	Butler	0	*	Jefferson	1	0.6
	Calhoun	2	1.8	Jones	0	*
	Cass	0	*	Keokuk	0	*
	Cedar	1	0.5	Kossuth	1	0.6
	Cherokee	0	*	Louisa	0	*
	Chickasaw	2	1.5	Lyon	1	0.9
	Clay	1	0.6	Madison	1	0.7
	Clayton	1	0.5	Mills	0	*
	Crawford	1	0.6	Mitchell	1	0.9
	Delaware	1	0.5	Monona	1	1.0
	Dickinson	0	*	Montgomery	2	1.7
	Emmet	1	0.9	O'Brien	2	1.3
	Floyd	0	*	Page	0	*
	Franklin	1	0.9	Palo Alto	1	1.0
	Greene	1	1.0	Poweshiek	1	0.5
	Grundy	0	*	Sac	1	0.9
	Guthrie	0	*	Shelby	2	1.5
Hamilton	1	0.6	Tama	1	0.6	
Hancock	1	0.8	Union	0	*	
Hardin	2	1.1	Winnebago	1	0.9	
Harrison	1	0.6	Wright	1	0.7	
<b>Group Totals</b>						
Number:	39					
Crude:	0.6					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	1	0.4	Mahaska	0	*
	Boone	1	0.4	Marion	0	*
	Bremer	1	0.4	Marshall	1	0.3
	Buchanan	0	*	Muscatine	1	0.2
	Carroll	0	*	Plymouth	1	0.4
	Cerro Gordo	2	0.4	Sioux	0	*
	Clinton	0	*	Story	1	0.1
	Des Moines	0	*	Wapello	1	0.3
	Fayette	1	0.5	Washington	1	0.5
	Jackson	1	0.5	Webster	1	0.2
	Jasper	1	0.3	Winneshek	0	*
	Lee	2	0.5			
	<b>Group Totals</b>					
Number:	17					
Crude:	0.2					

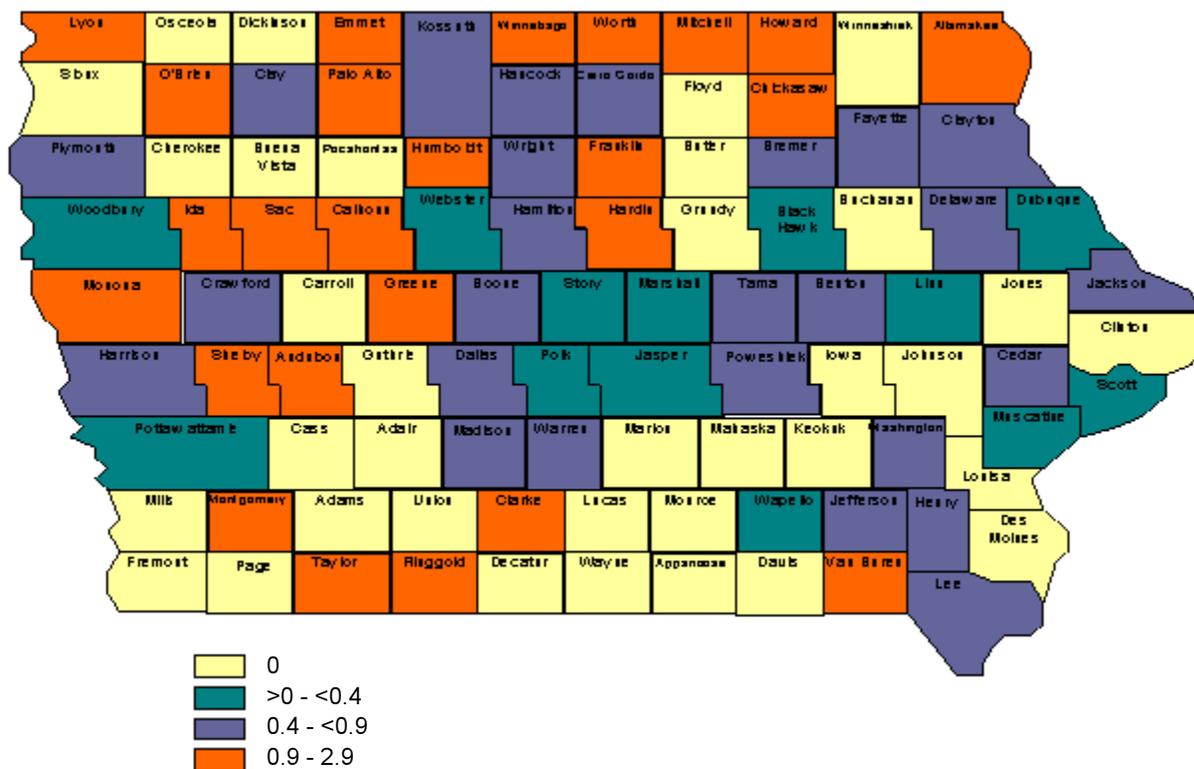
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	2	0.2	Polk	6	0.2
	Dallas	2	0.5	Pottawattamie	2	0.2
	Dubuque	1	0.1	Scott	3	0.2
	Johnson	0	*	Warren	2	0.5
	Linn	5	0.3	Woodbury	2	0.2
	<b>Group Totals</b>					
Number:	25					
Crude:	0.2					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

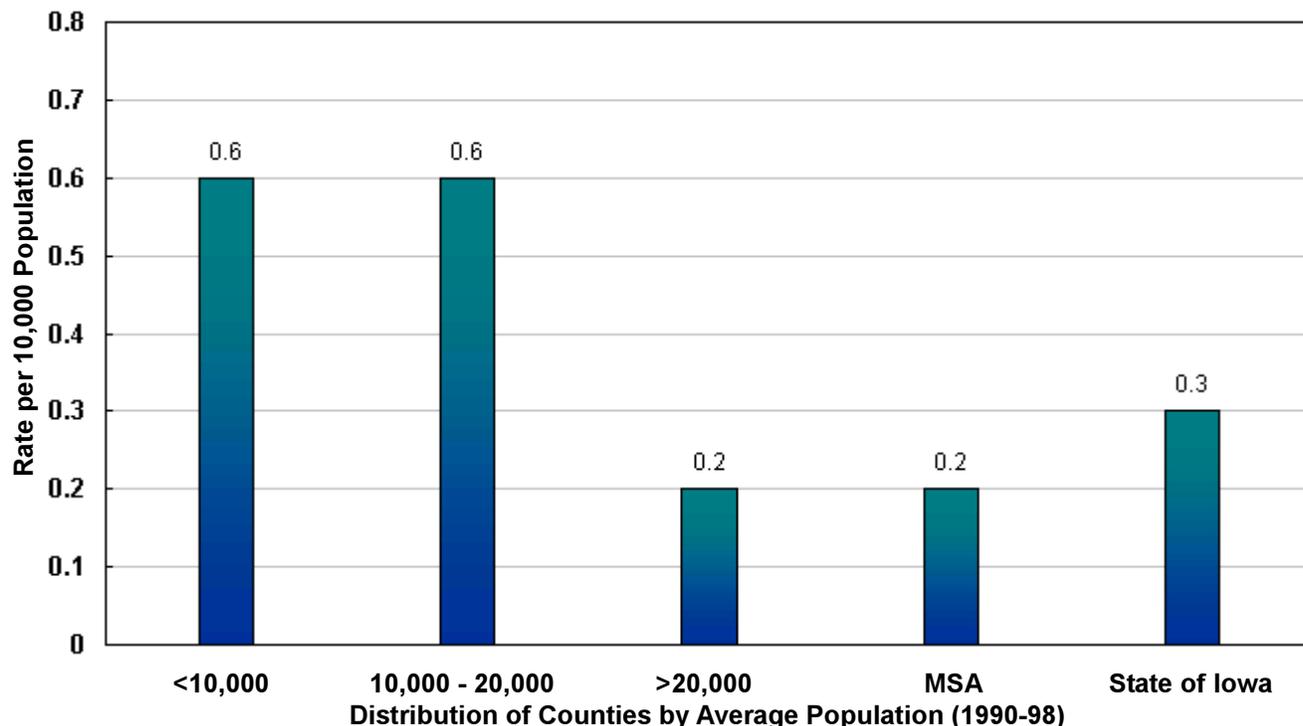
Source: Iowa Department of  
Inspections and Appeals

## Chronic Confusion or Dementing Illness Units 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Beds in Chronic Confusion or Dementing Illness Units - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	1,736	5.9

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	0	*	Monroe	0	*
	Audubon	41	60.0	Osceola	0	*
	Clarke	15	16.4	Pocahontas	0	*
	Davis	0	*	Ringgold	8	14.6
	Decatur	0	*	Taylor	12	17.2
	Fremont	0	*	Van Buren	18	23.1
	Howard	24	24.2	Wayne	0	*
	Ida	12	15.3	Worth	15	19.0
	<b>Group Totals</b>					
Number:	145					
Crude:	10.4					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	20	13.6	Henry	6	3.0
	Appanoose	0	*	Humboldt	24	23.1
	Buena Vista	0	*	Iowa	0	*
	Butler	0	*	Jefferson	14	8.7
	Calhoun	28	25.2	Jones	0	*
	Cass	0	*	Keokuk	0	*
	Cedar	6	3.3	Kossuth	18	10.5
	Cherokee	0	*	Louisa	0	*
	Chickasaw	37	28.3	Lyon	9	7.7
	Clay	10	5.8	Madison	18	12.8
	Clayton	16	8.6	Mills	0	*
	Crawford	24	14.2	Mitchell	14	12.9
	Delaware	16	8.7	Monona	20	20.0
	Dickinson	0	*	Montgomery	28	23.8
	Emmet	15	13.6	O'Brien	30	19.9
	Floyd	0	*	Page	0	*
	Franklin	19	17.8	Palo Alto	8	7.9
	Greene	10	9.6	Poweshiek	16	8.5
	Grundy	0	*	Sac	12	10.4
	Guthrie	0	*	Shelby	32	24.3
Hamilton	15	9.1	Tama	20	11.0	
Hancock	12	9.9	Union	0	*	
Hardin	32	17.0	Winnebago	11	9.4	
Harrison	18	11.5	Wright	20	14.0	
<b>Group Totals</b>						
Number:	578					
Crude:	8.3					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	13	5.1	Mahaska	0	*
	Boone	38	14.5	Marion	0	*
	Bremer	17	7.3	Marshall	78	19.8
	Buchanan	0	*	Muscatine	17	4.1
	Carroll	0	*	Plymouth	17	6.8
	Cerro Gordo	27	5.8	Sioux	0	*
	Clinton	0	*	Story	17	2.1
	Des Moines	0	*	Wapello	20	5.5
	Fayette	14	6.4	Washington	11	5.3
	Jackson	37	18.2	Webster	44	10.9
	Jasper	22	5.9	Winneshek	0	*
	Lee	40	10.5			
	<b>Group Totals</b>					
	Number:	412				
Crude:	5.4					

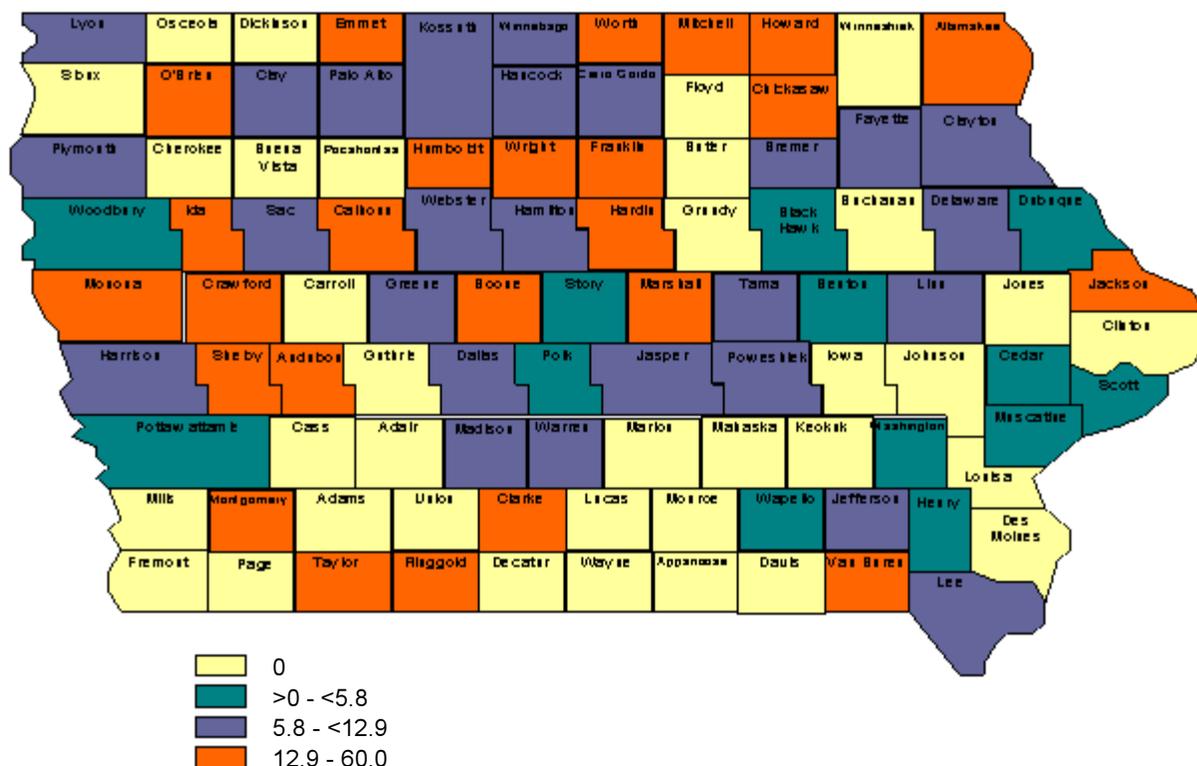
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	54	4.2	Polk	154	4.1
	Dallas	31	7.6	Pottawattamie	37	4.2
	Dubuque	16	1.8	Scott	75	4.7
	Johnson	0	*	Warren	52	12.8
	Linn	126	6.6	Woodbury	56	5.4
	<b>Group Totals</b>					
Number:	601					
Crude:	4.5					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

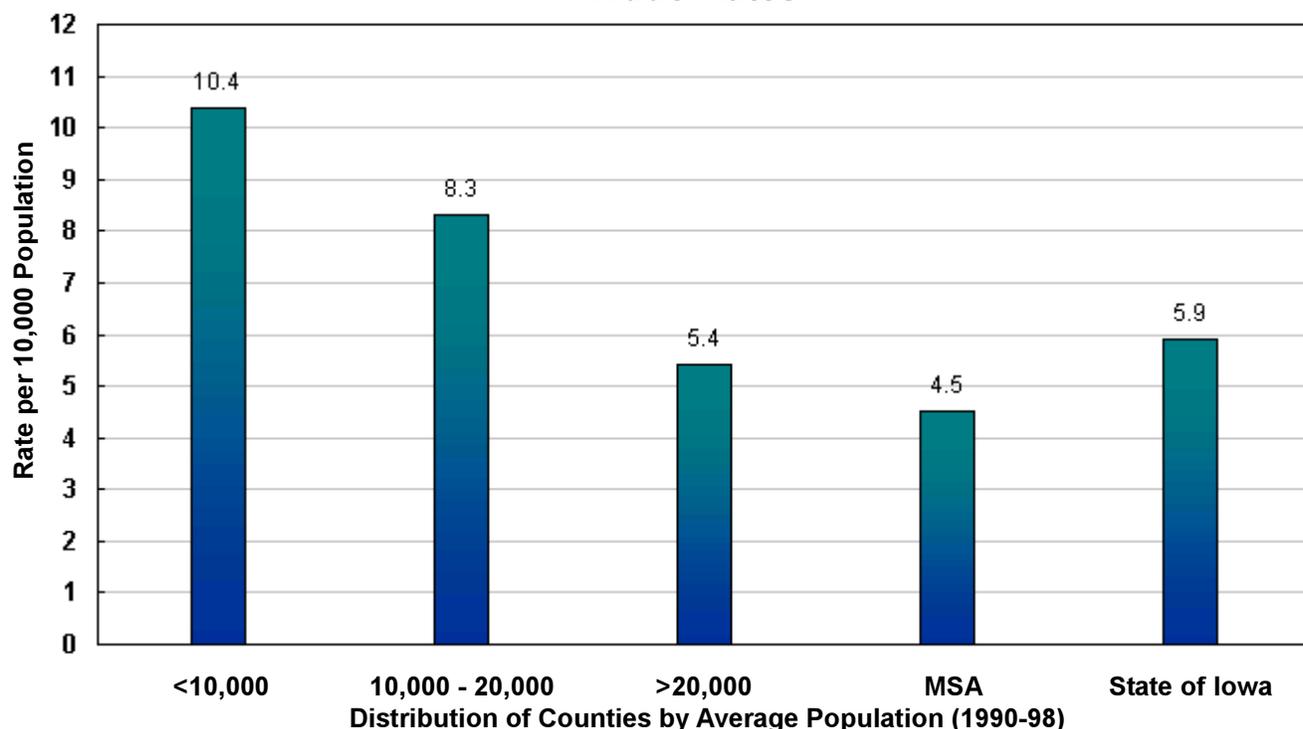
Source: Iowa Department of Inspections and Appeals

## Beds in Chronic Confusion or Dementing Illness Units 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Intermediate Care Facilities for Persons with Mental Illness - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	1	*

	County	Number	Crude <sup>1</sup>		County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	<b>Counties with Average Population 10,000 to 20,000</b>	Lucas	0	*
	Adams	0	*		Monroe	0	*
	Audubon	0	*		Osceola	0	*
	Clarke	0	*		Pocahontas	0	*
	Davis	1	1.2		Ringgold	0	*
	Decatur	0	*		Taylor	0	*
	Fremont	0	*		Van Buren	0	*
	Howard	0	*		Wayne	0	*
	Ida	0	*		Worth	0	*
	<u>Group Totals</u>					<u>Group Totals</u>	
Number:	1			Number:	0		
Crude:	0.1			Crude:	*		

	County	Number	Crude		County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	<b>Counties with Average Population &gt;20,000</b>	Henry	0	*
	Appanoose	0	*		Humboldt	0	*
	Buena Vista	0	*		Iowa	0	*
	Butler	0	*		Jefferson	0	*
	Calhoun	0	*		Jones	0	*
	Cass	0	*		Keokuk	0	*
	Cedar	0	*		Kossuth	0	*
	Cherokee	0	*		Louisa	0	*
	Chickasaw	0	*		Lyon	0	*
	Clay	0	*		Madison	0	*
	Clayton	0	*		Mills	0	*
	Crawford	0	*		Mitchell	0	*
	Delaware	0	*		Monona	0	*
	Dickinson	0	*		Montgomery	0	*
	Emmet	0	*		O'Brien	0	*
	Floyd	0	*		Page	0	*
	Franklin	0	*		Palo Alto	0	*
	Greene	0	*		Poweshiek	0	*
	Grundy	0	*		Sac	0	*
	Guthrie	0	*		Shelby	0	*
Hamilton	0	*	Tama	0	*		
Hancock	0	*	Union	0	*		
Hardin	0	*	Winnebago	0	*		
Harrison	0	*	Wright	0	*		

	County	Number	Crude		County	Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	<b>MSA Counties</b>	Mahaska	0	*	
	Boone	0	*		Marion	0	*	
	Bremer	0	*		Marshall	0	*	
	Buchanan	0	*		Muscatine	0	*	
	Carroll	0	*		Plymouth	0	*	
	Cerro Gordo	0	*		Sioux	0	*	
	Clinton	0	*		Story	0	*	
	Des Moines	0	*		Wapello	0	*	
	Fayette	0	*		Washington	0	*	
	Jackson	0	*		Webster	0	*	
	Jasper	0	*		Winneshek	0	*	
	Lee	0	*					

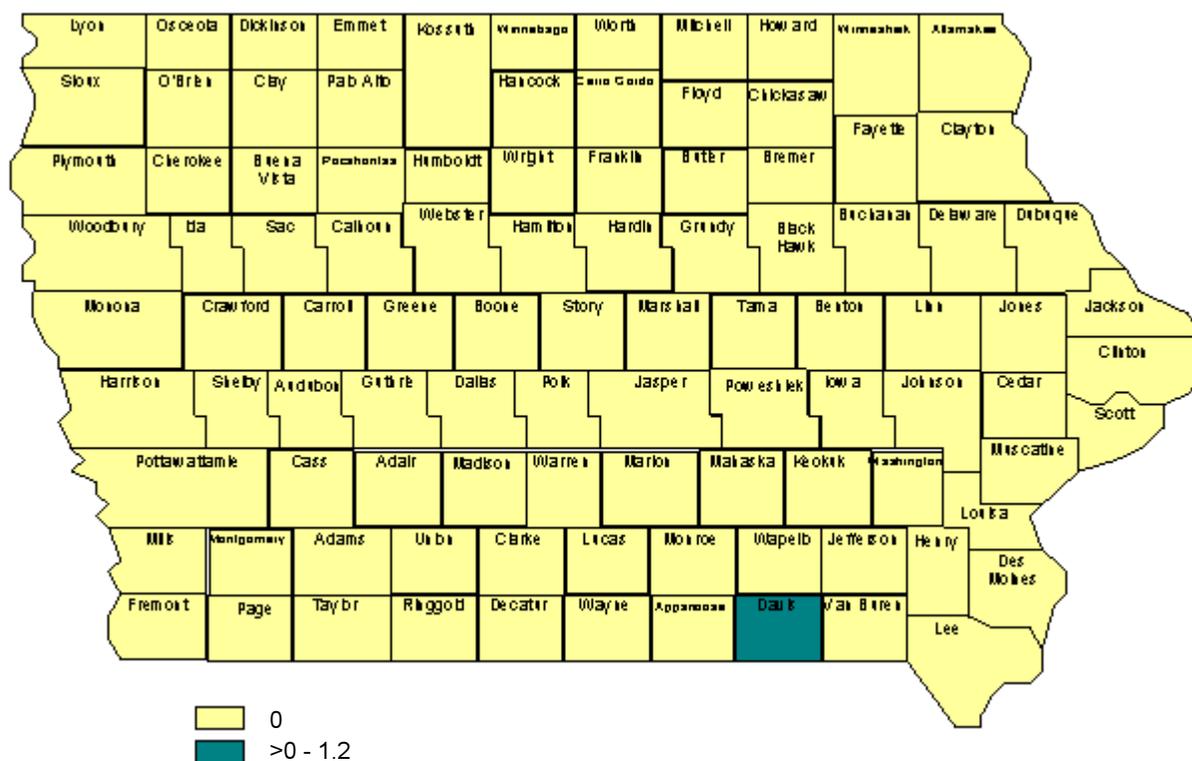
	County	Number	Crude		County	Number	Crude
<b>MSA Counties</b>	Black Hawk	0	*	<b>Group Totals</b>	Polk	0	*
	Dallas	0	*		Pottawattamie	0	*
	Dubuque	0	*		Scott	0	*
	Johnson	0	*		Warren	0	*
	Linn	0	*		Woodbury	0	*

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

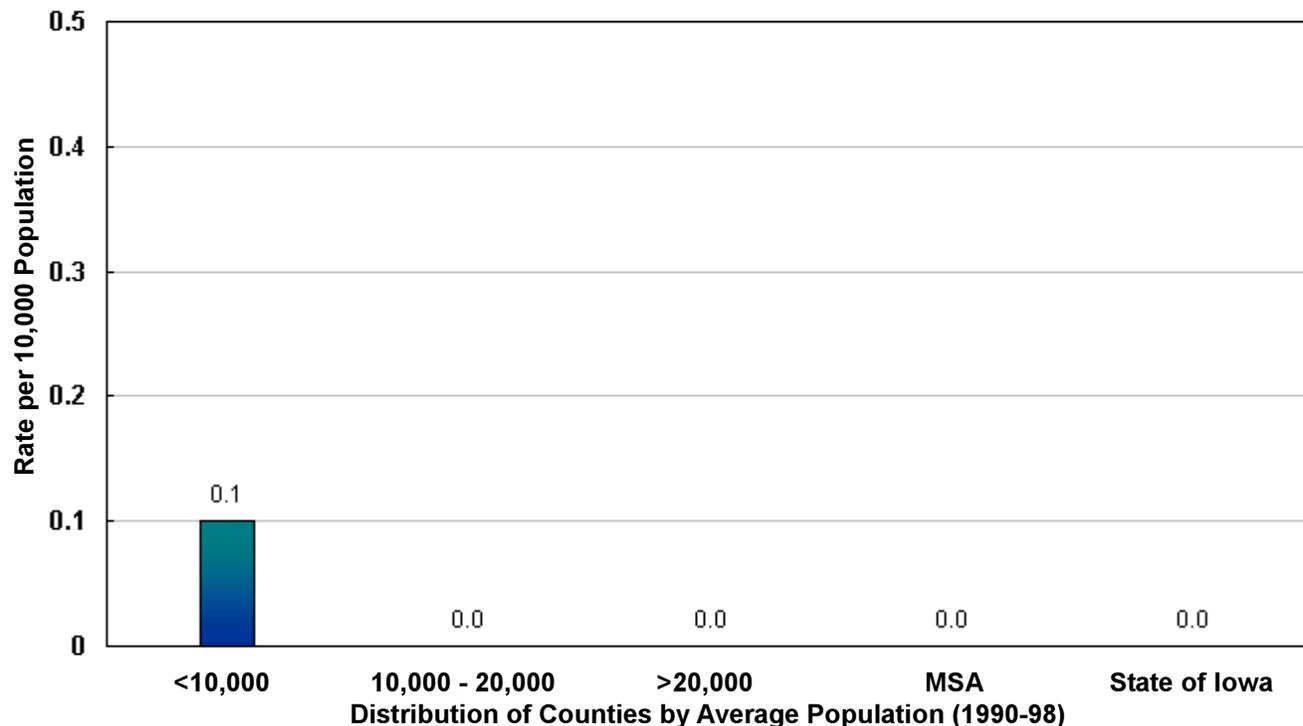
Source: Iowa Department of  
Inspections and Appeals

## Intermediate Care Facilities for Persons with Mental Illness 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Intermediate Care Beds for Persons with Mental Illness - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	25	0.1

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	0	*	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	25	29.3	Ringgold	0	*
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	0	*
	<u>Group Totals</u>					
Number:	25					
Crude:	1.8					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	0	*
	Appanoose	0	*	Humboldt	0	*
	Buena Vista	0	*	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	0	*	Jones	0	*
	Cass	0	*	Keokuk	0	*
	Cedar	0	*	Kossuth	0	*
	Cherokee	0	*	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	0	*	Madison	0	*
	Clayton	0	*	Mills	0	*
	Crawford	0	*	Mitchell	0	*
	Delaware	0	*	Monona	0	*
	Dickinson	0	*	Montgomery	0	*
	Emmet	0	*	O'Brien	0	*
	Floyd	0	*	Page	0	*
	Franklin	0	*	Palo Alto	0	*
	Greene	0	*	Poweshiek	0	*
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	0	*
Hamilton	0	*	Tama	0	*	
Hancock	0	*	Union	0	*	
Hardin	0	*	Winnebago	0	*	
Harrison	0	*	Wright	0	*	

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	0	*
	Boone	0	*	Marion	0	*
	Bremer	0	*	Marshall	0	*
	Buchanan	0	*	Muscatine	0	*
	Carroll	0	*	Plymouth	0	*
	Cerro Gordo	0	*	Sioux	0	*
	Clinton	0	*	Story	0	*
	Des Moines	0	*	Wapello	0	*
	Fayette	0	*	Washington	0	*
	Jackson	0	*	Webster	0	*
	Jasper	0	*	Winneshek	0	*
	Lee	0	*			

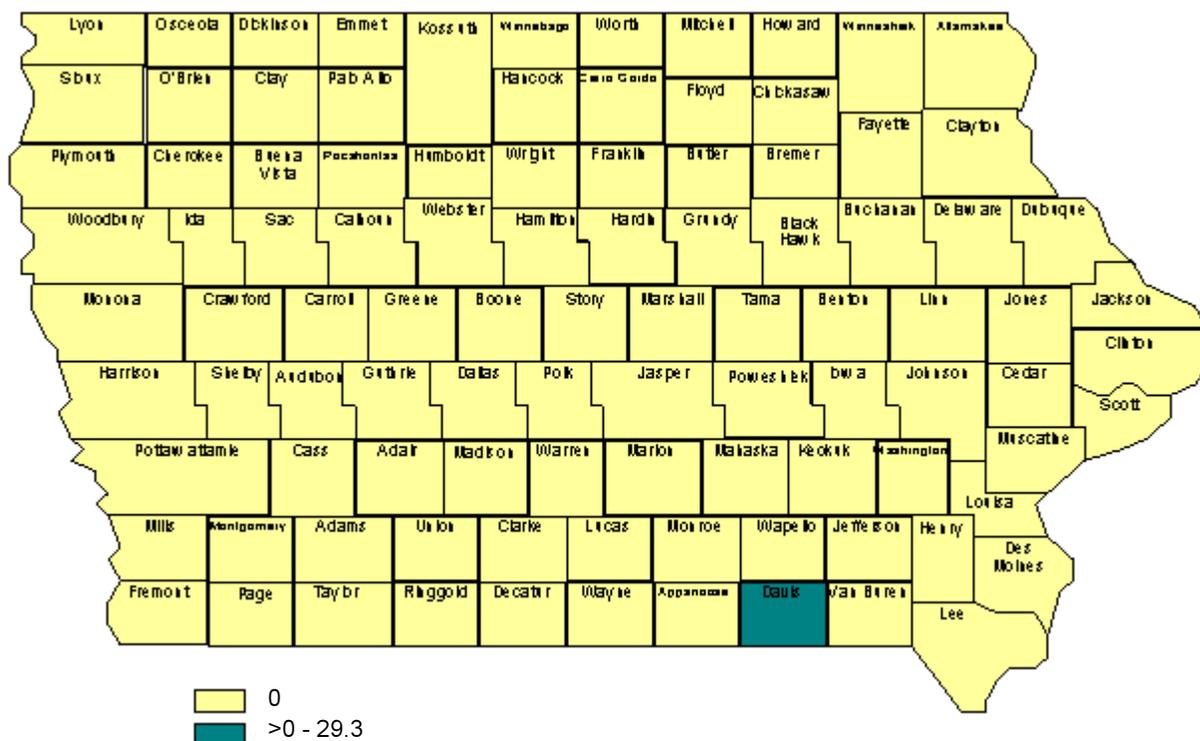
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	0	*	Polk	0	*
	Dallas	0	*	Pottawattamie	0	*
	Dubuque	0	*	Scott	0	*
	Johnson	0	*	Warren	0	*
	Linn	0	*	Woodbury	0	*
	<u>Group Totals</u>					
Number:	0					
Crude:	*					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

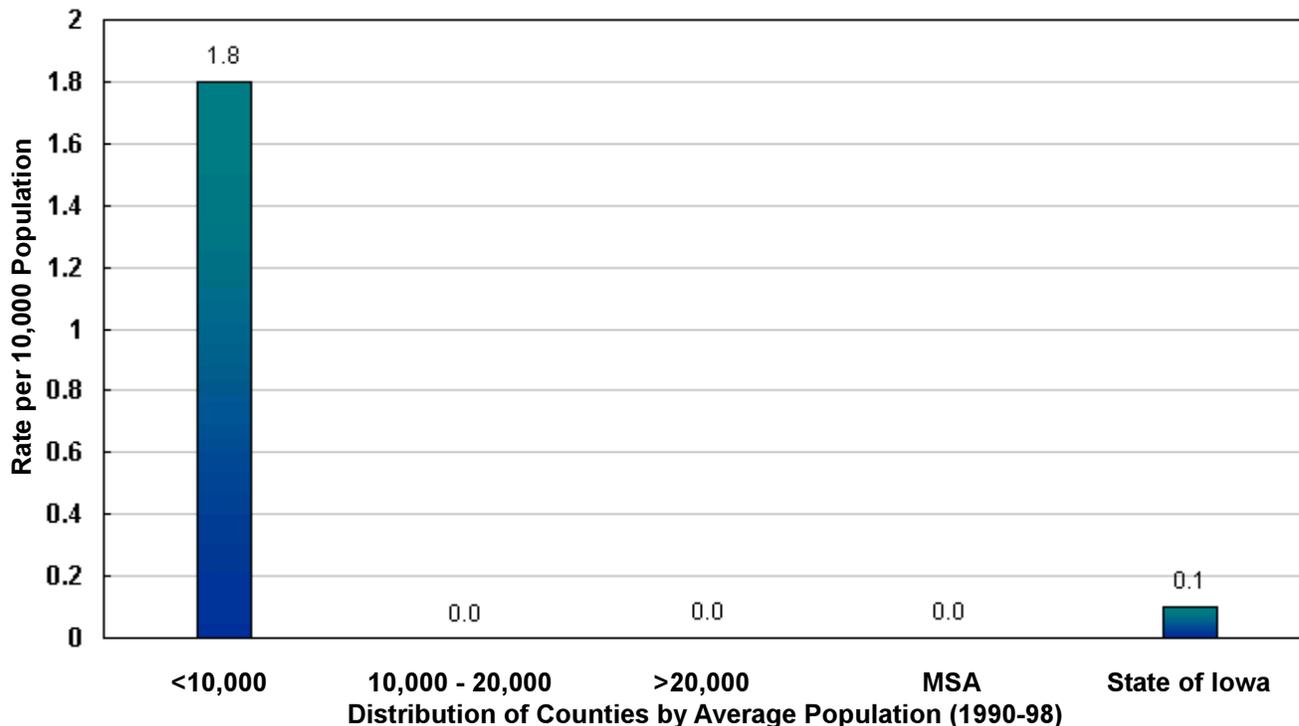
Source: Iowa Department of  
Inspections and Appeals

## Intermediate Care Beds for Persons with Mental Illness 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Intermediate Care Facilities for the Mentally Retarded - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	126	0.4

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	2	4.5	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	2	2.2	Pocahontas	0	*
	Davis	0	*	Ringgold	0	*
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	4					
Crude:	0.3					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	0	*
	Appanoose	0	*	Humboldt	0	*
	Buena Vista	1	0.5	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	3	2.7	Jones	0	*
	Cass	0	*	Keokuk	0	*
	Cedar	0	*	Kossuth	1	0.6
	Cherokee	0	*	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	0	*	Madison	0	*
	Clayton	6	3.2	Mills	2	1.4
	Crawford	2	1.2	Mitchell	0	*
	Delaware	0	*	Monona	0	*
	Dickinson	0	*	Montgomery	0	*
	Emmet	0	*	O'Brien	1	0.7
	Floyd	3	1.8	Page	0	*
	Franklin	0	*	Palo Alto	1	1.0
	Greene	0	*	Poweshiek	0	*
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	0	*
Hamilton	0	*	Tama	0	*	
Hancock	0	*	Union	2	1.6	
Hardin	0	*	Winnebago	3	2.6	
Harrison	1	0.6	Wright	4	2.8	

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	1	0.4
	Boone	0	*	Marion	2	0.6
	Bremer	0	*	Marshall	0	*
	Buchanan	0	*	Muscatine	0	*
	Carroll	1	0.5	Plymouth	0	*
	Cerro Gordo	1	0.2	Sioux	1	0.3
	Clinton	1	0.2	Story	4	0.5
	Des Moines	1	0.2	Wapello	0	*
	Fayette	0	*	Washington	2	1.0
	Jackson	1	0.5	Webster	1	0.2
	Jasper	3	0.8	Winneshek	0	*
	Lee	0	*			

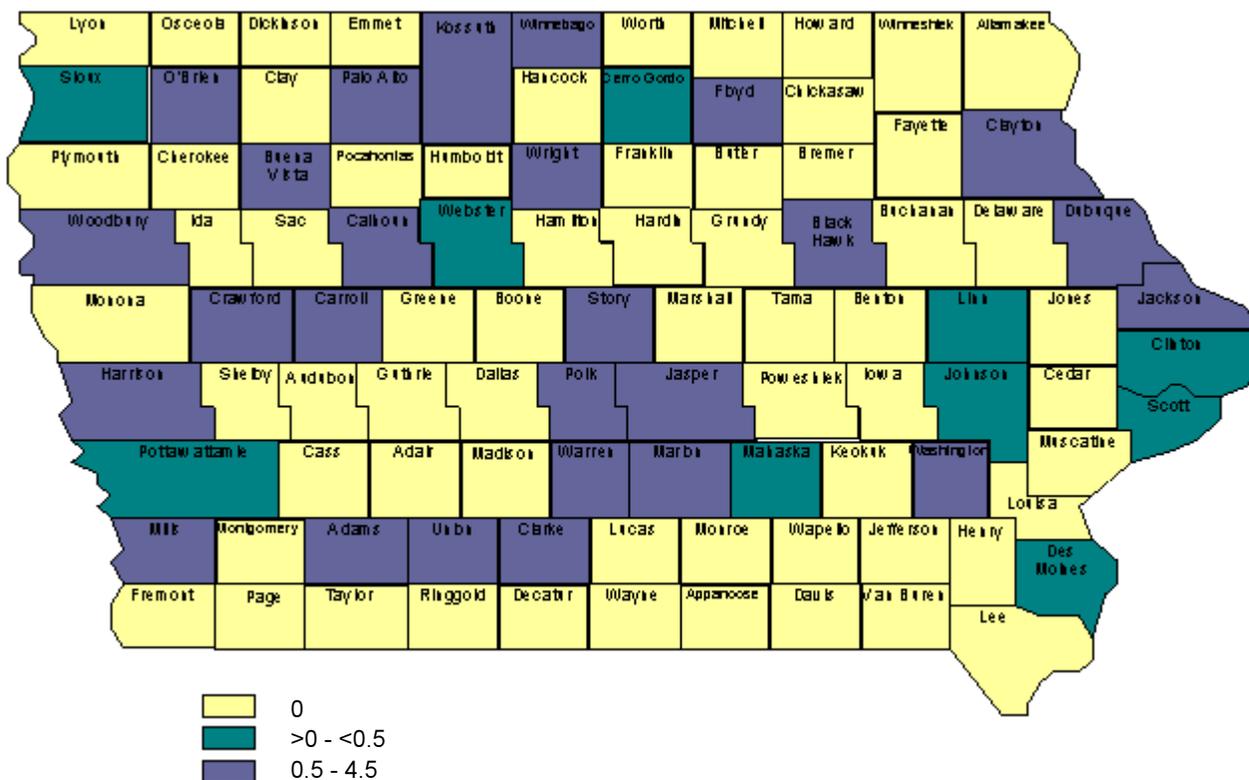
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	8	0.6	Polk	34	0.9
	Dallas	0	*	Pottawattamie	3	0.3
	Dubuque	5	0.6	Scott	1	0.1
	Johnson	1	0.1	Warren	2	0.5
	Linn	7	0.4	Woodbury	12	1.2
	<b>Group Totals</b>					
Number:	73					
Crude:	0.6					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

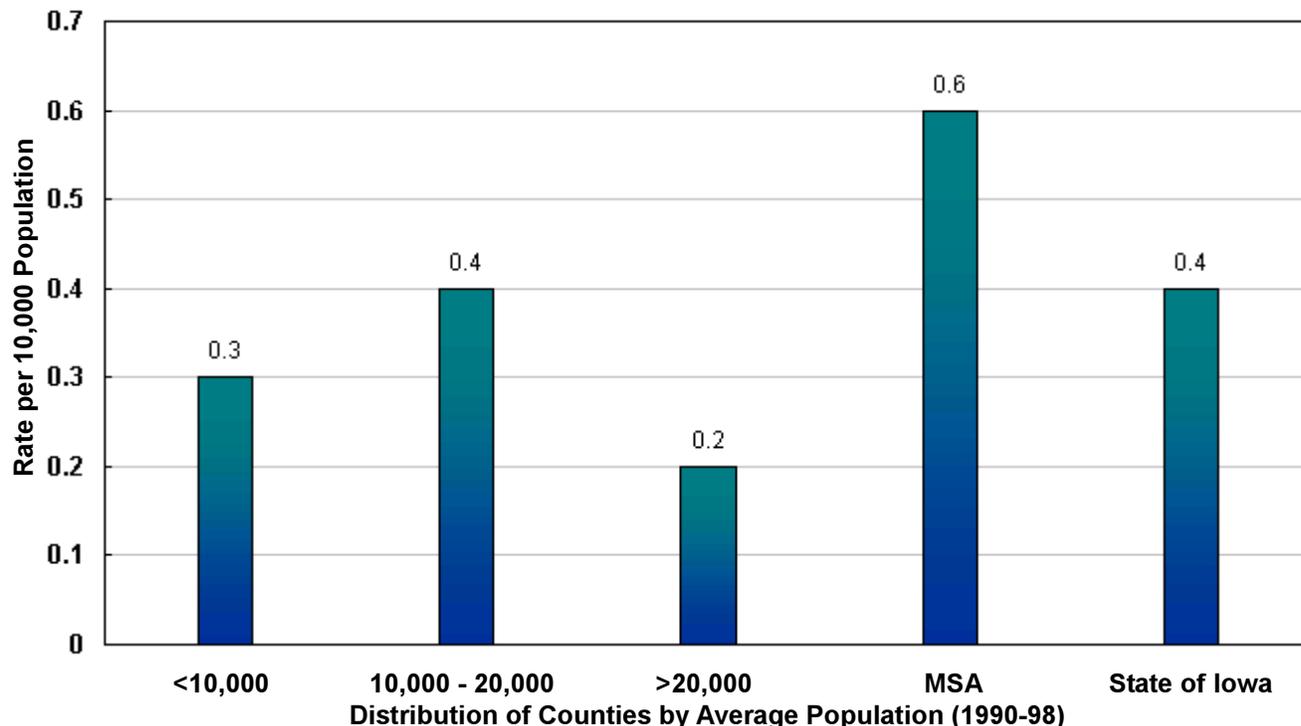
Source: Iowa Department of  
Inspections and Appeals

## Intermediate Care Facilities for the Mentally Retarded 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Intermediate Care Beds for the Mentally Retarded - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	1,562	5.3

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	12	26.8	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	14	15.3	Pocahontas	0	*
	Davis	0	*	Ringgold	0	*
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	0	*
	<u>Group Totals</u>					
Number:	26					
Crude:	1.9					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	0	*
	Appanoose	0	*	Humboldt	0	*
	Buena Vista	32	15.7	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	64	57.6	Jones	0	*
	Cass	0	*	Keokuk	0	*
	Cedar	0	*	Kossuth	15	8.7
	Cherokee	0	*	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	0	*	Madison	0	*
	Clayton	36	19.3	Mills	140	96.2
	Crawford	12	7.1	Mitchell	0	*
	Delaware	0	*	Monona	0	*
	Dickinson	0	*	Montgomery	0	*
	Emmet	0	*	O'Brien	60	39.7
	Floyd	57	33.7	Page	0	*
	Franklin	0	*	Palo Alto	16	15.8
	Greene	0	*	Poweshiek	0	*
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	0	*
Hamilton	0	*	Tama	0	*	
Hancock	0	*	Union	18	14.6	
Hardin	0	*	Winnebago	44	37.5	
Harrison	6	3.8	Wright	24	16.7	

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	8	3.6
	Boone	0	*	Marion	23	7.2
	Bremer	0	*	Marshall	0	*
	Buchanan	0	*	Muscatine	0	*
	Carroll	49	22.9	Plymouth	0	*
	Cerro Gordo	30	6.5	Sioux	12	3.8
	Clinton	25	5.0	Story	24	3.0
	Des Moines	16	3.8	Wapello	0	*
	Fayette	0	*	Washington	16	7.7
	Jackson	12	5.9	Webster	30	7.5
	Jasper	24	6.4	Winneshek	0	*
	Lee	0	*			

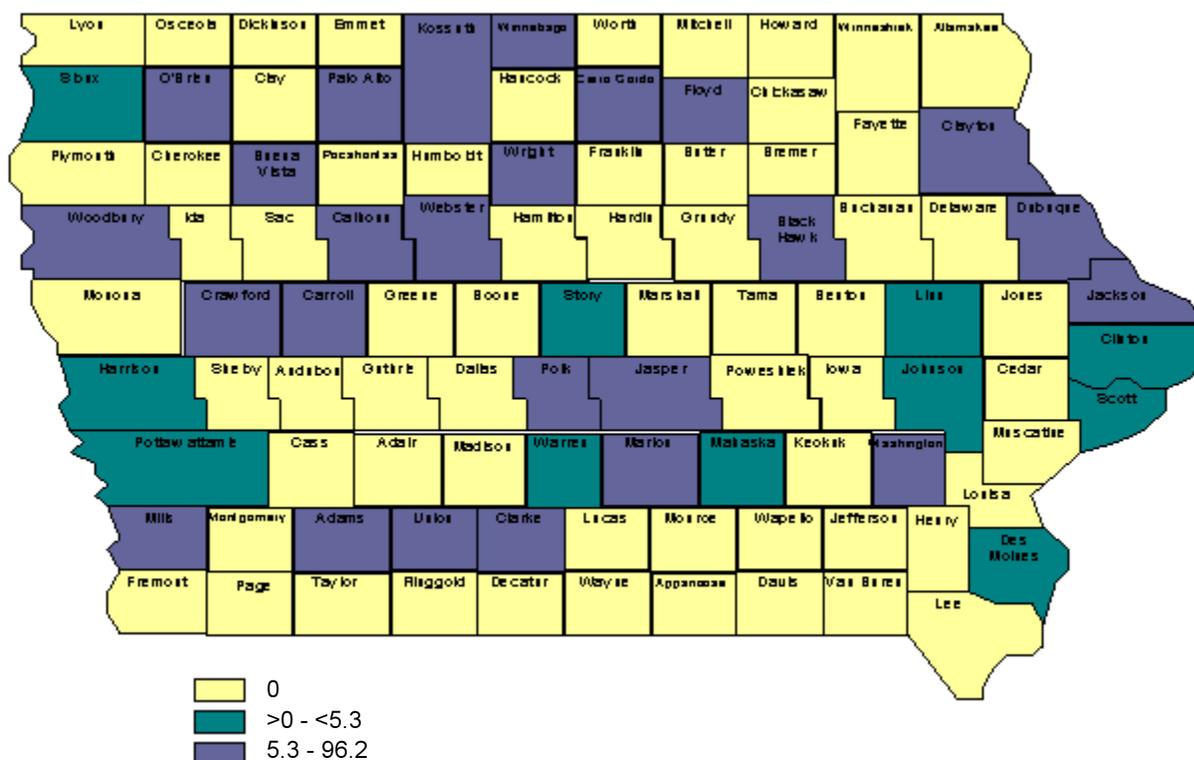
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	129	10.1	Polk	200	5.3
	Dallas	0	*	Pottawattamie	24	2.7
	Dubuque	94	10.5	Scott	54	3.4
	Johnson	8	0.7	Warren	16	3.9
	Linn	74	3.9	Woodbury	144	13.9
	<u>Group Totals</u>					
Number:	743					
Crude:	5.6					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

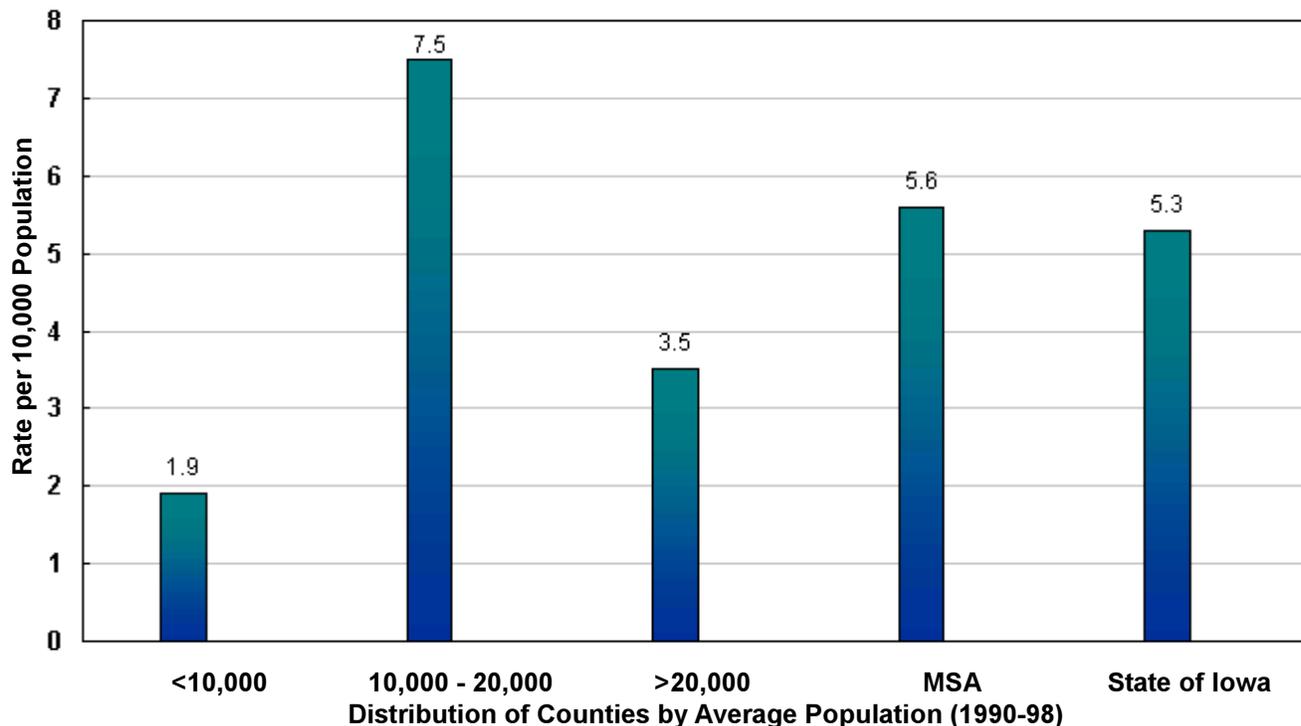
Source: Iowa Department of  
Inspections and Appeals

## Intermediate Care Beds for the Mentally Retarded 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Residential Care Facilities 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	148	0.5

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	2	2.1
	Adams	1	2.2	Monroe	1	1.2
	Audubon	1	1.5	Osceola	0	*
	Clarke	0	*	Pocahontas	1	1.2
	Davis	2	2.3	Ringgold	0	*
	Decatur	0	*	Taylor	1	1.4
	Fremont	1	1.2	Van Buren	1	1.3
	Howard	1	1.0	Wayne	1	1.5
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	13					
Crude:	0.9					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	2	1.4	Henry	2	1.0
	Appanoose	1	0.7	Humboldt	0	*
	Buena Vista	2	1.0	Iowa	2	1.3
	Butler	3	2.0	Jefferson	1	0.6
	Calhoun	0	*	Jones	2	1.0
	Cass	2	1.4	Keokuk	1	0.9
	Cedar	2	1.1	Kossuth	1	0.6
	Cherokee	1	0.8	Louisa	1	0.8
	Chickasaw	0	*	Lyon	0	*
	Clay	1	0.6	Madison	2	1.4
	Clayton	1	0.5	Mills	1	0.7
	Crawford	1	0.6	Mitchell	2	1.8
	Delaware	1	0.5	Monona	0	*
	Dickinson	1	0.6	Montgomery	0	*
	Emmet	1	0.9	O'Brien	3	2.0
	Floyd	2	1.2	Page	2	1.2
	Franklin	1	0.9	Palo Alto	1	1.0
	Greene	1	1.0	Poweshiek	2	1.1
	Grundy	1	0.8	Sac	1	0.9
	Guthrie	1	0.9	Shelby	3	2.3
Hamilton	0	*	Tama	1	0.6	
Hancock	1	0.8	Union	2	1.6	
Hardin	1	0.5	Winnebago	0	*	
Harrison	0	*	Wright	1	0.7	
<b>Group Totals</b>						
Number:	58					
Crude:	0.8					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	2	0.8	Mahaska	3	1.3
	Boone	2	0.8	Marion	5	1.6
	Bremer	0	*	Marshall	1	0.3
	Buchanan	0	*	Muscatine	2	0.5
	Carroll	1	0.5	Plymouth	2	0.8
	Cerro Gordo	0	*	Sioux	1	0.3
	Clinton	1	0.2	Story	4	0.5
	Des Moines	2	0.5	Wapello	2	0.6
	Fayette	1	0.5	Washington	4	1.9
	Jackson	2	1.0	Webster	1	0.2
	Jasper	1	0.3	Winneshek	2	0.9
	Lee	1	0.3			
	<b>Group Totals</b>					
Number:	40					
Crude:	0.5					

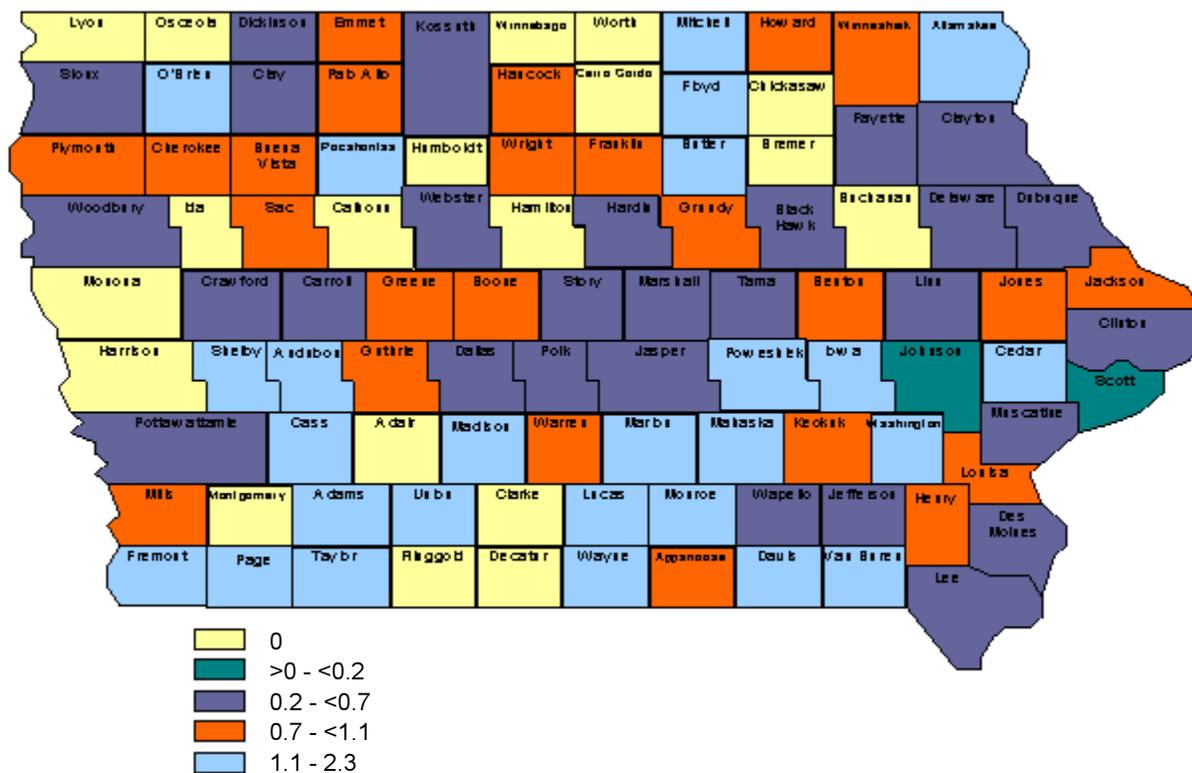
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	3	0.2	Polk	11	0.3
	Dallas	2	0.5	Pottawattamie	2	0.2
	Dubuque	3	0.3	Scott	2	0.1
	Johnson	1	0.1	Warren	3	0.7
	Linn	7	0.4	Woodbury	3	0.3
	<b>Group Totals</b>					
Number:	37					
Crude:	0.3					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

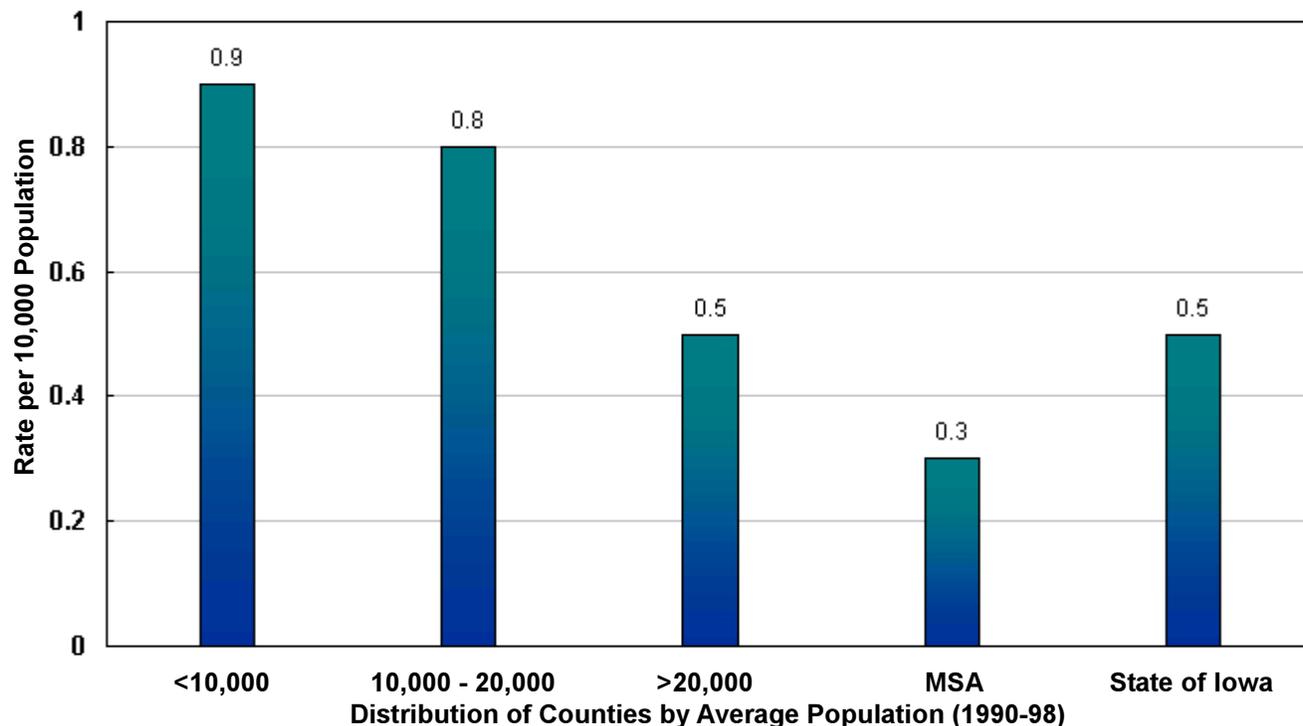
Source: Iowa Department of  
Inspections and Appeals

## Residential Care Facilities 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Beds in Residential Care Facilities 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	5,535	18.9

	County			County		
	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	42	44.6
	Adams	51	113.8	Monroe	9	11.2
	Audubon	58	84.9	Osceola	0	*
	Clarke	0	*	Pocahontas	9	10.4
	Davis	21	24.6	Ringgold	0	*
	Decatur	0	*	Taylor	62	89.1
	Fremont	15	18.7	Van Buren	48	61.5
	Howard	49	49.3	Wayne	15	22.3
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	379					
Crude:	27.1					

	County			County		
	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	86	58.6	Henry	35	17.2
	Appanoose	10	7.3	Humboldt	0	*
	Buena Vista	112	54.9	Iowa	65	41.5
	Butler	33	21.6	Jefferson	51	31.5
	Calhoun	0	*	Jones	99	49.0
	Cass	58	39.5	Keokuk	1	0.9
	Cedar	35	19.2	Kossuth	46	26.8
	Cherokee	20	15.3	Louisa	39	32.0
	Chickasaw	0	*	Lyon	0	*
	Clay	15	8.6	Madison	70	49.9
	Clayton	52	27.8	Mills	25	17.2
	Crawford	25	14.8	Mitchell	34	31.3
	Delaware	60	32.6	Monona	0	*
	Dickinson	38	23.1	Montgomery	0	*
	Emmet	2	1.8	O'Brien	72	47.7
	Floyd	97	57.4	Page	71	41.8
	Franklin	4	3.7	Palo Alto	33	32.5
	Greene	40	38.6	Poweshiek	84	44.6
	Grundy	8	6.5	Sac	18	15.6
	Guthrie	41	36.1	Shelby	150	113.9
Hamilton	0	*	Tama	40	22.1	
Hancock	51	42.1	Union	32	26.0	
Hardin	40	21.3	Winnebago	0	*	
Harrison	0	*	Wright	50	34.9	
<b>Group Totals</b>						
Number:	1,842					
Crude:	26.4					

	County			County		
	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	80	31.6	Mahaska	116	51.9
	Boone	145	55.3	Marion	203	63.3
	Bremer	0	*	Marshall	113	28.7
	Buchanan	0	*	Muscatine	83	19.9
	Carroll	47	21.9	Plymouth	102	41.0
	Cerro Gordo	0	*	Sioux	15	4.7
	Clinton	58	11.6	Story	42	5.3
	Des Moines	80	18.9	Wapello	37	10.3
	Fayette	90	40.9	Washington	96	46.4
	Jackson	55	27.1	Webster	18	4.5
	Jasper	20	5.4	Winneshek	53	24.9
	Lee	74	19.4			

	County			County		
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	65	5.1	Polk	356	9.5
	Dallas	124	30.4	Pottawattamie	79	9.0
	Dubuque	170	19.1	Scott	164	10.3
	Johnson	114	10.3	Warren	62	15.2
	Linn	486	25.4	Woodbury	167	16.1
<b>Group Totals</b>						
Number:	1,787					
Crude:	13.5					

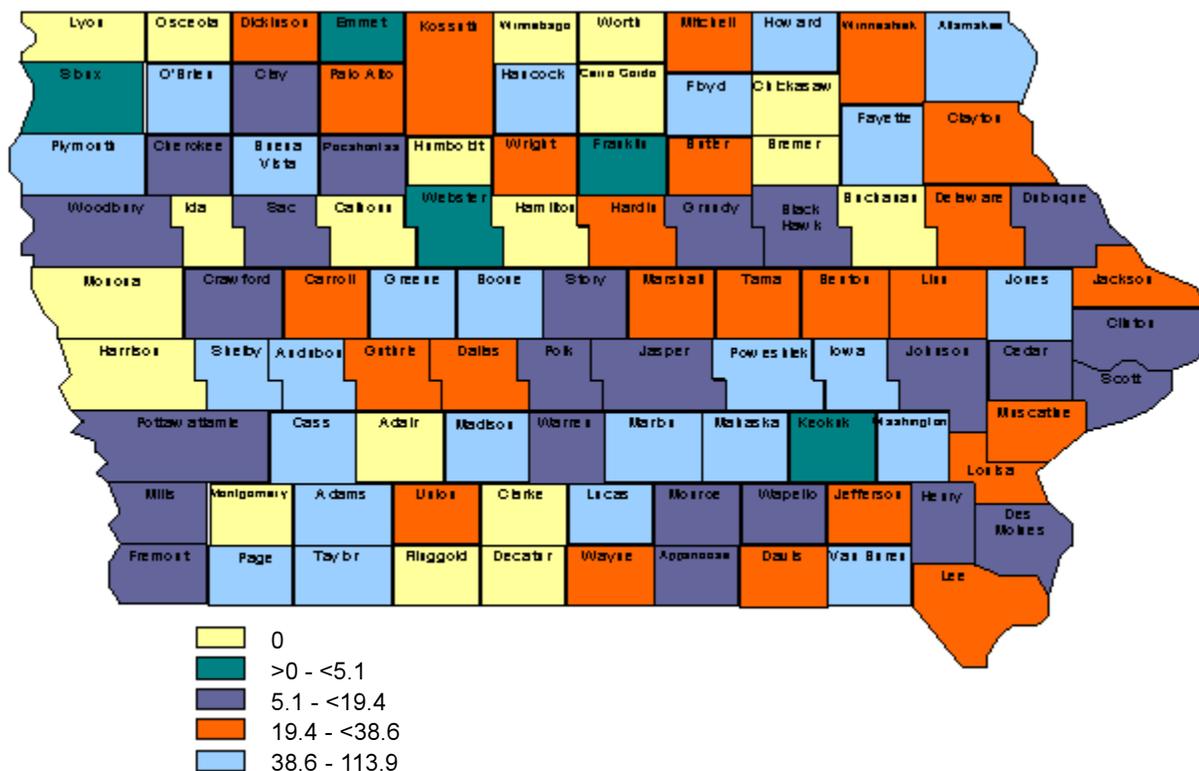
<sup>1</sup>Rates per 10,000 population

\*Crude rate less than 0.05

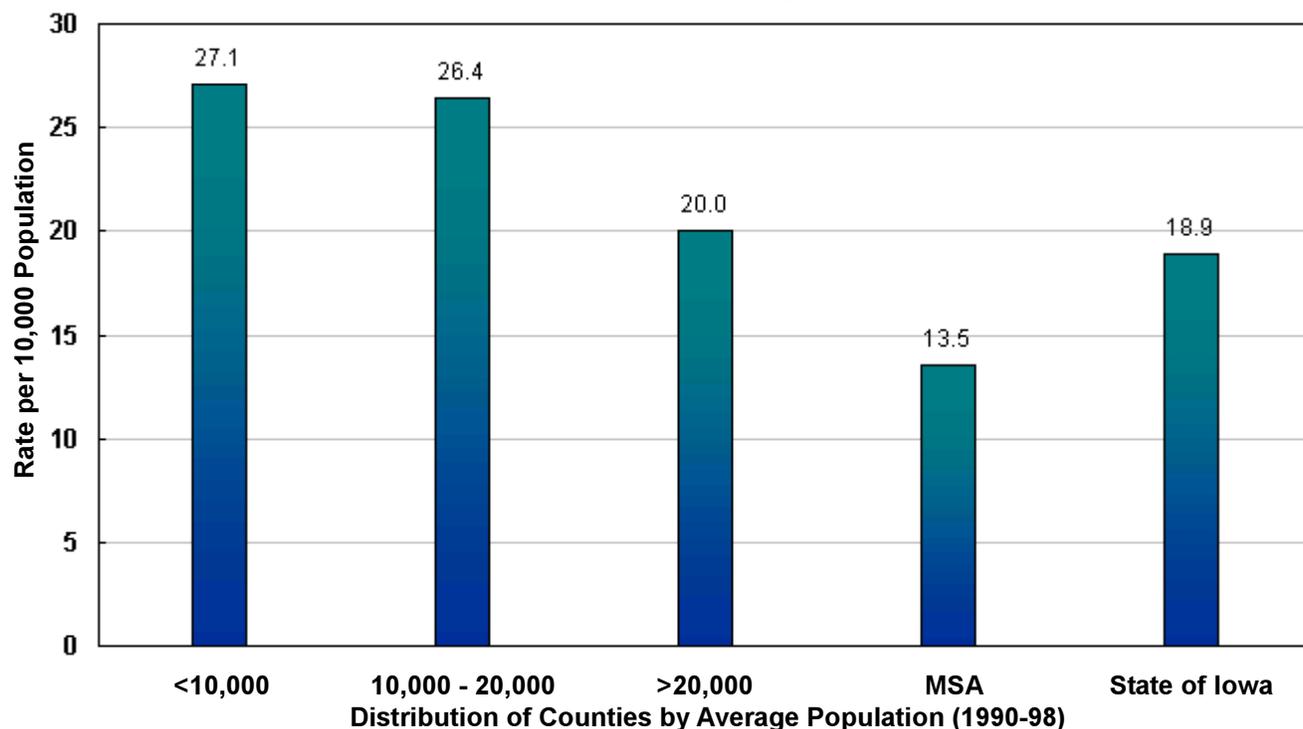
Source: Iowa Department of Inspections and Appeals

## Beds in Residential Care Facilities 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Residential Care Facilities for Persons with Mental Illness - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	15	0.1

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	0	*	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	0	*	Ringgold	0	*
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	0					
Crude:	*					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	0	*
	Appanoose	0	*	Humboldt	0	*
	Buena Vista	1	0.5	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	0	*	Jones	0	*
	Cass	1	0.7	Keokuk	0	*
	Cedar	0	*	Kossuth	0	*
	Cherokee	1	0.8	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	0	*	Madison	0	*
	Clayton	0	*	Mills	0	*
	Crawford	0	*	Mitchell	0	*
	Delaware	0	*	Monona	0	*
	Dickinson	0	*	Montgomery	0	*
	Emmet	0	*	O'Brien	0	*
	Floyd	0	*	Page	0	*
	Franklin	0	*	Palo Alto	0	*
	Greene	0	*	Poweshiek	0	*
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	0	*
Hamilton	0	*	Tama	0	*	
Hancock	0	*	Union	0	*	
Hardin	0	*	Winnebago	0	*	
Harrison	0	*	Wright	0	*	
<b>Group Totals</b>						
Number:	3					
Crude:	*					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	0	*
	Boone	0	*	Marion	0	*
	Bremer	0	*	Marshall	1	0.3
	Buchanan	0	*	Muscatine	0	*
	Carroll	0	*	Plymouth	0	*
	Cerro Gordo	1	0.2	Sioux	0	*
	Clinton	1	0.2	Story	1	0.1
	Des Moines	0	*	Wapello	1	0.3
	Fayette	0	*	Washington	0	*
	Jackson	0	*	Webster	1	0.2
	Jasper	0	*	Winneshek	0	*
	Lee	1	0.3			
	<b>Group Totals</b>					
Number:	7					
Crude:	0.1					

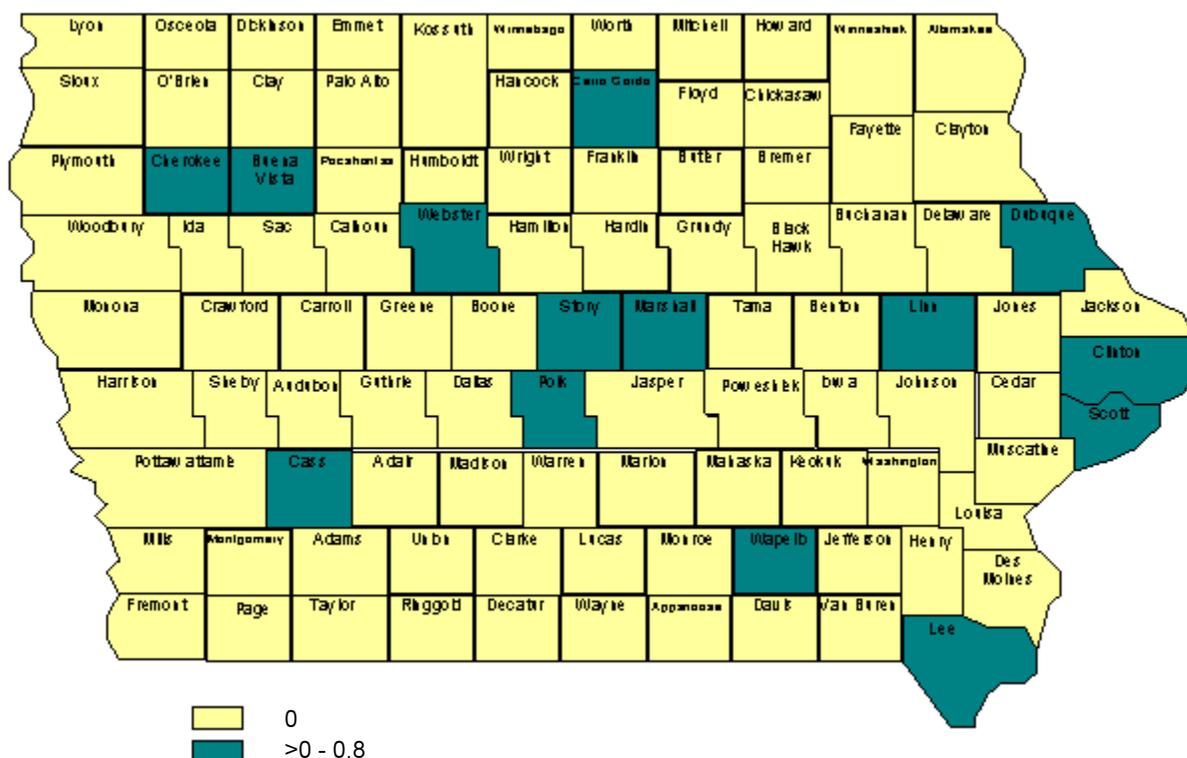
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	0	*	Polk	2	0.1
	Dallas	0	*	Pottawattamie	0	*
	Dubuque	1	0.1	Scott	1	0.1
	Johnson	0	*	Warren	0	*
	Linn	1	0.1	Woodbury	0	*
<b>Group Totals</b>						
Number:	5					
Crude:	*					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

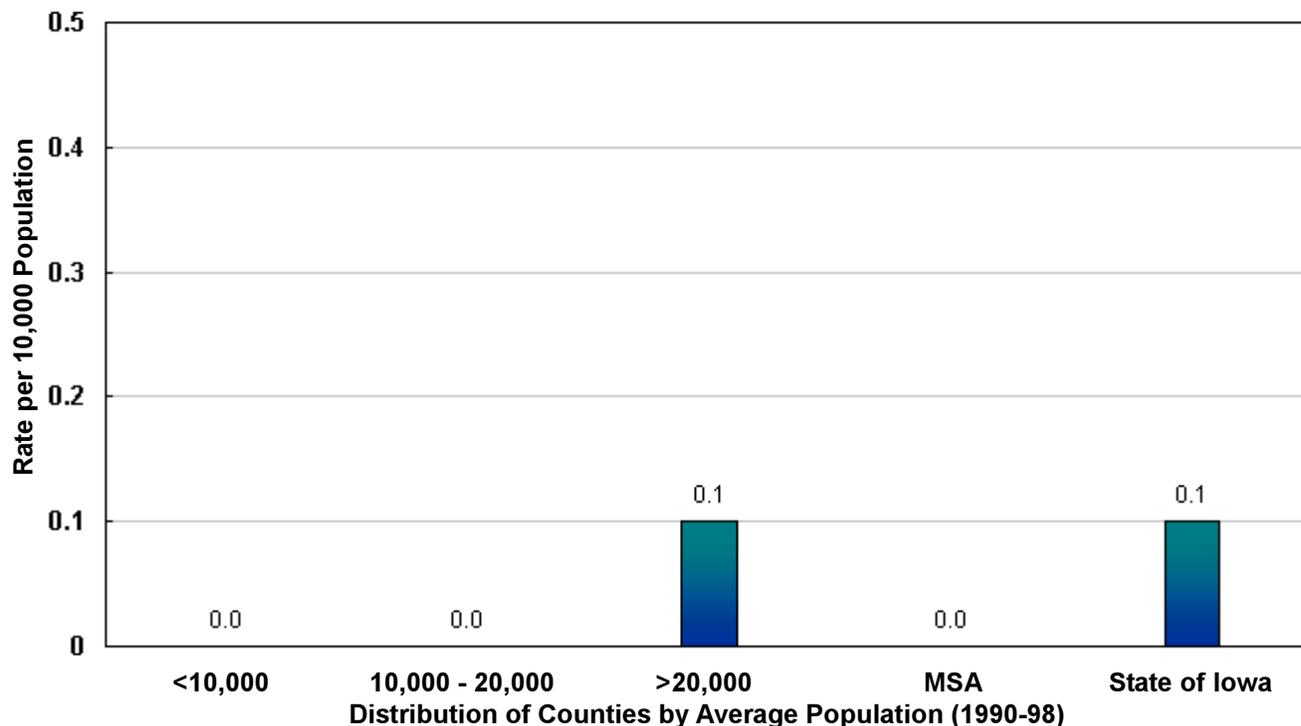
Source: Iowa Department of Inspections and Appeals

# Residential Care Facilities for Persons with Mental Illness 2001

## Crude Rates per 10,000 Population



## Crude Rates



## Beds in Residential Care Facilities for Persons with Mental Illness - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	374	1.3

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	0	*	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	0	*	Ringgold	0	*
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	0					
Crude:	*					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	0	*
	Appanoose	0	*	Humboldt	0	*
	Buena Vista	10	4.9	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	0	*	Jones	0	*
	Cass	15	10.2	Keokuk	0	*
	Cedar	0	*	Kossuth	0	*
	Cherokee	15	11.5	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	0	*	Madison	0	*
	Clayton	0	*	Mills	0	*
	Crawford	0	*	Mitchell	0	*
	Delaware	0	*	Monona	0	*
	Dickinson	0	*	Montgomery	0	*
	Emmet	0	*	O'Brien	0	*
	Floyd	0	*	Page	0	*
	Franklin	0	*	Palo Alto	0	*
	Greene	0	*	Poweshiek	0	*
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	0	*
Hamilton	0	*	Tama	0	*	
Hancock	0	*	Union	0	*	
Hardin	0	*	Winnebago	0	*	
Harrison	0	*	Wright	0	*	
<b>Group Totals</b>						
Number:	40					
Crude:	0.6					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	0	*
	Boone	0	*	Marion	0	*
	Bremer	0	*	Marshall	40	10.2
	Buchanan	0	*	Muscatine	0	*
	Carroll	0	*	Plymouth	0	*
	Cerro Gordo	15	3.2	Sioux	0	*
	Clinton	47	9.4	Story	8	1.0
	Des Moines	0	*	Wapello	38	10.5
	Fayette	0	*	Washington	0	*
	Jackson	0	*	Webster	12	3.0
	Jasper	0	*	Winneshek	0	*
	Lee	23	6.0			

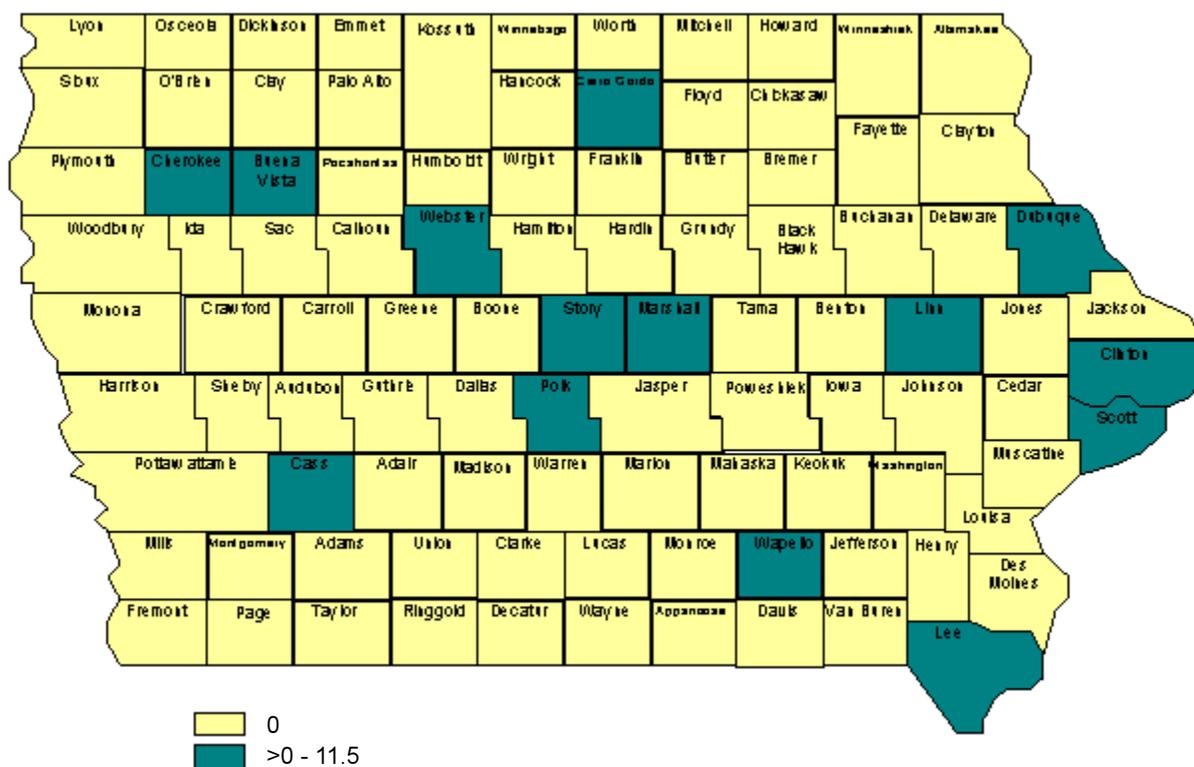
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	0	*	Polk	18	0.5
	Dallas	0	*	Pottawattamie	0	*
	Dubuque	9	1.0	Scott	60	3.8
	Johnson	0	*	Warren	0	*
	Linn	64	3.3	Woodbury	0	*
<b>Group Totals</b>						
Number:	151					
Crude:	1.1					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

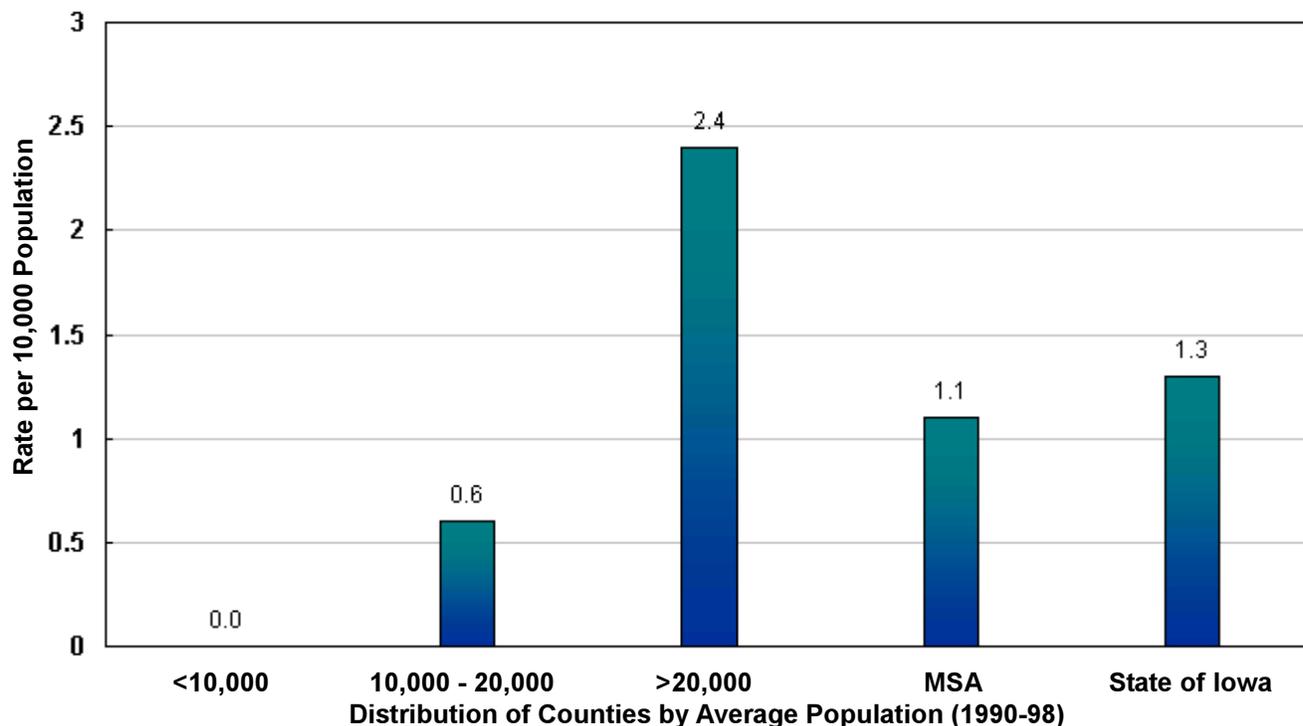
Source: Iowa Department of Inspections and Appeals

# Beds in Residential Care Facilities for Persons with Mental Illness 2001

## Crude Rates per 10,000 Population



## Crude Rates



## Residential Care Facilities for the Mentally Retarded - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	85	0.3

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	1	1.1
	Adams	0	*	Monroe	1	1.2
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	0	*	Ringgold	1	1.8
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	1	1.0	Wayne	0	*
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	4					
Crude:	0.3					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	1	0.7	Henry	0	*
	Appanoose	2	1.5	Humboldt	1	1.0
	Buena Vista	0	*	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	0	*	Jones	0	*
	Cass	2	1.4	Keokuk	0	*
	Cedar	0	*	Kossuth	1	0.6
	Cherokee	0	*	Louisa	0	*
	Chickasaw	2	1.5	Lyon	0	*
	Clay	1	0.6	Madison	0	*
	Clayton	1	0.5	Mills	1	0.7
	Crawford	2	1.2	Mitchell	1	0.9
	Delaware	0	*	Monona	0	*
	Dickinson	0	*	Montgomery	1	0.8
	Emmet	0	*	O'Brien	1	0.7
	Floyd	1	0.6	Page	1	0.6
	Franklin	1	0.9	Palo Alto	3	3.0
	Greene	1	1.0	Poweshiek	0	*
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	1	0.8
Hamilton	0	*	Tama	0	*	
Hancock	0	*	Union	1	0.8	
Hardin	0	*	Winnebago	0	*	
Harrison	0	*	Wright	1	0.7	
<b>Group Totals</b>						
Number:	27					
Crude:	0.4					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	0	*
	Boone	0	*	Marion	1	0.3
	Bremer	0	*	Marshall	0	*
	Buchanan	0	*	Muscatine	0	*
	Carroll	1	0.5	Plymouth	2	0.8
	Cerro Gordo	3	0.6	Sioux	3	0.9
	Clinton	2	0.4	Story	0	*
	Des Moines	3	0.7	Wapello	2	0.6
	Fayette	1	0.5	Washington	0	*
	Jackson	0	*	Webster	0	*
	Jasper	0	*	Winneshek	1	0.5
	Lee	2	0.5			
	<b>Group Totals</b>					
Number:	21					
Crude:	0.3					

	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	10	0.8	Polk	3	0.1
	Dallas	0	*	Pottawattamie	7	0.8
	Dubuque	3	0.3	Scott	3	0.2
	Johnson	3	0.3	Warren	0	*
	Linn	0	*	Woodbury	4	0.4
	<b>Group Totals</b>					
Number:	33					
Crude:	0.2					

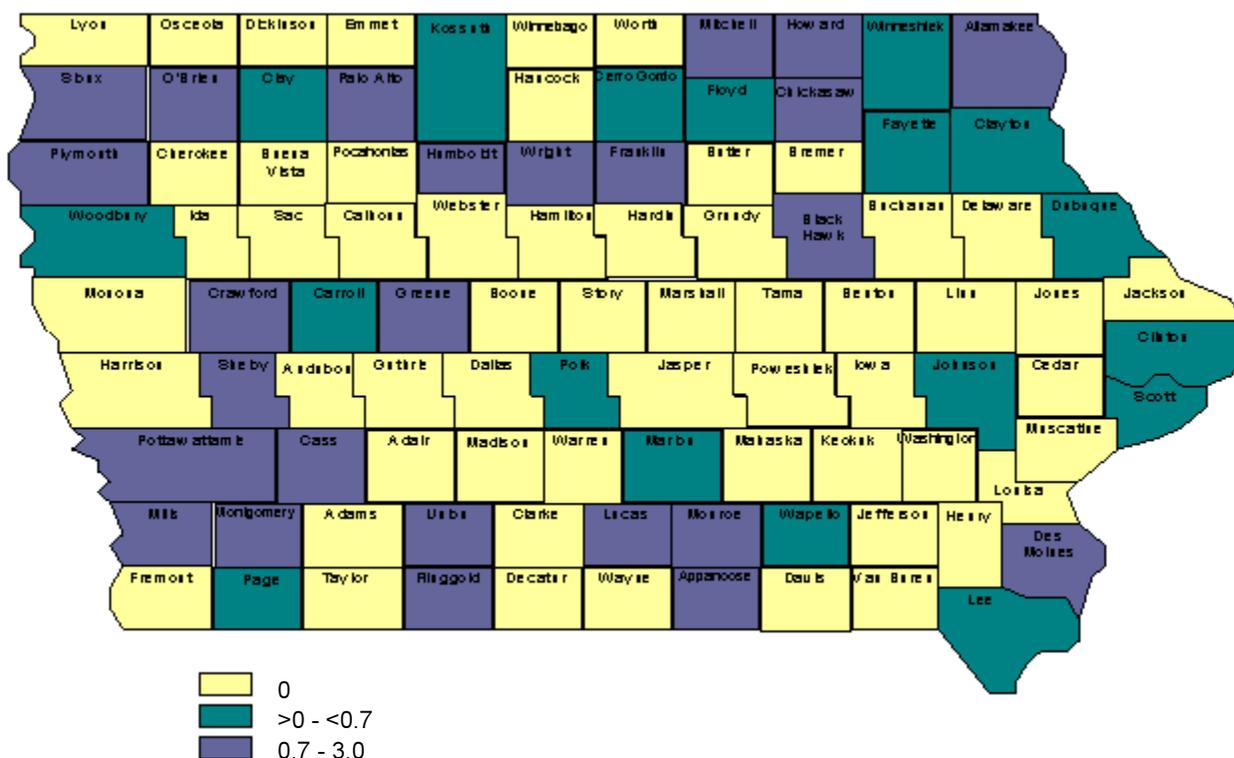
<sup>1</sup>Rates per 10,000 population

\*Crude rate less than 0.05

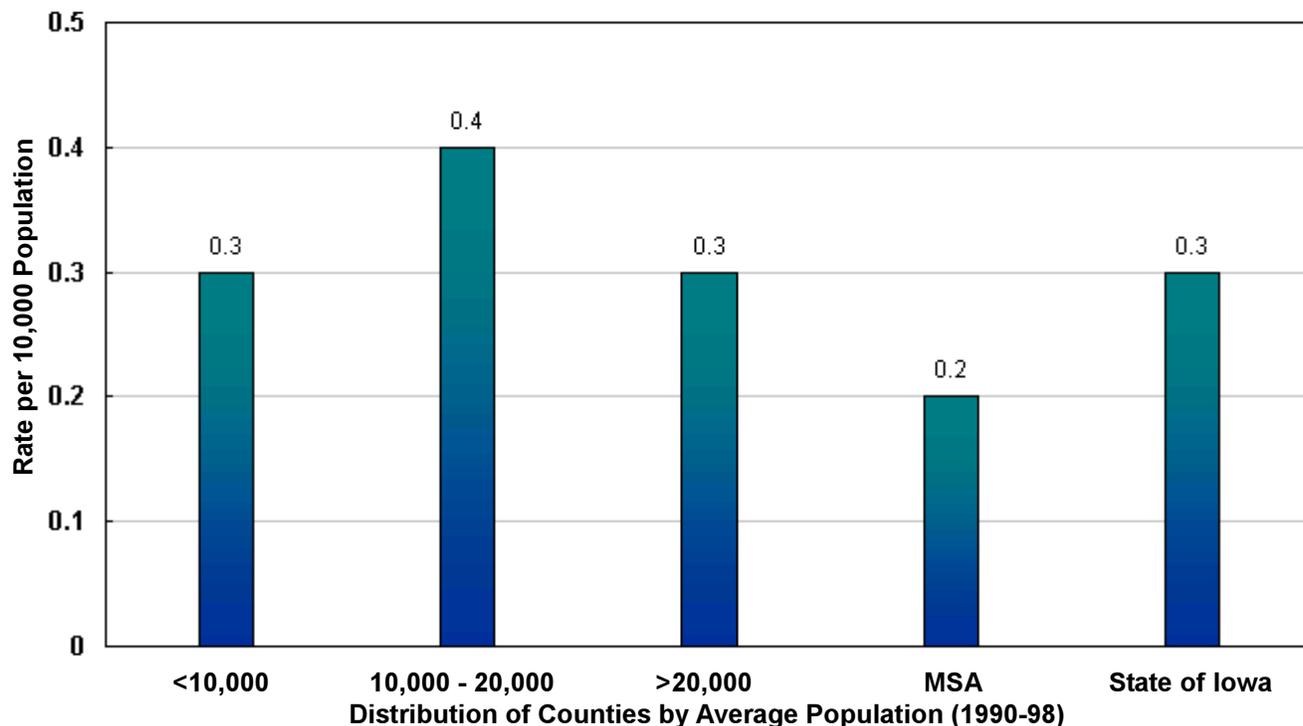
Source: Iowa Department of Inspections and Appeals

## Residential Care Facilities for the Mentally Retarded 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Beds in Residential Care Facilities for the Mentally Retarded - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	1,144	3.9

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	8	8.5
	Adams	0	*	Monroe	9	11.2
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	0	*	Ringgold	8	14.6
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	12	12.1	Wayne	0	*
	Ida	0	*	Worth	0	*
	<u>Group Totals</u>					
Number:	37					
Crude:	2.6					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	7	4.8	Henry	0	*
	Appanoose	18	13.1	Humboldt	15	14.4
	Buena Vista	0	*	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	0	*	Jones	0	*
	Cass	27	18.4	Keokuk	0	*
	Cedar	0	*	Kossuth	34	19.8
	Cherokee	0	*	Louisa	0	*
	Chickasaw	47	35.9	Lyon	0	*
	Clay	9	5.2	Madison	0	*
	Clayton	10	5.4	Mills	10	6.9
	Crawford	28	16.5	Mitchell	15	13.8
	Delaware	0	*	Monona	0	*
	Dickinson	0	*	Montgomery	10	8.5
	Emmet	0	*	O'Brien	50	33.1
	Floyd	12	7.1	Page	10	5.9
	Franklin	12	11.2	Palo Alto	25	24.6
	Greene	10	9.6	Poweshiek	0	*
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	9	6.8
Hamilton	0	*	Tama	0	*	
Hancock	0	*	Union	8	6.5	
Hardin	0	*	Winnebago	0	*	
Harrison	0	*	Wright	12	8.4	
<u>Group Totals</u>						
Number:	378					
Crude:	5.4					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	0	*
	Boone	0	*	Marion	5	1.6
	Bremer	0	*	Marshall	0	*
	Buchanan	0	*	Muscatine	0	*
	Carroll	36	16.8	Plymouth	16	6.4
	Cerro Gordo	158	34.0	Sioux	39	12.3
	Clinton	11	2.2	Story	0	*
	Des Moines	36	8.5	Wapello	30	8.3
	Fayette	8	3.6	Washington	0	*
	Jackson	0	*	Webster	0	*
	Jasper	0	*	Winneshek	9	4.2
	Lee	31	8.1			

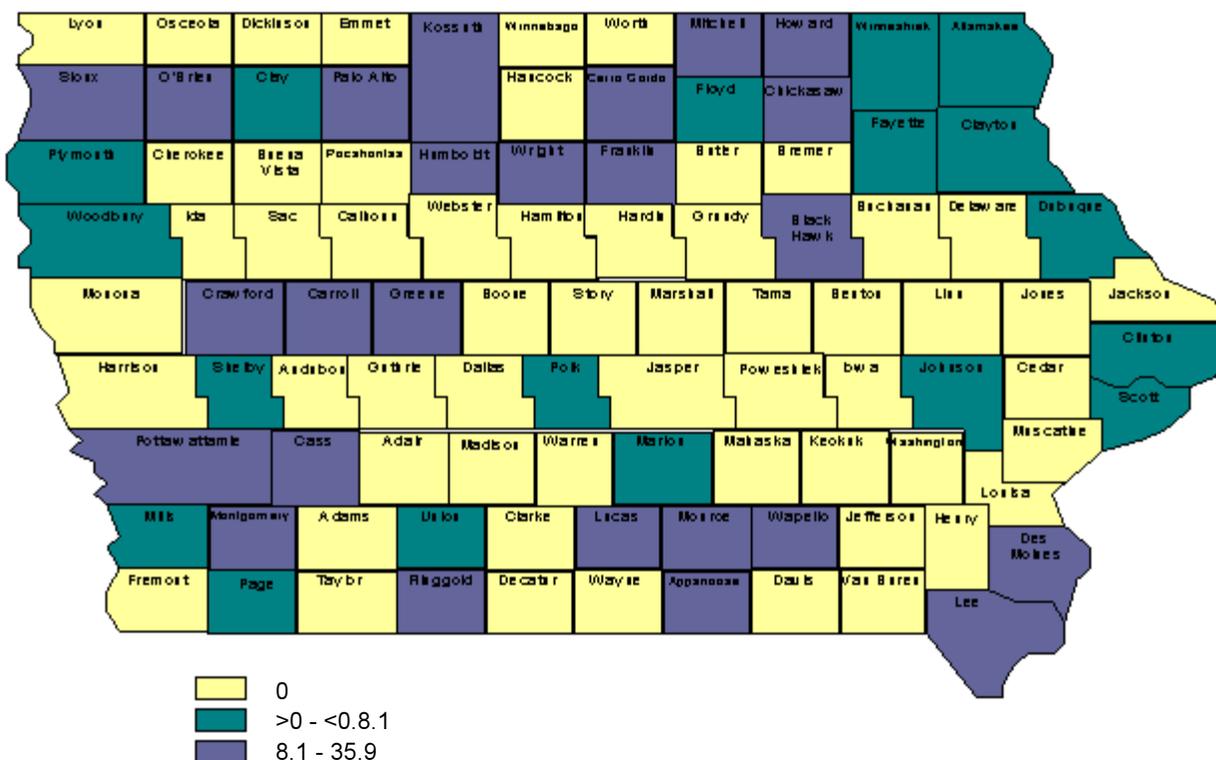
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	115	9.0	Polk	41	1.1
	Dallas	0	*	Pottawattamie	91	10.4
	Dubuque	23	2.6	Scott	24	1.5
	Johnson	18	1.6	Warren	0	*
	Linn	0	*	Woodbury	38	3.7
<u>Group Totals</u>						
Number:	350					
Crude:	2.6					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

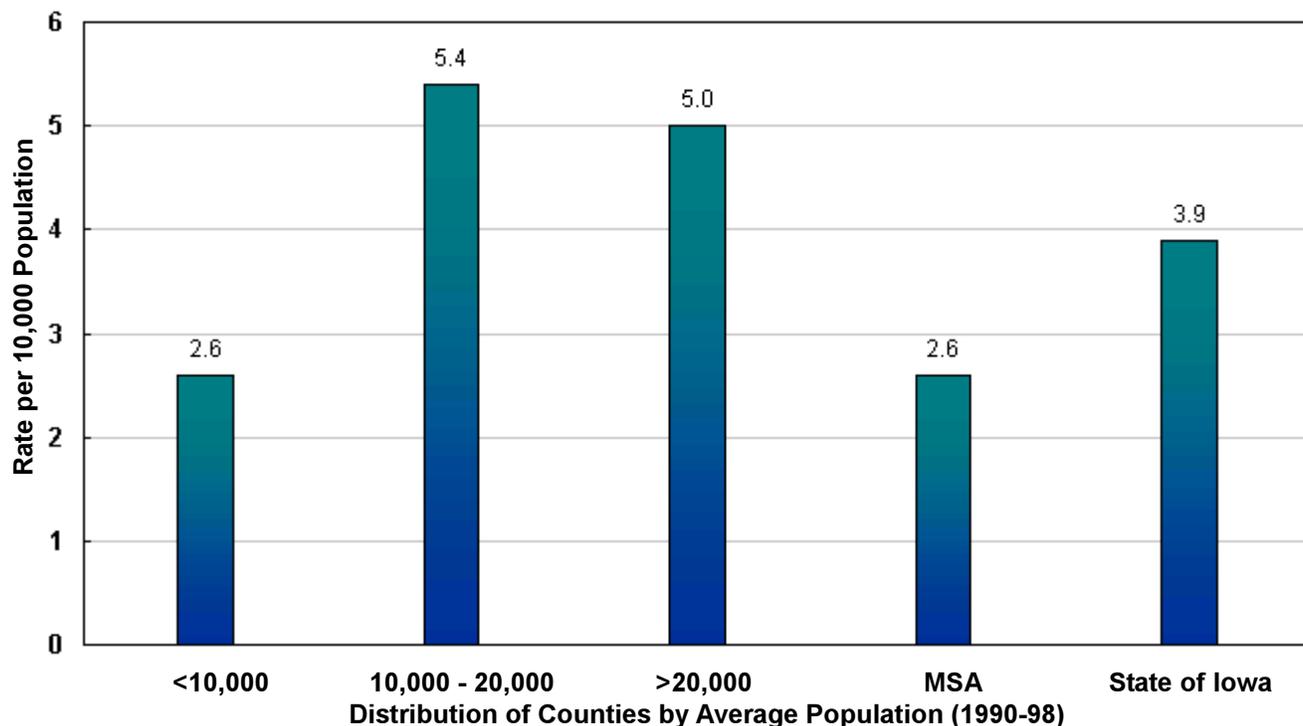
Source: Iowa Department of  
Inspections and Appeals

## Beds in Residential Care Facilities for the Mentally Retarded 2001

### Crude Rates per 10,000 Population



### Crude Rates



### 3-5 Bed Units for the Mentally Retarded 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	38	0.1

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	0	*	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	0	*	Ringgold	0	*
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	1	1.0	Wayne	1	1.5
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	2					
Crude:	0.1					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	1	0.7	Henry	0	*
	Appanoose	0	*	Humboldt	1	1.0
	Buena Vista	0	*	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	0	*	Jones	0	*
	Cass	0	*	Keokuk	0	*
	Cedar	0	*	Kossuth	0	*
	Cherokee	0	*	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	0	*	Madison	0	*
	Clayton	0	*	Mills	0	*
	Crawford	0	*	Mitchell	0	*
	Delaware	0	*	Monona	0	*
	Dickinson	0	*	Montgomery	0	*
	Emmet	0	*	O'Brien	0	*
	Floyd	0	*	Page	0	*
	Franklin	0	*	Palo Alto	0	*
	Greene	0	*	Poweshiek	0	*
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	0	*
Hamilton	0	*	Tama	0	*	
Hancock	0	*	Union	0	*	
Hardin	0	*	Winnebago	0	*	
Harrison	0	*	Wright	0	*	
<b>Group Totals</b>						
Number:	2					
Crude:	*					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	0	*
	Boone	0	*	Marion	0	*
	Bremer	0	*	Marshall	0	*
	Buchanan	0	*	Muscatine	0	*
	Carroll	1	0.5	Plymouth	0	*
	Cerro Gordo	0	*	Sioux	0	*
	Clinton	2	0.4	Story	0	*
	Des Moines	0	*	Wapello	1	0.3
	Fayette	1	0.5	Washington	0	*
	Jackson	0	*	Webster	2	0.5
	Jasper	0	*	Winneshek	1	0.5
	Lee	0	*			
	<b>Group Totals</b>					
Number:	8					
Crude:	0.1					

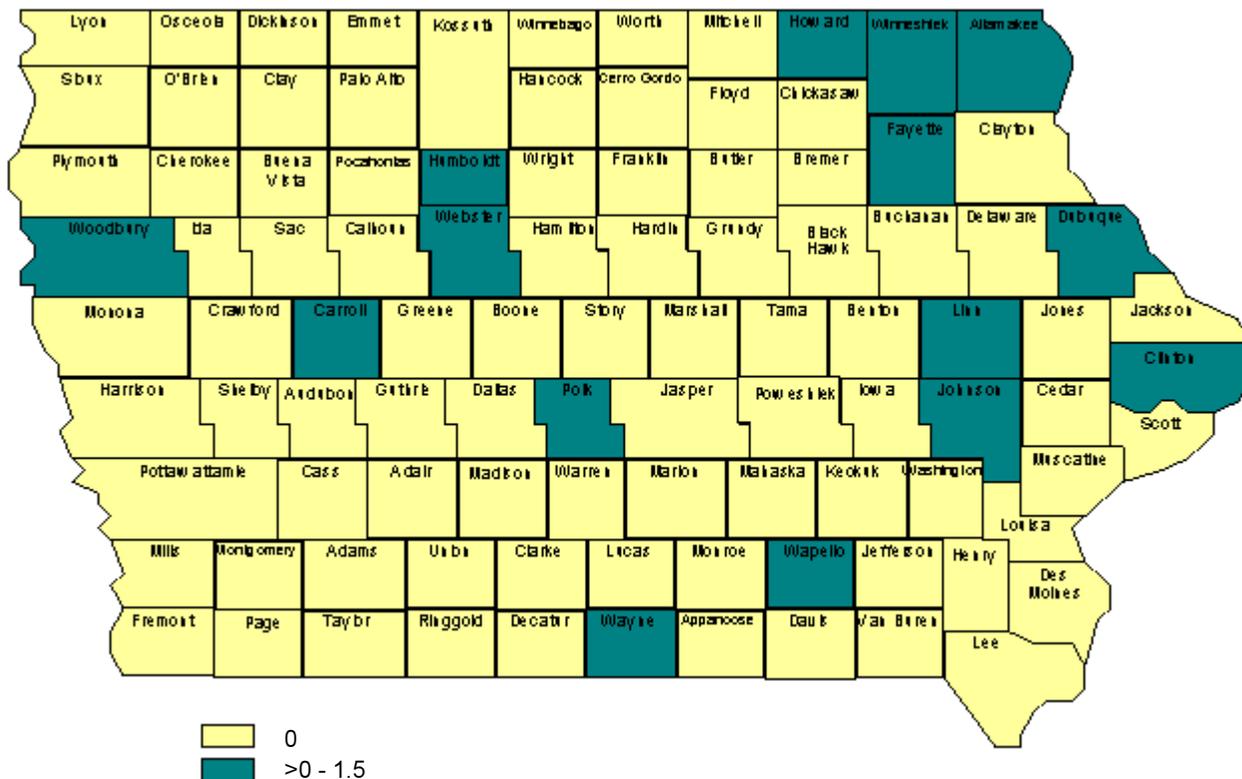
	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	0	*	Polk	5	0.1
	Dallas	0	*	Pottawattamie	0	*
	Dubuque	13	1.5	Scott	0	*
	Johnson	1	0.1	Warren	0	*
	Linn	1	0.1	Woodbury	6	0.6
	<b>Group Totals</b>					
Number:	26					
Crude:	0.2					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

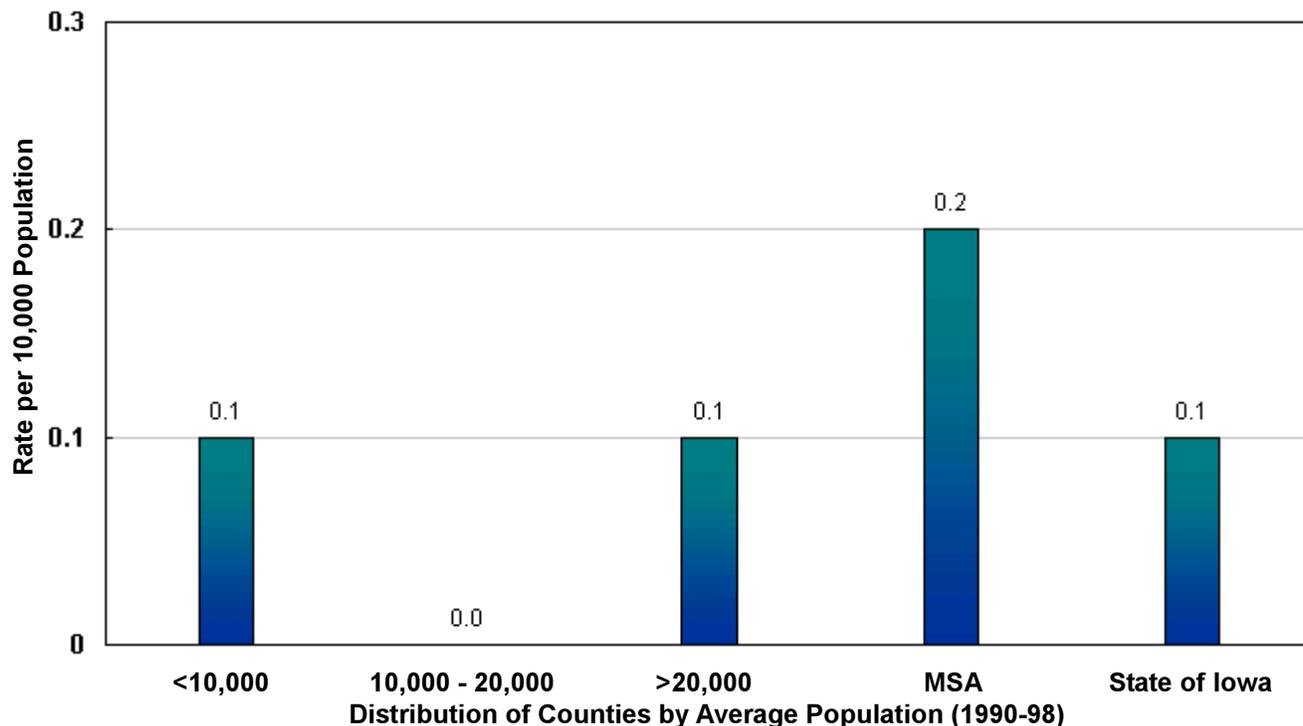
Source: Iowa Department of Inspections and Appeals

### 3-5 Bed Units for the Mentally Retarded 2001

#### Crude Rates per 10,000 Population



#### Crude Rates



## Beds in 3-5 Bed Units for the Mentally Retarded - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	189	0.6

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	0	*	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	0	*	Ringgold	0	*
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	5	5.0	Wayne	5	7.4
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	10					
Crude:	0.7					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	5	3.4	Henry	0	*
	Appanoose	0	*	Humboldt	5	4.8
	Buena Vista	0	*	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	0	*	Jones	0	*
	Cass	0	*	Keokuk	0	*
	Cedar	0	*	Kossuth	0	*
	Cherokee	0	*	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	0	*	Madison	0	*
	Clayton	0	*	Mills	0	*
	Crawford	0	*	Mitchell	0	*
	Delaware	0	*	Monona	0	*
	Dickinson	0	*	Montgomery	0	*
	Emmet	0	*	O'Brien	0	*
	Floyd	0	*	Page	0	*
	Franklin	0	*	Palo Alto	0	*
	Greene	0	*	Poweshiek	0	*
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	0	*
Hamilton	0	*	Tama	0	*	
Hancock	0	*	Union	0	*	
Hardin	0	*	Winnebago	0	*	
Harrison	0	*	Wright	0	*	
<b>Group Totals</b>						
Number:	10					
Crude:	0.1					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	0	*
	Boone	0	*	Marion	0	*
	Bremer	0	*	Marshall	0	*
	Buchanan	0	*	Muscatine	0	*
	Carroll	5	2.3	Plymouth	0	*
	Cerro Gordo	0	*	Sioux	0	*
	Clinton	10	2.0	Story	0	*
	Des Moines	0	*	Wapello	5	1.4
	Fayette	5	2.3	Washington	0	*
	Jackson	0	*	Webster	10	2.5
	Jasper	0	*	Winneshek	5	2.3
	Lee	0	*			
	<b>Group Totals</b>					
Number:	40					
Crude:	0.5					

	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	0	*	Polk	24	0.6
	Dallas	0	*	Pottawattamie	0	*
	Dubuque	65	7.3	Scott	0	*
	Johnson	5	0.5	Warren	0	*
	Linn	5	0.3	Woodbury	30	2.9
<b>Group Totals</b>						
Number:	129					
Crude:	1.0					

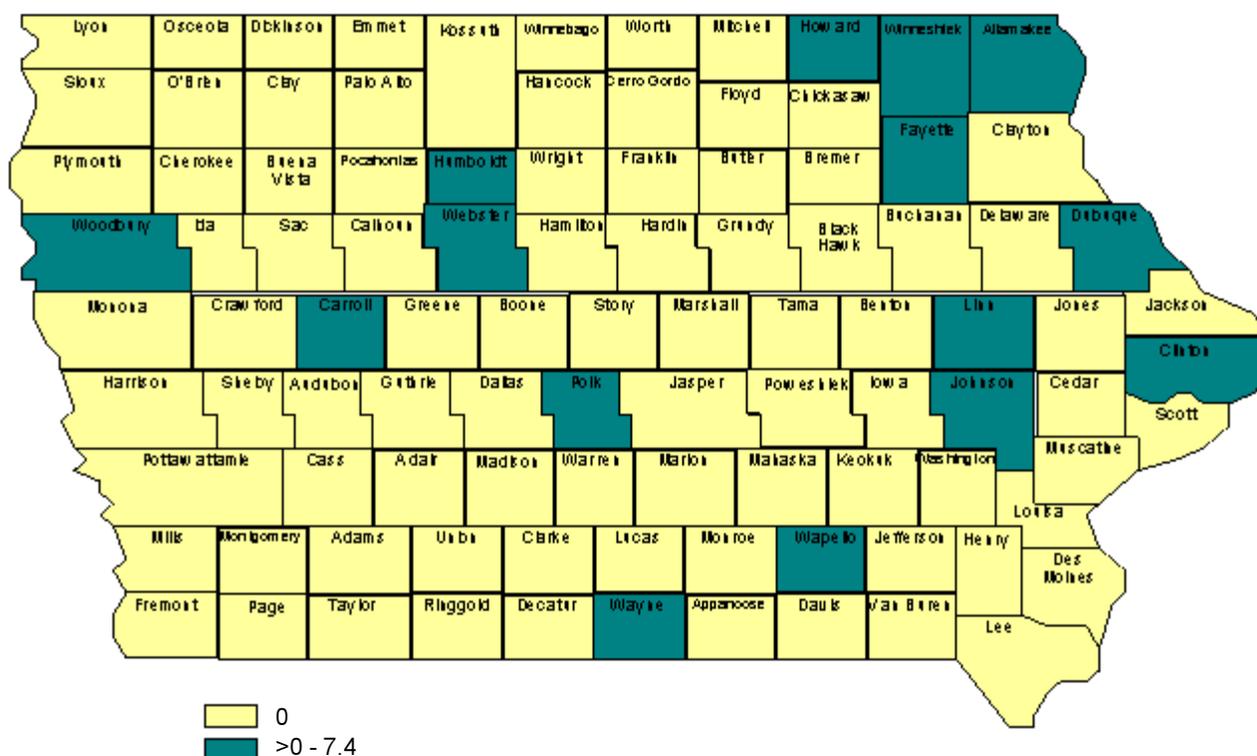
<sup>1</sup>Rates per 10,000 population

\*Crude rate less than 0.05

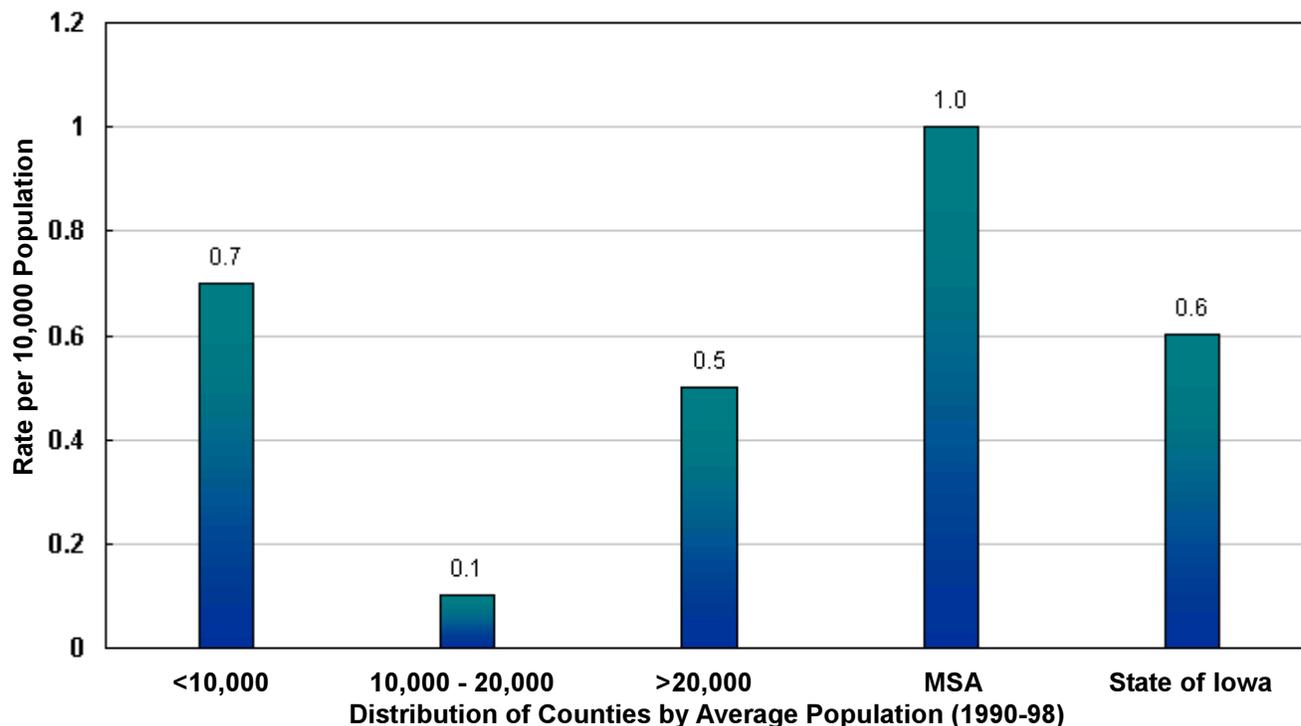
Source: Iowa Department of Inspections and Appeals

## Beds in 3-5 Bed Units for the Mentally Retarded 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Psychiatric Medical Institutions for Children - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	31	0.1

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	0	*	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	0	*	Ringgold	0	*
	Decatur	1	1.2	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	1					
Crude:	0.1					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	0	*
	Appanoose	0	*	Humboldt	0	*
	Buena Vista	0	*	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	0	*	Jones	0	*
	Cass	0	*	Keokuk	0	*
	Cedar	0	*	Kossuth	0	*
	Cherokee	0	*	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	0	*	Madison	0	*
	Clayton	0	*	Mills	1	0.7
	Crawford	0	*	Mitchell	0	*
	Delaware	0	*	Monona	0	*
	Dickinson	0	*	Montgomery	0	*
	Emmet	0	*	O'Brien	0	*
	Floyd	0	*	Page	0	*
	Franklin	0	*	Palo Alto	0	*
	Greene	0	*	Poweshiek	0	*
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	0	*
Hamilton	0	*	Tama	0	*	
Hancock	0	*	Union	0	*	
Hardin	0	*	Winnebago	0	*	
Harrison	0	*	Wright	0	*	

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	0	*
	Boone	0	*	Marion	0	*
	Bremer	0	*	Marshall	0	*
	Buchanan	1	0.5	Muscatine	0	*
	Carroll	0	*	Plymouth	0	*
	Cerro Gordo	3	0.6	Sioux	0	*
	Clinton	0	*	Story	2	0.3
	Des Moines	0	*	Wapello	0	*
	Fayette	0	*	Washington	0	*
	Jackson	0	*	Webster	0	*
	Jasper	0	*	Winneshek	0	*
	Lee	0	*			

	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	0	*	Polk	6	0.2
	Dallas	0	*	Pottawattamie	4	0.5
	Dubuque	1	0.1	Scott	0	*
	Johnson	0	*	Warren	0	*
	Linn	7	0.4	Woodbury	5	0.5
	<b>Group Totals</b>					
Number:	23					
Crude:	0.2					

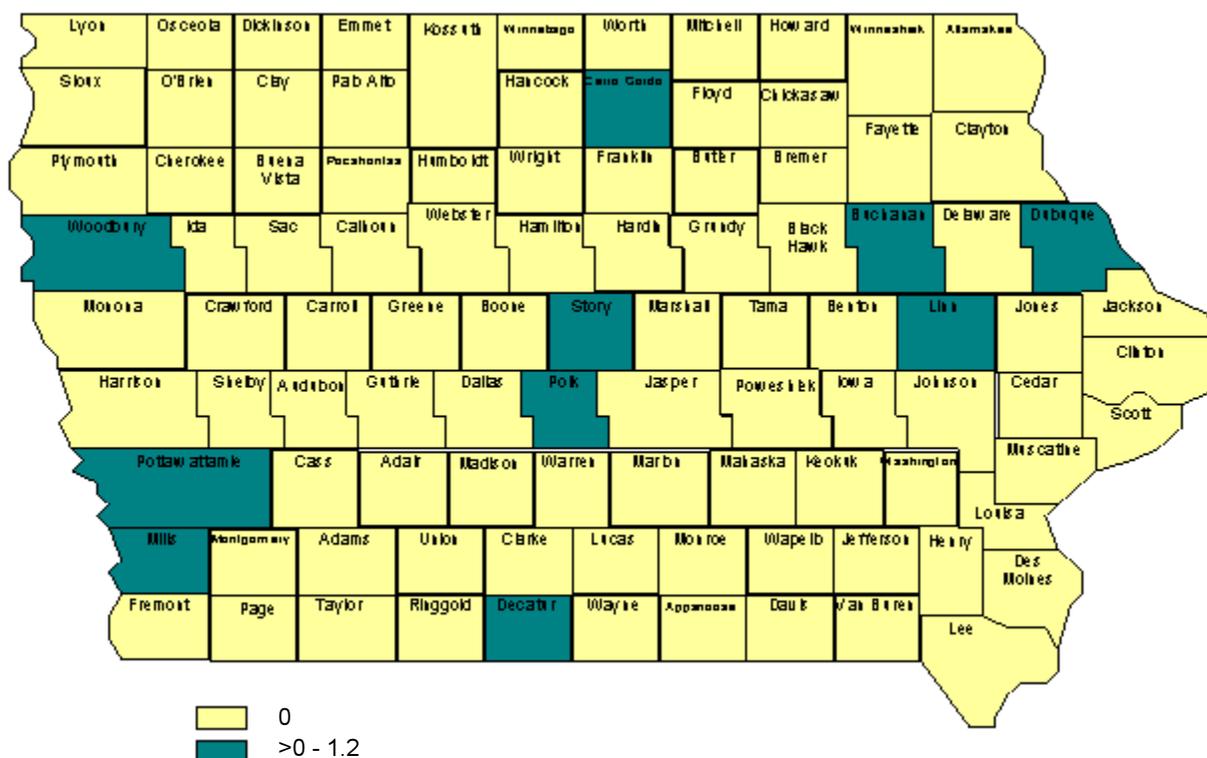
<sup>1</sup>Rates per 10,000 population

\*Crude rate less than 0.05

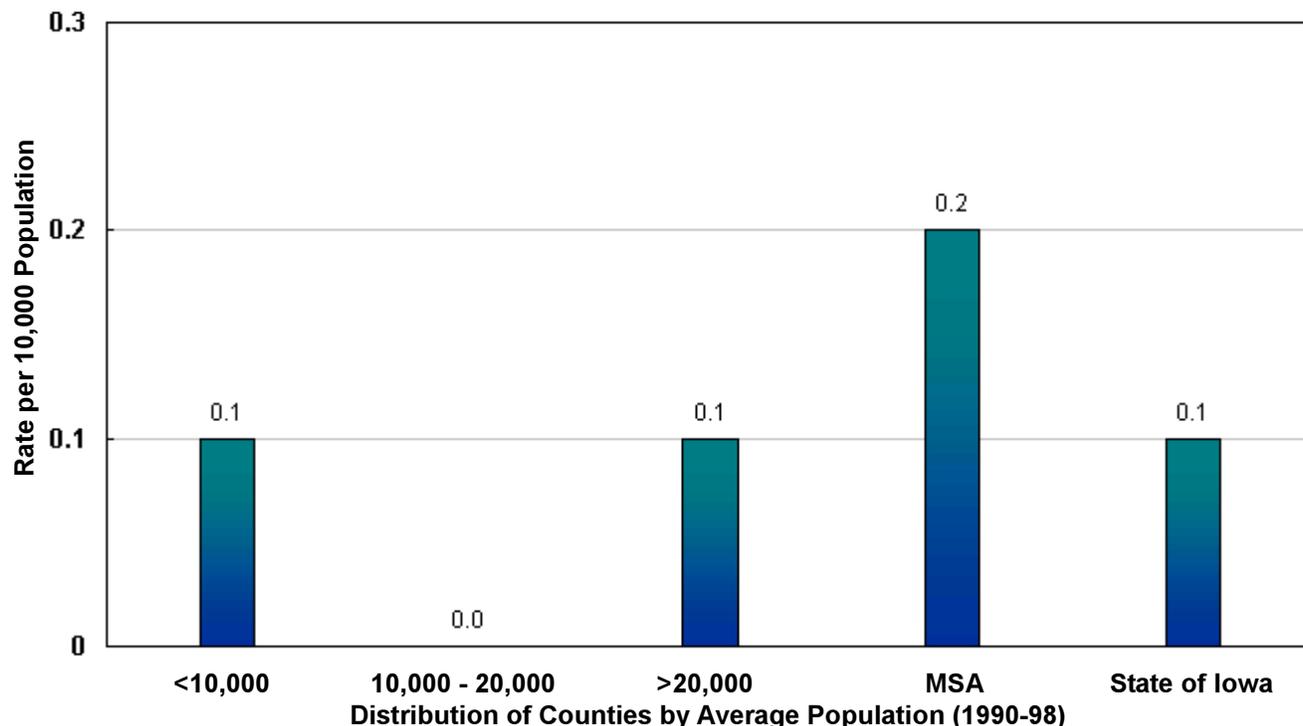
Source: Iowa Department of Inspections and Appeals

## Psychiatric Medical Institutions for Children 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Beds in Psychiatric Medical Institutions for Children - 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	548	1.9

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	0	*	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	0	*	Ringgold	0	*
	Decatur	13	15.0	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	13					
Crude:	0.9					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	0	*
	Appanoose	0	*	Humboldt	0	*
	Buena Vista	0	*	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	0	*	Jones	0	*
	Cass	0	*	Keokuk	0	*
	Cedar	0	*	Kossuth	0	*
	Cherokee	0	*	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	0	*	Madison	0	*
	Clayton	0	*	Mills	15	10.3
	Crawford	0	*	Mitchell	0	*
	Delaware	0	*	Monona	0	*
	Dickinson	0	*	Montgomery	0	*
	Emmet	0	*	O'Brien	0	*
	Floyd	0	*	Page	0	*
	Franklin	0	*	Palo Alto	0	*
	Greene	0	*	Poweshiek	0	*
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	0	*
Hamilton	0	*	Tama	0	*	
Hancock	0	*	Union	0	*	
Hardin	0	*	Winnebago	0	*	
Harrison	0	*	Wright	0	*	
<b>Group Totals</b>						
Number:	15					
Crude:	0.2					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	0	*
	Boone	0	*	Marion	0	*
	Bremer	0	*	Marshall	0	*
	Buchanan	30	14.2	Muscatine	0	*
	Carroll	0	*	Plymouth	0	*
	Cerro Gordo	46	9.9	Sioux	0	*
	Clinton	0	*	Story	37	4.6
	Des Moines	0	*	Wapello	0	*
	Fayette	0	*	Washington	0	*
	Jackson	0	*	Webster	0	*
	Jasper	0	*	Winneshek	0	*
	Lee	0	*			
	<b>Group Totals</b>					
Number:	113					
Crude:	1.5					

	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	0	*	Polk	129	3.4
	Dallas	0	*	Pottawattamie	43	4.9
	Dubuque	12	1.3	Scott	0	*
	Johnson	0	*	Warren	0	*
	Linn	108	5.6	Woodbury	115	11.1
	<b>Group Totals</b>					
Number:	407					
Crude:	3.1					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

Source: Iowa Department of Inspections and Appeals



# Community Trauma Care Facilities 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	83	0.3

	County			County		
	Number	Crude <sup>1</sup>		Number	Crude <sup>1</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	1	1.2	Lucas	1	1.1
	Adams	1	2.2	Monroe	1	1.2
	Audubon	1	1.5	Osceola	1	1.4
	Clarke	1	1.1	Pocahontas	1	1.2
	Davis	1	1.2	Ringgold	1	1.8
	Decatur	1	1.2	Taylor	0	*
	Fremont	1	1.2	Van Buren	1	1.3
	Howard	1	1.0	Wayne	1	1.5
	Ida	1	1.3	Worth	0	*
	<b>Group Totals</b>					
Number:	16					
Crude:	1.1					

	County			County		
	Number	Crude		Number	Crude	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	1	0.7	Henry	0	*
	Appanoose	1	0.7	Humboldt	1	1.0
	Buena Vista	1	0.5	Iowa	1	0.6
	Butler	0	*	Jefferson	1	0.6
	Calhoun	0	*	Jones	1	0.5
	Cass	1	0.7	Keokuk	1	0.9
	Cedar	0	*	Kossuth	1	0.6
	Cherokee	1	0.8	Louisa	0	*
	Chickasaw	1	0.8	Lyon	1	0.9
	Clay	1	0.6	Madison	1	0.7
	Clayton	2	1.1	Mills	0	*
	Crawford	1	0.6	Mitchell	1	0.9
	Delaware	1	0.5	Monona	1	1.0
	Dickinson	1	0.6	Montgomery	1	0.8
	Emmet	1	0.9	O'Brien	2	1.3
	Floyd	1	0.6	Page	2	1.2
	Franklin	1	0.9	Palo Alto	1	1.0
	Greene	1	1.0	Poweshiek	0	*
	Grundy	1	0.8	Sac	1	0.9
	Guthrie	1	0.9	Shelby	1	0.8
Hamilton	1	0.6	Tama	0	*	
Hancock	1	0.8	Union	1	0.8	
Hardin	1	0.5	Winnebago	0	*	
Harrison	1	0.6	Wright	2	1.4	
<b>Group Totals</b>						
Number:	43					
Crude:	0.6					

	County			County		
	Number	Crude		Number	Crude	
<b>Counties with Average Population &gt;20,000</b>	Benton	1	0.4	Mahaska	0	*
	Boone	1	0.4	Marion	1	0.3
	Bremer	2	0.9	Marshall	0	*
	Buchanan	1	0.5	Muscatine	0	*
	Carroll	1	0.5	Plymouth	1	0.4
	Cerro Gordo	0	*	Sioux	4	1.3
	Clinton	2	0.4	Story	1	0.1
	Des Moines	0	*	Wapello	0	*
	Fayette	2	0.9	Washington	1	0.5
	Jackson	1	0.5	Webster	0	*
	Jasper	0	*	Winneshek	1	0.5
	Lee	0	*			
	<b>Group Totals</b>					
Number:	20					
Crude:	0.3					

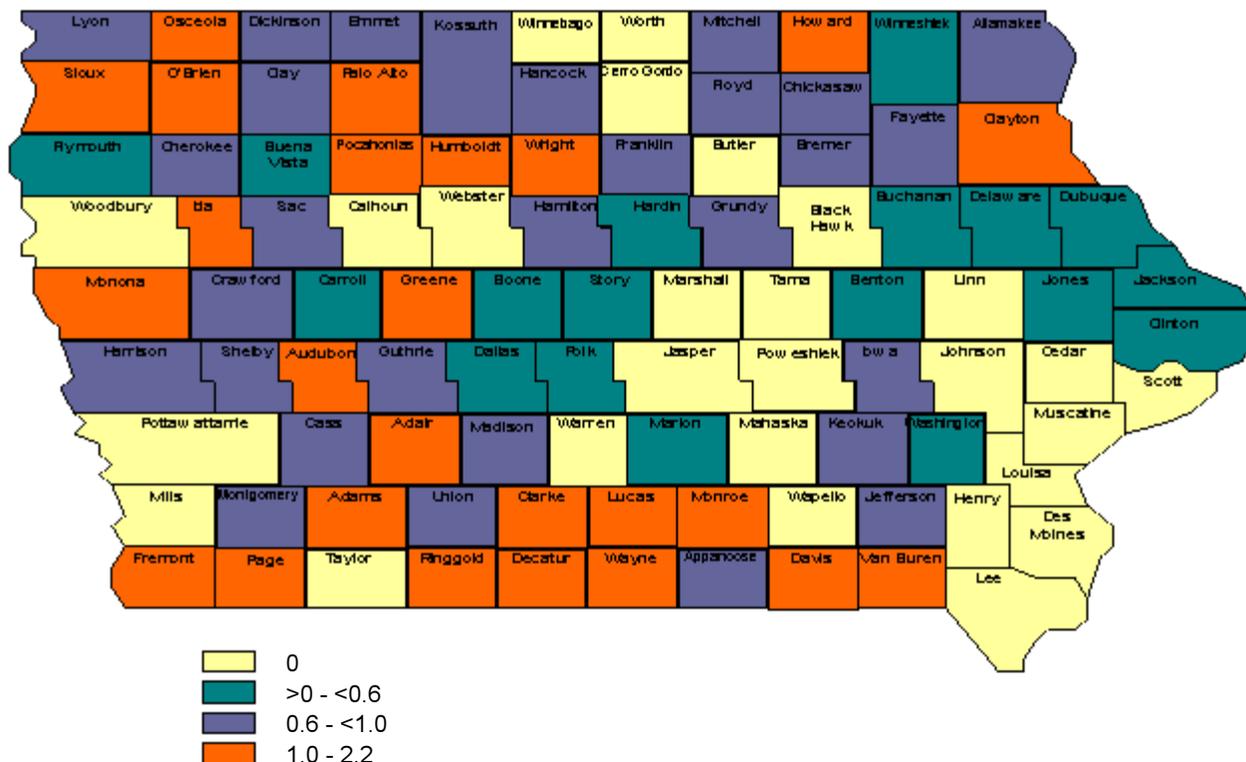
	County			County		
	Number	Crude		Number	Crude	
<b>MSA Counties</b>	Black Hawk	0	*	Polk	2	0.1
	Dallas	1	0.2	Pottawattamie	0	*
	Dubuque	1	0.1	Scott	0	*
	Johnson	0	*	Warren	0	*
	Linn	0	*	Woodbury	0	*
<b>Group Totals</b>						
Number:	4					
Crude:	*					

<sup>1</sup>Rates per 10,000 population  
\*Crude rate less than 0.05

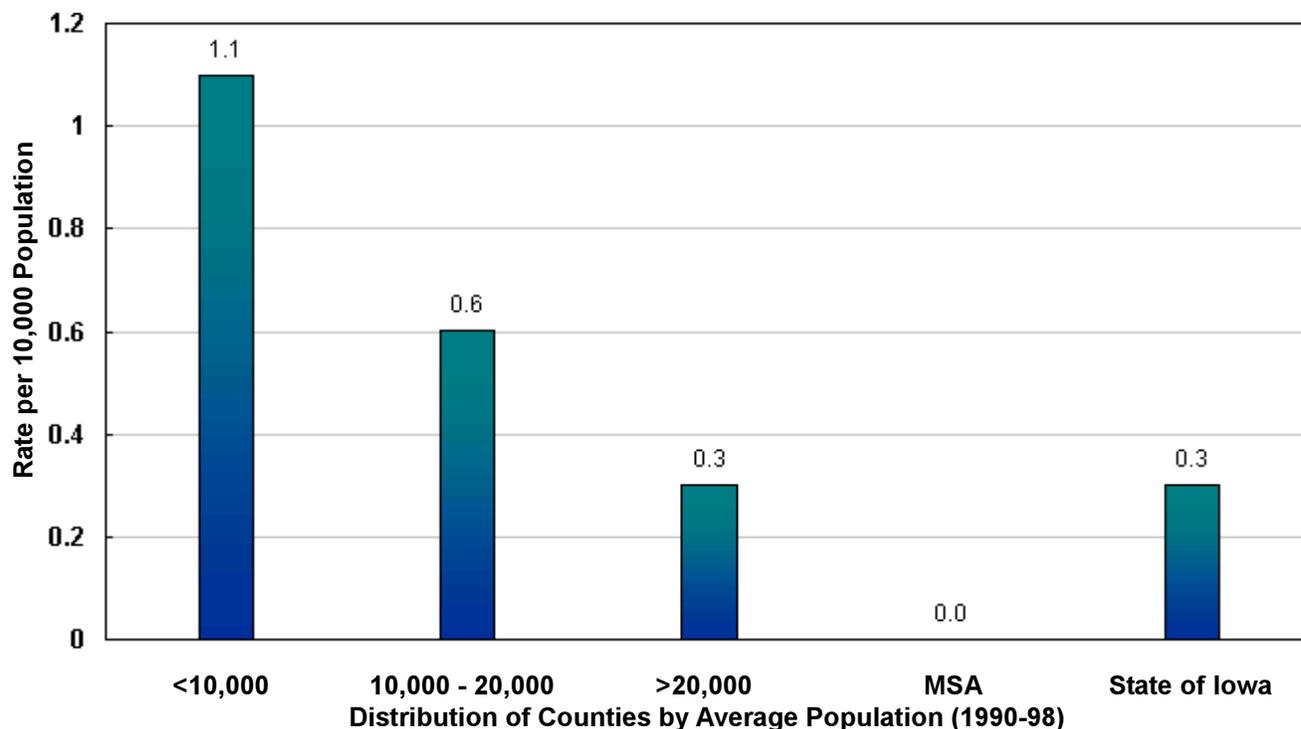
Source: Iowa Department of Inspections and Appeals

# Community Trauma Care Facilities 2001

## Crude Rates per 10,000 Population



## Crude Rates



## Area Trauma Care Facilities 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	22	0.1

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	0	*	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	0	*	Ringgold	0	*
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	0					
Crude:	*					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	1	0.5
	Appanoose	0	*	Humboldt	0	*
	Buena Vista	0	*	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	1	0.9	Jones	0	*
	Cass	0	*	Keokuk	0	*
	Cedar	0	*	Kossuth	0	*
	Cherokee	0	*	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	0	*	Madison	0	*
	Clayton	0	*	Mills	0	*
	Crawford	0	*	Mitchell	0	*
	Delaware	0	*	Monona	0	*
	Dickinson	0	*	Montgomery	0	*
	Emmet	0	*	O'Brien	0	*
	Floyd	0	*	Page	0	*
	Franklin	0	*	Palo Alto	0	*
	Greene	0	*	Poweshiek	1	0.5
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	0	*
Hamilton	0	*	Tama	0	*	
Hancock	0	*	Union	0	*	
Hardin	0	*	Winnebago	0	*	
Harrison	0	*	Wright	0	*	
<b>Group Totals</b>						
Number:	3					
Crude:	*					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	1	0.4
	Boone	0	*	Marion	1	0.3
	Bremer	0	*	Marshall	1	0.3
	Buchanan	0	*	Muscatine	1	0.2
	Carroll	1	0.5	Plymouth	0	*
	Cerro Gordo	0	*	Sioux	0	*
	Clinton	0	*	Story	1	0.1
	Des Moines	1	0.2	Wapello	1	0.3
	Fayette	0	*	Washington	0	*
	Jackson	0	*	Webster	1	0.2
	Jasper	1	0.3	Winneshek	0	*
	Lee	2	0.5			
	<b>Group Totals</b>					
Number:	12					
Crude:	0.2					

	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	1	0.1	Polk	1	*
	Dallas	0	*	Pottawattamie	2	0.2
	Dubuque	0	*	Scott	1	0.1
	Johnson	1	0.1	Warren	0	*
	Linn	0	*	Woodbury	1	0.1
<b>Group Totals</b>						
Number:	7					
Crude:	0.1					

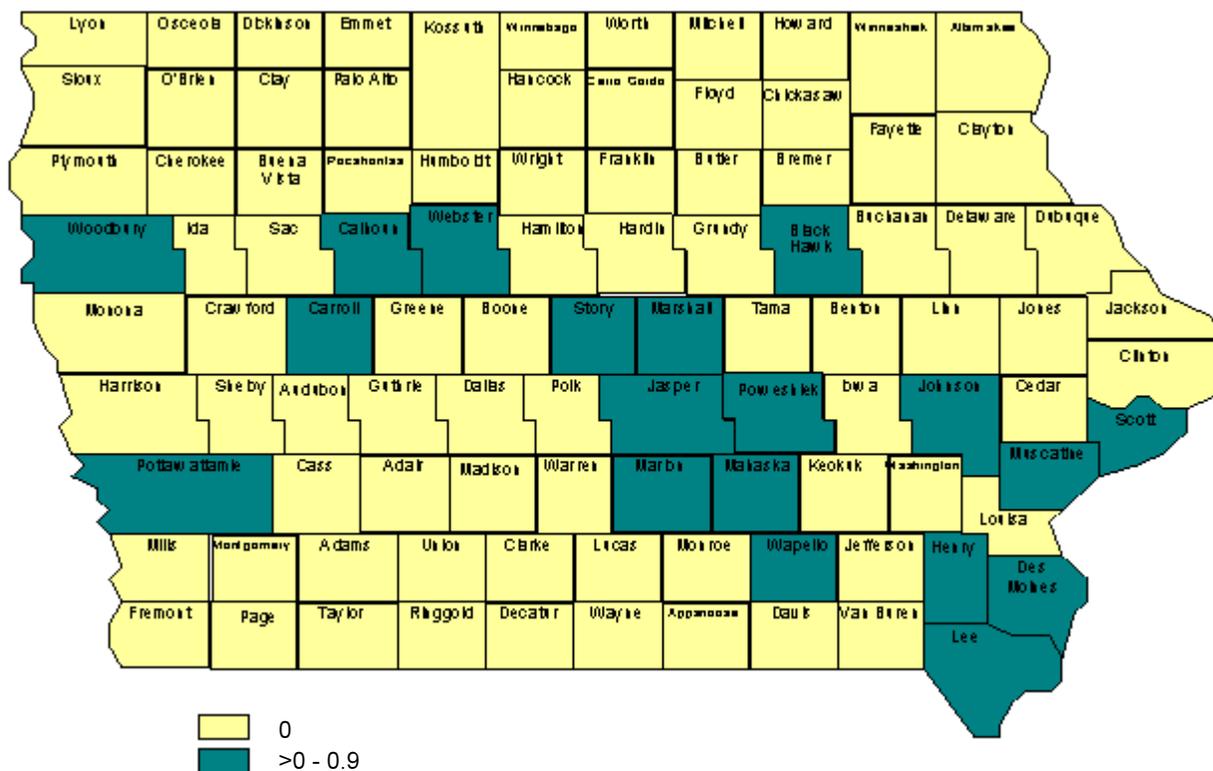
<sup>1</sup>Rates per 10,000 population

\*Crude rate less than 0.05

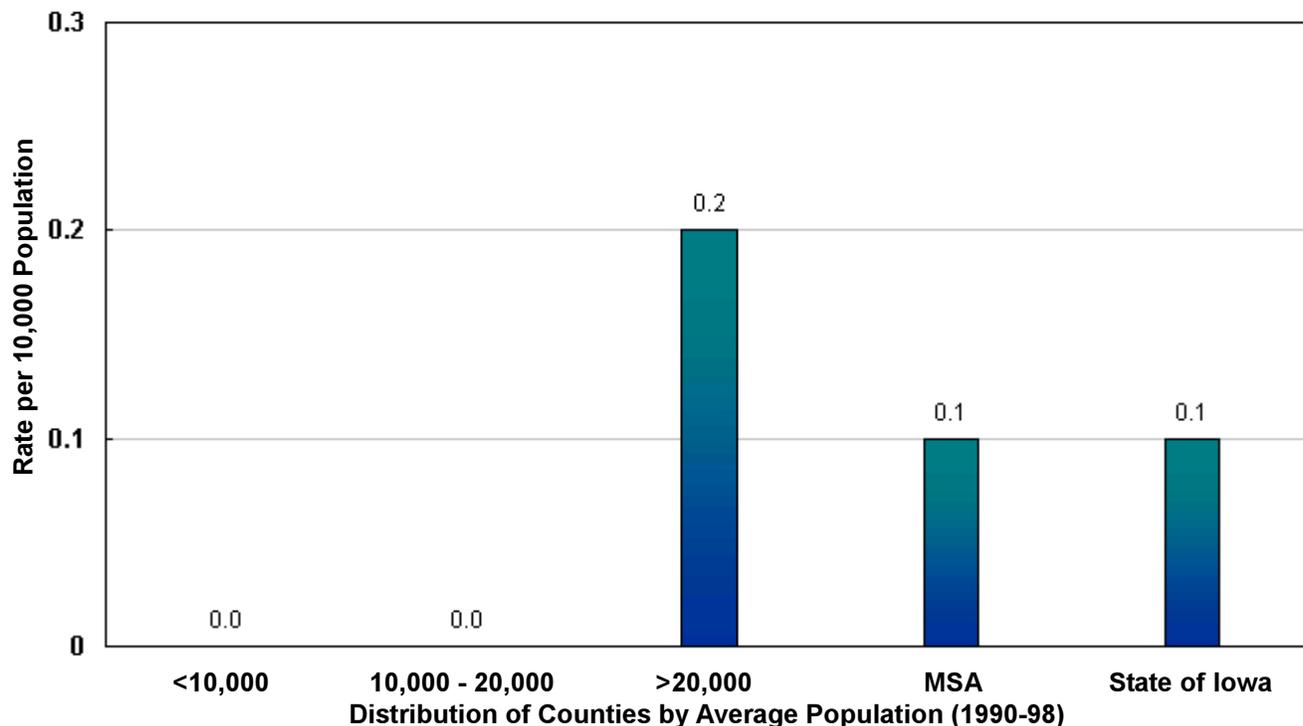
Source: Iowa Department of Inspections and Appeals

## Area Trauma Care Facilities 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Regional Trauma Care Facilities 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	10	*

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	0	*	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	0	*	Ringgold	0	*
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	0					
Crude:	*					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	0	*
	Appanoose	0	*	Humboldt	0	*
	Buena Vista	0	*	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	0	*	Jones	0	*
	Cass	0	*	Keokuk	0	*
	Cedar	0	*	Kossuth	0	*
	Cherokee	0	*	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	0	*	Madison	0	*
	Clayton	0	*	Mills	0	*
	Crawford	0	*	Mitchell	0	*
	Delaware	0	*	Monona	0	*
	Dickinson	0	*	Montgomery	0	*
	Emmet	0	*	O'Brien	0	*
	Floyd	0	*	Page	0	*
	Franklin	0	*	Palo Alto	0	*
	Greene	0	*	Poweshiek	0	*
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	0	*
Hamilton	0	*	Tama	0	*	
Hancock	0	*	Union	0	*	
Hardin	0	*	Winnebago	0	*	
Harrison	0	*	Wright	0	*	

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	0	*
	Boone	0	*	Marion	0	*
	Bremer	0	*	Marshall	0	*
	Buchanan	0	*	Muscatine	0	*
	Carroll	0	*	Plymouth	0	*
	Cerro Gordo	1	0.2	Sioux	0	*
	Clinton	0	*	Story	0	*
	Des Moines	0	*	Wapello	0	*
	Fayette	0	*	Washington	0	*
	Jackson	0	*	Webster	0	*
	Jasper	0	*	Winneshek	0	*
	Lee	0	*			

	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	2	0.2	Polk	1	*
	Dallas	0	*	Pottawattamie	0	*
	Dubuque	2	0.2	Scott	1	0.1
	Johnson	0	*	Warren	0	*
	Linn	2	0.1	Woodbury	1	0.1
	<b>Group Totals</b>					
Number:	9					
Crude:	0.1					

<sup>1</sup>Rates per 10,000 population

\*Crude rate less than 0.05

Source: Iowa Department of Inspections and Appeals



## ResourceTrauma Care Facilities 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	2	*

	County	Number	Crude <sup>1</sup>	County	Number	Crude <sup>1</sup>
<b>Counties with Average Population &lt;10,000</b>	Adair	0	*	Lucas	0	*
	Adams	0	*	Monroe	0	*
	Audubon	0	*	Osceola	0	*
	Clarke	0	*	Pocahontas	0	*
	Davis	0	*	Ringgold	0	*
	Decatur	0	*	Taylor	0	*
	Fremont	0	*	Van Buren	0	*
	Howard	0	*	Wayne	0	*
	Ida	0	*	Worth	0	*
	<b>Group Totals</b>					
Number:	0					
Crude:	*					

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	0	*	Henry	0	*
	Appanoose	0	*	Humboldt	0	*
	Buena Vista	0	*	Iowa	0	*
	Butler	0	*	Jefferson	0	*
	Calhoun	0	*	Jones	0	*
	Cass	0	*	Keokuk	0	*
	Cedar	0	*	Kossuth	0	*
	Cherokee	0	*	Louisa	0	*
	Chickasaw	0	*	Lyon	0	*
	Clay	0	*	Madison	0	*
	Clayton	0	*	Mills	0	*
	Crawford	0	*	Mitchell	0	*
	Delaware	0	*	Monona	0	*
	Dickinson	0	*	Montgomery	0	*
	Emmet	0	*	O'Brien	0	*
	Floyd	0	*	Page	0	*
	Franklin	0	*	Palo Alto	0	*
	Greene	0	*	Poweshiek	0	*
	Grundy	0	*	Sac	0	*
	Guthrie	0	*	Shelby	0	*
Hamilton	0	*	Tama	0	*	
Hancock	0	*	Union	0	*	
Hardin	0	*	Winnebago	0	*	
Harrison	0	*	Wright	0	*	

	County	Number	Crude	County	Number	Crude
<b>Counties with Average Population &gt;20,000</b>	Benton	0	*	Mahaska	0	*
	Boone	0	*	Marion	0	*
	Bremer	0	*	Marshall	0	*
	Buchanan	0	*	Muscatine	0	*
	Carroll	0	*	Plymouth	0	*
	Cerro Gordo	0	*	Sioux	0	*
	Clinton	0	*	Story	0	*
	Des Moines	0	*	Wapello	0	*
	Fayette	0	*	Washington	0	*
	Jackson	0	*	Webster	0	*
	Jasper	0	*	Winneshek	0	*
	Lee	0	*			

	County	Number	Crude	County	Number	Crude
<b>MSA Counties</b>	Black Hawk	0	*	Polk	1	*
	Dallas	0	*	Pottawattamie	0	*
	Dubuque	0	*	Scott	0	*
	Johnson	1	0.1	Warren	0	*
	Linn	0	*	Woodbury	0	*
<b>Group Totals</b>						
Number:	2					
Crude:	*					

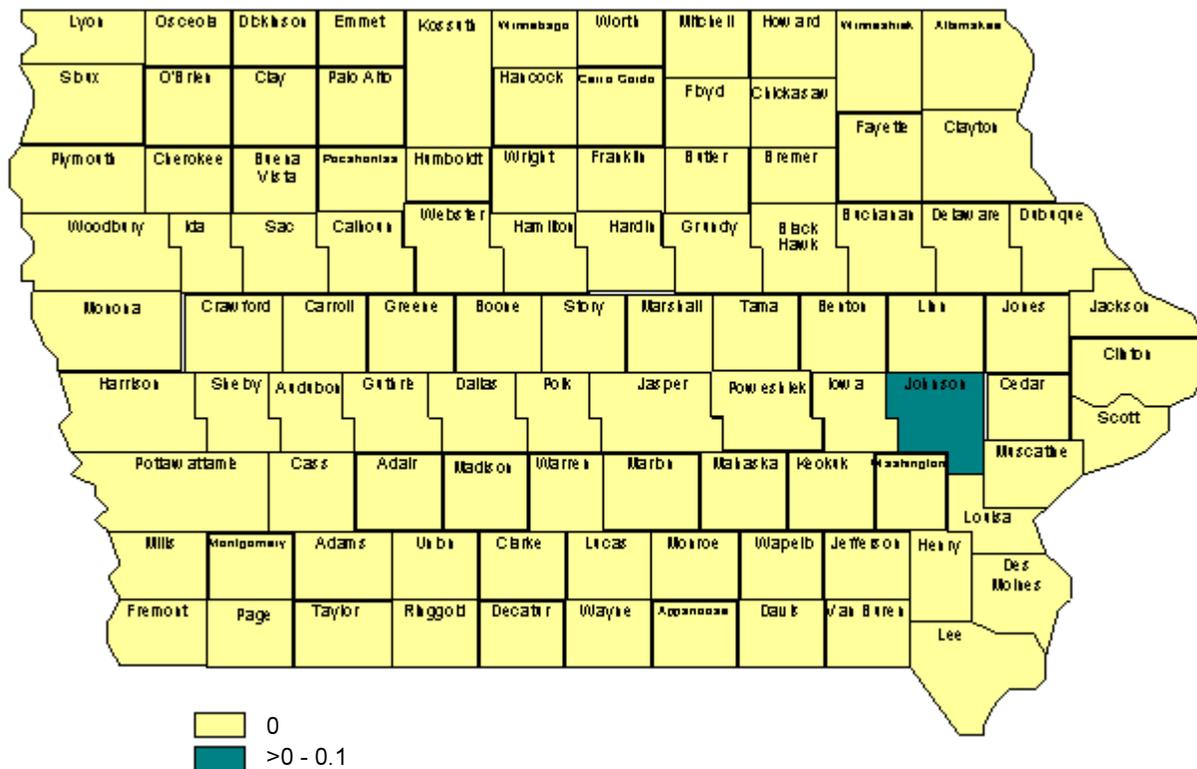
<sup>1</sup>Rates per 10,000 population

\*Crude rate less than 0.05

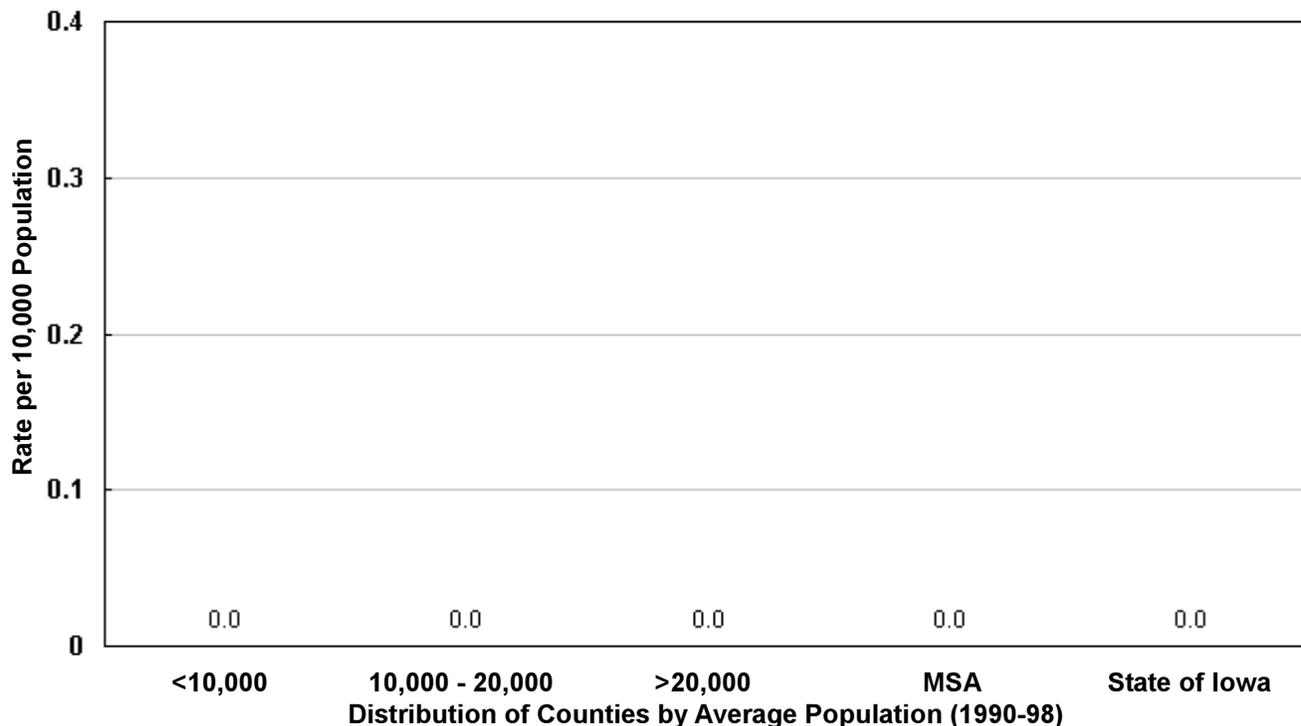
Source: Iowa Department of Inspections and Appeals

## Resource Trauma Care Facilities 2001

### Crude Rates per 10,000 Population



### Crude Rates



## Total Trauma Facilities 2001

TOTAL	Number	Crude <sup>1</sup>
State of Iowa	117	0.4

	County			County		
	Number	Crude <sup>1</sup>		Number	Crude <sup>1</sup>	
<b>Counties with Average Population &lt;10,000</b>	Adair	1	1.2	Lucas	1	1.1
	Adams	1	2.2	Monroe	1	1.2
	Audubon	1	1.5	Osceola	1	1.4
	Clarke	1	1.1	Pocahontas	1	1.2
	Davis	1	1.2	Ringgold	1	1.8
	Decatur	1	1.2	Taylor	0	*
	Fremont	1	1.2	Van Buren	1	1.3
	Howard	1	1.0	Wayne	1	1.5
	Ida	1	1.3	Worth	0	*
	<b>Group Totals</b>					
Number:	16					
Crude:	1.1					

	County			County		
	Number	Crude		Number	Crude	
<b>Counties with Average Population 10,000 to 20,000</b>	Allamakee	1	0.7	Henry	1	0.5
	Appanoose	1	0.7	Humboldt	1	1.0
	Buena Vista	1	0.5	Iowa	1	0.6
	Butler	0	*	Jefferson	1	0.6
	Calhoun	1	0.9	Jones	1	0.5
	Cass	1	0.7	Keokuk	1	0.9
	Cedar	0	*	Kossuth	1	0.6
	Cherokee	1	0.8	Louisa	0	*
	Chickasaw	1	0.8	Lyon	1	0.9
	Clay	1	0.6	Madison	1	0.7
	Clayton	2	1.1	Mills	0	*
	Crawford	1	0.6	Mitchell	1	0.9
	Delaware	1	0.5	Monona	1	1.0
	Dickinson	1	0.6	Montgomery	1	0.8
	Emmet	1	0.9	O'Brien	2	1.3
	Floyd	1	0.6	Page	2	1.2
	Franklin	1	0.9	Palo Alto	1	1.0
	Greene	1	1.0	Poweshiek	1	0.5
	Grundy	1	0.8	Sac	1	0.9
	Guthrie	1	0.9	Shelby	1	0.8
	Hamilton	1	0.6	Tama	0	*
	Hancock	1	0.8	Union	1	0.8
	Hardin	1	0.5	Winnebago	0	*
	Harrison	1	0.6	Wright	2	1.4
<b>Group Totals</b>						
Number:	46					
Crude:	0.7					

	County			County			
	Number	Crude		Number	Crude		
<b>Counties with Average Population &gt;20,000</b>	Benton	1	0.4	Mahaska	1	0.4	
	Boone	1	0.4	Marion	2	0.6	
	Bremer	2	0.9	Marshall	1	0.3	
	Buchanan	1	0.5	Muscatine	1	0.2	
	Carroll	2	0.9	Plymouth	1	0.4	
	Cerro Gordo	1	0.2	Sioux	4	1.3	
	Clinton	2	0.4	Story	2	0.3	
	Des Moines	1	0.2	Wapello	1	0.3	
	Fayette	2	0.9	Washington	1	0.5	
	Jackson	1	0.5	Webster	1	0.2	
	Jasper	1	0.3	Winneshek	1	0.5	
	Lee	2	0.5				
	<b>Group Totals</b>						
	Number:	33					
Crude:	0.4						

	County			County		
	Number	Crude		Number	Crude	
<b>MSA Counties</b>	Black Hawk	3	0.2	Polk	5	0.1
	Dallas	1	0.2	Pottawattamie	2	0.2
	Dubuque	3	0.3	Scott	2	0.1
	Johnson	2	0.2	Warren	0	*
	Linn	2	0.1	Woodbury	2	0.2
	<b>Group Totals</b>					
Number:	22					
Crude:	0.2					

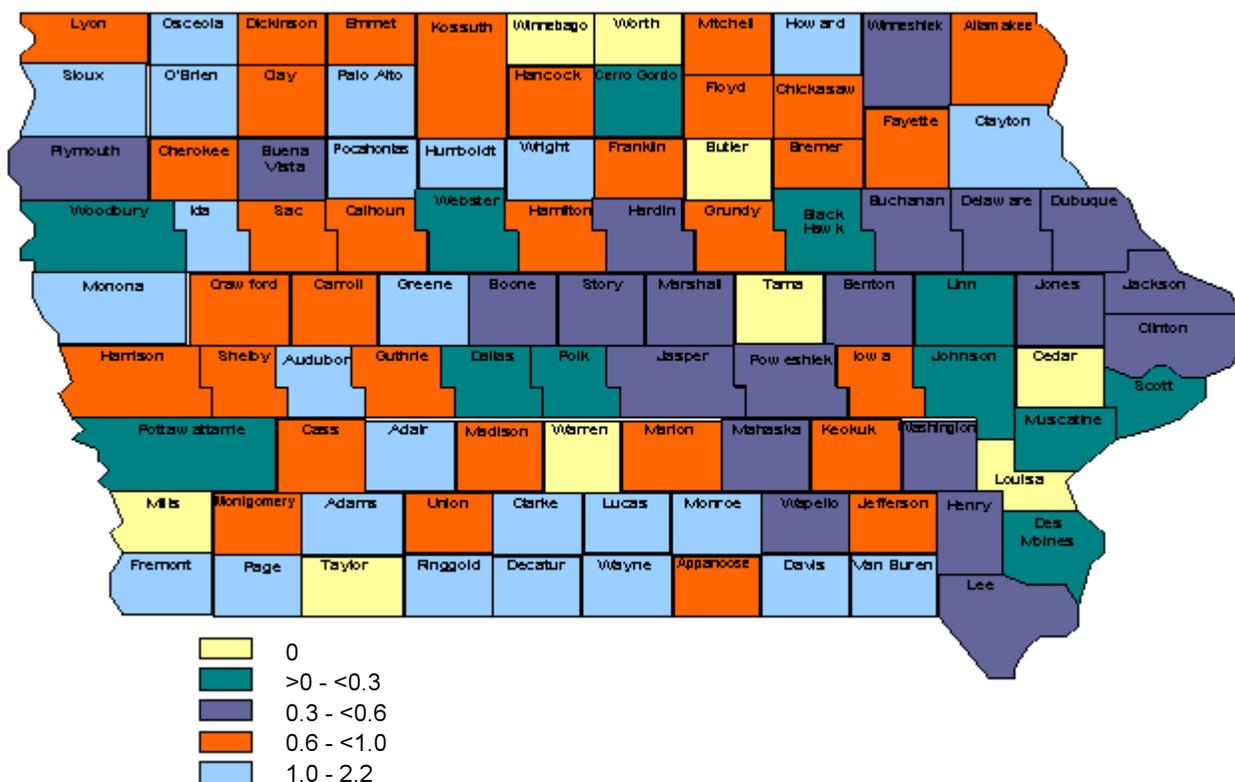
<sup>1</sup>Rates per 10,000 population

\*Crude rate less than 0.05

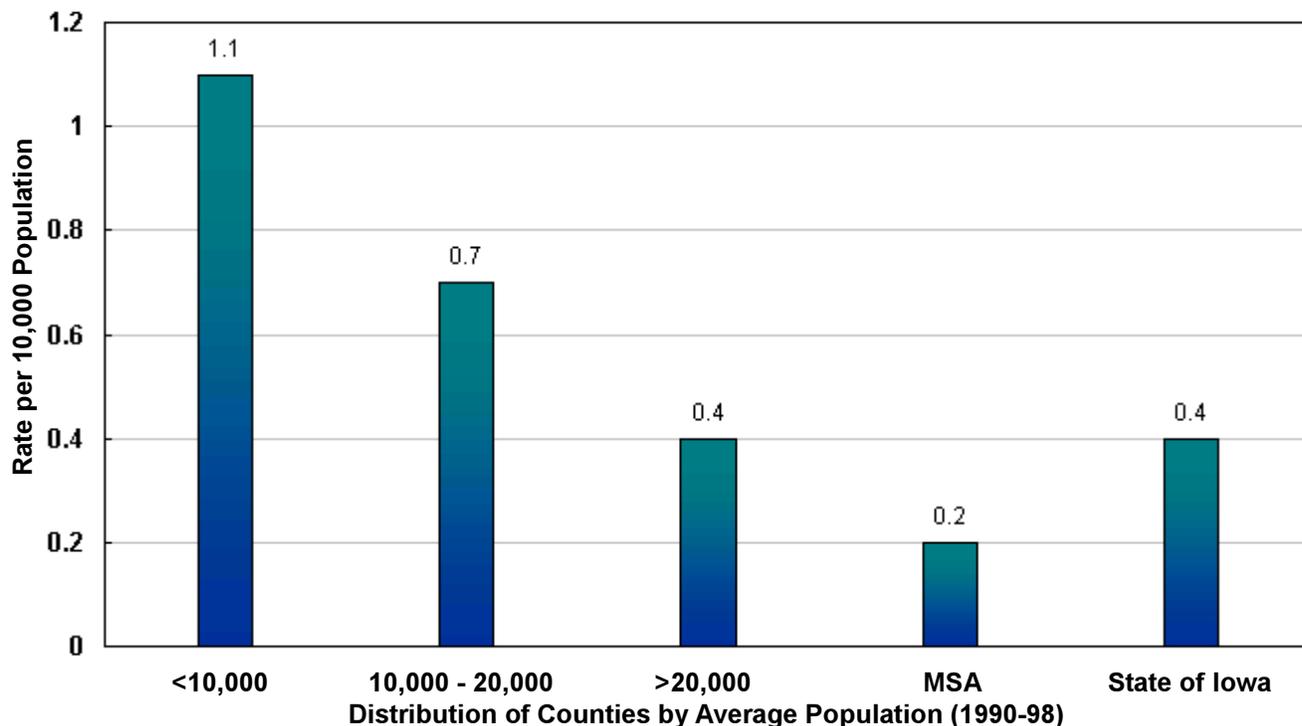
Source: Iowa Department of Inspections and Appeals

## Total Trauma Facilities 2001

### Crude Rates per 10,000 Population



### Crude Rates



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# Appendix I

## Data Sources

**Fact Book Item****Data Source****Introduction**

Healthy People 2010 Leading Health Indicators

<http://www.health.gov/healthypeople/LHI/>**Demographics**State Population Distributions  
Average Annual Population Distribution by Age  
Year 2000 US Standard Million PopulationUS Census Bureau  
Website: <http://www.census.gov>**Health and Social Behaviors**

Behavioral Risk Factor Surveillance System (BRFSS)

Centers for Disease Control & Prevention  
Website: <http://www.cdc.gov/nccdphp/brfss/>Iowa Adult Household Survey of Substance Use  
and Treatment NeedsCenter for Social and Behavioral Research  
The University of Northern Iowa  
Website: <http://csbsnt.csbs.uni.edu/dept/csbr/findings.html>

Iowa Youth Tobacco Survey

Iowa Department of Public Health and  
Consortium for Substance Abuse Research

Iowa Youth Survey

Iowa Department of Public Health and  
Consortium for Substance Abuse Research

Substance Abuse Treatment

Iowa Department of Public Health

Childhood Lead Poisoning

Iowa Department of Public Health  
Bureau of Lead Poisoning PreventionMarriages  
Dissolutions  
Domestic Abuse Cases  
Driving Under the Influence  
Juvenile Arrests  
Juvenile VandalismIowa Department of Public Health  
Vital Statistics**Prenatal and Infant Health**Live Births  
Out-of-Wedlock Births  
Mothers Under Age 20  
Low Birth Weight  
Mothers Who Began Prenatal Care  
in the First Trimester  
Mothers Who Smoked During Pregnancy  
Mothers Who Drank During PregnancyIowa Department of Public Health,  
Vital Statistics, Birth CertificatesFetal Deaths  
Neonatal Deaths  
Perinatal Deaths  
Infant Deaths  
Congenital MalformationsIowa Department of Public Health,  
Vital Statistics, Death CertificatesBirth Defects  
Selected Birth Defects in IowaIowa Birth Defects Registry  
The University of Iowa

**Fact Book Item****Data Source****Infectious Diseases**

Sexually Transmitted Diseases

Disease Prevention Program via  
Iowa Department of Public Health

Infectious Diseases

Bureau of Infectious Diseases via  
Iowa Department of Public Health**Cancer Incidence and Mortality**

All Sites of Cancer

*All incidence data from:*

Prostate

The University of Iowa, Iowa Cancer Registry

Lung &amp; Bronchus

Female Breast

*All mortality data from:*

Colorectum

“Cause of Death” codes on death certificates filed  
with Vital Records, Iowa Department of Public Health.

Non-Hodgkin’s Lymphoma

Leukemia

Analyses conducted by the University of Iowa,  
Iowa Cancer Registry.

Skin Melanoma

Oral Cavity (Excluding Lip)

Cervical

**Injury Mortality**

All Transportation

“Cause of Death” codes on death certificates filed with  
Vital Records, Iowa Department of Public Health.

Motor Vehicle Traffic

Suicide

Analyses conducted by The University of Iowa,  
Iowa Cancer Registry.

Firearms

Falls

Homicide

Poisoning

Burns

Drowning

All Other Unintentional

**Youth Injury Mortality**

All Transportation Ages 15-19

“Cause of Death” codes on death certificates filed with  
Vital Records, Iowa Department of Public Health.

Motor Vehicle Traffic Ages 15-19

All Transportation Ages 0-14

Analyses conducted by The University of Iowa,  
Iowa Cancer Registry.

Motor Vehicle Traffic Ages 0-14

Suicide Ages 15-19

Suicide Ages 0-14

Homicide Ages 15-19

Homicide Ages 0-14

**Fact Book Item****Data Source****Other Mortality**

All Causes  
 Heart Disease  
 Stroke  
 Chronic Obstructive Pulmonary Disease  
 Pneumonia/Influenza  
 Diabetes Mellitus  
 Atherosclerosis  
 Infectious/Parasitic  
 Nephritis, Nephrotic Syndrome, Nephrosis  
 Chronic Liver Disease and Cirrhosis  
 Congenital Anomalies  
 Conditions Originating in the Perinatal Period

“Cause of Death” codes on death certificates filed with VitalRecords, Iowa Department of Public Health.  
 Analyses conducted by The University of Iowa, Iowa Cancer Registry.

**Health Care Providers**

Primary Care Physicians  
 Family Practice Physicians  
 Internal Medicine Physicians  
 Pediatric Physicians  
 Obstetrics/Gynecology Physicians  
 General Surgeons  
 Other Specialty Physicians  
 Total Physicians  
 Physician Assistants  
 Nurse Practitioners  
 Pharmacists  
 Dentists

Office of Statewide Clinical Education Programs (OSCEP),  
 College of Medicine, The University of Iowa

Chiropractors

Iowa Department of Public Health

Registered Nurses  
 Licensed Practical Nurses

Board of Nursing via Iowa Department of Public Health

First Responders  
 Emergency Medical Technicians: Basic  
 Emergency Medical Technicians: Intermediate  
 Emergency Medical Technicians: Paramedic  
 Emergency Medical Technicians: Paramedic Specialist  
 Emergency Medical Technicians Total  
 Public Access Defibrillation Provider  
 Iowa Law Enforcement Emergency Care Provider

Bureau of Emergency Medical Services  
 via Iowa Department of Public Health

**Fact Book Item****Data Source****Health Care Facilities**

Hospitals	Department of Inspections and Appeals via Iowa Department of Public Health
Hospital Beds	
Nursing Facilities	
Nursing Facility Beds	
Chronic Confusion or Dementing Illness Units	
Chronic Confusion or Dementing Illness Beds	
Intermediate Care Facilities for Persons with Mental Illness	
Intermediate Care Facilities for Persons with Mental Illness Beds	
Intermediate Care Facilities for the Mentally Retarded	
Intermediate Care Facilities for the Mentally Retarded Beds	
Residential Care Facilities	
Residential Care Facilities Beds	
Residential Care Facilities for Persons with Mental Illness	
Residential Care Facilities for Persons with Mental Illness Beds	
Residential Care Facilities for the Mentally Retarded	
Residential Care Facilities for the Mentally Retarded Beds	
3 to 5 Bed Units for the Mentally Retarded	
3 to 5 Bed Units for the Mentally Retarded Beds	
Psychiatric Medical Institutions for Children	
Psychiatric Medical Institutions for Children Beds	
Community Trauma Care Facilities	
Area Trauma Care Facilities	
Regional Trauma Care Facilities	
Resource Trauma Care Facilities	
Total Trauma Facilities	

# Appendix II

## Glossary of Terms

## Glossary of Terms

- Area Trauma Care Facility:** Provides initial evaluation and stabilization, including surgical intervention for the severely injured patient. An area trauma care facility provides comprehensive inpatient services to patients who can be maintained in a stable or improving condition without specialized care. Critically injured patients who require specialized care are transferred to a resource or regional trauma care facility. An organized trauma team including a general surgeon, emergency physician, CRNA and/or anesthesiologist, nursing and ancillary personnel are promptly available to meet the patient upon arrival at the emergency department. The general surgeon, emergency physician, and ancillary personnel may be on-call from outside the hospital but with a clear commitment to meet the patient upon arrival at the emergency department when given timely notice by out-of-hospital EMS providers. Some area trauma care facilities elect to provide in-house 24-hour emergency physician coverage. In addition to direct patient care, area trauma care facilities provide community and outreach education and injury prevention programs.
- Community Trauma Care Facility:** Provides initial evaluation and stabilization of the severely injured patient. Stabilization may include surgical intervention. Most patients needing surgical intervention and/or specialty care are transferred to resource or regional trauma care facilities. Community trauma care facilities have the necessary equipment and diagnostic resources to resuscitate the severely injured patient. An organized team including a physician, nursing and ancillary personnel are promptly available to meet the patient upon arrival at the emergency department if given timely notice by out-of-hospital EMS providers. In addition to patient care, a community trauma care facility provides continuing education and injury prevention programs.
- Crude Rate:** The number of events or occurrences of disease in a given time period divided by the population at risk for that event or disease over the same time period.
- Age-adjusted Rate (Direct Method):** A weighted average of the age-specific incidence or mortality rates from the targeted population(s) where the weights are the proportions of persons in the corresponding age groups of a standard population. In this document, the Year 2000 US population is used as the standard population. Calculating an age-adjusted rate allows for comparisons across targeted populations after accounting or “adjusting” for possible differences in the age-distribution of these populations.
- Chronic Confusion or Dementing Illness Units<sup>1</sup>:** “Chronic Confusion or Dementing Illness” is a special license classification for nursing facilities or a special unit within such a facility providing care to persons who suffer from chronic confusion or dementing illness. Reference to Chronic Confusion of Dementing Illness Units is made in the acts and joint resolutions of the 1990 regular session of the Seventy-Third General Assembly of the State of Iowa.
- Emergency Medical Technician – Basic<sup>2</sup>:** The EMT-B course emphasizes the development of student skills in patient assessment and examination; the recognition of signs and symptoms of illness or injury; proper procedures when rendering emergency medical care including patient assisted medications, automated external defibrillation, maintenance of a non-medicated IV, and the use of an advanced airway device. General topics covered include: human anatomy and physiology, bleeding and shock, bandaging and splinting, medical/behavioral emergencies, obstetrics/gynecology, extrication from automobiles, farm, industrial and environmental emergencies, and ambulance operations.
- Emergency Medical Technician – Intermediate<sup>2</sup>:** The EMT-I course involves additional training in patient assessment, intravenous therapy, advanced airway management techniques and automated defibrillation.
- Emergency Medical Technician – Paramedic<sup>2</sup>:** This level covers additional emergency medical care skills including cardiac evaluation and treatment, medication effects and treatment, and advanced airway management techniques.
- Emergency Medical Technician – Paramedic Specialist<sup>2</sup>:** This level identifies individuals who have successfully completed a program of training that used, as a minimum, the 1985 EMT-P national standard curriculum (NSC), plus documentation of completion of the objectives to the 1998 EMT-P NSC, or completed the 1998 EMT-P NSC and have successfully completed the department’s testing requirements.
- Fetal Death<sup>3</sup>:** A birth that fails to show any sign of life after delivery. Reportable fetal deaths in Iowa are those greater than 20 weeks gestation. The responsibility for determining if a birth meets this definition is that of the attending physician. “Fetal death” and “stillbirth” are synonymous terms.

## Glossary of Terms *(continued)*

**First Responder<sup>2</sup>:** The First Responder course is designed to train the student in patient stabilizing techniques and basic emergency medical care prior to the arrival of an ambulance. Skills in this program include patient assessment, vital signs, automated external defibrillation, oxygen delivery, and use of an advanced airway device.

**Hospital<sup>1</sup>:** Any place which is devoted primarily to the maintenance of facilities for the diagnosis, treatment or care of two or more non-related individuals suffering from illness, injury or deformity for a period exceeding 24 hours. It is also a place which is devoted primarily to the rendering of obstetrical or other medical/nursing care for two or more non-related individuals for a period exceeding 24 hours. It can be any institution, place, building or agency in which any accommodation is primarily maintained, furnished or offered for the care of two or more non-related aged or infirmed persons requiring or receiving chronic or convalescent care for a period exceeding 24 hours. Hospitals shall include sanitariums or other related institutions within the meaning of the federal Hill-Burton Act. A hospital shall include, in any event, any facilities wholly or partially constructed, or constructed with federal assistance pursuant to Public Law 725, 79th Congress, approved August 13, 1946. Definition is found in Title 42 in the Code of Federal Regulations and 135J of the Iowa Administrative Code.

**Infant Death<sup>3</sup>:** Death of a liveborn infant under one year of age. Includes both neonatal and postneonatal deaths.

**Intermediate Care Facilities for the Mentally Retarded<sup>1</sup>:** Institutions or distinct parts of institutions whose primary purpose is to provide health or rehabilitative services to three or more individuals who primarily have mental retardation or a related conditions. Intermediate Care Facilities for the Mentally Retarded must meet the requirements of Iowa Code Chapter 135C and federal standards codified in 42 United States Code 1936d, which is contained in Title 42 of the Code of Federal Regulations, Part 483, Subpart D, 410-480. Definition is found in Chapter 135C of the Code of Iowa.

**Intermediate Care Facilities for Persons with Mental Illness<sup>1</sup>:** Institutions, places, buildings or agencies whose primary purpose is to provide accommodation, board and nursing care for a period exceeding 24 consecutive hours to three or more individuals who primarily have mental illness. Definition is found in Chapter 135C of the Code of Iowa.

**Live Birth<sup>3</sup>:** A birth that shows any sign of life after delivery. The World Health Organization considers a sign of life as being the breathing or showing of any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. The responsibility for determining if a birth meets this definition is that of the attending physician.

**Neonatal Death<sup>3</sup>:** Death of a liveborn infant occurring within the first 27 days of life.

**Nursing Facilities<sup>1</sup>:** Institutions or distinct parts of institutions housing three or more individuals for a period exceeding 24 consecutive hours, whose primary purpose is to provide health-related care and services, including rehabilitation, for individuals who because of mental or physical condition, require nursing care and other services in addition to room and board. Nursing facilities do not engage primarily in providing treatment or care for mental illness or mental retardation. Definition is found in Chapter 135C of the Code of Iowa.

**Perinatal Death<sup>3</sup>:** Death of a fetus of greater than 20 weeks gestation or death of a liveborn infant under 28 days of life.

**Primary Care Physicians:** Includes Family Practice, Internal Medicine, Pediatric, and Obstetrics/Gynecology physicians.

**Public Access Defibrillation:** An EMS provider level for nontraditional providers of emergency medical care who have successfully completed a program that uses a curriculum that meets the approved Iowa objectives regarding Public Access Defibrillation and have successfully completed the department's testing requirements.

**Residential Care Facilities<sup>1</sup>:** Institutions, places, buildings, or agencies providing accommodation, board, personal assistance and other essential daily living activities for a period exceeding 24 consecutive hours. Individuals living in a residential care facility are unable to sufficiently or properly care for themselves because of illness, disease, or physical or mental infirmity, but do not require the services of a registered or licensed practical nurse, except for emergencies. Definition is found in Chapter 135C of the Code of Iowa.

## Glossary of Terms (*continued*)

**Residential Care Facilities for the Mentally Retarded and Specialized 3-5 Bed Facilities<sup>1</sup>:** Facilities that provide accommodation, board, personal assistance, essential activities of daily living and rehabilitative services to three or more individuals with mental retardation. Residents of a Residential Care Facility for the Mentally Retarded are unable to sufficiently or properly care for themselves, but do not require the services of a registered or licensed practical nurse. The specialized license is for Residential Care Facilities which serve persons with mental retardation, chronic mental illness and other developmental disabilities having five or fewer residents as specified in Iowa Code Section 225C.26. The facility is exempt from Iowa Code Section 135.63. Definition is found in Chapter 135C of the Code of Iowa.

**Regional Trauma Care Facility:** Provides comprehensive care for the severely injured patient with complex multisystem trauma. An organized trauma team including a general surgeon, emergency physician, anesthesiologist, nursing and ancillary personnel are immediately available to the patient upon arrival at the emergency department. The general surgeon and anesthesiologist may take call from outside the hospital, but with a clear commitment to meet the patient upon arrival at the emergency department. A broad range of physician specialists are on-call and promptly available to provide care and/or consultation. In addition to direct patient care, regional trauma care facilities are responsible for community and outreach education and injury prevention.

**Resource Trauma Care Facility:** Provides the most comprehensive care for the severely injured patient with complex multisystem trauma. An organized trauma team including a general surgeon, emergency physician, anesthesiologist, nursing and ancillary personnel are immediately available to the patient upon arrival at the emergency department. Physician specialists may also respond immediately with the trauma team. A broad range of physician specialists are on-call and promptly available to provide care and/or consultation. In addition to direct patient care, resource trauma care facilities are responsible for resident training, research, community and outreach education, and injury prevention.

<sup>1</sup> Website for Iowa Department of Inspections and Appeals, Division of Health Facilities ([www.dia-hfd.state.ia.us](http://www.dia-hfd.state.ia.us))

<sup>2</sup> Website for Iowa Department of Public Health, Bureau of Emergency Medical Services ([www.idph.state.ia.us/pa/ems.htm](http://www.idph.state.ia.us/pa/ems.htm))

<sup>3</sup> Vital Statistics of Iowa 1997, Iowa Department of Public Health, Center for Health Statistics, March 1999.

## **Appendix III**

# **Coding and Classifications**

## Coding and Classifications

### Cancer Incidence and Mortality

Incidence: International Classification of Diseases for Oncology (ICD-O 2)<sup>1</sup>  
Codes for Newly Diagnosed Malignant Neoplasms

Mortality: Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, Ninth Revision (ICD-9)<sup>2</sup>  
Codes for Deaths due to Malignant Neoplasms

Type of Cancer	ICD-O 2 (Incidence)	ICD-9 (Mortality)
All Sites	C00.0–C80.9	140.0–208.9
Colorectum	C18.0–C20.9, C26.0	153.0–154.1, 159.0
Female Breast	C50.0–C50.9	174.0–174.9, 175
Leukemia	M9800–M9941	202.4, 203.1, 204.0–208.9
Lung & Bronchus	C34.0–C34.9	162.2–162.9
Non-Hodgkin's Lymphoma	M9590–M9595, M9670–M9717	200.0–200.8, 202.0–202.2, 202.8–202.9
Oral Cavity (Excluding Lip)	C01.9–C14.8	141.0–149.9
Prostate	C61.9	185
Skin Melanoma	C44.0–C44.9 (excluding M8000–M8110, M9590–M9989)	172.0–172.9
Cervical	C53.0–C53.9	180.0–180.9

*Note: Except for lymphoma and leukemia, all categorized sites exclude M9590-M9989.*

## Coding and Classifications (*continued*)

### Injury Mortality

Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, Ninth Revision (ICD-9)<sup>2</sup>

#### *Unintentional Poisoning*

- E850.0–E858.9 Unintentional poisoning by drugs, medicinal substances, and biologicals
- E860.0–E869.9 Unintentional poisoning by other solids and liquid substances, gases, and vapors

#### *Unintentional Burn*

- E890–E899 Fire/flame
- E924.0–E924.9 Hot object/substance

#### *Unintentional - Transportation*

##### **All:**

- E800–E807 Railway accidents
- E820–E825 Nontraffic-related accidents
- E826–E829 Other road vehicle accidents
- E830–E838 Water transport accidents
- E840–E845 Air and space transport accidents
- E810–E819 All traffic-related accidents

##### **Motor Vehicle Traffic:**

- E810–E819 All traffic-related accidents

#### *Unintentional Drowning*

- E830.0–E830.9 Accident to watercraft causing submersion
- E832.0–E832.9 Other accidental submersion or drowning in water transport accident
- E910.0–E910.9 Accidental drowning and submersion

#### *Firearm Mortality*

- E922.0–E922.9 Unintentional
- E955.0–E955.4 Suicide-related
- E965.0–E965.4, E970 Homicide/legal intervention

#### *Homicide and Legal Intervention Mortality*

- E960–E978

#### *Suicide Mortality*

- E950–E959

#### *Deaths from Falls and Fall-Related Injuries*

- E880–E886, E888

#### *All Other Unintentional Injury Mortality*

- E846–E848 Vehicle accidents not elsewhere classifiable
- E870–E876 Misadventures to patients during surgical/medical care
- E878–E879 Complications from surgical/medical procedures
- E900–E909 Accidents due to natural and environmental factors
- E911–E913.9 Suffocation
- E914–E915 Foreign body to eye or other orifice
- E916–E917.9 Struck by/against
- E918 Caught accidentally in or between objects
- E927 Overexertion
- E919–E921.9, E923–E924.9, E928 Other and unspecified environmental and accidental causes
- E929 Late effects
- E930–E949 Adverse effects in therapeutic use of drugs, medicinal, and biological substances

## Coding and Classifications (*continued*)

### Other Mortality

Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, Ninth Revision (ICD-9)<sup>3</sup>

390-398,402, 404-429	Heart Disease
140-208	Cancer
430-438	Stroke
490-496	COPD
480-487	Pneumonia/Influenza
250	Diabetes
001-139	Infectious/Parasitic
571	Chronic liver disease and cirrhosis
440-448	Atherosclerosis and other diseases of arteries, arterioles, and capillaries
580-589	Nephritis, nephrotic syndrome, and nephrosis
740-759	Congenital anomalies
760-779	Certain conditions originating in the perinatal period

<sup>1</sup> International Classification of Diseases for Oncology, Second Edition (ICD-O 2). World Health Organization, 1990.

<sup>2</sup> International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM). Commission on Professional and Hospital Activities, Ann Arbor, Michigan.

<sup>3</sup> World Health Organization, Manual of the international statistical classification of diseases, injuries, and causes of death, based on the recommendations of the Ninth Revision Conference, 1975. Geneva: World Health Organization, 1977.

# **Appendix IV**

## **Iowa Health Data Information Resources**

## Iowa Health Data Information Resources

- ADULT BLOOD LEAD EPIDEMIOLOGY AND SURVEILLANCE: LEAD POISONING PREVENTION PROGRAM: Rita Gergely, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6340. Fax: (515) 281-4529. E-mail: [rgergely@idph.state.ia.us](mailto:rgergely@idph.state.ia.us).
- ANNUAL REPORT OF PUBLIC HEALTH NURSING ACTIVITIES: Jody Smith, Bureau of Community Services, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-3932. Fax: (515) 242-6384. E-mail: [jsmith@idph.state.ia.us](mailto:jsmith@idph.state.ia.us).
- BACKFLOW ASSEMBLY TESTER REGISTRATION: Michael Magnant, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8722. Fax: (515) 281-4529. E-mail: [mmagnant@idph.state.ia.us](mailto:mmagnant@idph.state.ia.us).
- BEHAVIOR RISK FACTOR SURVEILLANCE SYSTEM (BRFSS): Jessica Davila (BRFSS Coordinator), State Center for Health Statistics, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7132. Fax: (515) 281-4535 or 281-4958. E-mail: [jdavila@idph.state.ia.us](mailto:jdavila@idph.state.ia.us).
- BIRTHS: Rosemary Hicks, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4952. Fax: (515) 281-4958. E-mail: [rhicks@idph.state.ia.us](mailto:rhicks@idph.state.ia.us). Jill France, Bureau Chief, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone (515) 281-6762. Fax (515) 281-0479. E-mail: [jfrance@idph.state.ia.us](mailto:jfrance@idph.state.ia.us).
- BOARD DISCIPLINARY ORDERS: Constance L. Price, Executive Director, Board of Dental Examiners, 400 SW 8<sup>th</sup> Street, Des Moines, IA 50309. Phone (515) 281-5157. Fax: (515) 281-7969. E-mail: [ibde@bon.state.ia.us](mailto:ibde@bon.state.ia.us).
- BOARD OF MEDICAL EXAMINERS ANNUAL REPORTS: Ann Mowery, Iowa State Board of Medical Examiners, Iowa Dept. of Public Health, 400 SW 8<sup>th</sup> Street, Suite C, Des Moines, IA 50309. Phone: (515) 281-5171. Fax: (515) 242-5908. E-mail: [ibme@bon.state.ia.us](mailto:ibme@bon.state.ia.us).
- CANCER SURVEILLANCE EPIDEMIOLOGY AND END RESULT PROGRAM (SEER): Kathleen McKeen, State Health Registry of Iowa, The University of Iowa, 2207 Westlawn, Iowa City, IA 52242. Phone: (319) 335-8508. Fax: (319) 335-8610. E-mail: [kathleen-mckeen@uiowa.edu](mailto:kathleen-mckeen@uiowa.edu).
- CARDIOVASCULAR SCREENING PROGRAM DATA: Sandi Ryan, Division of Health Promotion, Prevention and Addictive Behaviors, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7097. Fax: (515) 281-4535. E-mail: [ryan@idph.state.ia.us](mailto:ryan@idph.state.ia.us).
- CENTER FOR HEALTH EFFECTS OF ENVIRONMENTAL CONTAMINATION (CHEEC) Data Management Center (CDMC): Pete Weyer, Center for Health Effects of Environmental Contamination, The University of Iowa, 100 Oakdale Campus N203 OH, Iowa City, IA 52242. Phone: (319) 335-4550. Fax: (319) 335-4077. E-mail: [cheec@uiowa.edu](mailto:cheec@uiowa.edu).
- CENTRAL REGISTRY FOR BRAIN AND SPINAL CORD INJURIES: Richard Harmon, Bureau of Emergency Medical Services, Iowa Dept. of Public Health, 401 SW 7<sup>th</sup> Street, Suite D, Des Moines, IA 50309. Phone: (515) 725-0321. Fax: (515) 725-0318. E-mail: [dharmon@idph.state.ia.us](mailto:dharmon@idph.state.ia.us).
- CERTIFIED OUTPATIENT AND DIABETES EDUCATION PROGRAMS, SUMMARY DATA: Sandra Crandell, RN, Diabetes Control Program, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6204. Fax: (515) 281-4535. E-mail: [scrandel@idph.state.ia.us](mailto:scrandel@idph.state.ia.us).
- CHILD HEALTH DATA SYSTEM: M. Jane Borst, Bureau of Family Services, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4911. Fax: (515) 242-6384. E-mail: [jborst@idph.state.ia.us](mailto:jborst@idph.state.ia.us).
- CHILD HEALTH DIAGNOSIS AND TREATMENT: Maggie O'Rourke, Bureau of Family Services, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7721. Fax: (515) 242-6384. E-mail: [morourke@idph.state.ia.us](mailto:morourke@idph.state.ia.us).
- CHILDHOOD LEAD POISONING PROGRAM: Rita Gergely, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6340. Fax: (515) 281-4529. E-mail: [rgergely@idph.state.ia.us](mailto:rgergely@idph.state.ia.us).
- DAY CARE/HEAD START IMMUNIZATION LEVELS: Carolyn Jacobson, RN, BS, Immunization Bureau, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4938. Fax (800) 831-6292. E-mail: [cjacobso@idph.state.ia.us](mailto:cjacobso@idph.state.ia.us).
- DEATHS: Rosemary Hicks, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4952. Fax: (515) 281-4958. E-mail: [rhicks@idph.state.ia.us](mailto:rhicks@idph.state.ia.us). Jill France, Bureau Chief, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6762. Fax: (515) 281-0479. E-mail: [jfrance@idph.state.ia.us](mailto:jfrance@idph.state.ia.us).
- DENTAL HEALTH CENTER DATA REPORT: Hayley Harvey, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4916. Fax: (515) 242-6384. [hharvey@idph.state.ia.us](mailto:hharvey@idph.state.ia.us).
- DENTISTS, DENTAL HYGIENISTS, DENTAL ASSISTANTS: Constance L. Price, Executive Director, Board of Dental Examiners, 400 SW 8<sup>th</sup> Street, Des Moines, IA 50309. Phone (515) 281-5157. Fax: (515) 281-7969. E-mail: [ibde@bon.state.ia.us](mailto:ibde@bon.state.ia.us).

## Iowa Health Data Information Resources *(continued)*

- DIVORCES:** Rosemary Hicks, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4952. Fax: (515) 281-4958. E-mail: [rhicks@idph.state.ia.us](mailto:rhicks@idph.state.ia.us). Jill France, Bureau Chief, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6762. Fax (515) 281-0479. E-mail: [jfrance@idph.state.ia.us](mailto:jfrance@idph.state.ia.us).
- EMERGENCY MEDICAL SERVICES CERTIFICATION DATABASE:** Gary Ireland, Bureau of Emergency Medical Services, Iowa Dept. of Public Health, 401 SW 7<sup>th</sup> Street, Suite D, Des Moines, IA 50309. Phone: (515) 725-0319. Fax: (515) 725-0318. E-mail: [gireland@idph.state.ia.us](mailto:gireland@idph.state.ia.us).
- EMERGENCY MEDICAL SERVICES SERVICE DATABASE:** Gary Ireland, Bureau of Emergency Medical Services, Iowa Dept. of Public Health, 401 SW 7<sup>th</sup> Street, Suite D, Des Moines, IA 50309. Phone: (515) 725-0319. Fax: (515) 725-0318. E-mail: [gireland@idph.state.ia.us](mailto:gireland@idph.state.ia.us).
- FAMILY PLANNING DATA SYSTEM:** Kathleen Widelski, Nurse Clinician, Bureau of Family Services, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4907. Fax: (515) 242-6384. E-mail: [kwidelsk@idph.state.ia.us](mailto:kwidelsk@idph.state.ia.us).
- FETAL DEATH:** Rosemary Hicks, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4952. Fax: (515) 281-4958. E-mail: [rhicks@idph.state.ia.us](mailto:rhicks@idph.state.ia.us). Jill France, Bureau Chief, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6762. Fax: (515) 281-0479. E-mail: [jfrance@idph.state.ia.us](mailto:jfrance@idph.state.ia.us).
- FLUORIDATED WATER SYSTEMS DATA:** Michael Magnant, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8722. Fax: (515) 281-4529. E-mail: [mmagnant@idph.state.ia.us](mailto:mmagnant@idph.state.ia.us).
- FLUORIDATION CHECK SAMPLES:** Michael Magnant, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8722. Fax: (515) 281-4529. E-mail: [mmagnant@idph.state.ia.us](mailto:mmagnant@idph.state.ia.us).
- FLUORIDATION OPERATION REPORTS:** Michael Magnant, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8722. Fax: (515) 281-4529. E-mail: [mmagnant@idph.state.ia.us](mailto:mmagnant@idph.state.ia.us).
- FLUORIDE STATUS OF COMMUNITY PUBLIC WATER SYSTEMS:** Michael Magnant, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8722. Fax: (515) 281-4529. E-mail: [mmagnant@idph.state.ia.us](mailto:mmagnant@idph.state.ia.us).
- GAMBLING DATA:** Mary Crawford, Division of Health Promotion, Prevention, and Addictive Behaviors, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8479. Fax: (515) 281-4535. E-mail: [mcrawfor@idph.state.ia.us](mailto:mcrawfor@idph.state.ia.us).
- GENERAL ANESTHESIA AND CONSCIOUS SEDATION PERMITS:** Constance L. Price, Executive Director, Board of Dental Examiners, 400 SW 8<sup>th</sup> Street, Des Moines, IA 50309. Phone (515) 281-5157. Fax: (515) 281-7969. E-mail: [ibde@bon.state.ia.us](mailto:ibde@bon.state.ia.us).
- GOVERNOR'S PRIMARY CARE HPSAs (State Designated):** Carl Kulczyk, Bureau of Rural Health and Primary Care, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7223. Fax: (515) 242-6384. E-mail: [ckulczyk@idph.state.ia.us](mailto:ckulczyk@idph.state.ia.us).
- GRADE A MILK CERTIFICATION:** Kurt Rueber, Division of Environmental Health, Health Engineering Bureau, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-3773. Fax: (515) 281-4529. E-mail: [krueber@idph.state.ia.us](mailto:krueber@idph.state.ia.us).
- HAZARDOUS SUBSTANCES EMERGENCY EVENTS SURVEILLANCE (HSEES) SYSTEM:** Debbi Cooper, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6337. Fax: (515) 281-4529. E-mail: [dcooper@idph.state.ia.us](mailto:dcooper@idph.state.ia.us).
- HAZARDOUS WASTE SITE HEALTH ASSESMENT PROGRAM (formerly the Toxic Substance Evaluation Program):** Charles Barton, PhD, State Toxicologist, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6881. Fax: (515) 281-4529. E-mail: [cbarton@idph.state.ia.us](mailto:cbarton@idph.state.ia.us).
- HEAD/SPINAL CORD INJURY FATALITIES:** Thomas Brown, BS, CBIS-CI, Brain Injury Program Manager, Division of Health Promotion, Prevention and Addictive Behaviors, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6283. Fax: (515) 281-4535. E-mail: [tbrown@idph.state.ia.us](mailto:tbrown@idph.state.ia.us). Joann Muldoon, MA, MS, State Center for Health Statistics, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-5849. Fax: (515) 281-4958. E-mail: [jmuldoon@idph.state.ia.us](mailto:jmuldoon@idph.state.ia.us).
- HIV/AIDS REPORTING SYSTEM:** Randy Mayer, HIV/AIDS Surveillance Coordinator, Bureau of Disease Prevention, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-5150. Fax: (515) 281-4570. E-mail: [rmayer@idph.state.ia.us](mailto:rmayer@idph.state.ia.us).
- HOME CARE AIDE GRANT CLAIMS:** Julie McMahon, Bureau of Community Services, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-3104. Fax: (515) 242-6384. E-mail: [jmcmahon@idph.state.ia.us](mailto:jmcmahon@idph.state.ia.us).

## Iowa Health Data Information Resources *(continued)*

- HOSPITAL DATABASE:** Pierce Wilson or Donald Shepherd, State Center for Health Statistics, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4345 or (515) 281-7221. Fax: (515) 281-4958. E-mail: [dshepher@idph.state.ia.us](mailto:dshepher@idph.state.ia.us), [pwilson@idph.state.ia.us](mailto:pwilson@idph.state.ia.us).
- HOSPITAL INPATIENT DATA:** Pierce Wilson or Donald Shepherd, State Center for Health Statistics, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4345 or (515) 281-7221. Fax: (515) 281-4958. E-mail: [dshepher@idph.state.ia.us](mailto:dshepher@idph.state.ia.us), [pwilson@idph.state.ia.us](mailto:pwilson@idph.state.ia.us).
- IMMUNIZATION LEVELS OF 2-YEAR-OLDS:** Carolyn Jacobson, RN, BS, Immunization Bureau, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4938. Fax: (800) 831-6292. E-mail: [cjacobso@idph.state.ia.us](mailto:cjacobso@idph.state.ia.us).
- INFANT MORTALITY:** Jude Igbokwe, PhD, State Center for Health Statistics, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4068. Fax: (515) 281-4958. E-mail: [jigbokwe@idph.state.ia.us](mailto:jigbokwe@idph.state.ia.us). Michael Dare, State Center for Health Statistics, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4945. Fax: (515) 281-4958. E-mail: [midare@idph.state.ia.us](mailto:midare@idph.state.ia.us).
- INFECTIOUS DISEASE:** Center for Acute Disease Epidemiology, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6493, (800) 362-2736. Fax: (515) 281-4958. E-mail: [pquinlis@idph.state.ia.us](mailto:pquinlis@idph.state.ia.us).
- IOWA BIRTH DEFECTS REGISTRY:** Paul Romitti, PhD, Director, Iowa Birth Defects Registry, The University of Iowa, 4249 Westlawn Bldg., Iowa City, IA 52242. Phone: (319) 335-8585. Fax: (319) 335-8583. Web site: <http://www.public-health.uiowa.edu/birth.html>.
- IOWA EMS SERVICES PROGRAM REGISTRY:** Richard Harmon, Bureau of Emergency Medical Services, Iowa Dept. of Public Health, 401 SW 7<sup>th</sup> Street, Suite D, Des Moines, IA 50309. Phone: (515) 725-0321. Fax: (515) 725-0318. E-mail: [dharmon@idph.state.ia.us](mailto:dharmon@idph.state.ia.us).
- IOWA SUDDEN INFANT DEATH SYNDROME PROGRAM:** Stephanie Pettit, Bureau of Family Services, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-3108. Fax: (515) 242-6384. E-mail: [spettit@idph.state.ia.us](mailto:spettit@idph.state.ia.us).
- LEAD IN SCHOOLS AND PRESCHOOLS DRINKING WATER TEST RESULTS:** Rita Gergely, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6340. Fax: (515) 281-4529. E-mail: [rgergely@idph.state.ia.us](mailto:rgergely@idph.state.ia.us).
- LEAD INSPECTOR AND LEAD ABATEMENT CONTRACTOR CERTIFICATION PROGRAM:** Rita Gergely, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6340. Fax: (515) 281-4529. E-mail: [rgergely@idph.state.ia.us](mailto:rgergely@idph.state.ia.us).
- LICENSED PHYSICIANS:** Ann Mowery, Iowa State Board of Medical Examiners, Iowa Dept. of Public Health, 400 SW 8<sup>th</sup> Street, Suite C, Des Moines, IA 50309. Phone: (515) 281-5171. Fax: (515) 242-5908. E-mail: [ibme@bon.state.ia.us](mailto:ibme@bon.state.ia.us).
- LICENSING AND INSPECTION OF RADIATION MATERIALS:** Don Flater, Bureau of Radiological Health, Iowa Dept. of Public Health, 701 SW 7<sup>th</sup> Street, Suite D, Des Moines, IA 50309. Phone: (515) 281-3478. Fax: (515) 725-0318. E-mail: [dflater@idph.state.ia.us](mailto:dflater@idph.state.ia.us).
- LONG TERM CARE:** Barb Nervig, Certificate of Need, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4344. Fax: (515) 281-4958. E-mail: [bnervig@idph.state.ia.us](mailto:bnervig@idph.state.ia.us).
- MARRIAGES:** Rosemary Hicks, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4952. Fax: (515) 281-4958. E-mail: [rhicks@idph.state.ia.us](mailto:rhicks@idph.state.ia.us). Jill France, Bureau Chief, Vital Records, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6762. Fax: (515) 281-0479. E-mail: [jfrance@idph.state.ia.us](mailto:jfrance@idph.state.ia.us).
- MATERNAL HEALTH DATA SYSTEM:** Kimberly Piper, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6466. Fax: (515) 242-6384. E-mail: [kpiper@idph.state.ia.us](mailto:kpiper@idph.state.ia.us).
- MEDICAID BIRTH OUTCOMES:** Jude Igbokwe, PhD, State Center for Health Statistics, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4068. Fax: (515) 281-4958. E-mail: [jigbokwe@idph.state.ia.us](mailto:jigbokwe@idph.state.ia.us).
- MEDICAID POPULATIONS HPSAs (Federally Designated):** (See [POPULATIONS HPSAs](#)).
- MUAs (Federal Medically Underserved Areas, Federally Designated):** Carl Kulczyk, Bureau of Rural Health and Primary Care, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7223. Fax: (515) 242-6384. E-mail: [ckulczyk@idph.state.ia.us](mailto:ckulczyk@idph.state.ia.us).
- OVERSEAS VACCINE PROVIDERS:** Center for Acute Disease Epidemiology, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-6493. Fax: (515) 281-4958. E-mail: [pquinlis@idph.state.ia.us](mailto:pquinlis@idph.state.ia.us).
- PEDIATRIC NUTRITION SURVEILLANCE:** Susan Pohl, Bureau of Nutrition and WIC, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4545. Fax: (515) 281-4913. E-mail: [spohl@idph.state.ia.us](mailto:spohl@idph.state.ia.us).

## Iowa Health Data Information Resources (continued)

- POPULATIONS HPSAs (Federally Designated): Carl Kulczyk, Bureau of Rural Health and Primary Care, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7223. Fax: (515) 242-6384. E-mail: [ckulczyk@idph.state.ia.us](mailto:ckulczyk@idph.state.ia.us).
- RADIOLOGICAL PERMITS TO PRACTICE AND CONTINUING EDUCATION: Charlene Craig, Bureau of Radiological Health, Iowa Dept. of Public Health, 701 SW 7<sup>th</sup> Street, Suite D, Des Moines, IA 50309. Phone: (515) 725-0306. Fax: (515) 725-0318. E-mail: [ccraig@idph.state.ia.us](mailto:ccraig@idph.state.ia.us).
- PHARMACY/PHARMACISTS LICENSING: Diana Pirillo, Board of Pharmacy Examiners, 400 SW 8<sup>th</sup> Street, Suite E, Des Moines, IA 50309. Phone: (515) 242-5140. Fax: (515) 281-4609. E-mail: [diana.pirillo@ibpe.state.ia.us](mailto:diana.pirillo@ibpe.state.ia.us).
- POLK COUNTY INFANT MORTALITY PREVENTION CENTER: Mary O'Brien, Visiting Nurse Services, Suite 320, 1111 9<sup>th</sup> Street, Des Moines, IA 50314. Phone: (515) 558-9981. Fax: (515) 288-0437. E-mail: [mary@vnsgdm.org](mailto:mary@vnsgdm.org). Herman Hein, MD, Univ. of Iowa Hospitals, Pediatrics Dept., 200 Hawkins Drive, Iowa City, IA 52242. Phone: (319) 356-2637. Fax: (319) 356-8669. E-mail: [herman-hein@uiowa.edu](mailto:herman-hein@uiowa.edu).
- PREGNANCY NUTRITION SURVEILLANCE SYSTEM (PNSS): Angie Tagtow, Bureau of Nutrition and WIC, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7096. Fax: (515) 281-4913. E-mail: [atagtow@idph.state.ia.us](mailto:atagtow@idph.state.ia.us).
- PREVENTION SERVICE REPORT: Mary Crawford, Division of Health Promotion, Prevention, and Addictive Behaviors, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8479. Fax: (515) 281-4535. E-mail: [mcrawfor@idph.state.ia.us](mailto:mcrawfor@idph.state.ia.us).
- PRIMARY CARE HPSAs (Health Professional Shortage Areas, Federally Designated): Carl Kulczyk, Bureau of Rural Health and Primary Care, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7223. Fax: (515) 242-6384. E-mail: [ckulczyk@idph.state.ia.us](mailto:ckulczyk@idph.state.ia.us).
- PROFESSIONAL LICENSURE FILES: Marge Bledsoe, Bureau Chief, Professional Licensure, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 242-6385. Fax: (515) 281-3121. E-mail: [mbledsoe@idph.state.ia.us](mailto:mbledsoe@idph.state.ia.us).
- PUBLIC HEALTH NURSING GRANT CLAIMS: Julie McMahon, Bureau of Community Services, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-3104. Fax: (515) 242-6384. E-mail: [jmcmahon@idph.state.ia.us](mailto:jmcmahon@idph.state.ia.us).
- RADIATION EQUIPMENT REGISTRATION: Charlene Craig, Bureau of Radiological Health, Iowa Dept. of Public Health, 701 SW 7<sup>th</sup> Street, Suite D, Des Moines, IA 50309. Phone: (515) 725-0306. Fax: (515) 725-0318. E-mail: [ccraig@idph.state.ia.us](mailto:ccraig@idph.state.ia.us).
- RADON DATABASE: Rick Welke, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4928. Fax: (515) 281-4529. E-mail: [rwelke@idph.state.ia.us](mailto:rwelke@idph.state.ia.us).
- REGISTERED BACKFLOW PREVENTION ASSEMBLY TESTERS: Michael Magnant, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8722. Fax: (515) 281-4529. E-mail: [mmagnant@idph.state.ia.us](mailto:mmagnant@idph.state.ia.us).
- REGISTERED NURSE, LICENSED PRACTICAL NURSE, ADVANCED REGISTERED NURSE LICENSURE RECORDS: Board of Nursing, Iowa Dept. of Public Health, RiverPoint Business Park, 400 SW 8<sup>th</sup> Street, Suite B, Des Moines, IA 50309. Phone: (515) 281-3255. Fax: (515) 281-4825. Web site: [www.state.ia.us/nursing](http://www.state.ia.us/nursing). E-mail: [ibon@bon.state.ia.us](mailto:ibon@bon.state.ia.us).
- REGISTERED WATER TREATMENT SYSTEMS: Bruce Middleton, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4680. Fax: (515) 281-4529. E-mail: [bmiddle@idph.state.ia.us](mailto:bmiddle@idph.state.ia.us). Michael Magnant, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8722. Fax: (515) 281-4529. E-mail: [mmagnant@idph.state.ia.us](mailto:mmagnant@idph.state.ia.us).
- RESIDENT DENTIST LICENSE; DENTAL COLLEGE FACULTY PERMIT: Constance L. Price, Executive Director, Board of Dental Examiners, 400 SW 8<sup>th</sup> Street, Des Moines, IA 50309. Phone: (515) 281-5157. Fax: (515) 281-7969. E-mail: [ibde@bon.state.ia.us](mailto:ibde@bon.state.ia.us).
- RESIDENT LICENSURE AND RENEWAL, MD and DO: Ann Mowery, Iowa State Board of Medical Examiners, Iowa Dept. of Public Health, 400 SW 8<sup>th</sup> Street, Suite C, Des Moines, IA 50309. Phone: (515) 281-5171. Fax: (515) 242-5908. E-mail: [ibme@bon.state.ia.us](mailto:ibme@bon.state.ia.us).
- SCHOOL AGE K-12 IMMUNIZATION LEVELS: Carolyn Jacobson, RN, BS, Immunization Bureau, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4938. Fax: (800) 831-6292. E-mail: [cjacobso@idph.state.ia.us](mailto:cjacobso@idph.state.ia.us).
- SENTINEL PROJECT RESEARCHING AGRICULTURAL INJURY NOTIFICATION SYSTEM (SPRAINS): Richard Harmon, Bureau of Emergency Medical Services, Iowa Dept. of Public Health, 401 SW 7<sup>th</sup> Street, Suite D, Des Moines, IA 50309. Phone: (515) 725-0321. Fax: (515) 725-0318. E-mail: [dharmon@idph.state.ia.us](mailto:dharmon@idph.state.ia.us).
- SEXUALLY TRANSMITTED DISEASES (STDs): John Katz, Bureau of Infectious Diseases, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4936. Fax: (515) 242-6284. E-mail: [jkatz@idph.state.ia.us](mailto:jkatz@idph.state.ia.us).

## Iowa Health Data Information Resources *(continued)*

SPECIAL LICENSURE AND RENEWAL, MD and DO: Ann Mowery, Iowa State Board of Medical Examiners, Iowa Dept. of Public Health, 400 SW 8<sup>th</sup> Street, Suite C, Des Moines, IA 50309. Phone: (515) 281-5171. Fax: (515) 242-5908. E-mail:

[ibme@bon.state.ia.us](mailto:ibme@bon.state.ia.us).

SUBSTANCE ABUSE TREATMENT DATA: Lonnie Cleland, Division of Health Promotion, Prevention and Addictive Behaviors, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4636. Fax: (515) 281-4535. E-mail:

[lcleland@idph.state.ia.us](mailto:lcleland@idph.state.ia.us).

SWIMMING POOLS: Bruce Middleton, Division of Environmental Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4680. Fax: (515) 281-4529. E-mail:

[bmiddle@idph.state.ia.us](mailto:bmiddle@idph.state.ia.us).

SYSTEM TRAUMA REGISTRY (STR): Richard Harmon, Bureau of Emergency Medical Services, Iowa Dept. of Public Health, 401 SW 7<sup>th</sup> Street, Suite D, Des Moines, IA 50309. Phone: (515) 725-0321. Fax: (515) 725-0318. E-mail:

[dharmon@idph.state.ia.us](mailto:dharmon@idph.state.ia.us).

TB MYCOBACTERIA: Connie Waller, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8636. Fax: (515) 281-4570. E-mail:

[cwaller@idph.state.ia.us](mailto:cwaller@idph.state.ia.us).

TEMPORARY LICENSURE AND RENEWAL, MD and DO: Ann Mowery, Iowa State Board of Medical Examiners, Iowa Dept. of Public Health, 400 SW 8<sup>th</sup> Street, Suite C, Des Moines, IA 50309. Phone: (515) 281-5171. Fax: (515) 242-5908. E-mail:

[ibme@bon.state.ia.us](mailto:ibme@bon.state.ia.us).

TOXIC SUBSTANCE EVALUATION PROGRAM: (see [HAZARDOUS WASTE SITE HEALTH ASSESMENT PROGRAM](#)).

TUBERCULOSIS PROGRAM MEDICATION PROGRAM: Connie Waller, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-8636. Fax: (515) 281-4570. E-mail:

[cwaller@idph.state.ia.us](mailto:cwaller@idph.state.ia.us).

TUBERCULOSIS SURVEILLANCE: Jim Goodrich, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-7504. Fax: (515) 281-4570. E-mail:

[jgoodric@idph.state.ia.us](mailto:jgoodric@idph.state.ia.us).

VACCINE, DISTRIBUTION AND ADMINISTRATION: Carolyn Jacobson, RN, BS, Immunization Bureau, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-4938. Fax: (800) 831-6292. E-mail:

[cjacobso@idph.state.ia.us](mailto:cjacobso@idph.state.ia.us).

WIC PARTICIPANTS: Emily Roepsch, Bureau of Nutrition and WIC, Division of Family and Community Health, Iowa Dept. of Public Health, Lucas State Office Building, Des Moines, IA 50319. Phone: (515) 281-3459. Fax: (515) 281-4913. E-mail:

[eroepsch@idph.state.ia.us](mailto:eroepsch@idph.state.ia.us).

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