Health in Iowa

Annual Report

From the

Behavioral Risk Factor Surveillance System

Iowa 2012

Iowa Department of Public Health

Terry Branstad, Governor, Kim Reynolds, Lt. Governor
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1. INTRODUCTION

History

In 1984, the Centers for Disease Control and Prevention (CDC) launched the Behavioral Risk Factor Surveillance System (BRFSS) working in an ongoing fashion with several states to assess the health status and health risk behaviors of their citizens. In 1988, Iowa began full participation in BRFSS. The BRFSS is now conducted in all 50 states, the District of Columbia, and a few American territories.

Nature of the Survey

The Iowa Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing telephone survey. It is financially and technically supported by the CDC with further financial support from public and private sources.

The BRFSS is designed to collect information on the health conditions, health-related behaviors, attitudes, and awareness of residents age 18 and over. It also monitors the prevalence of these indicators over time. The indicators surveyed are major contributors to illness, disability and premature death.

This report focuses on the data collected during calendar year 2012. Some of the health-related issues discussed are: general health status, health care access, cancer screening, tobacco use, alcohol consumption, body weight, physical activity, oral health, diabetes, respiratory conditions, immunizations, and HIV/AIDS awareness.

Objectives

The objectives of the BRFSS are:

1. To determine the state specific prevalence of personal health behaviors related to the leading causes of premature death.

2. To develop the capacity of state health departments to conduct credible telephone surveys.

3. To advance the understanding that certain health-related behaviors are critical indicators of health.

Use of BRFSS Data

The CDC developed the BRFSS to help states assess health risks and monitor trends. Comparable surveillance methods are used in all states. This allows for comparisons among states and for the assessment of geographic patterns of risk factor prevalence.

The BRFSS information is used to design, implement, and support public health activities. These activities are designed to reduce the premature death and disability of Iowa residents. State public health departments are responsible for planning, implementing, and evaluating disease prevention programs. Many of these programs involve health risk behavior modification.

Examples of health risk behavior modification programs in Iowa are the Diabetes Prevention and Control Program, nutrition and physical activity campaigns such as Iowans Fit for Life, tobacco cessation and counter-marketing campaigns, and campaigns against problem drinking.

One way to assess program effectiveness is to monitor the prevalence of risk factors in the population. Comparing different times, demographic groups, or geographic areas may be quite useful in developing, implementing and evaluating intervention programs.

2. Methodology

Questionnaire Design

The BRFSS questionnaire is updated each calendar year by the CDC and by each participating state. The questionnaire consists of three sections: 1) the core questions required of all states participating in BRFSS; 2) a set of standardized modules developed by the CDC which states may opt to include in their survey; and 3) state-added questions which are designed and administered by individual states to address locally identified health problems. Core and optional module questions were previously tested. Changes in them were discussed and determinations were made whether to include them at the annual national BRFSS conference. A group of interested individuals from the Iowa Department of Public Health guided by the state coordinator met to discuss which optional modules and state-added questions to include in the coming year.

Participation by Iowans in the BRFSS survey is random, anonymous, voluntary and confidential. Survey participants are requested to provide such demographic information as age, sex, race, marital and employment status, annual household income, educational level, and location of residence by county and zip code. This location information is suppressed in public use data when the numbers are so small that the respondent might be identified.

Sampling Process

Two sampling frames are used in the BRFSS. One is for landline telephones, while the other is for cell phones. Only adults age 18 years and older were interviewed in both samples. People residing in group homes or institutions were not sampled.

In the landline sample one person residing in a household was interviewed. Households were selected using list-assisted random-digit dialing. This method provides a list of randomly chosen phone numbers from the pool of all existing landline phone numbers. These numbers are not drawn in a simple random fashion, but use what is known as the disproportionate stratified sampling technique (DSS). This sampling methodology was designed to produce a random sample of Iowa telephone numbers, including unlisted numbers and new subscribers in an efficient fashion.

The DSS method divides landline phone numbers into two strata. The first stratum is residential but unlisted. The second stratum is composed of residential listed numbers. Each stratum was sampled at a different rate. The listed residential numbers were sampled at the highest rate. Some numbers were marked by the list provider as not to be called because they have been predetermined to be nonresidential or nonworking. There was no set number to be sampled per group, and completed interviews were not thrown out.

The landline sample was also stratified into six geographic regions. These regions are the same regions used by health resource and emergency planning groups within the state. Geographic regions were represented at the same proportion as their population within the state. A seventh stratum was drawn from census tracts throughout the state containing a relatively high percentage of African American or Hispanic residents in an effort to better represent minority groups in Iowa.

Increasingly many people, including the young, single, ethnic minorities, and renters are opting not to use traditional landline telephone service in favor of cell phones.[1,2] Therefore, another sampling frame was added devoted to households having only cell phones or using cell phones 90 percent of the time or more. If they used both cell phones and landline phones to a significant degree, it was considered that they could be included in the landline sample, and, therefore, not interviewed on their cell phone. The cell phone mostly sample was a statewide sample of adults and was not further stratified geographically. Since the cell phone is more an individual appliance than a household appliance, the household selection was not done. College housing was also included in the cell phone sample. These respondents were also asked some procedural questions. For instance, they were asked if they were doing anything that would make it unsafe to conduct the interview and not interviewed if they were. We aimed for 20 percent of our total sample to be conducted with this cell phone sample by our data collection contractor. However, there were occasions when cell phone interviews were done involving people living in other states. The number of cell phone interviews in our sample is, therefore, larger than the number called by our contractor.

Approximately equal numbers of interviews per month were conducted from January through December in 2012 for a total sample size of 7,166. 5,654 of these were landline and 1,512 were cell phone. Interviews were conducted in both English and Spanish.

Interviewers made multiple attempts to reach a number to complete an interview before replacing that number. If the person selected to take the survey was not available, an appointment was made to complete the interview at another date and time. If the person was not available during the interview period, or if the person refused to participate, no other person was interviewed at that number. Attempts were made to convert initial refusals into participants.

The Interview Process

The interviews were conducted daytime, evenings, and weekends with appointments made as needed to schedule or complete interviews. The average time to complete an interview was 27.4 minutes for landline and 23.8 minutes for cell phone. The response rate, defined as completed interviews + partial completes divided by all eligible households called, was 57 percent for landline and 54 percent for cell phones*. Although the response rates seem rather low and have been declining in recent years, they are better than most states produce. A partial complete is an interview that was terminated before it was complete, but sufficient data had been collected to use for most measures. This means that results from questions later in the questionnaire are determined from a somewhat smaller sample than earlier questions. Even when not restricted to some sub-sample such as a particular age group. See Appendix 2 for the questions and their order.

A Computer Aided Telephone Interviewing (CATI) system was used. The CATI system not only assists interviewers in presenting the questionnaire and recording the responses, it also helps keep track of appointments and call-back attempts, and reports statistics of call dispositions.

*Cell phone statistics are only for those done by our contractor. Some cell phone interviews of Iowa residents are done by other states.

Advantages and Limitations

Telephone interviews provide a means to conduct affordable surveys to monitor the prevalence of behavioral risk factors. Surveys based on telephone interviews are much faster to complete than surveys based on in-person interviews.

In one hour, an experienced telephone interviewer can handle busy numbers, calls not answered, and refusals to participate, and still successfully complete one and one-half interviews. In contrast, in one day of in-person interviewing, many miles of travel may be required with few interviews completed.

Another advantage of telephone surveys is the much higher response rate compared to self-administered surveys, such as mail surveys.

Supervision and administration are simpler for telephone interviews than for in-person interviews. All calls can be made from one central location, and supervisors can monitor interviewers for quality control.

One main limitation to telephone surveys is that all Iowans are not reachable by telephone. Some do not live in households but are in institutions such as nursing homes or prisons. Some households do not have telephones. Persons of low socioeconomic status are less likely than persons of higher socioeconomic status to have uninterrupted telephone service and are therefore under-sampled. Furthermore, the percentage of households with a telephone varies by region. New telephone technology such as caller I.D., and call blockers that block telemarketers also pose problems for telephone surveys.

Furthermore, some inaccuracy is expected from any survey based on self-reported information. For example, respondents are known to under-report their weight and inaccurately recall socially undesirable habits. The potential for bias must always be kept in mind when interpreting self-reported data.

Despite these limitations, prevalence estimates from the BRFSS correspond well with findings from surveys based on in-person interviews, including studies conducted by the National Center for Health Statistics and the American Heart Association.

Analysis of the data

Unless everyone in the state was asked questions about his or her health, there would be no way to know exactly what these answers would be. When analyzing BRFSS data, conclusions are to be drawn about the entire adult population of the state of Iowa based on only a sample of randomly chosen people. The true prevalence in the population can only be estimated. The judgment of the value of prevalence in a population, such as the state based on the prevalence within a sample, always involves educated guesswork. The prevalence values from the survey and the true state prevalence values may differ by some amount, but a range of "true" state values can be determined with a high degree of confidence from the prevalence in the sample.

Most charts and tables in this report will indicate a range of values in which there is a 95% chance of the true Iowa value falling. This range is referred to as a 95% confidence interval (CI).

Charts will indicate this by use of a black line at the end of the bars in the chart. The end of the bar is the sample value, while the value in the population is probably somewhere in the range represented by the line. When the CIs of two or more groups do not overlap, their population values can be considered truly or significantly different.

An important factor in determining how well we can judge the response of all Iowans from the survey sample is the number of responses to the questions. The smaller the number of responses, the poorer is our ability to draw a conclusion about the whole state. Analyzing the data by such categories as age, sex, income, and educational level means there are a smaller number of interviews in each particular group than in the whole survey. Furthermore, many questions are only answered depending on the answer to previous questions. For instance, a person would only be asked at what age they were diagnosed with diabetes if they answer "yes" to whether they have ever been told they had diabetes. These smaller numbers decrease the ability to determine statistically significant differences. Some data may not be reported as significant solely due to small sample sizes. In general, data in which the number of responses is less than 50 or the 95% confidence interval is larger than 20% will not be reported since this data is considered highly unreliable.

Some people refuse to answer select questions but choose to respond to the majority of the questions. Those interviews were still used in the final count for the total sample size. However, they were not counted on the specific questions they refused. Unless otherwise indicated, prevalence measures do not include those who refused to answer a question or said they did not know.

A Change in How Data are Weighted

Generally, the best guess for how many Iowan adults would answer a question a certain way would be the same as how many adults in the sample answer that way. This is true, however, only if everyone in the state had an equal chance of being in the sample. This is not the case. The number of adults per household and the number of phone numbers per household influence a person's likelihood of being included in the survey. Furthermore, certain demographic groups may be over or under-represented in the sample based on their ease of being reached and willingness to respond. For instance, about half the adult Iowa population is male, but typically only about 40 percent of the sample interviewed is male. To solve these problems the data in the sample is weighted to the state population. That means several of the above factors are used to give each interview a weight that represents a certain distinct number of people in the state population.

In 2011, BRFSS changed the method used to weight its data. Two reasons for this were the inclusion of cell phones and the increase in computer power.

A landline telephone is seen as a household appliance, while a cell phone is more frequently seen as an individual possession. This means the old weighting method will not work for cell phones. Adults per household and phone numbers per household become irrelevant for cell phones. The increase in computer power allows a larger number of factors to be considered in the weighting process. Formerly, only age and gender combined were considered as demographic factors in Iowa. In the new method these are considered separately plus the addition of race/ethnicity, marital status, education level, home ownership, geographic region, and cell vs. landline telephone.

Unfortunately, the change in weighting method has disrupted trend information for the data. The estimate for the state value can be a few percentage points different depending on which method is used and the topic. Trend information in this report will only be determined from 2011 forward. Even comparisons of data from 2011 may be unsound for optional module and state added questions since 2012 is the first year cell phone interviews have been conducted for these. Information should be as sound as ever for comparing demographic groups or for comparing states and regions.

The 2012 BRFSS used a split sample technique. In this technique there are two versions of the questionnaire. An optional module or a module of state added questions may only be presented to half of the total sample of respondents. This is done to be able to ask a larger number of questions without unduly lengthening the interview. When this is done, data from these questions must be weighted with a weight specific to that questionnaire version in order to represent the entire state population.

References

1. AAPOR Cell Phone Task Force**.** New Considerations for Survey Researchers When Planning and Conducting RDD Telephone Surveys in the U.S. with Respondents Reached via Cell Phone Numbers. 2010.
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3. DEMOGRAPHICS OF THE BRFSS RESPONDENTS

The 7,166 respondents to the BRFSS for the year 2012 included 2,940 males and 4,226 females age 18 years and older. The following tables present the distribution of this respondent sample by 1) age and gender, 2) race/ethnicity, 3) level of education, and 4) annual household income.

Table 3.1: Distribution of Iowa Survey Respondents by Age and Gender for Year 2012

Age	Male		Female		Total	
	#	%	#	%	#	%
18-24	191	6.5	183	4.3	374	5.2
25-34	317	10.8	371	8.8	688	9.6
35-44	371	12.6	488	11.6	859	12.0
45-54	504	17.1	698	16.5	1,202	16.8
55-64	661	22.5	812	19.2	1,473	20.6
65-74	498	16.9	756	17.9	1,254	17.5
75+	384	13.1	867	20.5	1,251	17.5
Unknown	14	0.5	51	1.2	65	0.9
Total	2,940	41.0	4,226	59.0	7,166	100.0

Table **3.2: Distribution of Iowa Survey Respondents by Race/Ethnicity for Year 2012**

Race/Ethnicity	# of Total Respondents	% of Total Respondents
White Non-Hispanic	6,633	92.6
Black Non-Hispanic	91	1.3
Other Non-Hispanic[1]	159	2.2
Hispanic	230	3.2
Unknown/Refused	53	0.7
Total	7,166	100.0

Table 3.3: Distribution of Iowa Survey Respondents by Level of Education for Year 2012

Level of Education	# of Total Respondents	% of Total Respondents
Less than High School	495	6.9
High School Grad or GED	2,449	34.2
Some College or Technical School	2,073	28.9
College Graduate	2,136	29.8
Unknown/Refused	13	0.2
Total	7,166	100.0

[1] Other Non-Hispanic also includes those who chose multiple race categories.

Table 3.4: Distribution of Iowa Survey Respondents by Annual Household Income for Year 2012

Household Income	# of Total Respondents	% of Total Respondents[2]
<$15,000	567	7.9
$15,000-$24,999	1,052	14.7
$25,000- 34,999	778	10.9
$35,000-$49,999	1,048	14.6
$50,000-$74,999	1,043	14.6
>=$75,000	1,706	23.8
Unknown/Refused	972	13.6
Total	7,166	100.0

[2] Percents rounded to nearest tenth.

4. General Health Status and Health-Related Quality of Life

Background

General health status defined by responses to a single question such as "How is your health, in general?" have been found to be significant predictors of mortality. Additional studies that controlled for objective health status, age, sex, life satisfaction, income, residence, and other factors continue to find that the risk of mortality is two to six times greater for those individuals who had reported earlier that their health was bad or poor, compared to those who had reported their health as excellent.[2] The risk associated with poor self-rated health was actually higher than the risks associated with poor health status assessments by a physician.[2]

The Centers for Disease Control and Prevention (CDC) has defined health-related quality of life (HRQOL) as "an individual's or group's perceived physical and mental health over time"[1]. Physicians have often used HRQOL to measure the effects of chronic illness in their patients to understand better how an illness interferes with a person's day-to-day life. Similarly, public health professionals use health-related quality of life to measure the effects of numerous disorders, short- and long-term disabilities, and diseases in different populations. Tracking health-related quality of life in different populations can identify subgroups with poor physical or mental health and can help guide policies or interventions to improve their health.[1]

Self-ratings of health, or health-related quality of life, seek to determine how people perceive their own health and how well they function physically and psychologically during their usual daily activities. These indicators are important because they can assess dysfunction and disability that are not measured by standard morbidity and mortality measures.

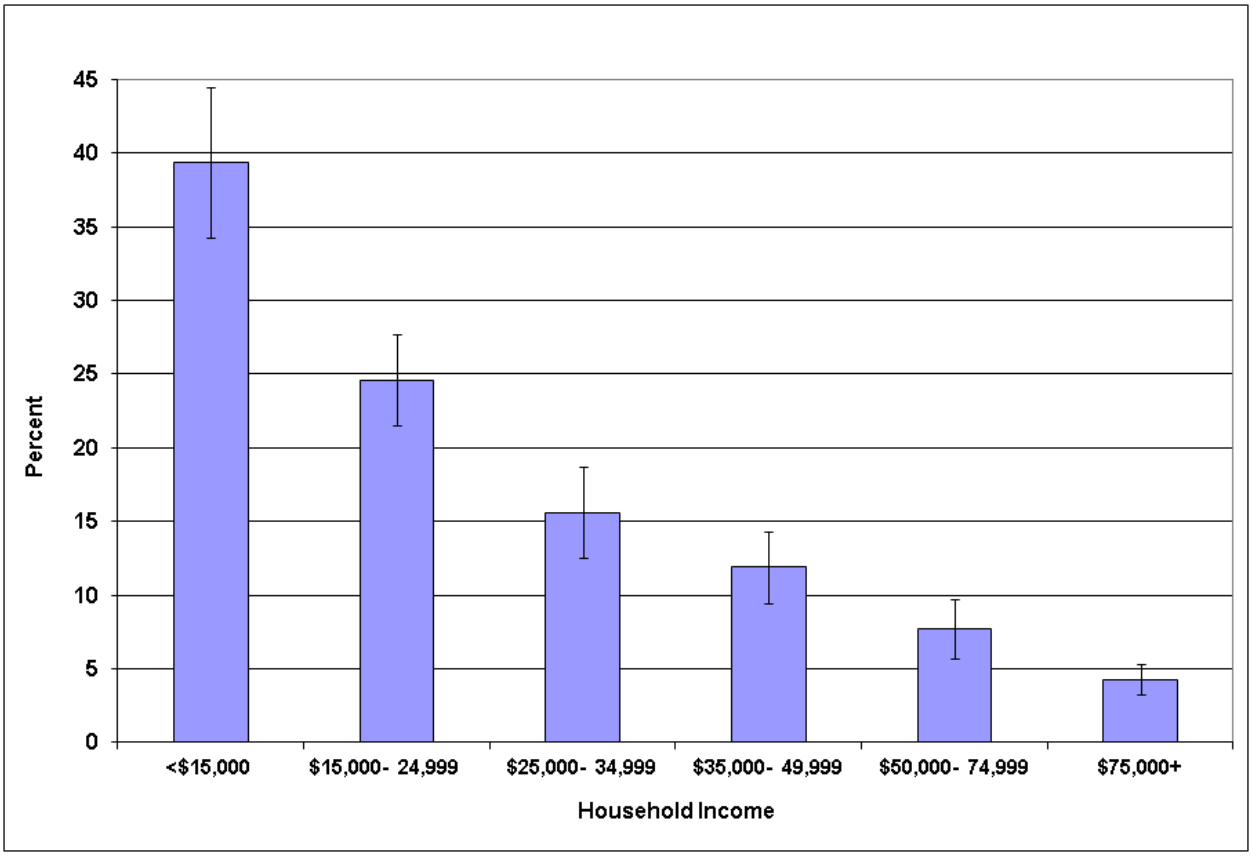
General Health Status Results

In 2012, when asked how their health was in general, 18.1 percent of respondents reported that it was excellent. Another 37.5 percent said it was very good. While 30.4 percent reported good health, 14 percent rated their health as fair or poor. This is somewhat worse than the figure from 2011 when 13 percent rated their health as fair or poor.

Age, education, household income, and race/ethnicity all had a significant impact on reported health status (see table 4.1). Household income had the most impact on reporting fair or poor health. While only 4.3 percent of those with incomes of $75,000 or over reported fair or poor health, 39.4 percent of those with incomes below $15,000 did so (see figure 4.1). Other respondents who were more likely to report having fair or poor health were those with less than a high school education, racial minorities, and those 75 years old and older. Those with a college education, those with household incomes $50,000 or higher, and those age 18 to 34 years all reported less than ten percent with fair or poor health.

In answer to the question about how many days during the past 30 days was their physical health not good, 67.1 percent of respondents reported none of the days and 10.3 percent reported 14 days or more.

Figure 4.1: Percent of Iowans Reporting Their Health as Fair or Poor by Household Income 2012



As shown in Table 4.2, there were fewer people reporting 14 or more bad physical days with younger age, higher education, and higher income.

Once again, household income had the greatest impact. People with household incomes less than $15,000 reported 27.4 percent having fourteen or more bad physical health days, while people with household incomes of $75,000 or more had only 5.1 percent. People age 18 to 24 and college graduates also reported less than five percent with 14 or more bad physical health days.

When responding to the question of how many days during the past 30 days their mental health was not good, 68.5 percent of the respondents indicated none of the days and 9.3 percent reported 14 or more days. Table 4.2 shows the pattern for bad mental health days. Fourteen or more days in the past 30 of bad mental health is referred to as frequent mental distress (FMD).

Men, Whites and Hispanics, older people, those with high education, and those with high income had a lower prevalence of FMD. Once again annual household income made the most difference. An annual household income of $15,000 or less had the most people with FMD (22.1%), while only 4.6 percent of those with $75,000 or more had FMD. An equally low prevalence was seen among respondents age 75 years and older.

Table 4.1: Percentage of Self-Reported Fair or Poor General Health Status, 2012

DEMOGRAPHIC GROUPS	General Health Status Fair or Poor	
	%	C.I. (95%)
TOTAL	14.0	(13-15)
SEX		
Male	13.6	(12.2-15)
Female	14.3	(12.9-15.7)
RACE/ETHNICITY		
Non-Hispanic White	13.0	(12-14)
Hispanic or other	23.6	(18.9-28.2)
AGE		
18-24	5.9	(3.5-8.3)
25-34	9.3	(6.6-12)
35-44	11.2	(8.7-13.7)
45-54	15.5	(13.1-17.9)
55-64	17.3	(15.1-19.5)
65-74	18.2	(15.8-20.6)
75+	24.7	(21.9-27.5)
EDUCATION		
Less Than H.S.	32.7	(27.4-38)
H.S. or G.E.D.	15.3	(13.7-16.9)
Some Post-H.S.	12.7	(11.1-14.3)
College Graduate	5.9	(4.7-7.1)
HOUSEHOLD INCOME		
<$15,000	39.4	(34.3-44.5)
$15,000- 24,999	24.6	(21.5-27.7)
$25,000- 34,999	15.6	(12.5-18.7)
$35,000- 49,999	11.9	(9.5-14.3)
$50,000- 74,999	7.7	(5.7-9.7)
$75,000+	4.3	(3.3-5.3)

When asked how many days poor physical or mental health kept them from performing their usual activities, 62.4 percent of those with some days of either bad physical or mental health said none. On the other hand, 12.2 percent said 14 days or more. This level increased with increasing age, decreasing education, and decreasing income.

Comparison with Other States

The percentage of people rating their health as fair or poor throughout the states and District of Columbia ranged from 11.7 percent to 25.2 percent. The median value was 16.9 percent. Iowa ranked quite well with only 14 percent rating their health as fair or poor. This put Iowa in the top 10 states in terms of self-reported health status.

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2. DeSalvo KB, Bloser N, Reynolds K, He J, and Muntner P. Mortality Prediction with A Single General Self-Rated Health Question: A Meta-Analysis. *Journal of General Internal Medicine.* Springer New York, Volume 21, Number 3 / March, 2006, 267-275.

Table 4.2: Percentage of Reported Days of Poor Physical or Mental Health in Past 30 Days, 2012

DEMOGRAPHIC GROUP	14 –30 Days of Poor Physical Health		14 –30 Days of Poor Mental Health (FMD)	
	%	**C.I. (95%)**	**%**	**C.I. (95%)**
TOTAL	10.3	(9.4-11.1)	9.3	(8.4-10.2)
SEX				
Male	10.2	(8.8-11.5)	7.4	(6.2-8.5)
Female	10.4	(9.3-11.5)	11.1	(9.7-12.4)
RACE/ETHNICITY				
White/Non-Hisp.	10.0	(9.1-10.8)	8.8	(7.9-9.7)
Black/Non-Hisp	12.4	(4.3-20.4)	10.8	(2-19.6)
Other/Non-Hisp	20.3	(11.6-29)	21.5	(13.1-30)
Hispanic	7.9	(3.7-12.1)	7.7	(3.6-11.9)
AGE GROUP				
18-24	4.7	(2.2-7.2)	14.9	(10.8-19)
25-34	6.0	(4-8.1)	8.3	(6-10.5)
35-44	7.6	(5.3-9.9)	9.0	(6.8-11.1)
45-54	13.2	(10.9-15.5)	11.9	(9.7-14.1)
55-64	12.5	(10.6-14.4)	8.9	(7.3-10.5)
65-74	12.7	(10.6-14.8)	5.1	(3.8-6.4)
75+	17.2	(14.7-19.8)	4.4	(3-5.7)
EDUCATION				
Less than H.S.	20.7	(16-25.3)	13.0	(9.2-16.8)
H.S. or G.E.D.	10.5	(9.1-11.9)	10.9	(9.2-12.5)
Some Post-H.S.	10.9	(9.3-12.4)	9.1	(7.5-10.7)
College Graduate	4.6	(3.7-5.6)	5.7	(4.5-6.8)
HOUSEHOLD INCOME				
Less than $15,000	27.4	(22.9-32)	22.1	(17.6-26.6)
$15,000- 24,999	16.4	(13.7-19.1)	12.8	(10.3-15.3)
$25,000- 34,999	11.2	(8.4-14)	11.8	(8.8-14.8)
$35,000- 49,999	7.5	(5.5-9.5)	6.1	(4.2-7.9)
$50,000- 74,999	6.1	(4.4-7.8)	7.8	(5.2-10.4)
$75,000+	5.1	(3.6-6.5)	4.6	(3.4-5.9)

5. INSURANCE COVERAGE AND ACCESS TO HEALTH CARE

Background

Access to health care is important for the prevention of disease, the detection of illness through screening, treatment, and management of illness and injuries. Adults who have a usual source of care are much more likely to use the health care system and obtain needed services.[1]

For those who lack health insurance, it may be impossible to obtain adequate health care. This not only includes expensive surgery and hospital stays, but also preventive care, management of chronic disorders such as diabetes or hypertension, and emergency treatment. Such a lack of access to health care allows small easily treatable problems to become major health problems for many individuals.[2]

Accurate estimates of the uninsured are important to obtain. The landscape of healthcare coverage is rapidly changing with the implementation of the Affordable Care Act. It will be necessary to evaluate the effects of vast changes in the healthcare delivery system over the next few years.

Health care costs have increased. This is especially true of particular sectors of costs such as pharmaceuticals. Such increases hit harder on individuals without health insurance and those living on fixed incomes. Both access and affordability of healthcare are important areas to monitor.

Insurance Coverage and Access to Health Care Results

In 2012, 11 percent of the survey respondents reported they had no health insurance. This figure is a little better than in 2011 when 11.6 percent of Iowans reported having no coverage.

Table 5.1 shows that more males, younger people, less educated people, people with lower incomes, and racial and ethnic minorities were more likely to lack any health care coverage. People with less than a high school education had the highest percentage of individuals without health care coverage (27.2%). However, more than a fifth of racial minorities, people between age 18 and 24 years, and people with annual household incomes less than $25,000 also had no coverage. Almost everyone age 65 years and older had health care coverage due to Medicare. In fact, if only those age 18 to 64 years old are considered, 13.4 percent are without coverage.

Two other demographic variables that had a major impact on health care coverage were employment status and marital status. Unemployed respondents had 17.6 percent reporting they were not covered by health insurance. Only 1.9 percent of retirees were without health insurance.

People who were married were much more likely to have health care coverage than those who were not. Only 5.8 percent of married respondents were without coverage, while 17.5 percent of unmarried respondents were without it.

When asked if there was a time in the past 12 months when they needed to see a doctor but could not because of the cost, 10.4 percent said that there was. The percentage was higher for females, younger people, people with less education, people with lower incomes, and racial and ethnic minorities. The lowest percentage (1.8%) was for people with annual household incomes of $75,000 or more. The highest percentage (26.5%) was for people earning less than $15,000.

Since it is important that care be coordinated, respondents were asked if they had one person they thought of as their personal doctor or health care provider. A positive reply was given by 76 percent of respondents. Women, White non-Hispanics, older people, people with more education, and people with higher household incomes were more likely to report a regular provider. Non-White or Hispanic respondents were least likely to report one regular provider (61.3%), while those age 65 years old and older were most likely (88.2%).

When asked how long it had been since their last regular checkup, 67.7 percent said less than one year. On the other end, 1.1 percent said they had never had a checkup. People who were female or older were more likely to have a checkup in the past year. Respondents who were 65 years old or older were most likely to have a checkup (86.6%), while those from age 25 to 34 were least likely (54.1%).

Comparison with Other States

In the fifty states and District of Columbia, the percent of non-elderly people without health insurance ranged from 7 percent to 35.8 percent. The lowest was from Massachusetts, which was the first state to pass major health reform legislation. Only six states had an equal or lower percentage of residents without health insurance than Iowa. Iowa had 13.4 percent of its non-elderly respondents reporting not having any insurance. The median for states and territories was 20.4 percent.

Health Objectives for Iowa and the Nation

The *Healthy People* 2020 and *Healthy Iowans* goals for health insurance coverage are to see all people be covered by some form of health insurance. In Iowa, only 86.6 percent of non-elderly adults have coverage. This is far short of the goal.

Having one specific source of primary care also missed the mark. *Healthy People 2020* has separate goals for people age 18 to 64 and people 65 and over. The goal for 18 to 64 is 89.2 percent, while the goal for age 65 and over is 100 percent. The results for Iowa were 73 percent and 88.2 percent respectively. The Healthy Iowans goal for all adults was 82.5 percent. The obtained prevalence of 76 percent also falls short.

References

1. National Center for Health Statistics. *Health, United States, 2010: With Special Feature on Death and Dying*, Hyattsville, Maryland: 2011.

Table 5.1
Percentage of Responses to Health Care Coverage and Access Questions in Iowa, 2012

DEMOGRAPHIC GROUPS	No Health Insurance Coverage		Time Couldn't Afford Help		Have One Person as Health Provider		Had Checkup in Past Year	
	%	C.I. (95%)	%	C.I. (95%)	%	C.I. (95%)	%	C.I. (95%)
TOTAL	11.0	(10-12)	10.4	(9.4-11.3)	76.0	(74.6-77.4)	67.7	(66.3-69.1)
SEX								
Male	12.2	(10.6-13.8)	8.5	(7.1-9.9)	69.2	(67-71.4)	61.3	(59.1-63.5)
Female	9.8	(8.4-11.2)	12.3	(10.9-13.7)	82.5	(80.9-84.1)	73.9	(72.1-75.7)
RACE/ETHNICITY								
Non-Hispanic White	9.4	(8.4-10.4)	9.2	(8.2-10.2)	77.6	(76.2-79)	68.3	(66.9-69.7)
Non-White or Hisp.	25.6	(20.5-30.7)	21.9	(17-26.8)	61.3	(55.6-67)	62.3	(58.6-66.1)
AGE								
18-24	20.5	(15.8-25.2)	13.5	(9.8-17.2)	62.3	(56.8-67.8)	55.7	(49.8-61.6)
25-34	18.2	(14.7-21.7)	15.4	(12.3-18.5)	63.2	(59.1-67.3)	54.1	(50-58.2)
35-44	12.7	(10-15.4)	13.7	(11-16.4)	74.2	(70.9-77.5)	60.5	(56.8-64.2)
45-54	10.3	(8.3-12.3)	11.0	(8.8-13.2)	79.8	(77.3-82.3)	66.4	(63.3-69.5)
55-64	7.0	(5.4-8.6)	8.4	(6.8-10)	81.7	(79.5-83.9)	74.7	(72.2-77.2)
65+	1.4	(0.8-2)	3.5	(2.5-4.5)	88.2	(86.8-89.6)	86.6	(85.2-88)
EDUCATION								
Less than H.S.	27.2	(21.5-32.9)	18.9	(14.4-23.4)	68.5	(62.8-74.2)	70.6	(64.9-76.3)
H.S. or G.E.D.	12.5	(10.7-14.3)	10.5	(8.9-12.1)	74.6	(72.2-77)	67.0	(64.6-69.4)
Some Post-H.S.	9.3	(7.7-10.9)	11.5	(9.7-13.3)	77.2	(74.8-79.6)	66.7	(64.2-69.2)
College Graduate	4.3	(3.1-5.5)	5.2	(4-6.4)	79.4	(77.2-81.6)	69.0	(66.6-71.4)
HOUSEHOLD INCOME								
Less than $15,000	22.0	(17.5-26.5)	26.5	(21.8-31.2)	64.0	(58.7-69.3)	63.0	(57.9-68.1)
$15,000- 24,999	21.6	(17.9-25.3)	20.5	(17-24)	71.2	(67.3-75.1)	66.2	(62.3-70.1)
$25,000- 34,999	16.2	(12.5-19.9)	15.1	(11.6-18.6)	72.5	(68.2-76.8)	64.1	(59.8-68.4)
$35,000- 49,999	9.6	(7.2-12)	9.7	(7.2-12.2)	74.7	(71.2-78.2)	67.9	(64.4-71.4)
$50,000- 74,999	5.9	(3.7-8.1)	5.6	(3.8-7.4)	78.9	(75.8-82)	68.5	(65-72)
$75,000+	2.3	(1.3-3.3)	1.8	(1-2.6)	83.6	(81.4-85.8)	69.2	(66.5-71.9)

2. Hadley J. Insurance Coverage, Medical Care Use, and Short-term Health Changes Following an Unintentional Injury or the Onset of a Chronic Condition. *Journal of the American Medical Association,* Vol. 297, No. 10; March, 2007.

6. EXERCISE AND PHYSICAL ACTIVITY

Background

A lifestyle lacking in regular physical activity has been associated with an increased risk for cardiovascular illness, cancer, osteoporosis, and other debilitating conditions.[1] Despite its risks, a large proportion of people remain inactive.

Although the percentage of people who do not engage in regular physical activity remains high, many efforts are underway to try to increase the physical activity level of Iowans. The Iowa Department of Public Health is actively working to increase the physical activity levels of Iowans. Interventions to increase physical activity include:

1) Creating a culture where physical activity is the easy choice.
2) Creating the commitment of Iowans to walk and bike for transportation.
3) Creating policies that enable Iowans to be physically active.
4) Increasing the number of complete streets. (A complete street is a street that has been designed with all users in mind cars, cyclists and pedestrians.)
5) Developing recreational trails.
6) Enhancing worksite wellness programs.
7) Continuing to promote physical activity and the built environment by the Iowa Department of Public Health and other organizations.

Encouraging people to have a less sedentary lifestyle by engaging in regular physical activity continues to be a significant step toward a healthier Iowa.

Exercise and Physical Activity Results

In 2012, 76.9 percent of respondents reported that they had engaged in some sort of physical activity for exercise during the past month other than their regular job. This is better than the 74.1 percent found in 2011.

A larger proportion of younger respondents reported engaging in leisure physical activity than older respondents. The percentage of respondents who exercised also increased with education and household income. This percentage was higher for White non-Hispanics than for other racial or ethnic groups. The lowest percentage of all examined demographic variables was for those with less than a high school education (59.8%), while the highest was for those age 18 to 24 years (89.5%). This was closely followed by those with a college education (89.1%) (see table 6.1).

Comparison with Other States

Values for the measure of not engaging in leisure time physical activity in the 50 states and the District of Columbia ranged from a low of 16.3 percent to a high of 31.5 percent. Iowa ranked slightly above the median on not engaging in leisure time physical activity. Iowa was at 23.1 percent, reporting not engaging in any leisure activity while the median for the nation was at 22.9 percent.

Table 6.1: Physical Activity in Iowans, 2012

Demographic Groups	Any Leisure Physical Exercise in Last Month	
	%	C.I. (95%)
TOTAL	76.9	(75.7-78.1)
SEX		
Male	76.9	(75.1-78.7)
Female	76.8	(75.2-78.4)
RACE/ETHNICITY		
White/Non-Hisp.	77.8	(76.6-79)
Non-White or Hisp.	68.7	(63.5-73.8)
AGE		
18-24	89.5	(86.2-92.8)
25-34	82.6	(79.3-85.9)
35-44	78.3	(75-81.6)
45-54	76.9	(74.2-79.6)
55-64	72.8	(70.3-75.3)
65-74	72.4	(69.6-75.1)
75+	61.4	(58.3-64.5)
EDUCATION		
Less than H.S.	59.8	(54.1-65.5)
H.S. or G.E.D.	70.3	(68.1-72.5)
Some Post-H.S.	80.0	(78-82)
College Graduate	89.1	(87.5-90.7)
HOUSEHOLD INCOME		
Less than $15,000	63.7	(58.8-68.6)
$15,000- 24,999	68.4	(64.9-71.9)
$25,000- 34,999	70.4	(66.5-74.3)
$35,000- 49,999	78.5	(75.6-81.4)
$50,000- 74,999	81.8	(79.1-84.5)
$75,000+	87.8	(86-89.6)

Health Objectives for the Nation

The national target for reducing the proportion of adults who engage in no leisure-time physical activity is 32.6 percent for Healthy People 2020. Iowa's level of 23.1 percent surpasses the modest 2020 target.

References

1. National Center for Health Statistics. *Health, United States, 2007: With Chartbook on Trends in the Health of Americans*, Hyattsville, Maryland: 2008.

7. OVERWEIGHT AND OBESITY

Background

Overweight and obesity are probably the most serious health problems in America today. Obesity is a condition linked to risk factors for heart disease, cancer, and stroke, which are all leading causes of death. It is associated with Type II diabetes, atherosclerosis (hardening of the arteries), gout, asthma, hypertension, sleep apnea, and osteoarthritis.[5] Obesity has been increasing so rapidly that it may be regarded as an epidemic.

The origin of overweight involves many factors. It reflects inherited, environmental, cultural, and socioeconomic traits. The increase in the prevalence of being overweight is a result of a shift in energy balance in which energy taken in from food is greater than energy used in physical activity.[1]

Strategies to combat obesity would seek to advance policies that

- Increase the availability of affordable healthy foods in all communities;
- Increase the frequency, intensity, and duration of physical activity;
- Improve access to safe and healthy places to live, work, learn, and play;
- Limit screen time; and
- Encourage employers to provide workplace wellness programs.

Exact measurements of body fat require sophisticated equipment. To eliminate this problem obesity is often estimated from weight standards that are adjusted for body frame. Carefully measured weight and height remain the most easily performed and useful means to determine nutritional status and to predict mortality for the general population.[2]

Body mass index (BMI) is used to determine the appropriateness of weight for a person's height. BMI is defined as a person's body weight in kilograms divided by their height in meters squared [weight (kg)/height (m^2)]. Estimations of the prevalence of overweight and obesity in this report are based on BMI determined from self-reported weight and height. In adults, overweight is considered to be a BMI value greater than or equal to 25 and less than 30. Obesity is considered to be a BMI greater than or equal to 30. This self-report method is likely to result in an underestimation of the actual extent of obesity. However, comparisons among demographic groups and years are likely to be valid. Furthermore, this is the only measure of overweight and obesity available on the state level.

The medical care costs of obesity in the United States are staggering. In 2008 dollars, these costs totaled about $147 billion.[2] There are other costs as well that are more difficult to estimate. For instance, obese people miss more work. Because people are fatter, airlines spend more on jet fuel, and the obese themselves spend more on gas.[3] The obesity epidemic is a big contributor to the skyrocketing health care costs in the United States. Because of the large number of people in the Baby Boomer generation and its high rate of obesity, as this population ages, obesity-related costs to Medicare are likely to grow significantly. It is estimated that Iowa could save 5.7 billion dollars by 2030 if BMI were lowered by just five percent.[4]

Overweight & Obesity Results

The BRFSS data show that in 2012 34.3 percent of non-pregnant adult Iowans were overweight and 30.4 percent were obese, based on BMI. The combined percentage of individuals who were overweight or obese was 64.7 percent. This combined prevalence is the same as in 2011 when 35.8 percent of non-pregnant adult Iowans were overweight and 29 percent were obese. Since obesity is a worse problem than overweight, however, this may be regarded as a more undesirable condition than last year.

Demographic factors behave somewhat differently for overweight and obesity. The self-reported weights show more males than females are overweight and obese. Prevalence of overweight and obesity increase with age until late middle age after which a decline is seen in obesity. More males are not more obese than females in all age groups. In fact, more females are obese than males in some of the younger age groups. Obesity prevalence shows a very sharp decrease for both sexes in the 75 years of age and older group (see Figure 7.1). There is a much stronger sex difference for overweight than for obesity. More men are overweight than women at all age groups and there is no decline at the oldest age group.

The effects of income are different for overweight and obesity. The percentage overweight tends to be lower at lower incomes but remain level at incomes higher than $25,000. On the other

Figure 7.1: Obesity by Age and Sex, 2012

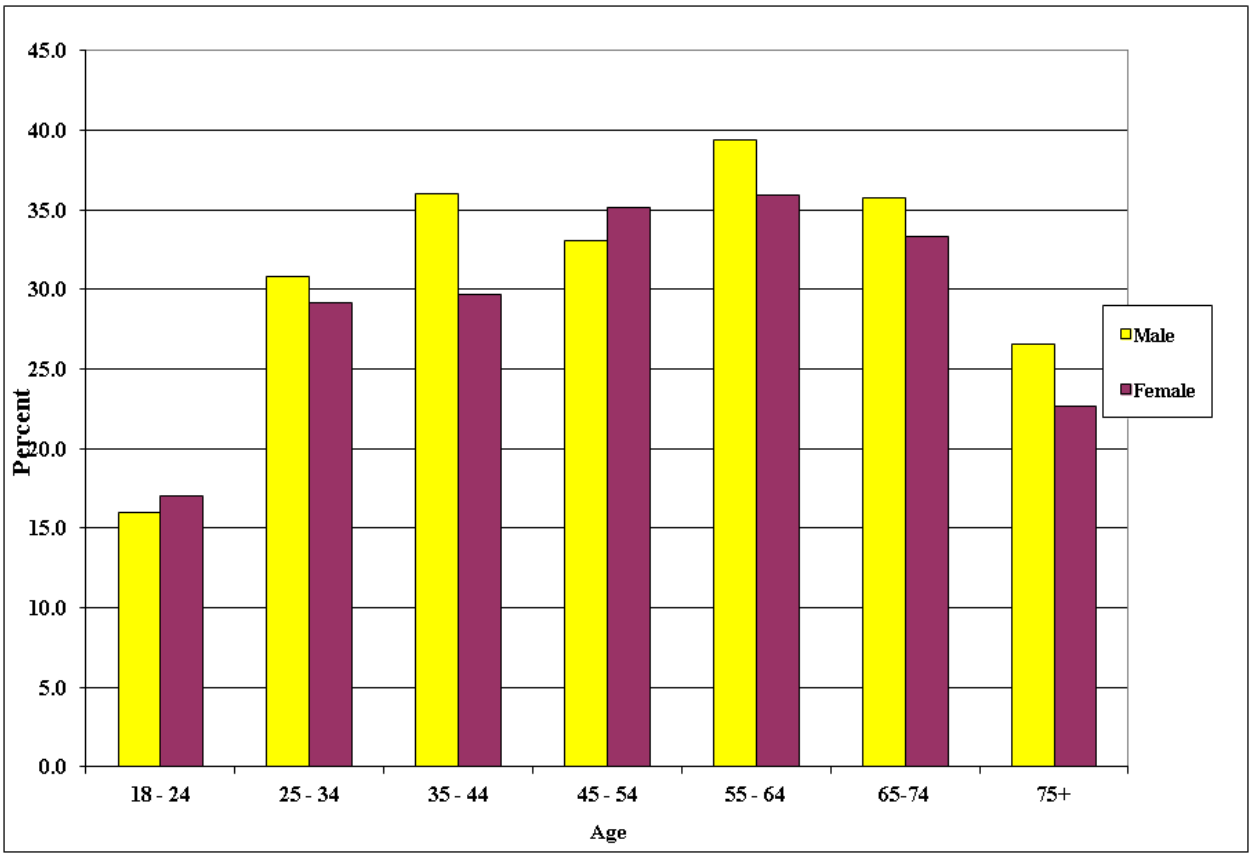


Table 7.1: Overweight and Obese Iowans Based on BMI, 2012

DEMOGRAPHIC GROUPS	Overweight		Obesity		Combined	
	%	C.I. (95%)	%	C.I. (95%)	%	C.I. (95%)
TOTAL	34.3	(32.9-35.7)	30.4	(29-31.8)	64.7	(63.1-66.3)
SEX						
Male	39.7	(37.5-41.9)	31.5	(29.5-33.5)	71.1	(68.9-73.3)
Female	28.8	(27-30.6)	29.3	(27.5-31.1)	58.1	(56.1-60.1)
RACE/ETHNICITY						
White/non-Hisp.	34.9	(33.5-36.3)	30.2	(28.8-31.6)	65.1	(63.5-66.7)
Non-White or Hisp.	28.1	(22.9-33.2)	32.5	(28.9-36.1)	60.6	(54.3-66.9)
AGE GROUP						
18 - 24	20.4	(15.9-24.9)	16.5	(12.2-20.8)	36.9	(31.2-42.6)
25 - 34	29.9	(26-33.8)	30.0	(26.1-33.9)	59.9	(55.8-64)
35 - 44	37.9	(34.2-41.6)	33.0	(29.3-36.7)	70.9	(67.4-74.4)
45 - 54	37.3	(34.2-40.4)	34.1	(31-37.2)	71.4	(68.5-74.3)
55 - 64	35.3	(32.6-38)	37.8	(35.1-40.5)	73.1	(70.6-75.6)
65-74	42.1	(39-45.2)	34.6	(31.6-37.5)	76.7	(74.1-79.3)
75+	39.3	(36.2-42.5)	24.2	(21.4-27)	63.6	(60.5-66.6)
EDUCATION						
Less than H.S.	34.6	(28.7-40.5)	28.6	(23.3-33.9)	63.3	(56.8-69.8)
H.S. or G.E.D.	34.8	(32.4-37.2)	33.5	(31.1-35.9)	68.3	(65.9-70.7)
Some Post-H.S.	31.5	(29.1-33.9)	32.3	(29.8-34.8)	63.9	(61.2-66.6)
College Graduate	37.7	(35.3-40.1)	23.9	(21.7-26.1)	61.6	(59.1-64.1)
HOUSEHOLD INCOME						
Less than $15,000	29.7	(24.8-34.6)	28.3	(23.6-33)	64.7	(59.6-69.8)
$15,000- 24,999	32.2	(28.5-35.9)	33.8	(30.1-37.5)	68.4	(64.7-72.1)
$25,000- 34,999	38.2	(33.5-42.9)	32.1	(27.8-36.4)	67.4	(63.1-71.7)
$35,000- 49,999	37.1	(33.4-40.8)	32.7	(29-36.4)	68.4	(64.7-72.1)
$50,000- 74,999	38.4	(34.9-41.9)	33.3	(30-36.6)	68.5	(65-72)
$75,000+	38.9	(36-41.8)	25.0	(22.5-27.5)	63.9	(61-66.8)

hand, obesity tends to be lower at both high and low income extremes (see table 7.1 and figure 7.2).

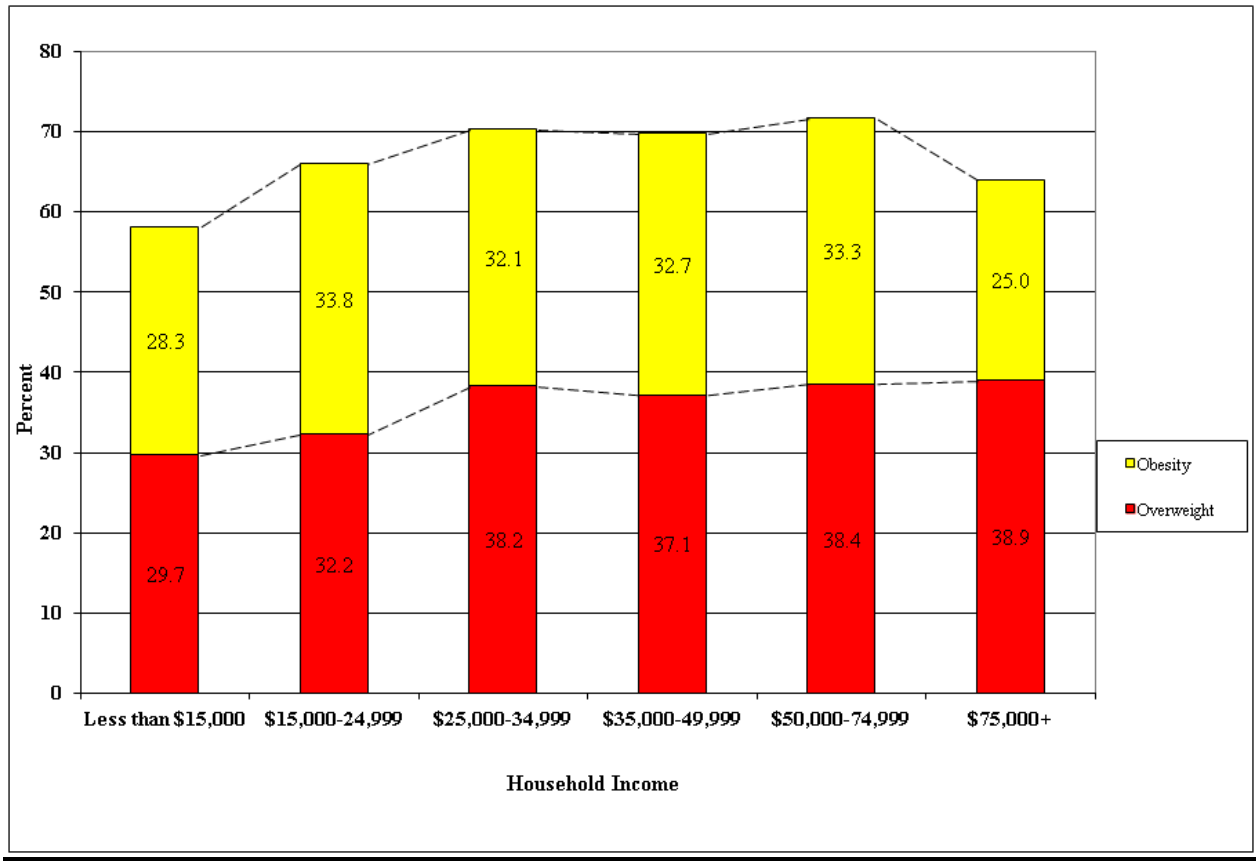
The affect of race/ethnicity is also reversed for overweight and obesity. More White non-Hispanics are overweight, but more Non-White or Hispanics are obese.

The demographic group with the highest prevalence of people over their healthy weight (combined overweight and obesity) is people aged 65 to 74 years with 76.7 percent. The group with the lowest prevalence over their healthy weight is those 18 to 24 years old (36.9%).

Comparison with Other States

Iowa's figure of 30.4 percent obese in 2012 was well above the U.S. median of 27.6 percent. The range of prevalence among the 50 states and District of Columbia for obesity was from a low of 20.5 percent to a high of 34.7 percent. While Iowa's obesity rate has continued to increase, the nation was essentially level compared to the previous year.

Figure 7.2: Overweight and Obesity by Income, Iowa 2012



Health Objectives for Iowa and the Nation

The *Healthy People 2020* objectives for the nation to be achieved on weight call for increasing the prevalence of healthy weight (neither overweight nor obese) to 33.9 percent among adults age 20 years and older. Iowa is well below this target having 32 percent at healthy weight. The Healthy People 2020 goal for obesity is 30.6 percent. Iowa has a prevalence of 31.3 percent for those over age 20. This does not reach the HP 2020 target. The *Healthy Iowans* goal for obesity is 27 percent. Iowa's figure of 30.4 percent for all adults fails to achieve this goal.

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3. Herper M, What Fat Costs America. Forbes, Nov., 2007.

4. The Trust for America's Health (TFAH) and the Robert Wood Johnson Foundation (RWJF), F as in Fat: How Obesity Threatens America's Future, 2013.

5. U. S. Department of Health and Human Services. The Surgeon General's call to action to prevent and decrease overweight and obesity, Rockville, MD.: Public Health Service, Office of the Surgeon General; 2001.

8. DIABETES

Background

Diabetes mellitus is a group of diseases characterized by high levels of blood glucose resulting from defects in insulin production, insulin action, or both.[1] Diabetes can be associated with serious complications and premature death.

Diabetes rates in the United States are approaching epidemic proportions. Diabetes may affect persons of all ages, although prevalence increases with age. It is estimated that a total of 25.8 million children and adults in the United States—8.3% of the population—have diabetes. Only about 18.8 million of these have been diagnosed, while 7.0 million remain undiagnosed.[1]

Skyrocketing costs accompany this epidemic with an estimated total annual cost (direct and indirect) in 2012 of $245 billion. This figure represents a 41 percent increase over a five year period. This includes direct medical costs of 176 billion and indirect costs resulting from increased absenteeism, reduced productivity, disease-related unemployment disability, and loss of productive capacity due to early mortality of another $69 billion. People with diagnosed diabetes, on average, have medical expenditures that are approximately 2.3 times higher than the expenditures would be in the absence of diabetes. Approximately one in five health care dollars is attributed to diabetes.[2]

The good news is that research studies have found that positive lifestyle changes can prevent or delay the onset of Type 2 diabetes among high–risk adults. Lifestyle interventions included diet modification, weight loss and moderate-intensity physical activity (such as walking for 2 ½ hours each week).

The complications of diabetes are many and severe. They can include heart disease, stroke, high blood pressure, kidney disease, blindness, diseases of the nervous system, dental disease, complications of pregnancy, lower extremity amputations, biochemical imbalances such as ketoacidosis and diabetic coma, and lower resistance to other diseases. However, complications can be minimized when diabetes is diagnosed early and patients are taught to self-manage their disease through blood glucose control, weight control, taking medications appropriately, decreasing unhealthy lifestyles such as smoking, and implementing healthy lifestyle interventions.[1]

The Diabetes Prevention and Control Program at the Iowa Department of Public Health acts as a resource for health care professionals regarding the latest guidelines for diabetes care, coordinates a statewide diabetes network, and collaborates with local community projects to develop initiatives on public awareness, prevention, and other areas of disease management. It also certifies programs for Medicaid reimbursement and assists certified programs in maintaining quality standards for outpatient education.

Diabetes Results

In 2012, 9.7 percent of respondents had ever been told by a physician that they have diabetes, excluding women told only during pregnancy. This is higher than in 2011 when 8.2 percent of Iowans had ever been told that they have diabetes.

Table 8.1 shows that the rate of diabetes is much higher when respondents are older, African American, lower in education, and have a lower household income. The demographic group with the highest percentage of diagnosed diabetics is people age 65 to 74 years (21.5%), while the group with the lowest percentage is people age 18 to 24 years (1.5%) (see table 10.1).

When asked if they had a test for diabetes in the past three years, 56.1 percent said they had.

Table 8.1: Iowans Ever Told They Had Diabetes, 2012

DEMOGRAPHIC GROUP	%	C.I. (95%)
TOTAL	9.7	(8.9-10.5)
SEX		
Male	10.4	(9.2-11.6)
Female	9.0	(8-10)
RACE/ETHNICITY		
White/Non-Hispanic	9.5	(8.7-10.3)
Black/Non-Hispanic	15.0	(7.7-22.3)
Other/Non-Hispanic	12.4	(7.1-17.7)
Hispanic	7.7	(4.1-11.3)
AGE GROUP		
18-24	1.5	(0.1-2.9)
25-34	2.6	(1.4-3.8)
35-44	5.0	(3.4-6.6)
45-54	9.9	(7.9-11.9)
55-64	14.2	(12.2-16.2)
65-74	21.5	(18.9-24)
75+	18.7	(16.3-21.1)
EDUCATION		
Less than H.S.	15.7	(12.2-19.2)
H.S. or G.E.D.	11.7	(10.3-13.1)
Some Post-H.S.	7.9	(6.7-9.1)
College Graduate	6.9	(5.7-8.1)
HOUSEHOLD INCOME		
Less than $15,000	16.9	(13.4-20.4)
$15,000- 24,999	13.8	(11.4-16.2)
$25,000- 34,999	12.8	(10.3-15.3)
$35,000- 49,999	9.0	(7.2-10.8)
$50,000- 74,999	8.0	(6.2-9.8)
$75,000+	5.4	(4.2-6.6)

More attention has been given lately to pre or borderline diabetes. People who catch their diabetes before it is fully developed stand a good chance of avoiding it altogether by making lifestyle changes. In 2012, 6.2 percent of non-diabetic respondents were told they had pre-diabetes.

The average age of diagnosis for people with diabetes was 50 years old (median = 50, mean = 50.9).

Comparison with Other States

The median prevalence of diagnosed diabetes for the 50 states and District of Columbia was 9.7 percent in 2012. Prevalence ranged from 7 percent to 13 percent. The figure for Iowa was at the median at 9.7 percent. This is a large increase in prevalence of diabetes in Iowa relative to the rest of the nation.

References

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2. American Diabetes Association. Economic Costs of Diabetes in the U.S. in 2012, *Diabetes Care*, April, 2013. Available at http://www.diabetes.org/advocate/resources/ cost-of-diabetes.html.

9. RESPIRATORY DISEASES

Background

Few things are as immediately important to life as the ability to breathe. Several respiratory diseases exist that can make breathing difficult. A few common ones are asthma and chronic obstructive pulmonary disease (COPD).

Asthma is a chronic, inflammatory disease of the lungs in which the airways become blocked or narrowed causing breathing difficulty. It is characterized by recurrent wheezing, breathlessness, coughing, and chest tightness.[3]

This chronic disease affects nearly 24 million Americans of all ages.[2] Asthma is the most common chronic disease of childhood. About seven million children in the U.S. suffer from asthma. Prevalence among adults and children has increased sharply since 1980.[2] More than 200,000 Iowans now have asthma of which 148,000 are adults.[1]

The causes of asthma are not completely understood, but are most likely a combination of personal and environmental risk factors. Those risk factors for asthma include family history of asthma and allergies, acute respiratory infections, exposure to indoor air pollution (tobacco smoke, animal dander, dust mites, cockroaches, occupational exposures to more than 250 substances), outdoor air pollution (burning leaves, pollen, air pollutants), obesity, and lack of exercise. Diet and early exposure to certain infectious agents may provide some protection. After developing asthma, a person often becomes especially sensitive to any exposures to the environmental risk factors listed.[3]

Asthma is a leading cause of inpatient admission and of unscheduled emergency department and physician office visits. Many of these admissions and visits could be avoided if medical and self-management of asthma were carried out according to national guidelines. Self-management of asthma involves the use of drugs and the avoidance of known triggers. People who suffer from asthma are encouraged to develop an asthma management plan.

Poor asthma control continues to be associated with increased emergency department visits, hospitalizations, and medical costs. The estimated total cost of asthma to society, including medical expenses ($50.1 billion per year), loss of productivity resulting from missed school or work days ($3.8 billion per year), and premature death ($2.1 billion per year) was $56 billion (2009 dollars) in 2007; a $3 billion (5.7%) increase from 2002. Medical expenses associated with asthma were $3,259 per person per year during 2002--2007.[2]

Chronic Obstructive Pulmonary Disease (COPD) includes both chronic bronchitis and emphysema**. It** is one of the most common lung diseases. Chronic bronchitis is defined by a long-term cough with mucus, while emphysema is defined by destruction of the lungs over time. Most people with COPD have a combination of both conditions.[4]

Smoking is the leading cause of COPD. The more a person smokes, the more likely that person will develop COPD. Another cause is exposure to secondhand smoke or air pollution.

There is no cure for COPD. However, there are many things you can do to relieve symptoms and keep the disease from getting worse. Persons with COPD must stop smoking. This is the best way to slow the lung damage. Medications may also be used to treat COPD symptoms. Oxygen therapy at home may be needed if a person has a low level of oxygen in their blood.

Respiratory Diseases Results

In 2012, 11.7 percent of Iowans reported ever being diagnosed by a physician with asthma. Out of all adult Iowans, 8.1 percent currently had asthma, and 3.4 percent formerly had asthma.* This is about the same as in 2011 when 11.8 percent of Iowans reported ever having asthma.

Table 9.1: Iowans Currently and Formerly Having Asthma, 2012

DEMOGRAPHIC GROUPS	Current Asthma		Former Asthma	
	%	C.I. (95%)	%	C.I. (95%)
TOTAL	8.1	(7.3-8.9)	3.4	(2.8-4)
SEX				
Male	6.1	(5.1-7.1)	4.4	(3.4-5.4)
Female	10.0	(8.6-11.4)	2.5	(1.9-3.1)
RACE/ETHNICITY				
White/non-Hispanic	7.8	(7-8.7)	3.4	(2.8-4.1)
Non-White or Hispanic	10.6	(7-14.3)	3.7	(1.7-5.7)
AGE				
18-24	10.0	(6.2-13.7)	5.3	(2.9-7.7)
25-34	7.5	(5.2-9.8)	6.8	(4.5-9.1)
35-44	7.1	(5.1-9.2)	2.6	(1.4-3.8)
45-54	8.1	(6.3-9.9)	2.7	(1.7-3.7)
55-64	8.2	(6.6-9.8)	2.7	(1.7-3.6)
65-74	9.1	(7.4-10.9)	1.8	(1-2.5)
75+	7.1	(5.4-8.8)	1.4	(0.8-2.1)
EDUCATION				
Less than H.S.	12.3	(8-16.6)	2.9	(1.1-4.7)
H.S. or G.E.D.	8.2	(6.8-9.6)	3.0	(2-4)
Some Post-H.S.	8.7	(7.1-10.3)	4.4	(3.2-5.6)
College Graduate	5.2	(4.2-6.2)	2.9	(2.1-3.7)
HOUSEHOLD INCOME				
Less than $15,000	18.7	(14.4-23)	5.2	(2.3-8.1)
$15,000- 24,999	9.4	(7.2-11.6)	4.0	(2.2-5.8)
$25,000- 34,999	9.0	(6.5-11.5)	3.2	(1.6-4.8)
$35,000- 49,999	5.3	(3.7-6.9)	4.2	(2.6-5.8)
$50,000- 74,999	6.0	(4.2-7.8)	2.3	(1.1-3.5)
$75,000+	4.9	(3.7-6.1)	3.4	(2.2-4.6)

* For some who had ever had asthma, their current status could not be determined.

In Iowa, more women, racial and ethnic minorities, **Lower education level, and household income** currently have asthma. The highest current asthma prevalence was among those with annual household incomes less than $15,000 (18.7%), while the lowest prevalence was for those with incomes of $75,000 or higher (4.9%) (see table 9.1).

Table 9.2
Iowans who have been told they have COPD

DEMOGRAPHIC GROUPS	COPD	
	%	C.I. (95%)
TOTAL	6.2	(5.6-6.8)
SEX		
Male	5.9	(4.9-6.9)
Female	6.6	(5.6-7.6)
RACE/ETHNICITY		
White/Non-Hispanic	6.1	(5.5-6.7)
Black/Non-Hispanic	11.9	(3.5-20.3)
Other/Non-Hispanic	12.0	(6.4-17.6)
Hispanic	1.9	(0-4.3)
AGE		
18-24	1.7	(0.3-3.1)
25-34	3.9	(1.9-5.9)
35-44	3.3	(1.7-4.9)
45-54	5.8	(4.2-7.4)
55-64	7.7	(6.1-9.3)
65-74	13.1	(11-15.2)
75+	12.1	(9.9-14.4)
EDUCATION		
Less than H.S.	11.7	(8.6-14.8)
H.S. or G.E.D.	6.8	(5.8-7.8)
Some Post-H.S.	6.8	(5.4-8.2)
College Graduate	2.2	(1.6-2.8)
HOUSEHOLD INCOME		
Less than $15,000	18.3	(14.4-22.2)
$15,000- 24,999	12.5	(10-15)
$25,000- 34,999	8.1	(5.9-10.3)
$35,000- 49,999	4.3	(2.9-5.7)
$50,000- 74,999	2.6	(1.6-3.6)
$75,000+	1.8	(1-2.6)

Starting in 2006 the BRFSS has collected a considerable amount of information from the people who reported they or their children had ever had asthma in a special callback survey. Most of the data from that survey is not included in this report, but will be presented separately. From the 2011 callback survey, however, it was found that 9.5 percent of adults with asthma had asthma-related emergency or urgent care visits.

When asked if they had been told they had COPD, 6.2 percent said they had. This is higher than 2011 when the figure was 5.1 percent. COPD was more common among women, older people, people with less education, and people with lower household income. Prevalence among Blacks and other non-Hispanic respondents was higher, but Hispanics were less likely to report COPD (see Table 11.2). The highest prevalence of having COPD was found among those with annual household incomes less than $15,000 (18.3%). People age 18 to 24 years, Hispanics, and people with annual household incomes of $75,000 or more all had a prevalence of COPD below two percent.

Comparison with Other States

While Iowa reported 8.1 percent of the entire adult population currently suffering from asthma, the median for the nation was 8.9 percent. Iowa's asthma prevalence was well below the median. Prevalence ranged from a low of 6.8 percent to a high of 11.1 percent.

References

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10. CARDIOVASCULAR DISEASES

Background

"Cardiovascular diseases" (CVD) refer in principle to any or all of the many disorders that can affect the circulatory system. CVD most often means coronary heart disease, heart failure, and stroke, taken together, which are the circulatory system disorders of greatest public health concern in the United States today. "Heart disease" most often includes coronary heart disease, heart attack (myocardial infarction), or heart failure. "Stroke" refers to a sudden impairment of brain function, sometimes termed "brain attack", which results from interruption of circulation to one or another part of the brain. Heart disease and stroke are mainly consequences of clogged arteries (atherosclerosis) and high blood pressure (hypertension).

Heart disease and stroke are the most common cardiovascular diseases. They are leading causes of death in the United States, accounting for nearly a third of all annual deaths.[1]

Deaths are only part of the picture. More than three million Americans currently report disability stemming from a cardiovascular disease. For example, suffering a stroke may lead to significant disability, such as paralysis, speech difficulties, and emotional problems. Following a heart attack, individuals frequently suffer fatigue and depression, and they may find it more difficult to engage in physical activities.[1] More than seven million hospitalizations each year are because of cardiovascular diseases.[3]

The economic impact of cardiovascular diseases on our nation's health care system continues to grow as the population ages. The cost of heart disease and stroke in the United States was estimated to be more than $312.6 billion in health care expenditures and lost productivity annually—and these costs are rising. On a personal level, families who experience heart disease or stroke not only have to deal with medical bills but also lost wages and the real potential of a decreased standard of living.[1]

In Iowa, heart disease is the number one cause and stroke is the fourth leading cause of death. Even so, the death rate from these causes has steadily declined. The rate per 100,000 population has gone from 344.9 in 1991 to 219.6 in 2011 for heart disease. The rate of deaths from stroke has gone from 74.7 in 1991 to 46.7 in 2011.[2]

At the same time mortality has declined, the BRFSS is documenting noteworthy increases in many risk factors that lead to heart disease and stroke. Reducing cardiovascular disease risk requires an integrated strategy that includes:

1) Lifestyle behavior change -- weight management; increased physical activity; no tobacco use; a low-fat, low-cholesterol diet with moderate sodium, sugar and alcohol intake; and control of high blood cholesterol, elevated blood pressure, and diabetes.

2) Community environmental support such as population screening to identify individuals with high levels of blood cholesterol, blood pressure, blood glucose, and other individuals at risk for heart disease. Community support also includes interventions that teach the skills necessary for behavior change that make living a healthier life easier. One popular example is the establishment and upkeep of bicycle trails for use by the public.

3) Development of public policies that encourage healthy lifestyle behaviors. These may be implemented in the form of laws, regulations, standards, or guidelines that contribute to setting these and other social and environmental conditions. For example, dietary patterns result from the influences of food production policies, marketing practices, product availability, cost, convenience, knowledge, choices that affect health, and preferences that are often based on early-life habits.[1]

Cardiovascular Diseases Results

In 2012, 5.1 percent of adult Iowans had been told by a doctor that they had had a heart attack or myocardial infarction; 4.6 percent had been told they had coronary heart disease or angina, and 3 percent had been told they had a stroke. Although these values may seem small, they represent around 90,000 Iowans with a heart attack or heart disease and 60,000 with a stroke. About 8.7 percent of Iowans reported being told they had any of the three conditions.

Table 10.1 shows the distribution of these conditions by demographic groups. Myocardial infarction and coronary heart disease/angina are combined when looking at the influence of various demographic factors.

More people experienced heart-related conditions if they were men, older people, people with lower education, people with lower household incomes, or non-Hispanics. Age is the variable with the most impact on having had these conditions. Less than two percent of those under age 45 reported a heart condition, while 22.4 percent of those 75 years or older reported a heart condition and 28.5 percent reported any of the three cardiovascular conditions. The pattern was much the same for those who said they had a stroke.

These results represent those who have survived these cardiovascular events. That may not match the actual prevalence of these conditions. Events ending in death on their first occurrence could not be considered here. Mortality data is required to complement the information from this survey.

References

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Table 10.1: Prevalence among Iowans of Heart Attack, Heart Disease, and Stroke, 2012

DEMOGRAPHIC GROUPS	Had any Heart Disease (MI or CHD)		Had Stroke		Had Any Cardio-vascular Disease	
	%	C.I. (95%)	%	C.I. (95%)	%	C.I. (95%)
TOTAL	7.0	(6.4-7.6)	3.0	(2.6-3.4)	8.7	(8.1-9.4)
SEX						
Male	8.9	(7.8-9.9)	3.4	(2.8-4)	10.7	(9.6-11.9)
Female	5.2	(4.5-5.9)	2.6	(2.2-3)	6.8	(6.1-7.6)
RACE/ETHNICITY						
White/Non-Hisp.	7.2	(6.5-7.8)	3.2	(2.8-3.6)	9.0	(8.3-9.7)
Black/Non-Hisp.	6.5	(1.9-11.1)	1.2	(0-3.6)	6.5	(1.9-11.1)
Other/Non-Hisp.	6.7	(2.9-10.4)	2.6	(0.4-4.8)	8.3	(4.1-12.5)
Hispanic	4.2	(1-7.5)	1.1	(0-2.3)	4.9	(1.5-8.3)
AGE						
18-24	0.7	(0-1.6)	0.0	(0-0)	0.7	(0-1.6)
25-34	0.3	(0-0.7)	0.2	(0-0.6)	0.5	(0-1)
35-44	1.8	(0.7-2.8)	0.9	(0.3-1.5)	2.2	(1.1-3.4)
45-54	5.1	(3.5-6.7)	2.2	(1.2-3.2)	6.5	(4.7-8.2)
55-64	9.5	(7.8-11.2)	3.2	(2.2-4.2)	11.7	(9.8-13.6)
65-74	16.6	(14.2-18.9)	7.7	(6-9.5)	20.6	(18-23.2)
75+	22.4	(19.6-25.1)	11.0	(8.9-13.1)	28.5	(25.5-31.4)
EDUCATION						
Less Than H.S.	13.1	(9.8-16.5)	6.3	(4.1-8.5)	16.4	(12.7-20.1)
H.S. or G.E.D.	8.3	(7.2-9.4)	3.6	(2.8-4.4)	10.4	(9.7-11.2)
Some Post-H.S.	6.0	(5-7.1)	2.7	(2.1-3.3)	7.6	(6.5-8.8)
College Graduate	4.0	(3.2-4.7)	1.2	(0.8-1.6)	4.7	(3.9-5.5)
HOUSEHOLD INCOME						
Less than $15,000	12.7	(9.8-15.6)	6.9	(4.5-9.3)	16.2	(12.9-19.5)
$15,000- 24,999	11.8	(9.7-13.9)	6.3	(4.7-7.9)	15.0	(12.7-17.4)
$25,000- 34,999	9.3	(7-11.6)	3.2	(2-4.4)	11.5	(9-13.9)
$35,000- 49,999	6.7	(5.1-8.4)	2.2	(1.2-3.2)	8.1	(6.3-9.8)
$50,000- 74,999	4.9	(3.6-6.2)	1.5	(0.9-2.1)	5.8	(4.4-7.2)
$75,000+	2.8	(1.9-3.6)	0.7	(0.3-1.1)	3.2	(2.3-4.1)

11. OTHER CHRONIC CONDITIONS

Background

The Behavioral Risk Factor Surveillance System asks people if they have a number of chronic health conditions. Several of these are covered in other chapters of this report such as cardiovascular diseases, respiratory diseases, and diabetes. This chapter looks at the remaining conditions about which information is collected. Although these conditions are important, the amount of information on each condition does not warrant that these should each have their own chapter.

Other Chronic Conditions Results

In 2012, 5.7 percent of Iowans had ever been told they had skin cancer, while 6.9 percent reported having been told they had some other type of cancer.

Skin cancer behaves somewhat differently from other types of cancers, which themselves may vary in prevalence and prognosis according to type. Both skin cancer and other cancers are more common with increasing age. Skin cancer is more common among white non-Hispanics and males. Other cancers, on the other hand, were more common among females and those with lower income. The highest prevalence of ever having cancer was for people age 75 and over. In this age group the prevalence was 21.9 percent for skin cancer and 21.1 percent for other cancers. Both Hispanics and Blacks as well as those age 18 to 34 years had a skin cancer prevalence less than half a percent, while for other cancers only people age 18 to 24 years had such a low prevalence (0.5%) (see table 11.1).

In 2012, 17 percent of adults reported that they had ever been told they had a depressive disorder. This is somewhat higher than in 2011 when it was 15.2 percent. The prevalence of depression was greater among women, people with less education, and lower income individuals and less among the elderly. The highest prevalence was among those with annual household incomes less than $15,000 (36.8%). The lowest prevalence was among those with annual household incomes of $75,000 or more (10.4%) (see table 11.1).

In 2012, 2.1 percent of adults reported they had ever been told they had kidney disease. A higher prevalence of kidney disease was reported with increasing age, decreasing education, decreasing income, and among African Americans. The highest percentage of kidney disease was among people age 75 years and older (6%). The lowest was among those age 18 to 24 years (0.5%). In addition, those between age 25 and 44 years and those with household incomes of $75,000 or more all had prevalence of kidney disease less than one percent (see table 11.1).

In 2012, 13.1 percent of adults reported they had ever been told they had visual impairment in one or both eyes. Visual impairment was more prevalent among women, the elderly, people with less education, people with lower income, and racial and ethnic minorities. The highest prevalence was among those with annual household incomes less than $15,000 (24.5%). The lowest was among those with annual household incomes of $75,000 or more (7.1%) (see table 11.1).

Health Objectives for the Nation

Healthy People 2020 has a goal of 6.1 percent of people experiencing a major depression episode. The 2012 Iowa BRFSS shows 17 percent of adult Iowans reporting ever having a depressive episode. Although it is not certain if all these would have been considered major depression, Iowa very likely exceeds the goal.

Healthy People 2020 has a goal of 13.6 percent reporting chronic kidney disease. Iowa's level of 2.1 percent is far lower than this goal.

Table 11.1
Prevalence of other chronic conditions in Iowa, 2012

DEMOGRAPHIC GROUPS	Skin Cancer		Other Cancer		Depressive Disorder		Kidney Disease		Visual Impairment	
	%	C.I. (95%)	%	C.I. (95%)	%	C.I. (95%)	%	C.I. (95%)	%	C.I. (95%)
TOTAL	5.7	(5.1-6.3)	6.9	(6.3-7.5)	17.0	(15.8-18.2)	2.1	(1.7-2.5)	13.1	(12.1-14.1)
SEX										
Male	6.4	(5.6-7.2)	5.4	(4.6-6.2)	12.3	(10.9-13.7)	1.8	(1.4-2.2)	11.8	(10.3-13.4)
Female	5.0	(4.4-5.6)	8.4	(7.4-9.4)	21.5	(19.9-23.1)	2.5	(1.9-3.1)	14.3	(12.9-15.7)
RACE/ETHNICITY										
White/Non-Hispanic	6.2	(5.6-6.8)	7.3	(6.7-7.9)	17.1	(15.9-18.3)	2.1	(1.7-2.5)	12.6	(11.6-13.6)
Black/Non-Hispanic	0.0	(0-0)	5.5	(0.6-10.4)	16.3	(6.7-25.9)	4.0	(0.5-7.5)		
Other/Non-Hispanic	2.5	(0.6-4.5)	4.4	(0.6-8.2)	21.0	(13.5-28.6)	2.6	(0.2-5)		
Hispanic	0.4	(0-1)	2.6	(0.4-4.8)	14.1	(8.8-19.4)	2.2	(0.3-4.2)	17.3	(13.2-21.3)
AGE GROUP										
18-24	0.4	(0-0.8)	0.5	(0-1.1)	18.3	(14-22.6)	0.5	(0-1.5)	7.4	(4.7-10.1)
25-34	0.4	(0-0.8)	3.7	(1.9-5.5)	16.6	(13.5-19.7)	0.8	(0.2-1.4)	9.6	(7-12.3)
35-44	1.8	(0.8-2.8)	2.7	(1.3-4.1)	17.3	(14.4-20.2)	0.8	(0.2-1.4)	9.2	(6.8-11.6)
45-54	3.0	(1.8-4.2)	4.2	(3-5.4)	20.0	(17.5-22.5)	2.2	(1.2-3.2)	18.4	(15.7-21.2)
55-64	7.3	(5.7-8.9)	9.6	(8-11.2)	18.8	(16.6-21)	3.0	(1.8-4.2)	13.5	(11.4-15.7)
65-74	13.2	(11.2-15.3)	13.8	(11.7-16)	14.2	(12.1-16.3)	3.2	(2.1-4.3)	15.8	(13.5-18.1)
75+	21.9	(19.3-24.5)	20.1	(17.6-22.6)	11.3	(9-13.5)	6.0	(4.3-7.6)	19.9	(17.3-22.5)
EDUCATION										
Less than H.S.	5.3	(3.5-7.1)	6.3	(4.1-8.5)	22.3	(17.8-26.8)	4.4	(2.6-6.2)	19.7	(15.2-24.3)
H.S. or G.E.D.	6.5	(5.5-7.5)	9.0	(7.8-10.2)	17.3	(15.3-19.3)	2.7	(1.9-3.5)	14.5	(12.8-16.3)
Some Post-H.S.	4.9	(3.9-5.9)	6.4	(5.2-7.6)	19.0	(16.8-21.2)	1.7	(1.1-2.3)	13.0	(11.2-14.8)
College Graduate	5.8	(4.8-6.8)	5.0	(4-6)	11.4	(9.8-13)	1.0	(0.6-1.4)	8.3	(7-9.7)
HOUSEHOLD INCOME										
Less than $15,000	4.2	(2.6-5.8)	9.3	(6.4-12.2)	36.8	(31.7-41.9)	4.6	(2.8-6.4)	24.5	(19.5-29.6)
$15,000- 24,999	7.3	(5.7-8.9)	8.8	(7-10.6)	22.5	(19.2-25.8)	4.0	(2.4-5.6)	19.5	(16.4-22.6)
$25,000- 34,999	5.6	(4-7.2)	5.5	(3.9-7.1)	17.9	(14.8-21)	1.9	(0.9-2.9)	16.2	(13.1-19.3)
$35,000- 49,999	5.8	(4.4-7.2)	7.9	(6.1-9.7)	14.8	(12.3-17.3)	1.9	(1.1-2.7)	10.9	(8.6-13.3)
$50,000- 74,999	5.4	(4-6.8)	6.5	(4.9-8.1)	13.6	(11.2-16)	1.3	(0.7-1.9)	10.1	(7.8-12.5)
$75,000+	5.3	(4.3-6.3)	4.9	(3.9-5.9)	10.4	(8.6-12.2)	0.8	(0.4-1.2)	7.1	(5.7-8.5)

12. TOBACCO USE

Background

Tobacco use remains the leading preventable cause of premature death in the United States. An estimated 46 million American adults currently smoke cigarettes and annually cigarette smoking causes more than 443,000 deaths each year, or one in every five deaths.[1] Cigarette smoking costs the nation more than $96 billion per year in direct medical expenses as well as more than $97 billion annually in lost productivity.[1] Secondhand smoke costs more than $10 billion (i.e., health care expenditures, morbidity, and mortality).[1]

Tobacco use is known to cause heart disease, peripheral vascular disease, and chronic lung disease, as well as cancers of the lung, larynx, esophagus, pharynx, mouth, bladder, pancreas, kidney, and cervix. In fact, smoking causes diseases in nearly every organ of the body.[2]

Consequences of smoking during pregnancy include spontaneous abortions, low birth weight babies, and sudden infant death syndrome (SIDS).[2]

Secondhand Smoke (SHS) increases the risk of heart disease and lung cancer in adults. SHS also affects children by increasing lower respiratory tract infections and asthma and by decreasing pulmonary function. According to the surgeon general there is no safe level of exposure to secondhand smoke.[3]

Public health efforts to reduce the prevalence of tobacco use began after the health risks were announced in the first surgeon general's report on tobacco in 1964.

Many steps are being taken to prevent use of tobacco. Some of these include reducing exposure to environmental tobacco smoke, smoking prevention education, the restriction of minors' access to tobacco, the treatment of nicotine addiction (cessation), and working toward changing social norms and environments that support tobacco use. The last component involves counter-advertising and promotion, product regulation, and economic incentives against tobacco.

The legal environment has recently made it much more difficult to continue smoking. In March of 2007, the Iowa state legislature passed a one dollar increase in the tax on a pack of cigarettes. In the long run this should further reduce the number of smokers by inducing people to try to quit and by making it less likely that new people will start. On July 1 of 2008 a smoking ban in most public places in the state took effect. This not only made it more difficult for smokers to find a place to smoke, but was quite beneficial at reducing exposure to secondhand smoke. Nationally, in 2009 the Food and Drug Administration (FDA) was given authority to regulate tobacco products.

Tobacco Use Results

Current smoking was defined as smoking at least 100 cigarettes in a lifetime and smoking every day or some days during the past 30 days. Of all respondents surveyed in 2012, 18.1 percent reported being a current smoker. This is a decline from the 20.4 percent found in 2011.

The proportion of current smokers was higher for males than for females. Smoking generally declined with increasing age, education, and income, although it was not as prevalent in the youngest ages as for those age 35 to 44 years. People of minority race/ethnicity had a higher proportion of smokers. Respondents with household incomes less than $15,000 reported the highest proportion of current smokers (36.5%). Only 4.1 percent of respondents age 75 years and older were current smokers (see table 12.1).

Nearly 25 percent of respondents were former smokers. This means that they had smoked at least 100 cigarettes in their lifetime, but did not smoke now. While more males were former smokers than females, the age trend for former smokers was the opposite of that for current smokers. The 18 to 24 year age group had only 7 percent former smokers, while the 65 to 74 year age group had 44.5 percent (see table 12.1 and figure 12.1). White non-Hispanics had a higher prevalence of former smokers than minority racial or ethnic groups. When former

Table 12.1: Percentage of Current and Former Smokers in Iowa, 2012

DEMOGRAPHIC	Current Smoker		Former Smoker	
GROUPS	%	**C.I. (95%)**	%	**C.I. (95%)**
TOTAL	18.1	(16.9-19.3)	25.0	(23.8-26.2)
SEX				
Male	19.8	(18-21.6)	29.7	(27.7-31.7)
Female	16.5	(14.9-18.1)	20.6	(19.2-22)
RACE/ETHNICITY				
White/Non-Hisp.	17.7	(16.5-18.9)	26.4	(25.2-27.6)
Non-White or Hisp.	21.5	(16.7-26.3)	12.8	(9.7-16)
AGE				
18-24	17.4	(13.3-21.5)	7.0	(4.5-9.5)
25-34	22.9	(19.2-26.6)	20.0	(16.7-23.3)
35-44	24.1	(20.8-27.4)	17.5	(14.8-20.2)
45-54	20.0	(17.5-22.5)	25.6	(22.7-28.5)
55-64	19.0	(16.6-21.4)	31.1	(28.6-33.6)
65-74	12.5	(10.5-14.6)	44.5	(41.4-47.6)
75+	4.1	(2.8-5.5)	37.3	(34.2-40.4)
EDUCATION				
Less Than H.S.	29.5	(24.2-34.8)	21.0	(16.9-25.1)
H.S. or G.E.D.	21.2	(19-23.4)	28.7	(26.5-30.9)
Some Post-H.S.	19.4	(17.2-21.6)	25.7	(23.5-27.9)
College Graduate	7.0	(5.8-8.2)	20.6	(18.6-22.6)
HOUSEHOLD INCOME				
Less than $15,000	36.5	(31.4-41.6)	18.5	(15-22)
$15,000- 24,999	26.0	(22.5-29.5)	27.7	(24.4-31)
$25,000- 34,999	21.7	(18-25.4)	30.4	(26.5-34.3)
$35,000- 49,999	15.5	(12.8-18.2)	27.3	(24.2-30.4)
$50,000- 74,999	14.7	(12-17.4)	27.2	(24.1-30.3)
$75,000+	11.1	(9.1-13.1)	24.2	(21.8-26.6)

smokers were asked how long it had been since they last smoked cigarettes regularly, the majority (58.8%) said ten or more years.

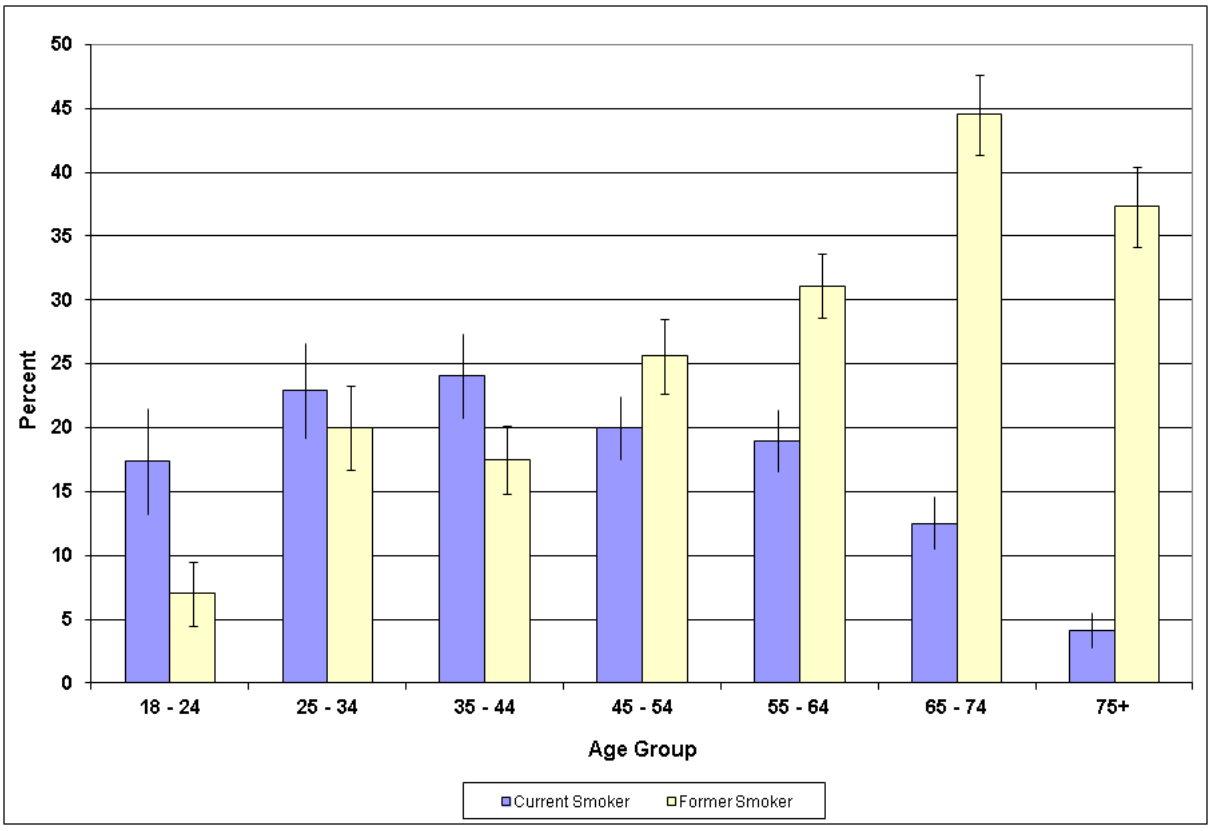
When asked about attempts to quit smoking, 57.7 percent of Iowa's current smokers reported they quit smoking for a day or more during the past year. Women and smokers under age 35 years were more likely to try to quit than men or older smokers. Little could be said about other demographic groups since the small number of smokers in these groups led to a lack of confidence in the interpretation of the resulting figures. As the number of current smokers declines, this inability to show differences will become even more pronounced.

In order to look at the use of other tobacco products besides cigarettes, all respondents were asked if they currently use chewing tobacco, snuff, or snus. Only 4.4 percent said they used one of these every day or some days.

A large number of state added tobacco questions were asked in the 2012 survey. Data from these will be presented in a special report. Only a couple findings from these are presented here.

Of smokers who had seen a doctor in the past year, 62 percent of them reported that the doctor had advised them to quit smoking. Of those with doctors advising to quit, 55.1 percent had been offered some form of assistance.

Figure 12.1: Percentage of Current and Former Smokers by Age, 2012



Most Iowans (81.7%) said they had rules against smoking anywhere in their home. However, 9 percent said they allowed smoking anywhere in the house, and 1.7 percent had no rules concerning smoking in the house. Regardless of rules, 9.9 percent said that someone else had smoked inside their home in the past seven days.

Comparison with Other States

In all the states and District of Columbia, smoking prevalence ranged from a low of 10.6 percent to a high of 28.3 percent. Iowa's current smoking prevalence of 18.1 percent was below the median of 19.6 percent for all states.

Health Objectives for Iowa and the Nation

The goal for *Healthy People* 2020 is to reduce the percentage of smokers to 12 percent, while the goal for *Healthy Iowans* is 16 percent. The prevalence of those reporting currently smoking is 18.1 percent in Iowa which, although an improvement, is well above both goals.

The *Healthy People 2020* goal for use of smokeless tobacco is only 0.3 percent. Iowa's prevalence of such use is 4.4 percent. There is a need for improvement in this area.

Iowa fell far short of the Healthy People 2020 goal of 80 percent of current smokers attempt to quit in the past year. At 57.7 percent the rate falls more than 20 percentage points short of the goal. It is encouraging that a higher rate is seen among younger people, but even this falls considerably short of the goal.

Iowa also missed the Healthy People 2020 goal for recent smoking cessation success by adult smokers. 4.5 percent of former smokers said they had not smoked regularly for six months to a year, while the goal was eight percent.

The Healthy Iowans goal was 87 percent for people having rules against smoking in their home. Only 81.7 percent said they had such rules.

References

1. Centers for Disease Control and Prevention. Fast Facts: Smoking & Tobacco Use, Atlanta: Office on Smoking and Health, 2013. Available at http://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/index.htm.
2. U. S. Department of Health and Human Services. The Health Consequences of Smoking: A Report of the Surgeon General. Atlanta, GA., 2004. Available at http://www.surgeongeneral.gov/.
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13. ALCOHOL CONSUMPTION

Background

Consumption of alcohol is a very widespread practice in our society. However, a large number of people get into serious trouble because of their consumption of alcohol. Alcohol consumed on an occasional basis will pose little risk to most people and may even promote health. Even at this level, factors such as family history, health condition, and use of medications can mean a person should not drink at all. Furthermore, many people find it impossible to consume alcohol in a controlled manner.

Several million adults engage in risky drinking that could lead to alcohol problems. These patterns include binge drinking (drinking too much at one time) and chronic heavy drinking (drinking a large quantity of alcohol on a regular basis).[1]

Alcohol dependency and abuse are major public health problems carrying a large economic cost and placing heavy demands on the health care system. In fact, excessive alcohol use is the 3rd leading lifestyle-related cause of death for people in the United States each year.[1]

Chronic alcohol use affects every organ and system of the body. It can lead to medical disorders (e.g., fetal alcohol syndrome, liver disease, cardiomyopathy, and pancreatitis). Heavy drinking can increase the risk for certain cancers. Drinking increases the risk of death from automobile crashes as well as recreational and on-the-job injuries. Furthermore, both homicides and suicides are more likely to be committed by persons who have been drinking.[2]

Binge drinking is a serious problem. It has been a particularly serious problem on college campuses. Students who binge drink are more likely to damage property, have trouble with authorities, miss classes, have hangovers, and experience injuries than those who do not.

Among men, research indicates that greater alcohol use is related to greater sexual aggression. Binge drinkers appear to engage in more unplanned sexual activity and to abandon safe sex techniques more often than students who do not binge.[1]

Alcohol Consumption Results

In the BRFSS survey, a standard drink is defined as one 12-ounce beer, one 5-ounce glass of wine, or a drink with one shot of hard liquor. In 2012, 56.4 percent of Iowans reported that they had at least one drink of alcohol in the past 30 days. On the days when they drank, 34.3 percent had an average of only one drink. The median was two drinks. About 13.8 percent reported drinking five or more drinks per day on the average.

In our analysis, chronic heavy drinking was defined to be an average of greater than two drinks per day for men and one drink per day for women. According to this definition, 6.2 percent of all respondents were heavy drinkers. This is down from 2011 when 8.1 percent were heavy drinkers.

Table 13.1
Heavy Drinking Among Iowans, 2012

DEMOGRAPHIC GROUPS	Heavy Drinking %	Heavy Drinking C.I. (95%)
TOTAL	6.2	(5.4-7)
SEX		
Male	7.7	(6.5-8.9)
Female	4.8	(4-5.6)
RACE/ETHNICITY		
White/Non-Hisp.	6.3	(5.5-7.1)
Black/Non-Hisp.	7.4	(0-15.6)
Other/Non-Hisp.	7.5	(2.3-12.6)
Hispanic	3.1	(0-7.3)
AGE		
18-24	7.3	(4.4-10.2)
25-34	7.6	(5.2-10)
35-44	6.3	(4.3-8.3)
45-54	6.4	(4.8-8)
55-64	7.6	(6-9.2)
65-74	4.4	(3.1-5.6)
75+	2.1	(1.1-3)
EDUCATION		
Less than H.S.	4.7	(2-7.4)
H.S. or G.E.D.	6.1	(4.9-7.3)
Some Post-H.S.	7.2	(5.8-8.6)
College Graduate	5.5	(4.3-6.7)
HOUSEHOLD INCOME		
Less than $15,000	6.4	(3.5-9.3)
$15,000- 24,999	3.3	(1.9-4.7)
$25,000- 34,999	7.5	(5-10)
$35,000- 49,999	8.3	(5.9-10.7)
$50,000- 74,999	6.6	(4.6-8.6)
$75,000+	6.9	(5.5-8.3)

Table 13.2
Binge Drinking Among Iowans, 2012

DEMOGRAPHIC GROUPS	Binge Drinking %	Binge Drinking C.I. (95%)
TOTAL	21.7	(20.3-23.1)
SEX		
Male	28.5	(26.3-30.7)
Female	15.2	(13.6-16.8)
RACE/ETHNICITY		
White/Non-Hisp.	21.8	(20.4-23.2)
Hispanic or other	20.0	(15.1-24.9)
AGE		
18-24	33.9	(28.4-39.4)
25-34	37.3	(33.2-41.4)
35-44	27.0	(23.7-30.3)
45-54	19.5	(17-22)
55-64	16.0	(13.8-18.2)
65-74	6.8	(5.2-8.3)
75+	1.4	(0.6-2.1)
EDUCATION		
Less than H.S.	16.3	(11.2-21.4)
H.S. or G.E.D.	18.5	(16.3-20.7)
Some Post-H.S.	26.5	(24-29)
College Graduate	21.3	(19.1-23.5)
HOUSEHOLD INCOME		
Less than $15,000	21.5	(16.6-26.4)
$15,000- 24,999	15.9	(12.6-19.2)
$25,000- 34,999	20.5	(16.8-24.2)
$35,000- 49,999	22.2	(18.9-25.5)
$50,000- 74,999	23.0	(19.7-26.3)
$75,000+	28.0	(25.3-30.7)

In spite of the fact that men had to have a larger number of drinks to be considered heavy drinkers, 7.7 percent of men were considered to be heavy drinkers, while only 4.8 percent of women were considered to be heavy drinkers. Age and race/ethnicity were also associated with the prevalence of heavy drinking. With respect to race/ethnicity, Hispanics were the lowest. There was really not one particular group that could be pointed to as having the highest prevalence of heavy drinking. Several groups had a prevalence around 7.5 percent. Only 2.1 percent of those age 75 and over reported heavy drinking (see table 13.1). There were more heavy drinkers among men than women at almost all ages (see figure 13.1).

The definition of binge drinking is when a man drinks more than five drinks or a woman drinks more than four drinks on one occasion. Among all adult Iowans, 21.7 percent reported at least one binge episode in the last 30 days. This is a decrease from 2011 when 23.1 percent reported bingeing.

Even with the lessened requirement on females, nearly twice as many males binge than females (28.5 percent versus 15.2 percent). In addition, the likelihood of bingeing decreases with age from 37.3 percent for 25 to 34 year olds to only 1.4 percent for those 75 years old and older. Unlike most risky behaviors, respondents with higher education and those with a higher household income were somewhat more likely to binge drink (see table 13.2). Men are more likely than women to binge drink at all age levels (see figure 13.2).

Comparison with Other States

The prevalence of people reporting heavy drinking in the 50 states and District of Columbia ranges from 3.5 percent to 8.5 percent. Iowa's figure of 6.2 percent is slightly above the median for the states of 6.1 percent. This indicates a substantial improvement in the prevalence of heavy drinking in Iowa relative to the nation as a whole.

For binge drinking, the range is from a low of 10.2 percent to a high of 25.2 percent with a median of 16.1 percent. Iowa's figure of 21.7 percent is well above the median. There are only six states with a higher prevalence of reported binge drinking. Seven out of nine of the highest states for binge drinking are in the upper Midwest.

Health Objectives for Iowa and the Nation

The *Healthy People 2020* goal for the nation for binge drinking is 24.3 percent. This modest goal is met in Iowa with 21.7 percent. The *Healthy Iowans* goal for binge drinking is 16 percent. Iowa's prevalence, though improved, was above this goal.

References

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Figure 13.1: Heavy Drinking in Iowa by Age and Sex, 2012

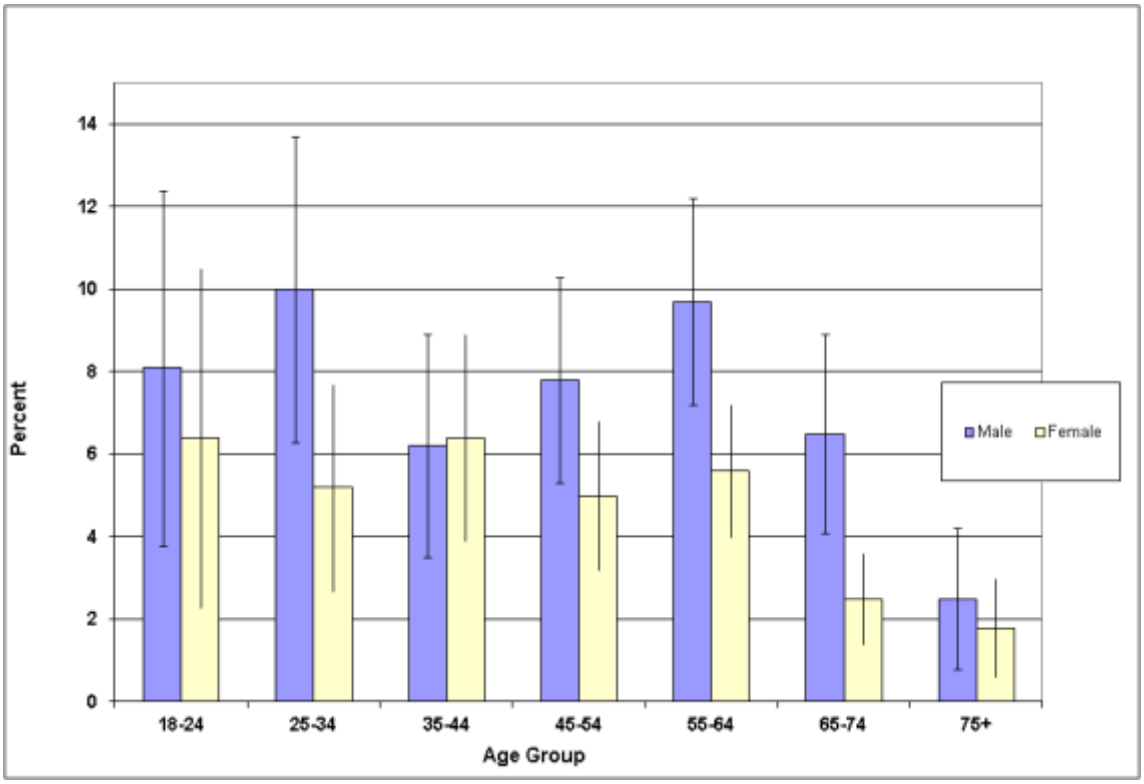
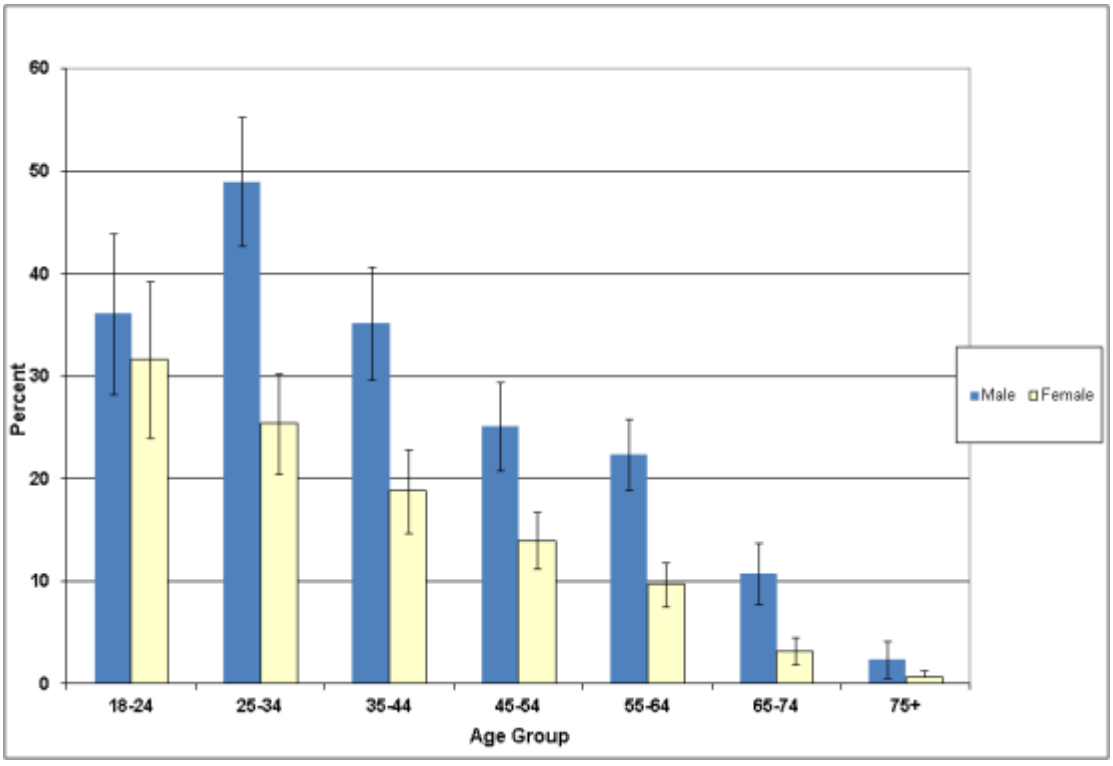


Figure 13.2: Binge Drinking in Iowa by Age and Sex, 2012



14. & CERVICAL CANCER SCREENING

Breast Cancer Screening

Background

Cancer is when a group of cells grows out of control. Breast cancer is a malignant (cancerous) tumor that starts from cells of the breast. The disease occurs mostly in women, but men can get breast cancer as well.[1]

Other than skin cancer, breast cancer is the most common cancer among women. After lung cancer, it is the second leading cause of cancer death in women. About 232,340 women in the United States will be found to have invasive breast cancer in 2013. About 39,620 women will die from the disease this year. Breast cancer death rates are going down. This is probably the result of finding the cancer earlier and improved treatment. Currently, there are more than 2.9 million women living in the U.S. who have been treated for breast cancer.[1] In Iowa, 405 women died from breast cancer in 2011.[3]

The chance of getting breast cancer increases as a woman gets older. Nearly 8 out of 10 breast cancers are found in women over age 50.[1] Individual factors other than age that increase the risk for developing breast cancer include family history, a personal history of breast cancer, possession of certain genes (BRCA1 or BRCA2), race, earlier abnormal breast biopsy, a long menstrual history, obesity after menopause, recent use of oral contraceptives, postmenopausal hormone therapy, never having children or having a first child after age 30, consuming one or more alcoholic beverages per day, and lack of exercise.[1] However, many women develop breast cancer without having any of the usual known risk factors.

Early detection of breast cancer is key to surviving the disease, and regular screening is key to detecting the disease early. There may be no detectable symptoms apart from screening until the disease is quite advanced.

Among the methods for early detection of breast cancer are clinical breast exam (CBE) and mammography. CBE is a clinical examination that involves a health care provider's physical examination of breast tissue. Mammography involves an x-ray examination of the breast and can detect abnormalities in the breast before they can be felt. Because the risk of developing breast cancer increases as women get older, mammography, with its increased sensitivity, is recommended for older women, while clinical breast exams should be part of the regular health routine for all adult women.

Due to increased survival rates for breast cancer when detected early, the National Cancer Institute recommends:

- Women age 40 years and older should be screened every one to two years with mammography.
- Women at higher than average risk of breast cancer should seek expert medical advice about whether they should begin screening before age 40 and the frequency of screening.[4]

Most cancer organizations also believe that adult women should have a clinical breast exam (CBE) by a health care provider as part of regular, routine care.

Although no screening method is foolproof, there is no doubt that screening for breast cancer saves lives.

Breast Cancer Screening Results

In 2012, 88.4 percent of women surveyed reported ever having a CBE by a physician. The percentage increased with education and household income and was lower for racial and ethnic minorities. It was more prevalent for women in the middle age groups than for those both younger and older. (see table 14.1).

When asked if they had ever had a mammogram, 93 percent of all female Iowa respondents ages 40 and older reported having one. Younger women were less likely to have a mammogram.

Table 14.1: Breast Examination Measures for Iowa Women, 2012

DEMOGRAPHIC GROUPS	Ever had a Mammogram		Had Mammogram in Last 2 Years		Ever had Clinical Breast Exam	
	Age 40 and over					
	%	C.I. (95%)	%	C.I. (95%)	%	C.I. (95%)
TOTAL FEMALES	93.0	(92-94.1)	75.9	(74.2-77.6)	88.4	(86.6-90.2)
Race/Ethnicity						
Non-Hispanic White	93.3	(92.2-94.4)	76.2	(74.5-77.9)	89.6	(87.9-91.3)
Non-White or Hispanic	90.4	(84.1-96.6)	71.0	(62-80)	77.7	(70.1-85.2)
AGE						
18 - 39					78.1	(73.9-82.3)
40 – 49	85.0	(81.6-88.4)	68.7	(64.4-73)	96.5	(94.9-98.2)
50 - 59	95.8	(94.3-97.3)	77.8	(74.6-81.1)	97.9	(96.8-99)
60 - 69	95.5	(94-97)	79.6	(76.4-82.8)	95.8	(94.1-97.4)
70 & up	95.7	(94.4-96.9)	80.1	(77-83.2)	87.2	(85.1-89.3)
EDUCATION						
Less than H.S.	89.2	(83.9-94.5)	63.5	(55.7-71.3)	70.1	(60.7-79.5)
H.S. or G.E.D.	91.8	(89.8-93.7)	74.5	(71.8-77.2)	87.2	(84.7-89.7)
Some Post-H.S.	93.6	(91.8-95.4)	76.2	(73.1-79.3)	88.6	(85.7-91.5)
College Graduate	95.5	(94-97.1)	81.4	(78.5-84.3)	96.8	(95.4-98.2)
HOUSEHOLD INCOME						
Less than $15,000	87.8	(83.6-91.9)	60.3	(53.6-67)	82.4	(77.3-87.5)
$15,000- 24,999	93.4	(91-95.7)	69.2	(64.7-73.7)	84.8	(80.7-88.9)
$25,000- 34,999	90.9	(87.2-94.6)	72.1	(66.8-77.4)	89.6	(85.1-94.1)
$35,000- 49,999	93.6	(90.9-96.4)	77.2	(72.7-81.7)	94.4	(91.7-97.1)
$50,000- 74,999	92.6	(89.1-96)	82.1	(77.6-86.6)	95.3	(92.2-98.4)
$75,000+	94.9	(93-96.9)	81.0	(77.5-84.5)	94.7	(91.8-97.6)

Also, women with higher education and income were more likely to have a mammogram (see table 14.1).

When asked if they had a mammogram in the past two years, 75.9 percent of all Iowa women over age 40 said they had. Older women, the women with a higher education level and those with a higher household income tended to have higher percentages of having a mammogram in the past two years (see table 14.1).

Comparison with Other States

In all states and the District of Columbia, the percent of women age 40 and older who have had a mammogram in the past two years ranged from 61.9 percent to 84.6 percent. Iowa's figure of 75.9 percent is better than the median of 74 percent.

Health Objectives for Iowa and the Nation

The national health objectives for *Healthy People 2020* include an increase to at least 81.1 percent of women age 40 and older who have had a mammogram within the preceding two years. Iowa falls short of this goal with 75.9 percent. The *Healthy Iowans* goal is 88 percent for women 50 years and older. Iowa falls short here as well with 78.2 percent.

Cervical Cancer Screening

Background

Cancer of the cervix begins in the lining of the cervix, the lower part of the uterus (womb). This cancer does not form suddenly. First, some cells begin to change from normal to pre-cancer and then to cancer. This can take a number of years, although sometimes it happens more quickly. These changes may go away without any treatment. More often, they need to be treated to keep them from changing into true cancer.[2]

Approximately 12,340 new cases of invasive cervical cancer and 4,030 cervical cancer-related deaths were projected to occur in 2013 in the United States.[2] Overall rates of U.S. women diagnosed with invasive cervical cancer have declined greatly in the last few decades.

The most important risk factor for cervical cancer is infection with the human papiloma virus (HPV). This virus is often, though not always, transmitted sexually. A vaccine now exists for HPV. Not all women infected with HPV get cervical cancer. Some other risk factors that may play a role are smoking, HIV infection, chlamydia infection, a diet low in fruit and vegetables, and obesity.[2]

The principal screening test for cervical cancer is the Papanicolaou (Pap) test. This test allows the cellular changes in the cervix to be detected when they are precancerous or at an early stage. Early detection through Pap tests can dramatically lower the incidence of invasive disease and can nearly eliminate deaths from cervical cancer.

The American Cancer Society recommends annual Pap tests begin no later than age 21 years. The test should be done every year until age 30. It could be done every three years after that if the woman is not at high risk. Women are at high risk of cervical cancer if they have a weak immune system from HIV infection, organ transplant, long-term steroid use, or because they were exposed to the drug DES when their mothers were pregnant with them.

Pap tests are not necessary for women who have had a total hysterectomy that was not due to cancer or are over age 65 and not high risk.[2] However, women who have been vaccinated against HPV should still follow these guidelines.

Cervical Cancer Screening Results

When asked if they ever had a Pap test, 91.8 percent of female respondents who had not had a hysterectomy reported having it. The proportion of women who ever had a Pap test increased with level of education and household income. It was higher in the middle age groups than at either extreme. It was lower in racial and ethnic minorities. (see table 14.2).

In 2012, 78 percent of female respondents reported that they had their last Pap test within the last three years. The percentage having a Pap test within three years increased with education and income. Women age 75 years and older had the lowest percentage (45.3%), while women age 25 to 34 had the highest percentage (93.2%) (see table 14.2).

Comparison with Other States

In all states and the District of Columbia the percent of adult women who have had a pap test in the past three years ranged from 68.5 percent to 82.2 percent. Iowa's figure of 78 percent is exactly at the median for the nation.

Health Objectives for Iowa and the Nation

For *Healthy People 2020* the goal for the proportion of women over the age of 18 who have had a Pap test in the last three years is 93 percent. For *Healthy Iowans* it is 92 percent. The figure for 2012 of 78 percent falls short of both of these goals.

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Table 14.2: Proportion of Iowa Women Having Pap Test, 2012

DEMOGRAPHIC GROUPS	Ever had a Pap test		Had Pap test in last 3 years	
	%	C.I. (95%)	%	C.I. (95%)
FEMALES	91.8	(90.2-93.4)	78.0	(75.8-80.2)
Race/Ethnicity				
Non-Hispanic White	92.7	(91.1-94.3)	78.4	(76.2-80.6)
Non-White or Hispanic	85.2	(78.1-92.3)	77.0	(68.3-85.7)
AGE				
18-24	56.6	(48-65.2)	55.4	(46.8-64)
25-34	97.2	(95.4-99)	93.2	(90.3-96.1)
35-44	96.8	(95-98.6)	89.9	(86.8-93)
45-54	98.2	(96.6-99.8)	85.7	(82.2-89.2)
55-64	98.2	(97.2-99.3)	83.2	(79.9-86.5)
65-74	97.7	(96.5-98.9)	70.8	(66.1-75.5)
75+	93.6	(91.8-95.4)	43.5	(38.4-48.6)
EDUCATION				
Less than H.S.	82.3	(72.9-91.7)	Unreliable	
H.S. or G.E.D.	91.5	(89.1-93.9)	72.2	(68.5-75.9)
Some Post-H.S.	90.5	(87.6-93.4)	77.6	(73.9-81.3)
College Graduate	98.1	(96.9-99.3)	90.9	(88.9-92.9)
HOUSEHOLD INCOME				
Less than $15,000	87.7	(83-92.4)	65.5	(58.2-72.8)
$15,000- 24,999	91.9	(88-95.8)	69.3	(63.4-75.2)
$25,000- 34,999	93.8	(89.9-97.7)	74.3	(67.8-80.8)
$35,000- 49,999	94.8	(91.7-97.9)	77.8	(72.9-82.7)
$50,000- 74,999	96.3	(93.4-99.2)	87.7	(83.4-92)
$75,000+	95.4	(92.5-98.3)	90.2	(86.7-93.7)

15. COLORECTAL CANCER SCREENING

Background

Colorectal cancer is the second leading cause of cancer-related deaths in both the United States and Iowa. Colorectal cancer occurs in the colon or rectum. It may also be referred to as colon cancer. The colon is the large intestine or large bowel. The rectum is the passageway that connects the colon to the anus.[1]

An estimated 102,480 new cases of colon and 40,340 new cases of rectal cancer are expected to exist in the United States in 2013.[1] There are estimated to be 50,830 deaths.[1] Incidence and mortality rates have been decreasing for most of the last two decades. The decline has been steeper in the most recent time period, partly due to an increase in screening, which can result in the detection and removal of colorectal polyps before they progress to cancer.[3]

Although the exact causes of colorectal cancer are unknown, risk factors include:

- **Age** – Approximately 93 percent of colorectal cancer cases occur in people age 50 and older, and the risk of developing the disease increases with age.
- **Family History** –Those who have family members diagnosed with colorectal cancer or pre-cancerous polyps are at high risk for the disease.
- **Personal History** – Persons who have inflammatory bowel diseases are at increased risk.

Modifiable risk factors include smoking, heavy alcohol use, obesity, a diet high in red meat, and physical inactivity.

Colorectal cancer usually develops from abnormal growths known as precancerous polyps in the colon and rectum. In the early stages there are often no symptoms. Some screening tests can detect polyps so they can be removed before they turn into cancer.[2]

The **U.S. Preventive Services Task Force** recommends that men and women who are not at a high risk begin regular screening for colorectal cancer at age 50.[4] If everyone ages 50 to 75 had regular screening, as many as 60 percent of deaths from colorectal cancer could be prevented. Recommended options include the following:

- **Fecal Occult Blood Test (FOBT) including Fecal Immunochemical Test (FIT):** Are tests that detect hidden blood in a stool sample. If results are normal, repeat the tests annually.
- **Flexible Sigmoidoscopy:** Uses a hollow, lighted tube to visually inspect the wall of the rectum and the lower third of the colon. If results are normal, repeat flexible sigmoidoscopy every five years.
- **Colonoscopy:** Is a test that uses a hollow, lighted tube to inspect the interior walls of the rectum and the entire colon. If it is normal, the test should be repeated every 10 years.
- **Double-Contrast Barium Enema:** Is a series of x-rays of the colon and rectum. If it is normal, the test should be repeated every five years.
- **Virtual Colonoscopy:** Is a three dimensional x-ray of the colon.[1]

The colonoscopy has the advantage over the other tests because it can remove polyps as well as detect them. The FOBT has the advantage that it is simplest and least expensive to use, but it cannot find or remove pre-cancerous polyps.

Colorectal Cancer Screening Results

In 2012, 40.8 percent of Iowans 50 years old or older reported ever using a home blood-stool testing kit (FOBT). Females reported a significantly higher percentage of the FOBT use than males (46.1% versus 34.8%). Education was also related to use of the test. Respondents with less than a high school education were least likely to use it (34.3%). This was almost identical to people with a household annual income less than $15,000 per year. College graduates were the most likely to have used it (47.4%) (see table 15.1).

Of all respondents 50 years old or older, 14.2 percent had used the blood stool test within the past two years. Again more females than males had met this criterion (16% vs. 12.1%). Unexpectedly, a higher prevalence meeting this criterion was found among people with a lower household income than among the higher income households. The lowest prevalence group was

Table 15.1: Prevalence of Colorectal Cancer screening in Iowans 50 Years Old or Older, 2012

DEMOGRAPHIC GROUPS	Ever Had Blood Stool Test		Had Blood Stool Test in Past Two Year		Ever Had Sigmoidoscopy/ Colonoscopy		Met Screening Criteria from any Method	
	%	C.I. (95%)	%	C.I. (95%)	%	C.I. (95%)	%	C.I. (95%)
TOTAL	40.8	(39.2-42.4)	14.2	(13.0-15.4)	69.3	(67.7-70.9)	67.3	(65.7-68.9)
SEX								
Male	34.8	(32.3-37.3)	12.1	(10.3-13.9)	66.8	(64.3-69.3)	64.3	(61.7-66.8)
Female	46.1	(43.9-48.3)	16.0	(14.4-17.6)	71.6	(69.6-73.6)	70.0	(68-72)
EDUCATION								
Less than H.S.	34.3	(28.2-40.4)	14.4	(09.9-18.9)	58.9	(52.2-65.6)	58.2	(51.7-64.7)
H.S. or G.E.D.	37.7	(35.2-40.2)	13.6	(11.8-15.4)	67.2	(64.7-69.7)	64.6	(62-67.2)
Some Post-H.S.	42.1	(39.0-45.2)	14.7	(12.5-16.9)	71.3	(68.4-74.2)	69.4	(66.4-72.3)
College Graduate	47.4	(44.3-50.5)	14.3	(12.1-16.5)	74.6	(71.7-77.5)	72.9	(70-75.8)
HOUSEHOLD INCOME								
Less than $15,000	34.4	(28.7-40.1)	15.1	(10.8-19.4(	61.0	(54.9-67.1)	55.0	(48.7-61.3)
$15,000- 24,999	42.5	(38.6-46.4)	16.6	(13.5-19.7)	65.4	(61.3-69.5)	64.6	(60.5-68.6)
$25,000- 34,999	40.0	(35.3-44.7)	14.8	(11.5-18.1)	70.4	(65.7-75.1)	68.4	(63.7-73.1)
$35,000- 49,999	40.0	(35.9-44.1)	14.1	(11.2-17.0)	68.7	(64.6-72.8)	65.7	(61.5-69.9)
$50,000- 74,999	42.1	(37.8-46.4)	13.6	(10.7-16.5)	71.9	(68.0-75.8)	70.7	(66.6-74.7)
$75,000+	38.3	(34.8-41.8)	11.7	(9.5-13.9)	72.0	(68.7-75.3)	71.7	(68.2-75.1)

people from households earning $75,000 or more (11.7%), while the highest was found among those from households earning $15,000 to $24,999 (16.6%) (see table 15.1).

In 2012, 69.3 percent of Iowans 50 years old or older reported ever having a sigmoidoscopy or colonoscopy screening test. Respondents with a higher annual household income and who were female were more likely to have the test. Education made the most difference in who was more likely to have the test. Those who had less than a high school education were least likely to have the test (58.9%). Those with a college education or higher were most likely to have the test (74.6%) (see table 15.1).

Having a colonoscopy was far more common than having a sigmoidoscopy (97.3 percent compared to only 2.7 percent for sigmoidoscopy). Nearly everyone who had one of these tests had a colonoscopy.

To determine the percentage of Iowans being adequately screened the percent of respondents who had either screening method within the proper time interval was calculated for individuals with normal screening results. The proper time interval for the blood stool test is within a year from the last test, while the proper time interval for a sigmoidoscopy is five years from the previous test. The proper interval for a colonoscopy is ten years from the last screening or as recommended by a health care provider if test results were negative. The result was that 67.3 percent of Iowans 50 years old and older had, at least, one of the colorectal screening methods within the prescribed time period. Respondents with less than $15,000 annual household income had the lowest percentage (55%), while college graduates had the highest (72.9%) (see Table 15.1).

Since 2004, a number of additional questions were included in the survey concerning colorectal cancer screening. A few findings from these are given here.

Respondents 50 years old and older reported that 70.3 percent of them had been talked to by a health care professional about colorectal cancer screening. When the health care professional talked about screening, 87.5 percent recommended having a sigmoidoscopy or colonoscopy. Of the respondents who had a test recommended, 83.9 percent then had the test.

Out of all respondents 50 years old and older, 60.6 percent reported seeing articles or advertising in the past six months about colorectal cancer screening. Television was the main medium of exposure to this advertising (76.2%). When people who said they did not plan to be tested were asked why they did not plan to be tested, one of the most common answers was not having any symptoms (31.8%). Colorectal cancer does not necessarily have symptoms.

Comparison with Other States

The proportion of people age 50 and older in all states and the District of Columbia who have ever had a sigmoidoscopy or colonoscopy ranges from 60.3 percent to 77.6 percent. Iowa's prevalence of 69.3 percent is better than the median of 67.3 percent.

Health Objectives for the Nation

The *Healthy People 2020* goal is for 70 percent of people age 50 to 75 to be screened according to the latest guidelines. Iowa's figure of 66.4 percent does not quite reach the goal.

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16. DISABILITY

Background

The World Health Organization's *International Classification of Functioning, Disability and Health (ICF)* defines disability as an umbrella term for impairments, activity limitations and participation restrictions. Disability is the interaction between individuals with a health condition (e.g. cerebral palsy, Down's syndrome and depression) and personal and environmental factors (e.g. negative attitudes, inaccessible transportation and public buildings, and limited social supports). Impairment is defined as "any loss or abnormality of psychological, physiological, or anatomical structure or function.[3]

Chronic physical, mental, and emotional conditions can limit the ability of adults to carry out important activities such as working and doing everyday household chores. With advancing age, an increasing percentage of adults experience limitation of activity.

The latest available Census estimates for 2011 found that over 37 million people in the United States (more than 12%) had a disability that prevented or limited their ability in some way.[2]

Arthritis and other musculo-skeletal conditions are the most frequently reported cause of activity limitation among both working-age and older adults. However, people can experience a wide range of types and severity of impairments.

Disability may not only be considered a health condition. It may also be seen as a demographic condition that affects health. This source of health disparities may arise due to difficulties with health access faced by the disabled deriving from physical, financial, or social sources. Special considerations need to be made for the disabled to participate in the healthcare system on an equal basis with the non-disabled.[1] Having a disability does not necessarily need to be a barrier to good general health in unrelated areas.

Many disabled Americans use Assistive Technology Devices (ATDs) to accommodate mobility impairments and other sensory and mental impairments. These can allow a person with a disability to work and otherwise live an independent life.

Disability Results

In 2012, 18.6 percent of adult Iowans responded "yes" to being limited in any way in activities due to an impairment or health problem. When asked whether they had a health problem requiring the use of special equipment, 7.2 percent of adult Iowans said they needed such items as a cane, a wheelchair, a special bed, or a special telephone.

Whether someone is considered to have a disability in this analysis is based on a positive response to either of these two questions. In 2012, 20.4 percent of respondents were considered to have a disability. This is down from the 21.7 percent in 2011.

As shown in Table 16.1, older people, females, people with less education, and people with lower household incomes reported higher percentages of disability. Hispanics reported a lower percentage of disability than White non-Hispanics. Of the five demographic variables analyzed, people age 18 to 24 years reported the lowest percentage (8.8%). Those with household incomes less than $15,000 reported the highest percentage of disability (40.8%). Many disabled people are unable to work due to their disability. The second highest reporting group was those age 75 years and over (40.2%). This group is the most rapidly growing group in the population. It is likely that part of why Hispanics have fewer people reporting disability is because they are younger than other racial or ethnic groups.

Arthritis is the most widespread disability we shall look at in the BRFSS. In 2012, 25.9 percent of all respondents reported having been diagnosed with arthritis. Since this is higher than the percent reporting disability, not all people diagnosed with arthritis find it to be a limitation.

The demographic pattern of diagnosed arthritis is very similar to disability in general. The prevalence increases with age, decreases with education and household income, and is lower for males and racial and ethnic minorities. Minorities could not be further broken apart with arthritis as they were with disability in general. Age had the greatest impact (see figure 16.2). The lowest prevalence is seen among people who were age 18 to 24 years (2.9%), while the highest was among those age 75 and older (57.8%) (see table 16.2).

Figure 16.1: Percent of Iowans with a Disability by Age, 2012

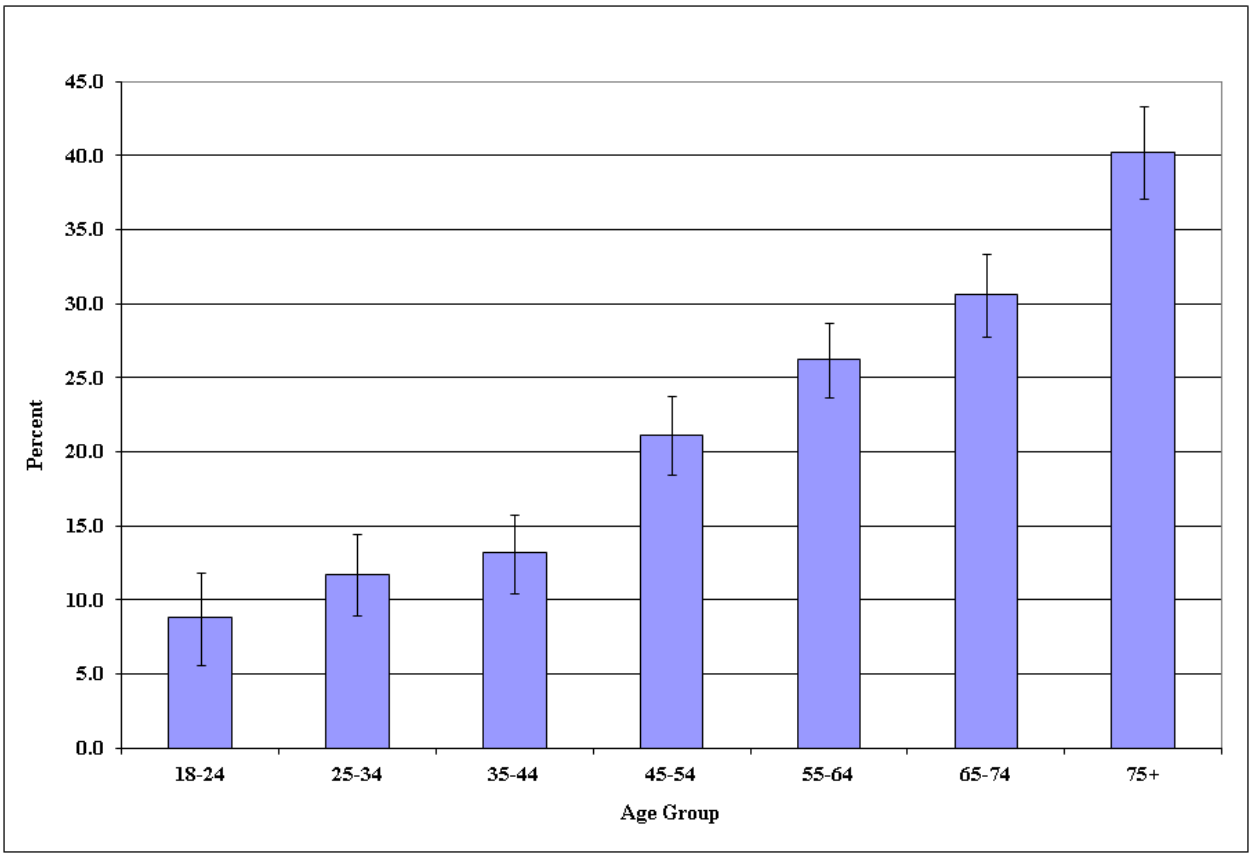


Table 16.1
Percent Reporting Being Disabled, 2012

Demographic Groups	Disability	
	%	C.I. (95%)
TOTAL	20.4	(19.3-21.5)
SEX		
Male	18.5	(16.9-20.1)
Female	22.2	(20.7-23.7)
RACE/ETHNICITY		
White/Non-Hisp.	20.7	(19.6-21.8)
Black/Non-Hisp.	23.1	(13.2-33.1)
Other/Non-Hisp.	22.2	(14.8-29.6)
Hispanic	12.2	(7.1-17.4)
AGE		
18-24	8.8	(5.6-11.9)
25-34	11.7	(9-14.5)
35-44	13.2	(10.5-15.8)
45-54	21.1	(18.5-23.8)
55-64	26.2	(23.7-28.7)
65-74	30.6	(27.8-33.4)
75+	40.2	(37.1-43.3)
EDUCATION		
Less than H.S.	30.1	(25.1-35.1)
H.S. or G.E.D.	21.6	(19.7-23.5)
Some Post-H.S.	20.1	(18.2-22.1)
College Grad.	14.9	(13.3-16.5)
HOUSEHOLD INCOME		
<$15,000	40.8	(35.9-45.8)
$15,000- 24,999	31.6	(28.1-35)
$25,000- 34,999	22.5	(19.1-25.8)
$35,000- 49,999	17.7	(15.1-20.3)
$50,000- 74,999	13.8	(11.4-16.1)
$75,000+	10.9	(9.2-12.6)

Table 16.2
Percent Reporting Diagnosed Arthritis, 2012

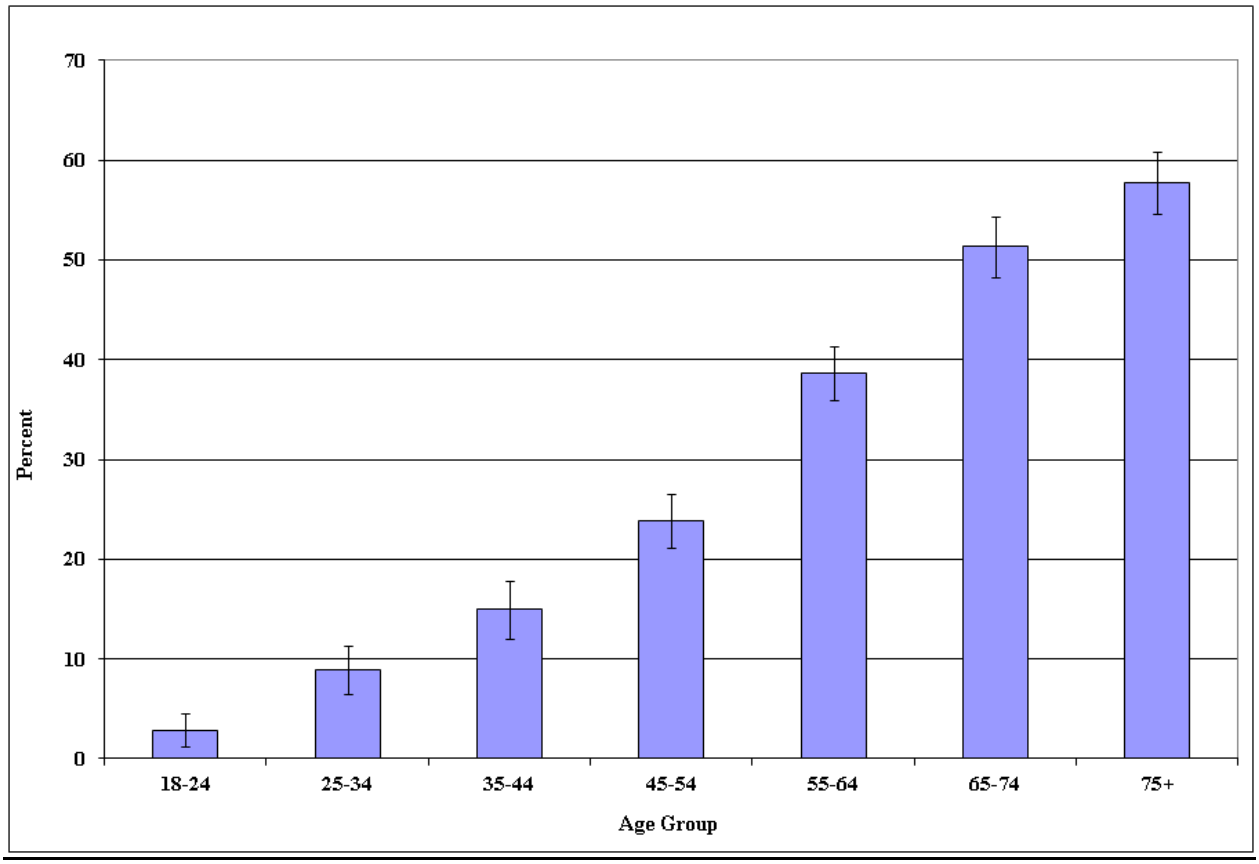
Demographic Groups	Arthritis	
	%	C.I. (95%)
TOTAL	25.9	(24.7-27.1)
SEX		
Male	21.6	(20-23.2)
Female	30.0	(28.4-31.6)
RACE/ETHNICITY		
White/Non-Hisp.	26.6	(25.4-27.8)
Non-White or Hisp.	19.9	(16-23.9)
AGE		
18-24	2.9	(1.3-4.5)
25-34	8.9	(6.5-11.3)
35-44	15.0	(12.1-17.9)
45-54	23.8	(21.1-26.5)
55-64	38.7	(36-41.4)
65-74	51.4	(48.3-54.4)
75+	57.8	(54.7-60.9)
EDUCATION		
Less than H.S.	31.6	(26.7-36.5)
H.S. or G.E.D.	30.6	(28.6-32.6)
Some Post-H.S.	24.8	(22.8-26.8)
College Grad.	18.3	(16.5-20.1)
HOUSEHOLD INCOME		
<$15,000	37.9	(33-42.8)
$15,000- 24,999	35.9	(32.4-39.4)
$25,000- 34,999	30.4	(26.7-34.1)
$35,000- 49,999	25.8	(22.9-28.7)
$50,000- 74,999	20.7	(18.2-23.2)
$75,000+	17.5	(15.5-19.5)

Comparison with Other States

The percent of people reporting disability in the U.S. ranged from 17 percent to 30.5 percent. Iowa's figure of 20.4 percent was below the median of 21.9 percent. This position is quite good considering Iowa's large elderly population and that the comparisons were not adjusted for differences in age.

In terms of arthritis, the range among the states was from a prevalence of 18.2 percent to 36.4 percent. Iowa's level of 25.9 percent was just above the median at 25.7 percent.

Figure 16.2: Percent of Iowans with Diagnosed Arthritis by Age, 2012



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17. INJURY CONTROL

Background

The 2012 BRFSS examines three areas related to injury control. These are falls, seatbelt use, and drinking and driving.

Falls

Unintentional falls are the leading cause of both fatal and nonfatal serious injuries among the fastest growing segment of the U.S. population, older adults. In the United States, one of every three people age 65 years and older falls each year.[4] The leading injuries resulting from falls are traumatic brain injuries (TBI), hip fractures, other fractures, and damage to internal organs.

In 2010, the direct medical costs of falls, adjusted for inflation, was $30.0 billion.[4] The financial toll for older adult falls is expected to increase as the population ages, and may reach $54.9 billion by 2020 (adjusted to 2007 dollars).[3] This projection includes indirect costs such as the costs of disabilities resulting from falls.

Elderly persons who survive a fall experience significant morbidity. Hospital stays are almost twice as long in elderly patients who are hospitalized after a fall than in elderly patients who are admitted for another reason. Compared with elderly persons who do not fall, those who fall experience greater functional decline in activities of daily living (ADLs) and in physical and social activities, and they are at greater risk for subsequent institutionalization.[4]

In 2009, about 20,400 people 65 and older died from injuries related to unintentional falls. In 2010, about 2.3 million people 65 and older were treated in emergency departments for nonfatal injuries from falls, and more than 662,000 of these patients were hospitalized.[4] In Iowa in 2011, the number of fatal falls was 454 with 361 being among those 75 years of age or older.[6] The number of people age 65 years and older is projected to double in the next 50 years. For people age 85 years and older, relative growth rates are even faster.

One of the strongest predictors of a fall is having sustained a previous fall.[1] A fall is often a marker of increasing fragility, functional decline, or neurological impairment, and may indicate the need for a secondary prevention strategy (e.g., hip protectors to prevent hip fractures.)

Falls Results

The BRFSS defines a fall as when a person unintentionally comes to rest on the ground or another lower level. Respondents age 45 years and older were asked how many times they had experienced a fall in the last 12 months. In this group, 29.3 percent said they had fallen at least once. Some, 3.2 percent, reported they had fallen five or more times. Of those who had fallen, 34.8 percent said that, at least, one fall had injured them. Some, 2.4 percent, had been injured five or more times. In this instance, injury was defined as limiting activity for at least a day or causing them to see a doctor.

Table 17.1: Prevalence of Falls in Iowa, 2012

DEMOGRAPHIC GROUPS	Any Falls in Last 12 Months	
	%	C.I. (95%)
TOTAL	29.3	(27.9-30.7)
SEX		
Male	28.0	(25.6-30.4)
Female	30.5	(28.5-32.5)
RACE/ETHNICITY		
White/Non-Hisp.	29.0	(27.4-30.6)
Non-White or Hisp.	35.6	(27.6-43.6)
AGE		
45-54	29.2	(26.2-32.2)
55-64	28.8	(26.2-31.4)
65-74	27.2	(24.5-29.9)
75+	33.9	(30.9-37)
EDUCATION		
Less than H.S.	38.5	(32.2-44.8)
H.S. or G.E.D.	27.1	(24.8-29.3)
Some Post-H.S.	30.5	(27.2-33.7)
College Graduate	27.7	(25.1-30.3)
HOUSEHOLD INCOME		
Less than $15,000	40.4	(34.6-46.1)
$15,000- 24,999	35.7	(31.7-39.6)
$25,000- 34,999	34.3	(29.6-38.9)
$35,000- 49,999	27.5	(23.8-31.2)
$50,000- 74,999	23.8	(20.4-27.2)
$75,000+	25.0	(22-27.9)

More of the people who reported falls had a lower level of education or a lower household income. Females and people who were non-White or Hispanic also reported a higher prevalence of falls than other groups. Age had little impact until age 75. People age 75 and older reported more falls. The group reporting the highest prevalence of falls was those with an annual household income less than $15,000 (40.4%), while the group with the lowest prevalence was those with annual household incomes between $50,000 and $75,000 (23.8%) (see table 17.1).

Seatbelt Use

In addition to being the leading cause of death among U.S. residents aged 5-34 years, motor vehicle-occupant injuries account for approximately 15% of all nonfatal injuries treated in U.S. emergency departments. In 2011, there were 34,182 passenger vehicles involved in fatal crashes. More than 21,000 passenger vehicle occupants lost their lives in traffic crashes in 2011, and an estimated 1.97 million were injured.[10]

Seatbelts save lives. Seat belts, which reduce the risk for fatal injuries from motor vehicle crashes by approximately 45 percent and serious injuries by approximately 50 percent, are the most effective intervention for protecting motor vehicle occupants.[5]

Failure to wear a seat belt contributes to more fatalities than any other single traffic safety-related behavior. 63% of people killed in accidents are not wearing seat belts. Unbelted occupants were five times more likely to die when involved in a crash than belted occupants. Wearing a seat belt is still the single most effective thing we can do to save lives and reduce injuries on America's roadways. The National Highway Traffic Safety Administration (NHTSA) estimates that approximately 270 lives are saved for every one percent increase in belt use. [8] Apart from this, seatbelt use would lead to a substantial saving in hospital costs and disability, particularly from head trauma.

Seatbelt Use Results

In 2012, when respondents were asked how often they wore a seatbelt when driving or riding in a car, 94.6 percent said always or nearly always. This figure is so near the maximum that it was difficult to see any differences between demographic groups. However, it appeared that wearing seatbelts was more common among females than males (98% vs. 91%). It also seemed to be less prevalent among younger people and those with less education (see table 17.2).

Drinking and Driving

An automobile crash is considered to be alcohol-related when the driver is reported to have a blood alcohol level of .08 grams per deciliter or higher. Considering that blood alcohol level may not be reported for every crash and that any amount of alcohol causes some amount of impairment, figures for its impact are conservative.

About three in every ten American auto crash deaths involve alcohol. On average someone is killed by a drunk driver every forty-eight minutes. In 2010, an estimated 10,228 people died in alcohol related driving crashes—a decline of over 50 percent since records started being kept in 1982.[9] About one-third of these deaths involved someone other than the driver.

Alcohol-related crashes in the United States cost the public an estimated $114.3 billion in 2000, including $51.1 billion in monetary costs and an estimated $63.2 billion in quality of life losses. People, other than the drinking driver, paid $71.6 billion of the alcohol-related crash bill, which is 63 percent of the total cost of these crashes.[7]

Drinking and Driving Results

In 2012, 5.6 percent of respondents reported that within the past 30 days they had driven when they had too much to drink at least once. More men than women had reported doing this (8% vs. 2.6%). A larger percentage of younger people also reported driving under the influence. The range was 8.3 percent for those age 25 to 34 years to only 0.8% for those age 75 and older (see table 17.2).

Comparison with Other States

In all states and the District of Columbia the range of people reporting at least one fall in the last year ranged from 14.8 percent to 36 percent with a median of 27.5 percent. At 29.3 percent, Iowa was worse than the median.

In terms of seatbelt use, the percent reporting their use always or nearly always ranged from 80.2 percent to 97.7 percent with a median of 93.8 percent. Iowa was better than the median here with 94.6 percent.

Drinking and driving at least once in the past month ranged from only 2 percent to 5.9 percent. The median was 3.5 percent. With 5.6 percent, Iowa was well above the median. There were only three states with a higher prevalence of people admitting to driving under the influence of alcohol. This finding is surprising considering Iowa is one of the lowest states in alcohol related traffic deaths.

Table 17.2: **Prevalence of Motor Vehicle Related Injury in Iowans, 2012**

DEMOGRAPHIC GROUPS	Always or Nearly Always Wear Seatbelts		Drink and Drive	
	%	C.I. (95%)	%	C.I. (95%)
TOTAL	94.6	(93.8-95.4)	5.6	(4.6-6.5)
SEX				
Male	91.0	(89.6-92.4)	8.0	(6.4-9.6)
Female	98.0	(97.4-98.6)	2.6	(1.7-3.5)
RACE/ETHNICITY				
White/Non-Hisp.	94.6	(93.8-95.4)	5.8	(4.8-6.8)
Black/Non-Hisp.	97.1	(93.4-100)	6.1	(0-14.3)
Other/Non-Hisp.	93.4	(88.4-98.5)	2.6	(0-6.5)
Hispanic	94.6	(91.3-98)	2.8	(0-6.1)
AGE				
18-24	91.1	(87.6-94.6)	6.5	(2.9-10.2)
25-34	93.2	(91-95.4)	8.3	(5.3-11.3)
35-44	93.8	(91.8-95.8)	4.7	(2.8-6.6)
45-54	95.3	(93.7-96.9)	5.4	(3.4-7.4)
55-64	97.1	(96.1-98.1)	6.1	(4.2-8)
65-74	96.5	(95.3-97.6)	2.8	(1.2-4.3)
75+	96.2	(94.8-97.5)	0.8	(0-1.6)
EDUCATION				
Less than H.S.	93.0	(89.1-96.9)	4.9	(0-10.2)
H.S. or G.E.D.	93.0	(91.6-94.4)	5.9	(4.1-7.7)
Some Post-H.S.	94.9	(93.7-96.1)	5.8	(4-7.5)
College Graduate	97.1	(96.3-97.9)	5.1	(3.6-6.5)
HOUSEHOLD INCOME				
Less than $15,000	92.9	(88.2-97.6)	4.5	(1.1-8)
$15,000- 24,999	94.5	(92.3-96.7)	2.9	(0.5-5.2)
$25,000- 34,999	95.9	(93.9-97.9)	7.4	(3.9-10.9)
$35,000- 49,999	94.8	(92.4-97.2)	6.4	(3.9-8.8)
$50,000- 74,999	96.6	(94.8-98.4)	5.8	(3.5-8.1)
$75,000+	96.8	(95.4-98.2)	6.0	(4.2-7.8)

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18. IMMUNIZATION

Background

The flu is a contagious respiratory illness caused by influenza viruses that infect the nose, throat, and lungs. It can cause mild to severe illness, and at times can lead to death. The best way to prevent the flu is by getting a flu **vaccine** each year.[1]

Influenza and pneumonia combined are the eighth leading cause of death among all Americans and the seventh leading cause for people over age 65. Influenza and pneumonia together resulted in more than 53,600 deaths in 2011 in the U.S.[6] and 673 in Iowa in 2011.[5]

Influenza can vary greatly from year to year in the severity of its impact. For instance, the usual seasonal influenza primarily was a problem for the elderly, while the recent H1N1 pandemic focused more on younger people. For healthy children and adults, influenza is typically a moderately severe illness. For unhealthy or elderly people, influenza can be very dangerous. Adults 65 years old and older who contract influenza are much more likely to have serious complications from this illness, which can affect their health and independence.

Influenza can be prevented with the influenza vaccine. This vaccine is produced each year so that it can be effective against influenza viruses that are expected to cause illness that year. A yearly influenza vaccination has been reported to be between 67 percent and 92 percent effective in preventing influenza and reducing its severity. The vaccine may be taken by a shot or by nasal spray. The nasal spray is not recommended for people at high risk, however. The best time to receive the influenza vaccine is soon after the vaccine becomes available in the fall of each year.[4] The Recommendation for annual vaccination against seasonal influenza includes almost everyone in the United States population from six months old and older.

Influenza is a very serious illness for anyone at high risk. Certain diseases that place people at high risk include:

- Chronic lung disease such as asthma, emphysema, chronic bronchitis, tuberculosis, or cystic fibrosis,
- Heart disease,
- Diabetes or other chronic metabolic disorders,
- Severe anemia, or
- Chronic kidney disease,
- Diseases or treatments that depress immunity.

Some of the symptoms associated with influenza are fever, chills, coughing, weakness, loss of appetite, bodily aches and pains, sore throat, or dry cough.

Pneumonia is a lung disease usually caused by bacteria, viruses, and other infectious agents such as fungi. Pneumonia is frequently a complication of influenza and is responsible for the vast majority of deaths from the two. In 2009, 1.1 million people in the U.S. were hospitalized with pneumonia and more than 50,000 people died from the disease.[2]

The Advisory Committee on Immunization Practices (ACIP) recommends that persons aged 65 years old or older receive at least one lifetime dose of pneumococcal vaccine.[3] People at higher risk should receive the pneumonia vaccine at age 19 and higher. Such people would be smokers, people with respiratory problems such as asthma or COPD, and those with compromised immunity.

Immunization Results

In 2012, 70.1 percent of Iowans age 65 and over reported having a flu shot in the past 12 months. This is about the same as the 70.2 percent reported in 2011. Among all adults, 45.5 percent had a flu immunization in the past 12 months. This was either in the form of a flu shot or a FluMist™ nasal spray. Females, older people, people with more education, and non-Hispanic Whites were more likely to have a flu immunization. The lowest percentage was found among people between age 18 and 24 years (26.3%), while the highest was for those age 75 and older (72.9%) (see table 18.1).

In 2012, 70.8 percent of Iowans age 65 and over reported ever having a pneumonia vaccination. This is also nearly identical to the figure found in 2011 (70.9%).

Among all adults, 31.4 percent had ever received a pneumonia vaccination. Older people, females, people with lower education, and people with lower income, were more likely to have pneumonia vaccinations. Age made the greatest difference in whether someone had a pneumonia vaccination. The lowest percentage of pneumonia vaccination occurred among those who were 35 to 44 years old (15.6%), while those 75 years old and older were highest by far (78.5%). The relationship with age was not perfectly linear since the youngest people were somewhat more likely to have had a pneumonia shot than those a few years older (see Table 18.1). Pneumonia vaccination did not really increase with increasing age until age 55. Since it is only recommended for those age 65 years and older except under special conditions, this is not surprising.

Those who had ever been told they had several chronic conditions that could increase the risk from flu or pneumonia were more likely to receive their flu and pneumonia vaccinations than those who had not been told they had these conditions. Of all respondents ever told they had diabetes, asthma, COPD, or kidney disease; 54.9 percent had a flu vaccination and 52.8 percent had a pneumonia vaccination. This compares with 43 percent and 25.8 percent respectively for those who did not have any of these conditions.

Comparison with Other States

The median percentage of the population age 65 and over who have had a flu shot in the past 12 months from all the states and the District of Columbia was 60.1 percent in 2012. The range was from 50 percent to 70.1 percent. Iowa had the highest value in the nation for people 65 years and over having a flu shot in the past year.

The median percentage of the population age 65 years old and older who ever had a pneumonia vaccination was 68.8 percent. The range was from 61.6 percent to 76.2 percent. Iowa's value of 70.8 percent is above the median.

Table 18.1: Percentage of influenza and Pneumonia Immunizations in Adult Iowans, 2012

DEMOGRAPHIC GROUPS	Influenza		Pneumonia	
	%	C.I. (95%)	%	C.I. (95%)
TOTAL	45.5	(44.1-46.9)	31.4	(30-32.8)
SEX				
Male	39.6	(37.4-41.8)	29.1	(27.1-31.1)
Female	51.0	(49-53)	33.6	(31.8-35.4)
RACE/ETHNICITY				
White/Non-Hispanic	46.5	(44.9-48.1)	31.7	(30.3-33.1)
Non-White or Hisp.	36.2	(30.5-41.8)	29.6	(23.8-35.4)
AGE GROUP				
18-24	26.3	(21.2-31.4)	23.7	(18-29.4)
25-34	34.0	(30.1-37.9)	17.3	(13.6-21)
35-44	37.0	(33.3-40.7)	15.6	(12.7-18.5)
45-54	42.7	(39.6-45.8)	17.2	(14.7-19.7)
55-64	52.6	(49.7-55.5)	27.7	(25.2-30.2)
65-74	67.4	(64.5-70.4)	63.4	(60.4-66.5)
75+	72.9	(70.1-75.7)	78.5	(75.9-81.1)
EDUCATION				
Less than H.S.	37.0	(31.3-42.7)	39.4	(33.5-45.3)
H.S. or G.E.D.	43.2	(40.8-45.6)	33.1	(30.9-35.3)
Some Post-H.S.	45.8	(43.3-48.3)	32.4	(29.9-34.9)
College Graduate	51.8	(49.3-54.3)	24.2	(22-26.4)
HOUSEHOLD INCOME				
Less than $15,000	40.2	(35.1-45.3)	43.2	(37.9-48.5)
$15,000- 24,999	42.9	(39-46.8)	40.7	(36.8-44.6)
$25,000- 34,999	46.7	(42.4-51)	38.8	(34.5-43.1)
$35,000- 49,999	43.0	(39.5-46.5)	30.9	(27.4-34.4)
$50,000- 74,999	44.5	(41-48)	24.1	(21-27.2)
$75,000+	47.7	(44.8-50.6)	21.6	(19.2-24)

Health Objectives for Iowa and the Nation

The *Healthy People 2020* and *Healthy Iowans*, goals for having a flu shot in the past 12 months and ever having a pneumonia vaccination for people age 65 and over are both 90%. Although much higher than the nation as a whole, Iowa's 2012 figures of 70.1 percent for having a flu shot and 70.8 percent for ever having a pneumonia vaccination have a long way to go to meet these targets. The *Healthy People 2020* goal for flu immunization of people age 18 to 64 is 80 percent. Iowa misses this by an even greater amount having an immunization prevalence of only 39.1

percent. The Healthy People 2020 goal for ever having a pneumonia vaccination for people age 18 to 64 is 60 percent. Iowa also is greatly lower than this with only 20.3 percent.

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19. HIV/AIDS

Background

HIV stands for human immunodeficiency virus. This is the virus that causes acquired immunodeficiency syndrome (AIDS). HIV is different from most other viruses because it attacks the immune system. The immune system gives our bodies the ability to fight infections. HIV finds and destroys a type of white blood cell that the immune system must have to fight disease. AIDS is the final stage of HIV infection. It can take years for a person infected with HIV, even without treatment, to reach this stage. Having AIDS means that the virus has weakened the immune system to the point at which the body has a difficult time fighting infections.[2]

The HIV epidemic has now been with us for more than thirty years.[4] The most recent Estimates from the World Health Organization (WHO) suggest that 34 million persons were living with HIV infection worldwide at the end of 2011. At the end of 2010, there were an estimated 872,990 persons in the U.S. living with diagnosed HIV infection. Over one fifth of these people do not know that they are infected.[1] Not knowing puts them and others at risk.

From 2008 through 2011, the estimated numbers of annual diagnoses of HIV infection in the United States remained reasonably stable. In 2011, the estimated rate of diagnoses of HIV infection in the United States was 15.8 per 100,000 population.[1]

Groups with the largest exposure include "men who have sex with men", injection drug users, African Americans, and Hispanics. New diagnoses are occurring among women and people infected heterosexually. These data must be used to ensure targeted prevention efforts to reach those in greatest need, with a primary focus on young African American and Hispanic men and women at risk through sexual and drug-related behaviors.

African Americans and Hispanics continue to be over-represented among persons with HIV diagnoses when compared to the sizes of their populations in Iowa. However, it is important to keep in mind that non-Hispanic whites account for sixty percent of HIV diagnoses and persons living with HIV/AIDS.[6]

HIV/AIDS prevalence continues to increase in Iowa. There were 2,023 persons living with HIV/AIDS who were diagnosed in Iowa on December 31, 2012, up from 1,939 a year earlier.[6]

In light of recent advances in HIV diagnostics and therapeutics, the lifetime costs of health care associated with HIV have grown considerably. Currently, the lifetime treatment cost of an HIV infection is estimated at $379,668 (in 2010 dollars).[3]

CDC recommends routine HIV testing in health care settings. People need to get tested so they can get treated and not infect others. Being tested will save their lives and the lives of other people.5 Treatment for HIV is better than ever before.

HIV/AIDS Results

In 2012 25.9 percent of all adult respondents reported ever being tested for HIV, not including as part of a blood donation. This is similar to 2011 when 26.5 percent said they had been tested. Females, non-White or Hispanic race/ethnicity, younger people except those under 25 years, people of lower education, and people of lower household income were more likely to be tested. The largest proportion of respondents tested was among those age 25 to 34 years (48.3%). The smallest proportion reporting ever being tested was four percent of those age 75 years and older (see table 19.1).

Table 19.1: Percentage of Iowans Tested for HIV/AIDS, 2012

DEMOGRAPHIC GROUPS	Had HIV Test	
	%	C.I. (95%)
TOTAL	25.9	(24.5-27.3)
SEX		
Male	23.6	(21.6-25.6)
Female	28.1	(26.1-30.1)
RACE/ETHNICITY		
Non-Hispanic White	24.4	(23-25.8)
Non-White or Hisp.	40.4	(34.5-46.2)
AGE		
18-24	23.0	(18.3-27.7)
25-34	48.3	(44-52.6)
35-44	39.0	(35.3-42.7)
45-54	27.1	(24.2-30)
55-64	16.7	(14.5-18.9)
65-74	8.8	(7-10.6)
75+	4.0	(2.3-5.7)
EDUCATION		
Less than H.S.	24.8	(19.1-30.5)
H.S. or G.E.D.	21.5	(19.3-23.7)
Some Post-H.S.	27.5	(25-30)
College Graduate	30.3	(27.9-32.7)
HOUSEHOLD INCOME		
<$15,000	38.8	(33.3-44.3)
$15,000- 24,999	27.3	(23.4-31.2)
$25,000- 34,999	25.8	(21.5-30.1)
$35,000- 49,999	23.7	(20.4-27)
$50,000- 74,999	25.8	(22.5-29.1)
$75,000+	25.8	(23.3-28.3)

There is an interesting interaction between sex and age. Figure 19.1 shows that in younger people, many more women have been tested, while there is little difference between the sexes in the older age groups.

Finally, respondents to the HIV section were read a set of high risk sexual and drug use practices and asked if any of them applied to them. They did not have to say which ones. A total of 2.4 percent said that at least one of these statements applied to them. These respondents would have a very high risk of contracting HIV.

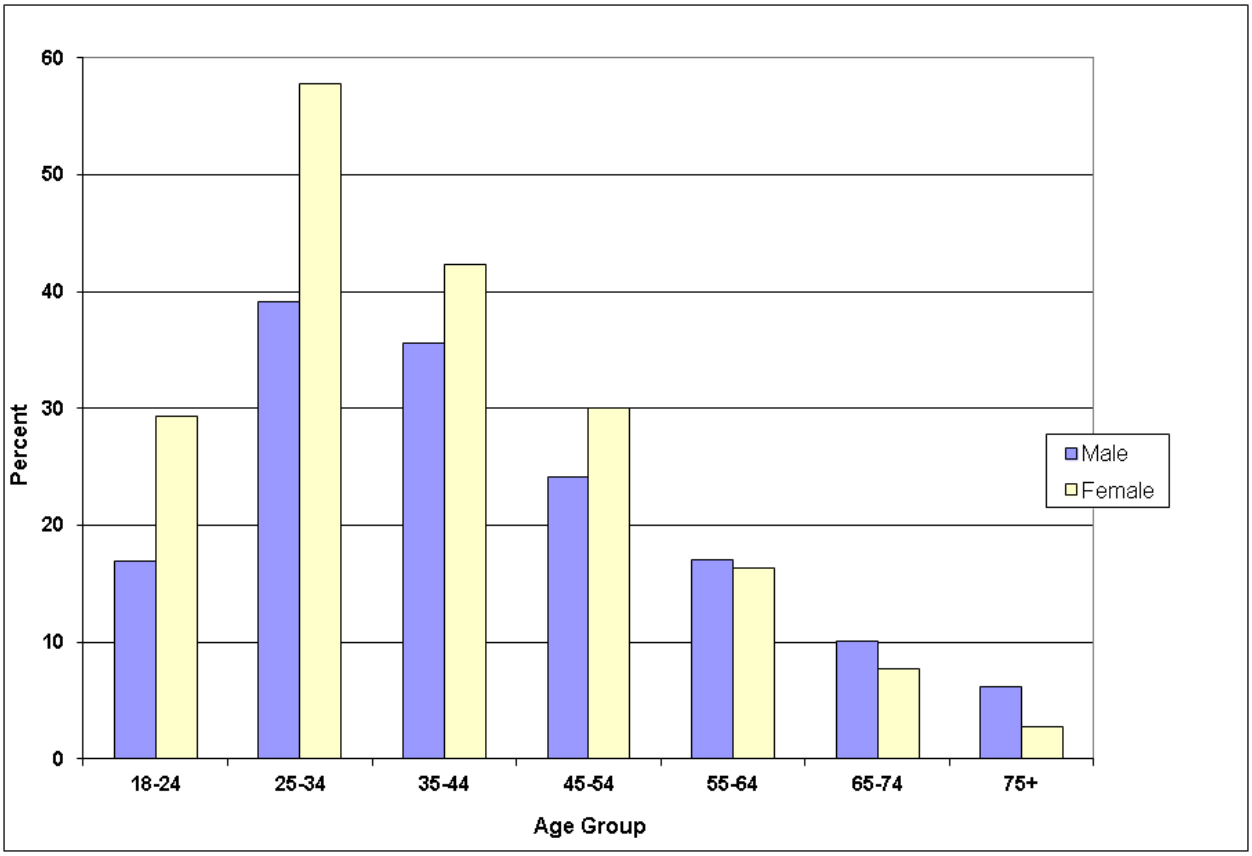
Comparison with Other States

The percentage of people who had a test for HIV ranged from 23.4 percent to 66.2 percent. The median percentage of people tested was 34 percent. There were only three states with a lower percentage than Iowa's figure of 25.9 percent. Five out of six of the states with the lowest testing prevalence were in the upper Midwest.

Health Objectives for the Nation

Healthy People 2020 has the goal of 16.9 percent of people age 15 to 44 being tested for HIV in the past 12 months. Iowa had a level of 9.6 percent for respondents age 18 to 44 tested within this time period. This is much below the goal.

Figure 19.1: Percentage of Iowans Reporting Ever Being Tested for HIV by Age and Gender, 2012



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20. ORAL HEALTH

Background

Good overall health requires good oral health. Oral health complications not only reflect general health conditions, but also exacerbate them. Oral diseases are linked to poor pregnancy outcomes, cardiovascular disease, diabetes, and respiratory disease. Poor oral health results in chronic and acute pain, loss of days from work and school, and inappropriate use of emergency rooms. Untreated oral diseases and conditions can impact the ability to eat and drink, swallow, maintain proper nutrition, smile, and communicate.[2]

There are threats to oral health across the lifespan. Nearly one-third of all adults in the United States have untreated tooth decay. In addition, nearly a quarter of all adults have experienced some facial pain in the past six months.[1]

The baby boomer generation will be the first where the majority will maintain their natural teeth over their entire lifetime, having benefited from water fluoridation and fluoride toothpastes. Over the past 10 years, the number of adults missing all their natural teeth has declined from 31 percent to 25 percent for those aged 60 years and older, and from 9 percent to 5 percent for those adults between 40 and 59 years. However, 5 percent means a surprising 1 out of 20 middle-aged adults are missing all their teeth.[1]

Toothaches are the most common pain of the mouth or face reported by adults. This pain can interfere with vital functions such as eating, swallowing, and talking. Almost 1 of every 4 adults reported some form of facial pain in the past 6 months.[1]

Most adults show signs of gum disease. Severe gum disease affects about 14 percent of adults aged 45 to 54 years. This increases to one in every four adults aged 65 years and older. Signs and symptoms of soft tissue diseases such as cold sores are common in adults and affect about 19 percent of those aged 25 to 44 years. [1] Oral cancers are most common in older adults, particularly those over 55 years who smoke and are heavy drinkers.[1]

Profound disparities remain that affect those without the resources to achieve good oral care or the knowledge of its importance. Over 40 percent of poor adults (20 years and older) have at least one untreated decayed tooth compared to 16 percent of non-poor adults. This fact inspired the first Surgeon General's Report on Oral Health, which identified a "silent epidemic" of dental and oral diseases and called for a national effort to improve Americans' oral health.3

Many studies document that those in poverty, racial minorities, and those in rural areas have less access to dental care. For example, poor children are more likely to have unmet dental need than children from families with higher incomes. Non-Hispanic black and Hispanic children and adults are less likely to have seen a dentist in the past 6 months than non-Hispanic whites. The most common barriers to good oral health are a lack of dental insurance or the inability to pay for care and problems of access involving transportation and travel, as well as the need to take time off work for appointments.3

Increasing access to preventive care is an important way to improve oral health for all populations, but in particular for the vulnerable and underserved. Many oral diseases can be prevented through a combination of behavior changes (e.g. home care and hygiene, proper food choices, tobacco cessation) and system changes (e.g. community water fluoridation, oral health promotion and awareness, increasing accessibility to care, increasing the dental safety net).

Oral Health Results

Table 20.1:
Percentage of Iowans Having Dental Visits within the Past 12 Months, 2012

DEMOGRAPHIC GROUPS	Last Dental Visit Within 12 Months	
	%	C.I. (95%)
TOTAL	71.1	(69.7-72.5)
SEX		
Male	66.9	(64.7-69.1)
Female	75.2	(73.4-77)
RACE/ETHNICITY		
White/Non-Hisp.	72.5	(71.1-73.9)
Non-White or Hisp.	58.8	(53-64.7)
AGE		
18-24	69.2	(63.9-74.5)
25-34	68.0	(64.1-71.9)
35-44	72.4	(68.9-75.9)
45-54	74.2	(71.3-77.1)
55-64	74.3	(71.8-76.8)
65-74	69.8	(66.9-72.6)
75+	67.4	(64.3-70.4)
EDUCATION		
Less than H.S.	49.4	(43.3-55.5)
H.S. or G.E.D.	65.1	(62.7-67.5)
Some Post-H.S.	74.0	(71.6-76.4)
College Graduate	84.9	(83.1-86.7)
HOUSEHOLD INCOME		
Less than $15,000	49.1	(43.8-54.4)
$15,000- 24,999	52.5	(48.6-56.4)
$25,000- 34,999	64.4	(60.1-68.7)
$35,000- 49,999	70.8	(67.3-74.3)
$50,000- 74,999	78.3	(75.2-81.4)
$75,000+	87.1	(84.9-89.3)

In 2012, 71.1 percent of Iowans surveyed reported visiting a dentist, dental hygienist or dental clinic within the past year. Females were more likely than males to report a dental visit during the past 12 months. Both higher education and greater income were related to the likelihood of having a dental visit. White non-Hispanics were more likely to have a dental visit than other race and ethnic groups. People in middle age were more likely to have a dental visit than either the younger or the older respondents. Iowans with a household income of $75,000 or more had the highest proportion reporting recent dental visits (87.1%). At the other extreme, 49.1 percent of those with an annual household income less than $15,000 reported visiting a dentist in the past 12 months (see table 20.1).

A majority of adult respondents (58.3%) had no permanent teeth removed due to tooth decay or gum disease. On the other hand, 5.7 percent had all their permanent teeth removed. The percentage of those with all permanent teeth removed rose with increasing age, lower income, and lower education. It was highest for those 65 years old and older (17.3%).

Health Objectives for Iowa and the Nation

Healthy People 2020 had a goal of 41.2 percent of Americans age 45 to 64 years having no teeth extracted. Iowa far surpassed this goal with 51.1 percent having no extractions in this age group.

In *Healthy People 2020* the goal was only 21.6 percent of people age 65 to 74 years having all permanent teeth extracted. Iowa surpassed this goal having only 14.6 percent with all permanent teeth extracted.

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21. MENTAL ILLNESS AND STIGMA

Background

Mental Health is a general term referring not only to the absence of mental disorder, but also the ability of a person to successfully handle the daily challenges and social interactions of life.[1] Health is not merely physical health, but also mental health. Nor are these two independent of each other. Poor physical health can lead to poor mental health, and poor mental health can lead to poor physical health.

One of every five adults, or about 40 million Americans, experiences some type of mental disorder every year. Over 19 million suffer from anxiety disorder, the most common mental illness. More than 18 million people experience a depressive disorder each year.[1] Although depressive disorders are somewhat less common than anxiety disorders, they are often more serious. Almost six percent of the population meets the criteria for serious mental illness.[2]

The combined indirect and related costs of mental illness are immense and include the costs of lost productivity; lost earnings due to illness; and societal costs, such as increased criminal-justice and family-caregiver costs. The National Institute of Mental Health (NIMH) conservatively estimates the total costs associated with serious mental illness to be in excess of $300 billion per year. This estimate is based on 2002 data.

Mental health and mental disorders also have a significant impact on the total health-care system. Up to half of all visits to primary care physicians are due to conditions caused by or made worse by mental or emotional problems. People with depression are more than four times as likely to have a heart attack as those without such a history. Roughly 37% of alcohol abusers and 53% of drug abusers also have at least one serious mental illness.[1]

Another characteristic of a lack of mental health (or mental illness) is stigma. People with mental problems are frequently viewed negatively and kept at a distance. This can put more stress on an already fragile mental condition.

Mental Illness and Stigma Results

Data in this chapter will come from a module to evaluate mental illness and stigma. For other information related to mental health see Chapter 4 on general health status and health-related quality of life and chapter 11 on other chronic conditions. The 2012 survey also included a module on adverse childhood experience. The data from this module is expected to be related to mental health. Data from this module will be presented in a special report.

The Mental Illness and stigma module contains ten questions. Results from the first six of these make up a single measure of mental illness called the K-6 scale. The questions in the K-6 scale all ask how often the respondent has felt a certain way. These are coded into numbers from zero to four and summed to obtain the K-6 score. The value of these scores which can range from zero to 24 can then be divided up to indicate levels of mental illness. A score of greater than 12 indicates serious mental illness (SNI).[1]

According to the K-6, 3.1% of adult Iowans are experiencing serious mental illness. SMI was more frequent among those with lower income, lower education, women, and Other race (see table 21.1). Those with less than $15,000 annual household income had the greatest percent reporting SMI (13.1%).

Table 21.1: Serious Mental Illness in Iowans as Measured by the K-6 Scale, 2012

DEMOGRAPHIC GROUPS	Serious Mental Illness – K-6	
	%	C.I. (95%)
TOTAL	3.1	(2.5-3.6)
SEX		
Male	2.4	(1.7-3.1)
Female	3.7	(2.9-4.6)
RACE/ETHNICITY		
White/Non-Hisp.	2.9	(2.4-3.5)
Black/Non-Hisp.	0.0	(0-4.2)
Other/Non-Hisp.	8.5	(2.8-14.2)
Hispanic	1.8	(0.1-3.4)
AGE		
18-24	5.1	(2.4-7.8)
25-34	2.1	(0.9-3.3)
35-44	2.1	(1.1-3.1)
45-54	4.4	(3-5.8)
55-64	3.5	(2.4-4.6)
65-74	1.6	(0.7-2.4)
75+	2.1	(0.9-3.2)
EDUCATION		
Less than H.S.	7.3	(4.2-10.5)
H.S. or G.E.D.	4.1	(3-5.2)
Some Post-H.S.	2.3	(1.5-3.2)
College Graduate	1.0	(0.6-1.5)
HOUSEHOLD INCOME		
Less than $15,000	13.7	(9.9-17.5)
$15,000-24,999	5.2	(3.3-7)
$25,000-34,999	2.7	(1.1-4.2)
$35,000-49,999	0.7	(0.2-1.3)
$50,000-74,999	1.5	(0.2-2.7)
$75,000+	1.7	(0.7-2.6)

In the next question, people were asked how many days out of the past 30 a mental health condition or emotional problem kept them from doing their work or other usual activities. Most people (91.1%) said none. However, 2.4% said 14 days or more. People with an annual household income of less than $15,000 had the highest prevalence with 13.2 percent reporting being limited 14 days or more.

When asked if they were taking medicine or receiving treatment from a doctor or health professional for any kind of mental condition or emotional problem, 13.3% said yes. This was higher for people with low household incomes and for women. It was somewhat higher in middle age and somewhat lower for racial and ethnic minorities and those with a college education. People with household income less than $15,000 per year had the highest percentage of people receiving treatment (27.6%). Non-Hispanic Blacks had the lowest percent at 7 percent (see table 21.2).

The last two questions in the module involved attitudes toward people with mental illness. The first asked if the respondent thought treatment can help people with mental illness lead normal lives. The second asked whether the respondent thought people were generally caring and sympathetic to people with mental illness. Results from these two questions were combined to get an idea of the degree of stigma the respondent might feel toward the mentally ill. If they disagreed with both questions, their degree of stigma was considered high. If they agreed with both, their degree of stigma was considered low.

Table 21.2: Iowans Receiving Treatment for Mental Illness, 2012

DEMOGRAPHIC	Receiving Treatment	
GROUPS	**%**	**C.I. (95%)**
TOTAL	13.3	(12.3-14.3)
SEX		
Male	8.6	(7.2-10)
Female	17.7	(16.1-19.3)
RACE/ETHNICITY		
White/Non-Hisp.	13.7	(12.6-14.8)
Black/Non-Hisp.	7.0	(1.3-12.8)
Other/Non-Hisp.	12.9	(6.9-19)
Hispanic	9.0	(4.1-13.8)
AGE		
18-24	11.4	(7.5-15.4)
25-34	12.2	(9.4-15)
35-44	13.7	(11-16.3)
45-54	16.7	(14.2-19.1)
55-64	15.8	(13.7-17.9)
65-74	11.0	(9.1-12.9)
75+	10.1	(7.8-12.3)
EDUCATION		
Less than H.S.	16.5	(12.2-20.8)
H.S. or G.E.D.	13.0	(11.2-14.8)
Some Post-H.S.	14.8	(12.8-16.8)
College Graduate	10.3	(8.7-11.9)
HOUSEHOLD INCOME		
Less than $15,000	27.6	(22.9-32.3)
$15,000-24,999	15.5	(12.8-18.2)
$25,000-34,999	13.2	(10.5-15.9)
$35,000-49,999	12.8	(10.3-15.3)
$50,000-74,999	11.1	(8.9-13.3)
$75,000+	10.3	(8.5-12.1)

Most people (94.3%) agreed that treatment could help the mentally ill. A lower number (60.5%) agreed that people were generally caring for the mentally ill. About 1.5% of all respondents showed a high degree of stigma, while 49.1% showed a low degree of stigma. The remainder agreed with one question, while disagreeing with the other.

References

1. Kessler RC, Barker PR, Colpe LJ, Epstein JF, Groerer JC, Hiripi E, Howes MJ, Normand S-LT, Manderscheid RW, Walters EE, Zaslavsky AM. Screening for serious mental illness in the general population. *Archives of General Psychiatry*, 60(2); 2003. 184-189.
2. National Institute of Mental Health (NIMH), Annual Total Direct and Indirect Costs of Serious Mental Illness (2002) Available at http://www.nimh.nih.gov/statistics/pdf/Total_Direct_Indirect_Costs-SMI.pdf.

Appendix 1

Year 2020 Health Objectives for the Nation: State Summary of BRFSS[1] Data for 2012

Iowa

Healthy People 2020[2] Objective[3]	Yr 2020 Target	State, 2012
Health Insurance (Objective #AHS-1.1) Ages ≥18	100%	89%
Specific Source of Ongoing Primary Care (Objective #AHS-5.3) Ages ≥18 & < 65	89.4%	73%
Specific Source of Ongoing Primary Care (Objective #AHS-5.4) Ages ≥ 65	100%	88.2%
Pap Test, Within Past Three Years (Objective #C-15) Women, Ages ≥ 18	93%	78.0%
Colorectal cancer screening according to latest guidelines (Objective #C-16) Ages ≥ 50 < 75	70.5%	66.4%
Mammogram, Within Past Two Years (Objective #C-17) Women, Ages ≥ 40	81.1%	75.9%
Increase the proportion of adolescents and adults who have been tested for HIV in the past 12 months (Objective #HIV-14.1) Ages 18 - 44	16.9%	9.6%
Influenza Immunization, Within Past Year (Objective # IID-12.5) Ages 18 - 64	80%	39.1%
Influenza Immunization, Within Past Year (Objective # IID-12.7) Ages ≥ 65	90%	70.1%
Pneumococcal Pneumonia Vaccination, Ever Had (Objective # IID-13.1) Ages ≥ 65	90%	70.8%
Increase the proportion of adults who are at a healthy weight (Objective #NWS-8) Ages ≥ 20	33.9%	32.0%
Obese, BMI ≥ 30 (Objective NWS-9) Ages ≥ 20	30.6%	31.3%
Any Permanent Teeth Extracted Due to Caries or Periodontal Disease (Objective #OH-4.1) Ages 45-64	68.8%	48.9%
Extraction of All Natural Teeth (Objective # OH-4.2) Ages 65-74	21.6%	14.6%
No Leisure Time Physical Activity (Objective # PA-1) Ages ≥ 18	32.6%	33.1%
Binge Drinking, During the Past Month (Objective #SA-14.3) Ages ≥ 18	24.3%	21.7%
Cigarette Smoking (Objective #TU-1.1) Ages ≥ 18	12%	18.1%

Healthy People 2020[2] Objective[3]	Yr 2020 Target	State, 2012
Smokeless Tobacco Use (Objective #TU-1.2) Ages ≥ 18	0.3%	4.4%
Increase smoking cessation attempts by adult smoker (Objective #TU-4.1) Ages ≥ 18	80%	57.7%
Increase recent smoking cessation success by adult smokers 6 Mo. To 1 Yr. (Objective #TU-4.1) Ages ≥ 18	8%	4.5%

[1] Behavioral Risk Factor Surveillance System

[2] Public Health Service. Healthy People 2020: National Health Promotion and Disease Prevention Objectives--full report with commentary. Washington, DC: U.S. Department of Health and Human Services, 2010.

[3] In some cases, BRFSS definitions of objectives differ slightly from those in Healthy People 2010. See Healthy People 2010 for the exact definition of the objective.

Appendix 2

Health Objectives for Iowa:
State Summary of BRFSS[1] Data for 2012

Healthy Iowans[2] Objective[3]	Yr 2016 Target	Iowa, 2012
An increase in the proportion of people with health insurance Ages 18 – 64	100%	86.6%
An increase in the proportion of people who have one person as a health provider.	82.5%	76%
Influenza Immunization, Within Past Year (Objective #10-2) Ages >= 65	90%	70.1%
Pneumonia Vaccination, Ever Had Ages >= 65	90%	70.8%
A reduction in adult binge drinking	16%	21.7%
A reduction in adult tobacco use (Cigarette Smoking)	17%	18.1%
An increase in the proportion of homes that have rules against smoking.	87%	81.7%
Mammogram screening in past 2 years **Women** Ages >= 50	88%	75.9%
Colorectal cancer screening Ages >= 50	70%	67.3%
Pap test in past 3 years Women Ages >= 21 years	92%	78.0%
A reduction in the proportion of adults who are obese	27%	30.4%
An increase in seatbelt usage to reduce injuries and deaths from motor vehicle crashes.	96%	94.6%

[1]Behavioral Risk Factor Surveillance System
[2]Iowa Department of Public Health, *Healthy Iowans: Iowa's Health Improvement Plan 2012-2016, 2013 Progress Report*.
[3]In some cases, BRFSS definitions of objectives differ slightly from those in Healthy Iowans. See Healthy Iowans for the exact definition of the objective.

Appendix 3

Iowa 2012 BRFSS Questionnaire

Section 1: Health Status

1.1: Would you say that in general your health is:

1 Excellent
2 Very good
3 Good
4 Fair or
5 Poor

Section 2: Healthy Days - Health-related Quality of Life

2.1: Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?
Number of days
8 8 None

2.2: Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?
__ __ Number of days
8 8 None If Q2.1 also "None", skip to next module

If Q2.1 and Q2.2=88 (None), ⇨ Go to next section.

2.3: During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?
__ __ Number of days
8 8 None

Section 3: Health Care Access

3.1: Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?

1 Yes
2 No

3.2: Do you have one person you think of as your personal doctor or health care provider?

If "No," ask: "Is there more than one, or is there no person who you think of as your personal doctor or health care provider?"

1 Yes, only one
2 More than one
3 No

3.3: Was there a time in the past 12 months when you needed to see a doctor but could not because of the cost?

1 Yes
2 No

3.4: About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.

1 Within past yr (any time less than 12 months ago)
2 Within past 2 yrs (one year but less than 2 years ago)
3 Within past 5 yrs (two years but less than 5 years ago)
4 5 or more years ago
8 Never

Section 4: Exercise

4.1: During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?

1 Yes
2 No

Section 5: Chronic Health Conditions

Now I would like to ask you some questions about general health conditions.
Has a doctor, nurse, or other health professional EVER told you that you had any of the following? For each, tell me "Yes," "No," or you're "Not sure."

5.1: (Ever told) you had a heart attack, also called a myocardial infarction?

1 Yes
2 No

5.2: (Ever told) you had angina or coronary heart disease?

1 Yes
2 No

5.3: (Ever told) you had a stroke?

1 Yes
2 No

5.4: (Ever told) you had asthma?

1 Yes
2 No ⇨ **Go to Q5.6**

5.5: Do you still have asthma?

1 Yes
2 No

5.6: (Ever told) you had skin cancer?

1 Yes
2 No

5.7: (Ever told) you had any other types of cancer?

1 Yes
2 No

5.8: (Ever told) you have Chronic Obstructive Pulmonary Disease or COPD, emphysema or chronic bronchitis?

1 Yes
2 No

5.9 (Ever told) you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?

1 Yes
2 No

INTERVIEWER NOTE: Arthritis diagnoses include:

- rheumatism, polymyalgia rheumatica
- osteoarthritis (not osteoporosis)
- tendonitis, bursitis, bunion, tennis elbow
- carpal tunnel syndrome, tarsal tunnel syndrome
- joint infection, Reiter's syndrome
- ankylosing spondylitis; spondylosis
- rotator cuff syndrome

- connective tissue disease, scleroderma, polymyositis, Raynaud's syndrome
- vasculitis (giant cell arteritis, Henoch-Schonlein purpura, Wegener's granulomatosis,
- polyarteritis nodosa)

5.10 (Ever told) you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?
1 Yes
2 No

5.11: (Ever told) you have kidney disease? Do NOT include kidney stones, bladder infection or incontinence.
INTERVIEWER NOTE: Incontinence is not being able to control urine flow.
1 Yes
2 No

5.12: Do you have any trouble seeing, even when wearing glasses or contact lenses?
1 Yes
2 No

5.13: (ever told) you have diabetes?
(If "Yes" and respondent is female, ask: "Was this only when you were pregnant?")
(If Respondent says pre-diabetes or borderline diabetes, use response code 4.)
1 Yes
2 Yes, but female told only during pregnancy
3 No
4 No, pre-diabetes or borderline diabetes

Module 1: Pre-Diabetes
NOTE: Only asked of those not responding "Yes" (code=1) to Core Q5.13 (Diabetes awareness question).
1. Have you had a test for high blood sugar or diabetes within the past three years?
1 Yes
2 No

CATI note: If Core Q5.13 = 4 (No, pre-diabetes or borderline diabetes); answer Q2 "Yes" (code = 1).
2. Have you ever been told by a doctor or other health professional that you have pre-diabetes or borderline diabetes?
If "Yes" and respondent is female, ask: "Was this only when you were pregnant?"
1. Yes
2. Yes, during pregnancy
3. No

State Added Diabetes [Module 2 – 2012 – Only Question 1]
To be asked following core Q5.13 if response is "yes"
1. How old were you when you were told you have diabetes?
__ __Code age in years **[97 = 97 and older]**

Section 6: Oral Health

6.1: How long has it been since you last visited a dentist or a dental clinic? Include visits to dental specialists, such as orthodontists**.**
1 Within the past year (any time less than 12 months ago)
2 Within the past 2 years (1 year but less than 2 years ago)
3 Within the past 5 years (2 years but less than 5 years ago)
4 5 or more years ago
8 Never

6.2: How many of your permanent teeth have been removed because of tooth decay or gum disease? Do not include teeth lost for other reasons, such as injury or orthodontics.
NOTE: If wisdom teeth are removed because of tooth decay or gum disease, they should be included in the count for lost teeth.
1 1 to 5
1 6 or more but not all
2 All
8 None

Section 7: Demographics
7.1: What is your age?
__ __ Code age in years

7.2: Are you Hispanic or Latino?
1 Yes
2 No

7.3: Which one or more of the following would you say is your race?
Mark all that apply
1 White
2 Black or African American
3 Asian
4 Native Hawaiian or Other Pacific Islander
5 American Indian, Alaska Native or
6 Other **[specify]**

CATI note: If more than one response to Q7.3, continue. Otherwise, go to Q7.5

7.4: Which one of these groups would you say best represents your race?
1 White
2 Black or African American
3 Asian
4 Native Hawaiian or Other Pacific Islander
5 American Indian, Alaska Native
6 Other **[specify]**

7.5 Have you ever served on active duty in the United States Armed Forces, either in the regular military or in a National Guard or military reserve unit? Active duty does not include training for the Reserves or National Guard, but DOES include activation, for example, for the Persian Gulf War.
1 Yes
4 No

7.6: Are you:
1 Married
2 Divorced
3 Widowed
4 Separated
5 Never married or
6 A member of an unmarried couple

7.7: How many children less than 18 years of age live in your household?
_ _ Number of children
8 8 None

7.8: What is the highest grade or year of school you completed?
1 Never attended school or only attended kindergarten
2 Grades 1 through 8 (Elementary)
3 Grades 9 through 11 (Some high school)
4 Grade 12 or GED (High school graduate)
5 College 1 year to 3 years (Some college or technical school)
6 College 4 years or more (College graduate)

7.9: Are you currently:
1 Employed for wages
2 Self-employed
3 Out of work for more than 1 year
4 Out of work for less than 1 year
5 A Homemaker
6 A Student
7 Retired or
8 Unable to work

7.10: Is your annual household income from all sources:
01 Less than $10,000
02 $10,000 to less than $15,000
03 $15,000 to less than $20,000
04 $20,000 to less than $25,000
05 $25,000 to less than $35,000
06 $35,000 to less than $50,000
07 $50,000 to less than $75,000
08 $75,000 or more

7.11: About how much do you weigh without shoes?
If respondent answers in metric, put "9" in the first position, Round fractions up
__ __ __ Weight pounds/kilograms

7.12: About how tall are you without shoes?
If respondent answers in metric, put "9" in the first position, Round fractions down
__/__ __ Height ft/inches/meters/centimeters

7.13: What county do you live in?
__ __ _ County name

7.14: What is your ZIP Code where you live?
_ _ _ _ _ ZIP Code

7.15: Do you have more than one telephone number in your household?
Do not include cell phones or numbers that are only used by a computer or fax machine.
1 Yes
2 No ⇨ **Go to Q7.17**

7.16: How many of these are residential numbers?
__ Residential telephone numbers **[6=6 or more]**

7.17: Do you have a cell phone for personal use? Please include cell phones used for both business and personal use.
1 Yes
2 No ⇨ **Go to Q7.19**

7.18: Thinking about all the phone calls that you receive on your landline and cell phone, what percent, between 0 and 100, are received on your cell phone?
_ _ _ Enter percent (1 to 100)
8 8 8 Zero

7.19: Do you own or rent your home?
1 Own
2 Rent
3 Other arrangement
INTERVIEWER NOTE: "Other arrangement" may include group home, staying with friends or family without paying rent.
Note: Home is defined as the place where you live most of the time/the majority of the year.

7.20: Indicate sex of respondent. **Ask only if necessary**.
1 Male ⇨ **Go to next section.**
2 Female **If respondent 45 years old or older, go to next section**

7.21: To your knowledge, are you now pregnant?
1 Yes
2 No

Section 8: Disability
The following questions are about health problems or impairments you may have.
8.1: Are you limited in any way in any activities because of physical, mental, or emotional problems?
1 Yes
2 No

8.2: Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone?
Include occasional use or use in certain circumstances
1 Yes
2 No

Section 9: Tobacco Use
9.1: Have you smoked at least 100 cigarettes in your entire life?
5 packs = 100 cigarettes
1 Yes
2 No ⇨ **Go to Q9.5**

9.2: Do you now smoke cigarettes every day, some days, or not at all?
1 Every day
2 Some days
3 Not at all ⇨ **Go to Q9.4**

9.3: During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?
1 Yes ⇨ **Go to Q9.5**
2 No ⇨ **Go to Q9.5**

9.4: How long has it been since you last smoked cigarettes regularly?
0 1 Within the past month (less than 1 month ago)
0 2 Within the past 3 months (1 month but less than 3 months ago)
0 3 Within the past 6 months (3 months but less than 6 months ago)
0 4 Within the past year (6 months but less than 1 year ago)
0 5 Within the past 5 years (1 year but less than 5 years ago)
0 6 Within the past 10 years (5 years but less than 10 years ago)
0 7 10 years or more
0 8 Never smoked regularly

9.5: Do you currently use chewing tobacco or snuff, or snus every day, some days, or not at all?
NOTE: Snus (Swedish for snuff) is a moist smokeless tobacco, usually sold in small pouches that are placed under the lip against the gum.
Snus (rhymes with 'goose'
1 Every day
2 Some days
3 Not at all

Section 10: Alcohol Consumption
10.1: During the past 30 days, how many days per week or per month did you have at least 1 drink of any alcoholic beverage such as beer, wine, a malt beverage or liquor?
1 __ __ Days per week
2 __ __ Days in past 30
8 8 8 No drinks in past 30 days **Go to next section**

10.2: One drink is equivalent to a 12 ounce beer, a 5 ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank, about how many drinks did you drink on the average?

NOTE: A 40 ounce beer would count as 3 drinks, or a cocktail drink with 2 shots would count as 2 drinks

__ __Number of drinks

10.3: Considering all types of alcoholic beverages, how many times during the past 30 days did you have **X [X = 5 for men, X = 4 for women]** or more drinks on one occasion?

__ __Number of times

8 8 None

10.4: During the past 30 days, what is the largest number of drinks you had on any occasion?

_ _ Number

Section 11: Immunization

11.1: Now I will ask you questions about seasonal flu vaccine. There are two ways to get the seasonal flu vaccine, one is a shot in the arm and the other is a spray, mist, or drop in the nose called FluMist™. During the past 12 months, have you had either a seasonal flu shot or a seasonal flu vaccine that was sprayed in your nose?

1 Yes
2 No **Go To Q11.4**

11.2: During what month and year did you receive your most recent flu shot injected into your arm or flu vaccine that was sprayed in your nose?

_ _ /_ _ _ _ Month/Year

11.3: At what kind of place did you get your last flu shot/vaccine?

0 1 A doctor's office or health maintenance organization (HMO)
0 2 A health department
0 3 Another type of clinic or health center (Example: a community health center)
0 4 A senior, recreation, or community center
0 5 A store (Examples: supermarket, drug store)
0 6 A hospital (Example: inpatient)
0 7 An emergency room
0 8 Workplace
0 9 Some other kind of place
1 0 Received vaccination in Canada/Mexico (Volunteered –)
1 1 A school

11.4: A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person's lifetime and is different from the flu shot. Have you ever had a pneumonia shot?

1 Yes
2 No

Section 12: Falls

If respondent is 45 years or older continue, otherwise go to next section.

The next questions ask about recent falls. By a fall, we mean when a person unintentionally comes to rest on the ground or another lower level.

12.1**:** In the past 12 months, how many times have you fallen?

_ _ Number of times **[76 = 76 or more]**
8 8 None **[Go to next section]**

12.2: [Fill in "Did this fall (from Q15.1) cause an injury?"]. If only one fall from Q15.1 and response is "Yes" (caused an injury); code 01. If response is "No", code 88.

How many of these falls caused an injury? By an injury, we mean the fall caused you to limit your regular activities for at least a day or to go see a doctor.

_ _ Number of falls **[76 = 76 or more]**
8 8 None

Section 13: Seatbelt Use

13.1: How often do you use seat belts when you drive or ride in a car? Would you say…

1 Always
2 Nearly always
3 Sometimes
4 Seldom
5 Never
8 Never drive or ride in a car

Section 14: Drinking and driving

CATI note: If Q13.1 = 8 (Never drive or ride in a car), go to Section 15, otherwise continue.

CATI note: If Q10.1 = 888 (No drinks in the past 30 days); go to next section.

The next question is about drinking and driving.

14.1: During the past 30 days, how many times have you driven when you've had perhaps too much to drink?

_ _ Number of times
8 8 None

Section 15: Breast /Cervical Cancer Screening

CATI Note: If respondent is male, go to the next section.
The next questions are about breast and cervical cancer.

15.1: A mammogram is an x-ray of each breast to look for breast cancer. Have you ever had a mammogram?

1 Yes
2 No **Go to Q15.3**

15.2: How long has it been since you had your last mammogram?

1 Within the past year (any time less than 12 months ago)
2 Within the past 2 years (1 year but less than 2 years ago)
3 Within the past 3 years (2 years but less than 3 years ago)
4 Within the past 5 years (3 years but less 5 years ago)
5 5 or more years ago

15.3: A clinical breast exam is when a doctor, nurse or other health professional feels the breast for lumps. Have you ever had a clinical breast exam?

1 Yes
2 No Go to Q15.5

15.4: How long has it been since your last breast exam?

1 Within the past year (any time less than 12 months ago)
2 Within the past 2 years (1 year but less than 2 years ago)
3 Within the past 3 years (2 years but less than 3 years ago)
4 Within the past 5 years (3 years but less than 5 years ago)
5 5 or more years ago

15.5: A Pap test is a test for cancer of the cervix. Have you ever had a Pap test?

1Yes
2 No Go to Q15.7

15.6: How long has it been since you had your last Pap test?

1 Within the past year (any time less than 12 months ago)
2 Within the past 2 years (1 year but less than 2 years ago)
3 Within the past 3 years (2 years but less than 3 years ago)
4 Within the past 5 years (3 years but less than 5 years ago)
5 5 or more years ago

CATI NOTE: If response to core Q7.23 = 1 (is pregnant) then go to next section.

15.7: Have you had a hysterectomy?
A hysterectomy is an operation to remove the uterus (womb)
1 Yes
2 No

Section 16: Prostate Cancer Screening
CATI Note: If respondent is ≤39 years of age, or is female, go to next section.
Now, I will ask you some questions about prostate cancer screening.

16.1: A Prostate-Specific Antigen test, also called a PSA test, is a blood test used to check men for prostate cancer. Has a doctor, nurse, or other health professional EVER talked with you about the advantages of the PSA test?
1 Yes
2 No

16.2: Has a doctor, nurse, or other health professional EVER talked with you about the disadvantages of the PSA test?
1 Yes
2 No

16.3: Has a doctor, nurse, or other health professional EVER recommended that you have a PSA test?
1 Yes
2 No

16.4: Have you ever had a PSA test?
1 Yes
2 No **[Go to next section]**

16.5: How long has it been since you had your last PSA test?
1 Within the past year (any time less than 12 months ago)
2 Within the past 2 years (1 year but less than 2 years)
3 Within the past 3 years (2 years but less than 3 years)
4 Within the past 5 years (3 years but less than 5 years)
5 5 or more years ago

16.6: What was the MAIN reason you had this PSA test – was it?
1 Part of a routine exam
2 Because of a prostate problem
3 Because of a family history of prostate cancer
4 Because you were told you had prostate cancer
5 Some other reason

Section 17: Colorectal Cancer Screening
CATI Note: If respondent is ≤ 49 years of age, go to next section

17.1: A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. Have you ever had this test using a home kit?
1 Yes
2 No **Go to Q17.3**

17.2: How long has it been since you had your last blood stool test using a home kit?
1 Within the past year (any time less than 12 months ago)
2 Within the past 2 years (1 year but less than 2 years ago)
3 Within the past 5 years (2 years but less than 5 years ago)
4 5 or more years ago

17.3: Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams?
1 Yes
2 No **Go to next section**

17.4: For a SIGMOIDOSCOPY, a flexible tube is inserted into the rectum to look for problems. A COLONOSCOPY is similar, but uses a longer tube, and you are usually given medication through a needle in your arm to make you sleepy and told to have someone else drive you home after the test. Was your MOST RECENT exam a sigmoidoscopy or a colonoscopy?
1 Sigmoidoscopy
2 Colonoscopy

17.5: How long has it been since you had your last sigmoidoscopy or colonoscopy?
1 Within the past year (any time less than 12 months ago)
2 Within the past 2 years (1 year but less than 2 years ago)
3 Within the past 5 years (2 years but less than 5 years ago)
4 Within the past 10 years (5 years but less than10 years ago)
5 10 or more years ago

Section 18: HIV/AIDS
The next few questions are about the national health problem of HIV**,** the virus that causes AIDS. Please remember that your answers are strictly confidential and that you don't have to answer every question if you don't want to. Although we will ask you about testing, we will not ask you about the results of any test you may have had.

18.1: Have you ever been tested for HIV? Do not count tests you may have had as part of a blood donation.
Include tests using fluid from your mouth.
1 Yes
2 No ⇨ **Go to Q18.3**

18.2: Not including blood donations, in what month and year was your last HIV test?
Note: If response is before January 1985, code "Don't know".
CATI INSTRUCTION: If the respondent remembers the year but cannot remember the month, code the first two digits 77 and the last four digits for the year.
__ __/__ __ __ __ **Code month and year**

18.3: I'm going to read you a list. When I'm done, please tell me if any of the situations apply to you. You do not need to tell me which one.
- You have used intravenous drugs in the past year.
- You have been treated for a sexually transmitted or venereal disease in the past year.
- You have given or received money or drugs in exchange for sex in the past year.
- You had anal sex without a condom in the past year.

Do any of these situations apply to you?
1 Yes
2 No

Module 5: Sugar Sweetened Beverages and Menu Labeling
Now I would like to ask you some questions about sugary beverages.
Interviewer note: Please remind respondents to include regular soda that they mixed with alcohol.

1. During the past 30 days, how often did you drink regular soda or pop that contains sugar? Do not include diet soda or diet pop.
1 _ _ Times per day
2 _ _ Times per week
3 _ _ Times per month
8 8 8 None

2. During the past 30 days, how often did you drink sweetened fruit drinks, such as Kool-aid, cranberry juice cocktail, and lemonade? Include fruit drinks you made at home and added sugar to.

Interviewer note: Fruit drinks are sweetened beverages that often contain some fruit juice or flavoring. Do not include 100% fruit juice, sweet tea, coffee drinks, sports drinks, or energy drinks.
1 _ _ Times per day
2 _ _ Times per week
3 _ _ Times per month
8 8 8 None

3. The next question is about eating out at fast food and chain restaurants. When calorie information is available in the restaurant, how often does this information help you decide what to order?
01 Always
02 Most of the time
03 About half the time
04 Sometimes
05 Never
06 Never noticed or never looked for calorie information
08 Usually cannot find calorie information
55 Do not eat at fast food or chain restaurants

Module 6: Excess Sun Exposure
1. In the past 12 months, how many times did you have a red OR painful sunburn that lasted a day or more?
8 Zero
1 One
2 Two
3 Three
4 Four
5 Five or m

Module 17: Mental Illness and Stigma
Now, I am going to ask you some questions about how you have been feeling lately.

1. About how often during the past 30 days did you feel nervous — would you say all of the time, most of the time, some of the time, a little of the time, or none of the time?
1 All
2 Most
3 Some
4 A little
5 None

2. During the past 30 days, about how often did you feel hopeless — all of the time, most of the time, some of the time, a little of the time, or none of the time?
1 All
2 Most
3 Some
4 A little
5 None

3. During the past 30 days, about how often did you feel restless or fidgety? [If necessary: all, most, some, a little, or none of the time?]
1 All
2 Most
3 Some
4 A little
5 None

4. During the past 30 days, about how often did you feel so depressed that nothing could cheer you up? [If necessary: all, most, some, a little, or none of the time?]
1 All
2 Most
3 Some
4 A little
5 None

5. During the past 30 days, about how often did you feel that everything was an effort?
Note: If respondent ask what does "everything was an effort" means; say, "Whatever it means to you"
[If necessary: all, most, some, a little, or none of the time?]
1 All
2 Most
3 Some
4 A little
5 None

6. During the past 30 days, about how often did you feel worthless?
[If necessary: all, most, some, a little, or none of the time?]
1 All
2 Most
3 Some
4 A little
5 None

7. During the past 30 days, for about how many days did a mental health condition or emotional problem keep you from doing your work or other usual activities?
_ _ Number of days
8 8 None
INTERVIEWER NOTE: If asked, "usual activities" includes housework, self-care, care giving, volunteer work, attending school, studies, or recreation.

8. Are you now taking medicine or receiving treatment from a doctor or other health professional for any type of mental health condition or emotional problem?
1 Yes
2 No

These next questions ask about peoples' attitudes toward mental illness and its treatment.
9. Treatment can help people with mental illness lead normal lives. Do you –agree slightly or strongly, or disagree slightly or strongly?
1 Agree strongly
2 Agree slightly
3 Neither agree nor disagree
4 Disagree slightly
5 Disagree strongly

10. People are generally caring and sympathetic to people with mental illness. Do you – agree slightly or strongly, or disagree slightly or strongly?
1 Agree strongly
2 Agree slightly
3 Neither agree nor disagree
4 Disagree slightly
5 Disagree strongly
INTERVIEWER NOTE: If asked for the purpose of Q9 or Q10: say: "answers to these questions will be used by health planners to help understand public attitudes about mental illness and its treatment and to help guide health education programs".

State Added Tobacco Use

The following questions are about tobacco

[Only Ask if Q9.2 = 1 (everyday) or 2 (some days)]

1. Previously you said you now smoke cigarettes every day or some days. On average on the days you smoked, about how many cigarettes did you smoke a day?

___ ___ ___ Number of cigarettes
6 6 6 Less than one cigarette a day
8 8 8 NONE

[Only Ask if Q9.2 = 2 (some days)]

2. Previously you said you now smoke cigarettes some days. During the past 30 days, on how many days did you smoke cigarettes?

___ ___ Number of days [01-30]
8 8 None

3. If you ever smoked a cigarette even once, how old were you when you smoked a whole cigarette for the first time?

___ ___ ___ Years [001-130]
8 8 8 Never smoked a cigarette

4. How likely are you to smoke in the next year? Would you say…

1 Very likely
2 Somewhat likely
3 Not at all likely

[Only Ask if Q9.2 = 1 (everyday) or 2 (some days, else go to next section]

5. How soon after you wake up do you usually have your first cigarette?

1 within 5 minutes
2 from 5 to 30 minutes
3 from 30 minutes to 1 hour
4 more than 1 hour

6. During the past 30 days were the cigarettes you smoked usually menthol?

1 Yes
2 No

State Added Other Tobacco Products

[Only Ask if Q9.5 = 1 or 2]

1. Previously you said you used chewing tobacco, snuff, dip, or snus. During the past 30 days, on how many days did you use chewing tobacco, snuff, dip, or snus?

_ _ days [1-30]
8 8 None

2. During the past 30 days, on how many days did you smoke cigars, cigarillos, or very small cigars that look like cigarettes?

___ ___ Days [1-30]
8 8 None

3. The next questions ask you about smoking tobacco in a water pipe. A water pipe is also called a hookah. Have you ever tried smoking tobacco in a water pipe in your entire life, even one or two puffs?

1 Yes
2 No **[Go to next section]**

4. During the past 30 days, on how many days did you smoke tobacco in a water pipe?

___ ___ Days [1-30]
8 8 None

State Added Tobacco Cessation

1. Quitlines are free telephone services that help people quit smoking or quit tobacco use. Have you ever heard of QuitLine Iowa, the telephone based service in Iowa to help people stop smoking?

1 Yes
2 No **[Skip to Q3]**

[Only Ask if Q9.1 = 1 or Q9.5 = 1 or 2]

2. Have you ever called QuitLine Iowa for help to quit smoking or help to quit other types of tobacco?

1 Yes
2 No

[Only Ask if Q9.3 = 1 or Q9.4 = 01-04, else go to SATCQ5]

3. The last time you tried to quit using tobacco did you call a telephone quitline to help you quit?

1 Yes
2 No

4. The last time you tried to quit using tobacco, did you use any of the following medications: a nicotine patch, nicotine gum, nicotine lozenges, nicotine nasal spray, nicotine inhalers, or pills such as Wellbutrin, Zyban, buproprion, Chantix, or varenicline to help you quit?

1 Yes
2 No

[Only Ask if Q9.2 = 1 or 2, or Q9.4 = 01-03]

5. **[If Q9.4 = 01-03 ask "**Have you", **else ask** "Do you want to"**]** quit smoking cigarettes for good?

1 Yes
2 No **[Skip toQ8]**

6. When you try to quit smoking, do you plan to use a telephone quitline, a class, or one on one counseling from a health professional to help you quit?

1 Yes
2 No

7. When you try to quit smoking, do you plan to use a nicotine patch, nicotine gum, nicotine lozenges, nicotine nasal spray, nicotine inhalers, or pills such as Wellbutrin , Zyban, buproprion, Chantix, or varenicline to help you quit?

1 Yes
2 No

[Only Ask if Q9.5 = 1 or 2, else go to SATCQ10]

8. Earlier you said that you use chewing tobacco, snuff, or snus. Do you want to quit using chewing tobacco, snuff, dip, or snus for good?

1 Yes
2 No **[Skip to Q10]**

9. When you try to quit using chewing tobacco, snuff, or snus, do you plan to use a telephone quitline, a class, or one-on-one counseling from a health professional to help you quit?

1 Yes
2 No

[Only Ask if Q3.1 = 1, else go to Q12]

10. What type of health care coverage do you use to pay for most of your medical care? Is it coverage through...

11 Your employer
12 Someone else's employer
13 A plan that you or someone else buys on your own
14 Medicare, Medicare supplemental or MEDIGAP

15 Medicaid, Title XIX, Iowa Care
16 The military, CHAMPUS, or the VA
17 Indian Health Service or Alaska Native Health Service, or
18 Some other source?
88 None, out of pocket [Skip to Q12]

11. Does your health insurance help pay for counseling or medications to help people stop smoking cigarettes?
1 Yes
2 No

12. Medicaid is a state health insurance program that covers low-income Iowans. Are you aware that nicotine cessation medications are available free or at reduced costs to adult Iowans enrolled in Medicaid?
1 Yes
2 No

State Added Provider Advise on Tobacco Use
1. In the past 12 months, have you seen a doctor, dentist, nurse, or other health professional?
1 Yes
2 No **[Skip to next section]**

[Only Ask if Q9.2 = 1 or 2 OR Q9.5 = 1 or 2]
2. In the past 12 months, did any doctor, dentist, nurse, or other health professional advise you to quit smoking cigarettes or using any other tobacco products?
1 Yes
2 No **[Skip to next section]**

3. The last time a health professional advised you to quit using tobacco, did they also offer any assistance, information, additional advice, booklets, videos, or website addresses to help you quit?
1 Yes
2 No

4. The last time a health professional advised you to quit using tobacco, did they put you in contact with, or tell you how to contact, a telephone quitline, a class or program, or one-on-one counseling?
1 Yes
2 No

State Added Secondhand Smoke
1. Not counting decks, porches, or garages, during the past 7 days, that is since last [TODAY'S DAY OF WEEK], on how many days did someone other than you smoke tobacco inside your home while you were at home?
___ NUMBER OF DAYS [1-7]
8 8. NONE

2. Not counting decks, porches, or garages, inside your home, is smoking …
[INTERVIEWER NOTE: The order of the response categories for this question is being randomly reversed.]
1 Always Allowed
2 Allowed only at some times or in some places, or
3 Never allowed
6 Family does not have a smoking policy

[Only Ask if Q7.9 = 1 or 2, else go to Tobacco Policy]
3. At your workplace, is smoking in outdoor areas… ?
[INTERVIEWER NOTE: The order of the response categories for this question is being randomly reversed.]
1 Always allowed
2 Allowed only at some times or in some places
3 Never allowed

4. At your workplace, is the use of chewing tobacco, snuff, dip or snus...
[INTERVIEWER NOTE: The order of the response categories for this question is being randomly reversed.]
1 Always allowed
2 Allowed only at some times or in some places
3 Never allowed

State Added Tobacco Policy
1. Should smoking at parks be …
1 Always allowed
2 Allowed only at some times or in some places
3 Never allowed

2. Would you be in favor of an increase in the tax on a pack of cigarettes if the money were used to improve the public's health?
1 Yes
2 No

3. Would you be in favor of an increase in the tax on chewing tobacco, snuff, dip, or snus if the money were used to improve the public's health?
1 Yes
2 No

4. Should tobacco use be completely banned on school grounds, including fields and parking lots, and at all school events, even for teachers and other adults?
PROMPT tobacco includes cigarettes, chewing tobacco, dip, snus, snuff and other newer types of tobacco, like Orbs, Strips and Sticks.
1 Yes
2 No

5. In the past 12 months, have you visited a casino?
1 Yes
2 No

6. Would you visit casinos more often if they were smoke-free?
1 Yes
2 No

[Only Ask if Q9.1 = 1]
7. The Iowa Smoke-Free Air Act of 2008 forbids cigarette smoking in most bars, restaurants, workplaces and other public places. Which of the following statements best describes how your smoking may have changed because of the Smoke Free Air Act?
1 I quit smoking because of the Smoke-Free Air Act
2 I smoke less because of the Smoke-Free Air Act
3 The Smoke-Free Air Act did not affect how much I smoke.
4 I already quit smoking before the law was passed.

8. Now I'm going to ask you a question about sexual orientation. Do you consider yourself to be
1 Heterosexual or straight
IF NEEDED: A person who has sex with and/or is primarily attracted to people of the opposite sex.
2 Homosexual, gay, or lesbian
IF NEEDED: A person who has sex with and/or is primarily attracted to people of the same sex.
3 Bisexual
IF NEEDED: A person who has sex with and/or is attracted to people of either sex.
4 Other

Remember, your answers are confidential.
IF NEEDED: Research has shown that some sexual minority community members have important health risk factors, such as smoking. We are collecting information about sexual orientation to learn whether this is true in Iowa. You don't have to answer any question if you don't want.

State Added Colorectal Cancer Screening
[ASK IF AGE > 49]

1. Next, I would like to ask you some questions about colorectal cancer screening.

Has a health care provider ever talked to you about being tested for colorectal or colon cancer?

1 Yes
2 No **Go to Next Module**

2. What test did your health care provider recommend?

1 Blood Stool Kit
2 Sigmoidoscopy or colonoscopy (exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems)
3 Other test
4 Recommended both Blood Stool Kit and sigmoidoscopy or Colonoscopy
5 Did not recommend a test **Go to Next Module**

3. Did you have the test [if Q2 = 4, tests] your health care provider recommended?

1 Yes **Go to Next Module**
2 No

4. What is the main reason you did not have the test?

11 No symptoms
12 No family history of colorectal cancer
13 Cost/Not covered by insurance
14 Too old to have test
15 Too young to have test
16 No time
17 Test is distasteful
18 Embarrassment
19 Fear of finding cancer
20 Don't want to do the prep
21 Don't know where to get the test
22 Don't know how to do the test
23 Other

State Added Colorectal Cancer Advertising
[ASKED IF AGE > 49]

1. In the past 6 months, have you seen any articles or advertising about colorectal cancer screening?

1 Yes
2 No **Go to Next Module**

1. Where did you see this article or advertisement about colorectal cancer?

[IF MORE THAN ONE, SELECT MOST FREQUENTLY SEEN]

11 Magazine
12 Doctor's Office
13 Television
14 Radio
15 Health Newsletter
16 Billboards
17 Bus signs
18 Other

State Added Colorectal Cancer Knowledge
[ASK IF AGE > 49]

1. Next, I'm going to read you several statements about colorectal cancer. After I read each one, please tell me if you strongly agree, somewhat agree, somewhat disagree or strongly disagree.

A person's age is considered a risk factor for developing colorectal cancer. Would you say...

1 Strongly agree,
2 Somewhat agree,
3 Neither agree nor disagree,
4 Somewhat disagree, or
5Strongly disagree?

2. A person's race or ethnicity is considered a risk factor for developing colorectal cancer. Would you say...

1 Strongly agree,
2 Somewhat agree,
3 Neither agree nor disagree,
4 Somewhat disagree, or
5 Strongly disagree?

3. A person's gender is considered a risk factor for developing colorectal cancer. Would you say...

1 Strongly agree,
2 Somewhat agree,
3 Neither agree nor disagree,
4 Somewhat disagree, or
5 Strongly disagree?

4. Colorectal cancer in a blood relative is considered a risk factor for developing colorectal cancer. Would you say...

1 Strongly agree,
2 Somewhat agree,
3 Neither agree nor disagree,
4 Somewhat disagree, or
5 Strongly disagree?

5. A person's use of tobacco is considered a risk factor for developing colorectal cancer. Would you say...

1 Strongly agree,
2 Somewhat agree,
3 Neither agree nor disagree,
4 Somewhat disagree, or
5 Strongly disagree?

6. A person's diet is considered a risk factor in developing colorectal cancer. Would you say...

1 Strongly agree,
2 Somewhat agree,
3 Neither agree nor disagree,
4 Somewhat disagree, or
5 Strongly disagree?

7. A person's weight is considered a risk factor in developing colorectal cancer. Would you say...

1 Strongly agree,
2 Somewhat agree,
3 Neither agree nor disagree,
4 Somewhat disagree, or
5 Strongly disagree?

8. A person's alcohol intake is considered a risk factor in developing colorectal cancer. Would you say...

1 Strongly agree,
2 Somewhat agree,
3 Neither agree nor disagree,
4 Somewhat disagree, or
5 Strongly disagree?

State Added Colorectal Cancer Plans
[Ask MODULE ONLY if Age > 49]

1. I'd like to get a sense of your plans regarding colorectal cancer screening. Which of the following best describes your plan for gathering information? Would you say…

[Interviewer note: repeat "about colorectal cancer screening" when necessary]

1 You do not plan to get more information about colorectal cancer screening,
2 You will get more information at some point in the future,
3 You will get information within six months,
4 You will get information within the next month,
5 You have already received more information, or
6 You are already knowledgeable and do not need more information?

2. Which of the following best describes your plan for getting screened for colorectal cancer? Would you say…

1 You do not plan to get screened for colorectal cancer,
2 You plan on getting screened at some point in the future,
3 You plan on getting screened within the next six months,
4 You plan on getting screened within the next month
5 You have made an appointment to get screened , or
6 You have already been screened for colorectal cancer.
[Go to Next Module]

[IF SACCSQ3 = 1 OR 2, SKIP TO Next Module]

3. If you have not been screened for colorectal cancer, what has kept you from being screened?

11 no symptoms
12 no family history of colorectal or colon cancer
13 Cost/Not covered by insurance
14 Don't know where to get the exam
15 I am nervous about the procedure
16 OTHER Specify_____
88 I have been screened

State Added Colorectal Cancer Risk
[Ask MODULE ONLY if Age > 49]

1. In terms of your own risk, what would you say your chances are of developing colorectal cancer? Would you say ...

1 High,
2 Medium,
3 Low, or
4 None?

2. If a person is of average risk for colorectal cancer, at what age should the person be screened for the first time?

___ ___ AGE [18-97]
97. 97 years old or older

State Added Emergency Preparedness for People with Disabilities
[ASK THIS SECTION ONLY IF Q8.1 OR Q8.2 = 1, OTHERWISE SKIP TO NEXT SECTION]

1. Would you or a family member need special help with evacuating from your home, school or place of work, in case of a large-scale disaster or emergency that requires evacuation?

1 Yes
2 No **[SKIP TO Q3]**

2. What type of help would you need?
[SELECT ALL THAT APPLY]

1 A ride to safety
2 Special transportation to accommodate wheelchair or medical equipment
3 Help evacuating service animal
4 Directions in Braille, Sign language, or help of interpreter
5 Other

INTERVIEWER NOTE: Medical equipment is equipment that helps monitor health status or provides treatment such as a glucometer for diabetic testing, blood pressure monitor, oxygen tanks and/or carrying device, suction machine, or CPap device for sleeping. Special equipment is adapted equipment or assistive technology devices that a person uses to complete tasks. Examples would be crutches, cane, walker, communication device, commode, Hoyer lift, transfer bench, bath chair or bench, aids for eating or dressing, a reacher/grabber device, hearing aids, or glasses.

3. How likely would you be to use a community emergency shelter, in case of a large-scale disaster or emergency that requires evacuation? Would you say...

1 Not likely, **[SKIP TO next section]**
2 Somewhat likely, or
3 Very likely?

4. What type of special accommodations or assistance would you need?
[SELECT ALL THAT APPLY]

11 Special diet
12 Help in getting prescribed medications
13 Space for medical equipment
14 Space for walker, wheelchair or other special equipment
15 Help with getting up, toileting, dressing, eating or moving around
16 Directions in Braille, Sign language, or help of interpreter
17 Accommodation nearby for caregiver
18 Accommodation for service animal
19 Other
88 I wouldn't need any

State Added Caregiving

People may provide regular care or assistance to a friend or family member who has a health problem, long-term illness, or disability.

1. During the past month, did you provide any such care or assistance to a friend or family member?

1 Yes
2 No **[Go to next section]**

2. What age is the person to whom you are giving care?
INTERVIEWER NOTE: If more than one person, ask: "What is the age of the person to whom you are giving the most care?"
_ _ _ Code age in years [0-115]

The remainder of these questions in this section will be about the person to whom you are giving the **most** care.

3. Is this person male or female?

1 Male
2 Female

4. What is his/her relationship to you?

11 Parent
12 Parent-in-law
13 Child
14 Spouse
15 Sibling
16 Grandparent
17 Grandchild
18 Other Relative
19 Non-relative

5. For how long have you provided care for your **[CATI: code from Q4]. If Q4 = 77 Don't know/not sure or 99 Refused; say: "that person."**

NOTE**: Code using respondent's unit of time.**

1 _ _ Days
2 _ _ Weeks
3 _ _ Months
4 _ _ Years

6. What has a doctor said is the major health problem, long-term illness, or disability that the person you care for has?

[SELECT ONLY ONE]

Physical Health Condition/Disease

0 1 Arthritis/Rheumatism
0 2 Asthma
0 3 Cancer
0 4 Diabetes
0 5 Heart Disease
0 6 Hypertension/High Blood Pressure
0 7 Lung Disease/Emphysema
0 8 Osteoporosis
0 9 Parkinson's Disease
1 0 Stroke

Disability

1 1 Eye/Vision Problem (blindness)
1 2 Hearing Problems (deafness)
1 3 Multiple Sclerosis (MS)
1 4 Spinal Cord Injury
1 5 Traumatic Brain Injury (TBI)

Learning/Cognition

1 6 Alzheimer's Disease or Dementia
1 7 Attention-Deficit Hyperactivity Disorder (ADHD)
1 8 Learning Disabilities (LD)

Developmental Disability

1 9 Cerebral Palsy (CP)
2 0 Down's Syndrome
2 1 Other developmental disability (e.g., spinal bifida, muscular dystrophy, fragile X)

Mental Health

2 2 Anxiety
2 3 Depression
2 4 Other

7. In which one of the following areas does the person you care for most need your help? Would you say...

0 1 Taking care of himself/herself, such as eating, dressing, or bathing
0 2 Taking care of his/her residence or personal living spaces, such as cleaning, managing money, or preparing meals
0 3 Communicating with others
0 4 Learning or remembering
0 5 Seeing or hearing
0 6 Moving around within the home
0 7 Transportation outside of the home
0 8 Getting along with people
0 9 Relieving/decreasing anxiety or depression
1 0 Something else

8. In an average week, how many hours do you provide care for **[CATI: code from Q4]**. **If Q4 = 77 (Don't know/not sure) or 99 (Refused); say: "that person"** because of his/her health problem, long-term illness, or disability?

NOTE: Round up to the next whole number of hours.

_ _ _ Hours per week

9. I am going to read a list of difficulties you may have faced as a caregiver. Please indicate which one of the following is the greatest difficulty you have faced as a caregiver.

0 1 Creates a financial burden
0 2 Doesn't leave enough time for yourself
0 3 Doesn't leave enough time for your family
0 4 Interferes with your work
0 5 Creates stress
0 6 Creates or aggravates health problems
0 7 Affects family relationships
0 8 Other difficulty
8 8 No difficulty

10. During the past year, has the person you care for experienced changes in thinking or remembering?

Read only if necessary: "Had more difficulty remembering people, places, or things, or understanding or making decisions as easily as they once did."

1 Yes
2 No

State Added Cognitive Impairment

The next few questions ask about difficulties in thinking or remembering that can make a big difference in everyday activities. This does not refer to occasionally forgetting your keys or the name of someone you recently met. This refers to things like confusion or memory loss that are happening more often or getting worse. We want to know how these difficulties impact you or someone in your household.

1. During the past 12 months, have you experienced confusion or memory loss that is happening more often or is getting worse?

1 Yes
2 No

CATI NOTE: If 1 adult in household and Q1 = 1 (Yes), go to Q4; otherwise, go to next module.
CATI NOTE: If number of adults > 1, go to Q2.

2. [If Q1 = 1); Not including yourself], how many adults 18 or older in your household experienced confusion or memory loss that is happening more often or is getting worse during the past 12 months?

_____ Number of people [6 = 6 or more]
8 NONE

CATI NOTE: If Q1 = 1 and Q2 > 6, go to Q4.
CATI note: If number of adults > 1 and Q2 < 7; continue. Otherwise, go to next module.
CATI note: If Q2 < 7; go to Q3. Otherwise, go to next module.

3. Of these people, please select the person who had the most recent birthday. How old is this person?

0 1 Age 18-29
0 2 Age 30-39
0 3 Age 40-49
0 4 Age 50-59
0 5 Age 60-69
0 6 Age 70-79
0 7 Age 80-89
0 8 Age 90 +

CATI note: If Q1 ≠ 1 (Yes); read: "For the next set of questions we will refer to the person you identified as 'this person'."
INTERVIEWER NOTE: Repeat definition only as needed: "For these questions, please think about confusion or memory loss that is happening more often or getting worse."

4. During the past 12 months, how often [If Q1 = 1 (Yes): insert "have you;" otherwise, insert "has this person"] given up household activities or chores [If Q1 = 1 (Yes): insert "you;" otherwise, insert "they"] used to do, because of confusion or memory loss that is happening more often or is getting worse?
1 Always
2 Usually
3 Sometimes
4 Rarely
5 Never

5. As a result of [If Q1 = 1 (Yes): insert "your;" otherwise, insert "this person's"] confusion or memory loss, in which of the following four areas [If Q1 = 1 (Yes): insert "do you;" otherwise, insert "does this person"] need the MOST assistance?
1 Safety [read only if necessary: such as forgetting to turn off the stove or falling]
2 Transportation [read only if necessary: such as getting to doctor's appointments]
3 Household activities [read only if necessary: such as managing money or housekeeping]
4 Personal care [read only if necessary: such as eating or bathing]
5 Needs assistance, but not in those areas
6 Doesn't need assistance in any area

6. During the past 12 months, how often has confusion or memory loss interfered with [If Q1 = 1 (Yes): insert "your;" otherwise, insert "this person's"] ability to work, volunteer, or engage in social activities?
1 Always
2 Usually
3 Sometimes
4 Rarely
5 Never

7. During the past 30 days, how often [If Q1 = 1 (Yes): insert "has;" otherwise, insert "have you,"] a family member or friend provided any care or assistance for [If Q1 = 1 (Yes): "you;" otherwise, insert "this person"] because of confusion or memory loss?
1 Always
2 Usually
3 Sometimes
4 Rarely
5 Never

8. Has anyone discussed with a health care professional, increases in [If Q1 = 1 (Yes): insert "your;" otherwise, insert "this person's"] confusion or memory loss?
1 Yes
2 No ⇨ **Go to next module**

9. [If Q1 = 1 (Yes): insert "Have you;" otherwise, insert "Has this person"] received treatment such as therapy or medications for confusion or memory loss?
1 Yes
2 No

10. Has a health care professional ever said that [If Q1 = 1 (Yes): insert "you have;" otherwise, insert "this person has"] Alzheimer's disease or some other form of dementia?
1 Yes, Alzheimer's Disease
2 Yes, some other form of dementia but not Alzheimer's disease
3 No diagnosis has been given

Module 22: Adverse Childhood Experience

I'd like to ask you some questions about events that happened during your childhood. This information will allow us to better understand problems that may occur early in life, and may help others in the future. This is a sensitive topic and some people may feel uncomfortable with these questions. At the end of this section, I will give you a phone number for an organization that can provide information and referral for these issues. Please keep in mind that you can ask me to skip any question you do not want to answer.

All questions refer to the time period before you were 18 years of age. Now, looking back before you were 18 years of age—

1. Did you ever live with anyone who was depressed, mentally ill, or suicidal?
1 Yes
2 No

2. Did you live with anyone who was a problem drinker or alcoholic?
1 Yes
2 No

3. Did you live with anyone who used illegal street drugs or who abused prescription medications?
1 Yes
2 No

4. Did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?
1 Yes
2 No

5. Were your parents separated or divorced?
1 Yes
2 No
8 Parents not married

6. How often did your parents or adults in your home ever slap, hit, kick, punch or beat each other up?
1 Never
2 Once
3 More than once

7. Before age 18, how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking. Would you say---
1 Never
2 Once
3 More than once

8. How often did a parent or adult in your home ever swear at you, insult you, or put you down?
1 Never
2 Once
3 More than once

9. How often did anyone at least 5 years older than you or an adult ever touch you sexually?
1 Never
2 Once
3 More than once

10. How often did anyone at least 5 years older than you or an adult, try to make you touch them sexually?
1 Never
2 Once
3 More than once

11. How often did anyone at least 5 years older than you or an adult, force you to have sex?

1 Never
2 Once
3 More than once

State Added Gambling

1. In the past 12 months have you bet money or possessions on any of the following activities? Casino gaming including slot machines and table games; lottery including scratch tickets, pull tabs and lotto; sports betting; internet gambling; bingo or any other type of wagering.

1 Yes
2 No