



**Northeastern Minnesota & Northwestern Wisconsin  
Regional Health Status Survey**

**SUMMARY REPORT  
2000  
Second Edition**

A Collaborative Effort Among  
Regional Health Organizations

Second Edition  
May, 2001

Please Cite as:

Block, D.E., Kinney, A. M., Sundberg, L., Peterson, J. M., Kelly, G.L. & Bridge to Health Collaborative (2000). Bridge to Health Survey 2000: Northeastern Minnesota and Northwestern Wisconsin regional health status survey. (Available from Community Health Department, St. Mary's/Duluth Clinic Health System, 407 East Third Street, Duluth, MN 55805)

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Cost: \$25.00

## ACKNOWLEDGEMENTS

Members of the Bridge to Health Collaborative deserve credit for all that went into the planning, funding, conducting, and producing *Bridge to Health Survey 2000*. The Collaborative includes members of 118 local, regional, and state health-related organizations serving northeastern Minnesota and northwestern Wisconsin. It is an unincorporated, all volunteer organization with the following Mission Statement:

*Through a collaborative effort, take an active role to understand and improve the health status and quality of life of the communities within the region. This will be achieved by conducting periodic assessments and serving as a catalyst for interventions to improve health.*

The Bridge to Health Collaborative greatly appreciates the financial contribution from the Allina Foundation, Project REACH that provided the majority of funding for *Bridge to Health Survey 2000*. Without this assistance, *Survey 2000* would not have been possible. Other major sponsors include the Duluth Clinic Foundation and St. Luke's Foundation. (A listing of all financial sponsors appears on the following page.)

Members of the Collaborative and the organizations that they represent contributed countless hours to the *Survey 2000* effort. The Collaborative is greatly indebted to Derryl Block (University of Minnesota, School of Nursing) who served as Project Coordinator overseeing all aspects of the project and who was intimately involved with data collection and analysis. A special thank you to Ann Kinney and the Minnesota Department of Health, Center for Health Statistics for the many hours of technical assistance and guidance provided to this project.

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Others who deserve recognition for *Bridge to Health Survey 2000* are: Mike Finch (United Health Care and the University of Minnesota) who was the Project Facilitator and provided research assistance as well as enthusiasm for *Bridge to Health* since 1995; Gayle Kelly, Project Consultant, responsible for editing and producing the final report; Steven Greenfield who aided in data analysis; and Cindy Erickson who assisted with production of the report.

# **BRIDGE TO HEALTH SURVEY 2000**

## **FINANCIAL SPONSORS**

Allina Foundation	Hayward Area Memorial Hospital
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American Lung Association of WI	Carlton County Public Health and Social Services
CareNorth Health System	First Plan of Minnesota
Miller-Dwan Medical Center	Cook County Health Department

In addition to financial contributions, the above organizations and many other organizations in the Bridge to Health Collaborative contributed staff and in-kind resources to *Bridge to Health Survey 2000*.

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## INTRODUCTION

The *Bridge to Health Survey 2000* was designed to gather population-based, health status data about adult residents in a sixteen-county region in Northeastern Minnesota and Northwestern Wisconsin (total population approximately 481,000). The goal of the survey was to provide information to enable communities to better understand the health and wellbeing of their residents. Such information is necessary for planning and evaluating health-related programs and services.

The impetus for the survey effort was a gap in *local* information on important indicators of health status. The *Bridge to Health Survey 2000* augments existing data to provide a more complete picture of the region's current health status.

The first *Bridge to Health Survey* was conducted in 1995 as a collaborative effort of 70 health-related organizations representing public health, tribal health services, hospitals, clinics and educational institutions. The *Bridge to Health Survey 2000* was also a collaborative endeavor, and by the fall of 2000 the Bridge to Health Collaborative had grown to include 118 members.

### INFORMATION GAP MOTIVATES ONGOING, LOCAL DATA COLLECTION

Existing data from state vital records indicated that heart disease, cancer, stroke, pulmonary disease and injuries are the primary causes of death in this region. However, there was an "information gap" concerning other critical indicators of health status. For example, information about health risk behaviors (e.g., smoking, seat belt use, substance abuse, diet, preventive screenings, etc.), disease prevalence and health care access was available at the state level from the Behavioral Risk Factor Surveillance System, but there was concern that state level data may not sufficiently represent rural areas such as Northeastern Minnesota and Northwestern Wisconsin. (This particular region is more sparsely populated and is demographically older than either state as a whole.) Since the sample size of the statewide surveys was too small to allow for analysis at the county or community level, local survey data collection was needed.

The desire for reliable, local data that would provide an accurate picture of a community's health status was thus the major impetus for health care organizations to collaborate on both the 1995 Survey and the *Bridge to Health Survey 2000*. Other factors that influenced local health organizations to participate in a region-wide survey process included:

- Desire to individually and collectively use survey results to address local health issues.
- Need for accurate local data to target health care resources more effectively.
- Desire to develop baseline data in order to measure changes in health status over time.
- Expectation that the process would encourage cooperation among local health organizations.
- Hope that the information would be a catalyst for creating healthier communities across the region.

## HISTORY OF THE PROJECT

In March 1995, health organizations from throughout Northeastern Minnesota and Northwestern Wisconsin gathered to explore the idea of working together to collect local information on the population's health status. The first *Bridge to Health Survey* was planned from March 1995 to October 1995, and data were collected October to December 1994. The *Bridge to Health Survey 2000* was planned between October 1998 and October 1999, and data were collected November 1999 to February 2000.

The process used was similar for both the 1995 and 2000 surveys. Three work groups were established to direct the survey process: 1) the Data Team determined the survey methodology, reviewed survey tools and designed a customized survey instrument; 2) the Communications Team was responsible for internal communications among project sponsors as well as external communications to the general public (e.g., media relations, newsletters and press conferences); and 3) the Steering Committee reviewed recommendations from both of the Teams and served as the final decision-making body.

In planning the *Bridge to Health Survey 2000*, results of the 1995 survey were reviewed to determine improvements that could be made. Many new questions related to tobacco use were incorporated into the 2000 survey in response to the Bridge to Health Collaborative's development of focused interventions to reduce tobacco use in the region. An attempt was made to keep the questions in the 2000 survey as consistent as possible with those in the 1995 survey to allow for monitoring change over time.

Evaluation of utilization of the *1995 Bridge to Health Survey* showed that the survey results were used extensively by Collaborative members to plan and gain funding for programs and services in the region (1). It is the intention of the Bridge to Health Collaborative that the rich data from the *Bridge to Health 2000 Survey* will be equally useful to the region.

## FOCUS OF THE SUMMARY REPORT

The *Bridge to Health Survey 2000 Summary Report* is intended to be a data resource book for the topics covered in the survey. Chapters are organized by topic area. Demographic and geographic differences in the survey findings are highlighted with bulleted text and figures. Some of the major themes that are recurrent in the findings include:

- Relationship of Poverty to Health Status and Health Risk Behaviors
- Health Status and Health Risk Behaviors of the Older Population
- Regional and Urban/Rural Differences in Health Risk Behaviors and Access to Care

## REFERENCE

1. Block D. Interorganizational collaborative health planning: Is the effort worth it? Paper presented at the American Public Health Association 128<sup>th</sup> Annual Meeting. Boston: 2000 November 13.

## METHODOLOGY AND DEMOGRAPHICS

The *Bridge to Health Survey 2000* data were collected through 6,251 computer-aided telephone interviews conducted by the Survey Research Center of the Division of Health Services Research and Policy located in the School of Public Health at the University of Minnesota. The Bridge to Health Collaborative decided to change from the mixed methodology used in 1995 (a self-administered mail-back survey with telephone follow-up of non-respondents) to an all-telephone data collection format for the 2000 survey. The decision to change to all-phone was based on a number of advantages of telephone over mail-back designs. These advantages included a higher level of quality control (e.g. questions are not accidentally skipped, and respondents are less likely to refuse to answer individual questions), generally higher response rates due to the ability to make many more attempts to contact respondents, and more rapid availability of the data due to simultaneous data entry.

A press release was sent to the regional media in order to notify the general public about the project and of the possibility of being contacted as a respondent. In addition, survey sponsors designed local efforts (such as radio interviews, television interviews and articles in local newspapers) to inform their communities of the importance of the project.

### Sample Design

As in 1995, the sample for the 2000 survey was designed with four goals in mind: 1) to provide data specific to the 16-county region as a whole, yet with sufficient sample size to detect small differences over time; 2) to allow for comparison of the Northeastern Minnesota region and the Northwestern Wisconsin region; 3) to allow for comparison of urban and rural respondents; and 4) to provide county level data with a sufficient level of statistical precision ( $\pm 5.7$  percentage points).

To accomplish the four goals, a disproportionate stratified sampling method was employed. Eighteen geographic strata were defined. St. Louis County, MN was split into two strata: the city of Duluth and the remainder of the county. Similarly, Douglas County, WI was split into two strata: the city of Superior and the remainder of the county. The remaining 14 counties each comprised one stratum.

The sample was designed to provide an approximately equal number of respondents in each stratum, with one exception. The city of Duluth was oversampled to provide a large enough number of respondents from the urban (i.e. Duluth/Superior) area to be able to detect statistically significant differences between the rural and urban regions.

The sampling frame consisted of households in the region with telephones. A random sample of households with telephones within each of the 18 strata was purchased from Genesys Sampling Systems, a division of Marketing Systems Group of Fort Washington, PA.

## **Data Collection**

One adult (age 18 and older) from each sampled household was selected to participate in the survey. To select the respondent, the person answering the telephone was asked to identify the adult in the household who had most recently had a birthday. This individual became the designated respondent. The interviews lasted an average of 15 minutes.

## **Survey Response**

In the *Bridge to Health Survey 2000*, 8,449 eligible households were contacted by phone between November 1999 and February 2000, with 6,251 interviews completed. The result was a response rate of 74.0%, a considerable improvement over the response rate obtained in the 1995 survey (64%).

## **Statistical Weighting of Data**

Statistical weighting of the Bridge to Health data was necessary due to the design of the sample. The weights account for differences in household size, differences in the size of the population in each of the 18 strata, and differences in response rates between men and women and people of different ages.

A four-step procedure was used to calculate the weights. The first step involved weighting the data by the inverse of the selection probability within the household (i.e. the number of adults age 18 and older living in the household).

The next step was to weight the data by the actual size of the adult population in each of the 18 strata divided by the number of respondents from each stratum. This step ensured that the data from each stratum counted toward the results for the region as a whole in the same proportion as the population from that stratum counted toward the population in the Bridge to Health region as a whole. Population data were obtained from 1998 U.S. Census estimates of population size (1).

The third step was to post-stratify the data based on the 1998 U.S. Census estimates of the age and gender distributions for adults within each of the eighteen strata (2,3). This accounted for any under-representation or over-representation within the data set by gender and/or age.

The last step was to divide the weights by a numeric constant, which forced the weighted total sample size to be equal to the total number of respondents in the sample.

There were 93 respondents who did not provide their age and/or the number of adults living in the household. Since this information was needed to calculate the weights, these respondents were dropped from the analyses used to produce this report, making the final sample size n=6,158.

## **Limitations of Findings**

There are several sources of bias that can affect data collected via survey. Some possible sources of bias include mode of administration (e.g. telephone), non-response, and factors related to the respondents.



The failure to include data from residents in the Bridge to Health region who did not have telephones is a potential source of bias because adults without phones may be different from adults who have phones. However, non-telephone bias was not expected to be large in the regional data overall, since according to 1990 U.S. Census data, 95% of all households in the Bridge to Health region had telephones (3).

Non-response may be another source of bias. For instance, some sampled households were not contacted, and some selected respondents were not interviewed. Additionally, some respondents refused to answer specific questions on the survey. Bias occurs if those who did not respond are somehow different than those who did respond.

Other potential sources of bias relate to differences among respondents in their interpretations of questions, honesty in answering, accuracy of recall and willingness to disclose information.

### **Guide to Interpreting Tables in This Report**

Three different types of tables are included in this report:

1) The first type of table displays results for all of the response categories for a single question. In this case, the number of respondents who answered the question (n=) is listed within the table title. For an example of this type of table, see Table 1.1 in Chapter 1.

2) Most tables in this report reflect responses to multiple questions within a single table. Each column on this type of table presents the results for one question (e.g. the percentage of respondents who answered “yes” to a question). The number of respondents who answered the question (n=) in this case is listed in the column heading below the topic. Since each column represents a different question, the number of respondents answering each question may differ. For an example of this type of table, see Table 2.1 in Chapter 2.

3) The third type of table design is a combination of the first two types. Part of the table includes the results for one question with several response categories (e.g. respondents who currently smoke, who used to smoke but quit, and who never smoked). A second part of the table includes the results for questions asked of a subset of respondents (e.g. the percentage of current smokers who have tried to quit in the past year). For an example of this type of table, see Table 7.1 in Chapter 7.

### **PROFILE MEASURES IN THE REPORT**

The tables of results incorporate a standard set of demographic and geographic comparisons including gender, gender by age, educational attainment, poverty status, urban and rural areas of residence and state geographic regions of residence (Northeastern Minnesota and Northwestern Wisconsin).

Many of these characteristics were associated with each other. For instance, respondents' poverty status was closely related to educational attainment and age. Results observed among respondents with less than a high school education relate very closely to those observed among the elderly, which is partly due to the older age of the respondents with less than a high school education. Additionally, almost one-half (47.4%) of respondents 65 years of age and older were classified as living at/or below 200% of poverty.

## **A. Gender and Age**

Results for all tables include a breakdown of results by gender with male and female respondents listed separately. Many topic areas covered in the Bridge to Health Survey have wide variation not only for gender and age but for the interaction of these two variables. Thus, a breakdown by age into seven categories (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 to 74, and 75 years and older) appears for males and for females (Figure A.1).

## **B. Education**

Tables also include a breakdown by respondents' highest level of educational attainment. Highest level of educational attainment is categorized into five groups: less than a completed high school education; high school graduate; some college education; graduate from a vocational, trade, or associate degree program; or a bachelor's degree or higher level of education.

Educational attainment was inversely related to age except for the college degree level of education. Thus, respondents with less than a high school education were substantially older as a group than those with higher educational levels. This is displayed graphically in Figure A.2.

## **C. Poverty Status**

Poverty status was determined from respondents' household size and reported income. Respondents were asked to indicate the category of income that applied to their household for the last year. The income categories corresponded to percentages of the 1999 poverty guidelines set by the U.S. Department of Health and Human Services according to the number of people in the household. The tables in this report show two categories of poverty: 200% of poverty or less, and more than 200% of poverty. For example, a respondent with a household size of four with an income of \$33,400 was classified as living at or below 200% of poverty.

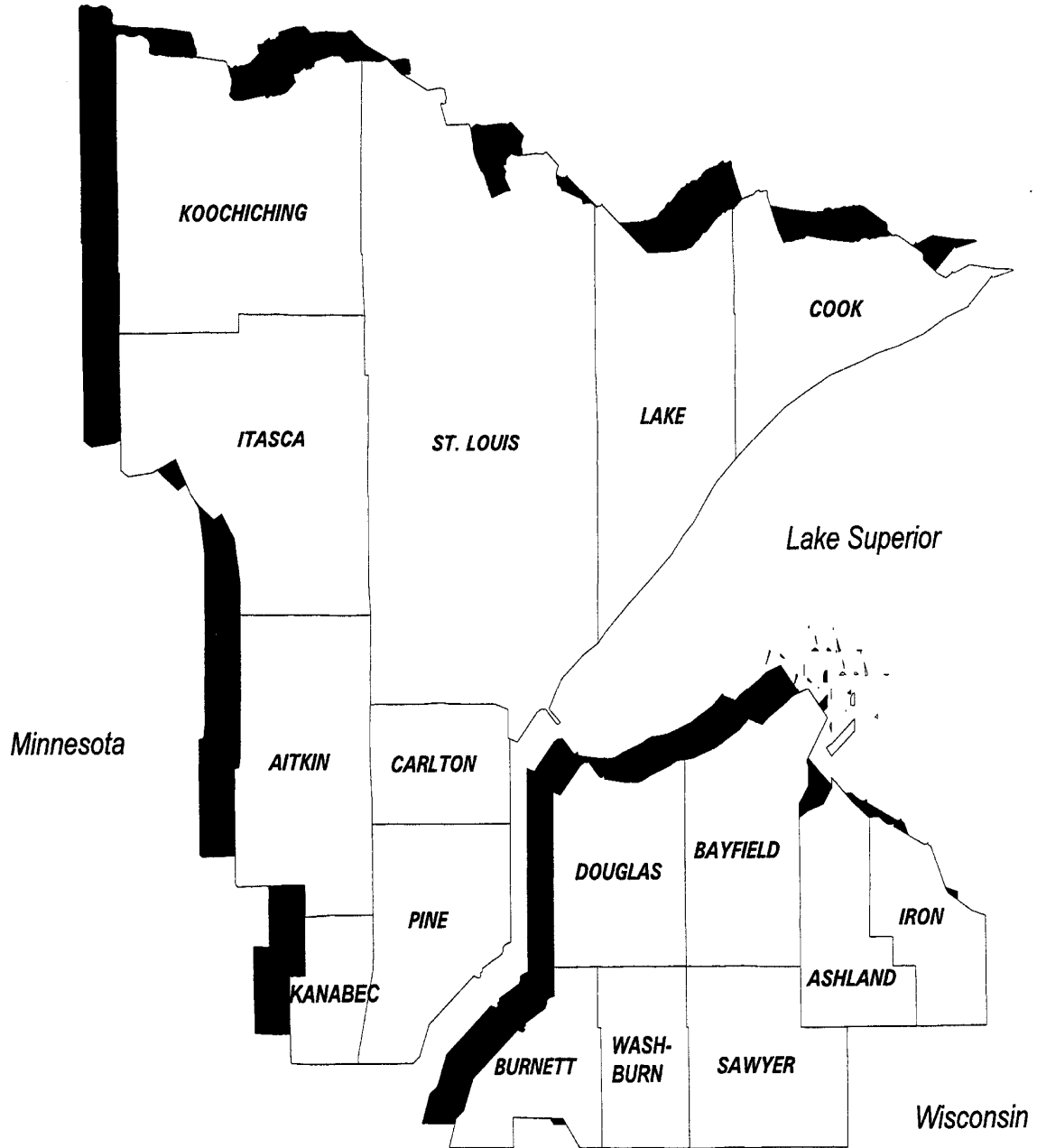
## **D. Geographic Area of Residence**

There are three reporting levels for this report based on geography (Map A.1). The first level is an overall region-wide summary that encompasses all 16 counties (made up of 18 geographic strata) in Northeastern Minnesota and Northwestern Wisconsin. The second level is an urban versus rural comparison where the Duluth and Superior area is compared to rural Northeastern Minnesota (excluding Duluth) and rural Northwestern Wisconsin (excluding Superior). The third level is a regional comparison of all of Northeastern Minnesota (including Duluth) with all of Northwestern Wisconsin (including Superior).

For all comparisons, findings that are summarized within each chapter reflect differences tested statistically significant at the .05 level. This means that the probability of the observed difference among the categories of demographic or geographic characteristics occurring by chance is less than 1 in 20. Statistical tests included one-way analysis of variance (ANOVA) and chi-square tests of independence.

Map A.1

BRIDGE TO HEALTH SURVEY 2000 REGION



## **E. Characteristics of the Sample Population (Table A.1) (Figures A.1-A.4)**

- Half of the respondents were male and half female (49.0% and 51.0%, respectively).
- Respondent age ranged from 18 to 99 years, with the mean age of 48.4 years, median age of 46.0 years and standard deviation of 17.9 years. The age and gender distribution of the sample is described in Figure A.1.
- The educational attainment of the sample was high, with only 8.9% having less than a high school education. Almost 3 out of 10 respondents had a vocational/associate degree or a college degree (10.7% and 18.4%, respectively) (Table A.1).
- The median age of those with less than a high school education was significantly higher than the median age of other educational groups (66.5 years vs. 44.0 to 47.0 years) (Figure A.2).
- Poverty status had a U-shaped relationship with age: respondents age 18 to 24 and those age 75 and older were more likely to have incomes at or below 200% of poverty than respondents in other age groups (Figure A.3).

Poverty was inversely related to educational attainment. Over half (56.6%) of respondents with less than a high school education had incomes at or below 200% of poverty, compared to 12.1% of respondents who were college graduates (Figure A.4).

## **COMPARING 1995 AND 2000 BRIDGE TO HEALTH SURVEY RESULTS**

Readers are encouraged to read the text carefully to note differences in the presentation of results or in question wording between the 1995 and 2000 Bridge to Health Survey results. While changes may be seen for some indicators between the 1995 and 2000 Bridge to Health Survey results, readers are strongly cautioned against interpreting such changes as trends.

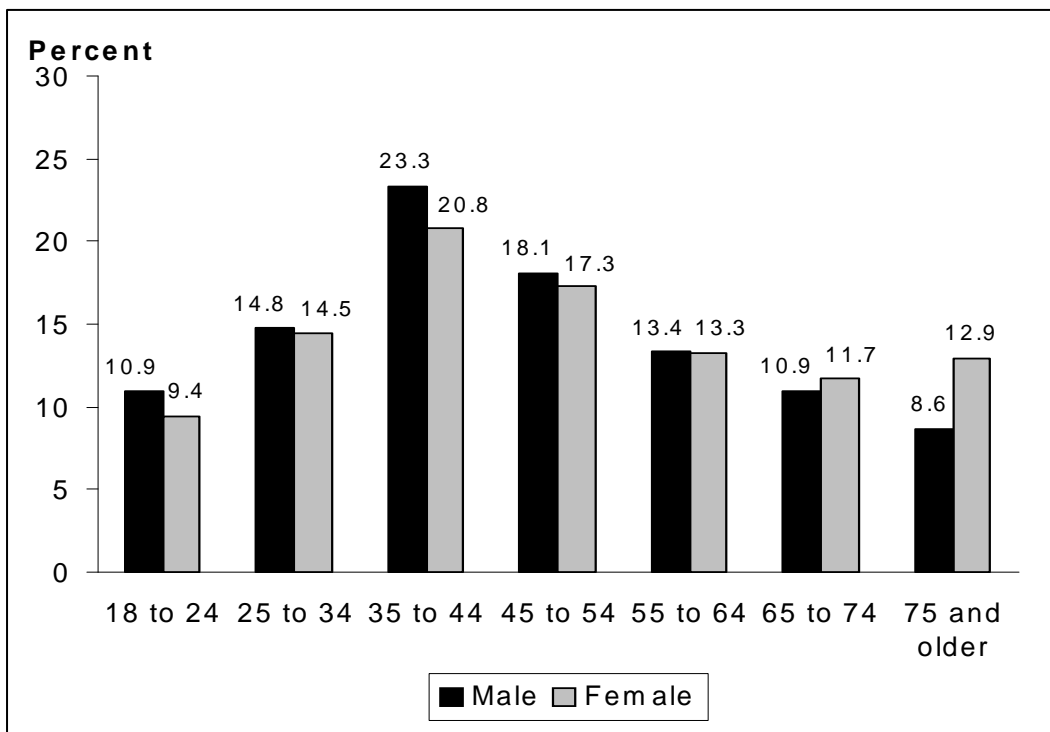
**TABLE A.1**  
**CHARACTERISTICS OF THE SAMPLE**  
 Bridge to Health Survey 2000  
 (n=6158)

Demographic Characteristics	Unweighted Sample		Weighted Sample	
	Frequency	Percent	Frequency	Percent
<b>Overall results</b>	<b>6158</b>	<b>100.0</b>	<b>6158</b>	<b>100.0</b>
<b>Gender</b>				
Male	2275	36.9	3019	49.0
Female	3883	63.1	3139	51.0
<b>Males by Age</b>				
18 to 24	127	5.6	330	10.9
25 to 34	258	11.3	448	14.8
35 to 44	486	21.4	703	23.3
45 to 54	552	24.3	545	18.1
55 to 64	380	16.7	404	13.4
65 to 74	303	13.3	328	10.9
75 and older	169	7.4	261	8.6
<b>Females by Age</b>				
18 to 24	140	3.6	296	9.4
25 to 34	443	11.4	455	14.5
35 to 44	767	19.8	654	20.8
45 to 54	846	21.8	543	17.3
55 to 64	602	15.5	417	13.3
65 to 74	562	14.5	368	11.7
75 and older	523	13.5	406	12.9
<b>Education<sup>1</sup></b>				
Less than H.S.	567	9.2	550	8.9
H.S. Graduate	2216	36.0	2158	35.1
Some College	1532	24.9	1652	26.9
Voc./Assoc. Degree	707	11.4	657	10.7
College Graduate	1135	18.4	1133	18.4
<b>Poverty Status<sup>2</sup></b>				
200% or less	1602	33.8	1467	31.3
More than 200%	3132	66.2	3220	68.7
<b>Urban/Rural</b>				
Duluth/Superior	1398	22.7	1410	22.9
Rural NE Minnesota	2686	43.6	3456	56.1
Rural NW Wisconsin	2074	33.7	1292	21.0
<b>Region</b>				
NE Minnesota	3787	61.5	4532	73.6
NW Wisconsin	2371	38.5	1626	26.4

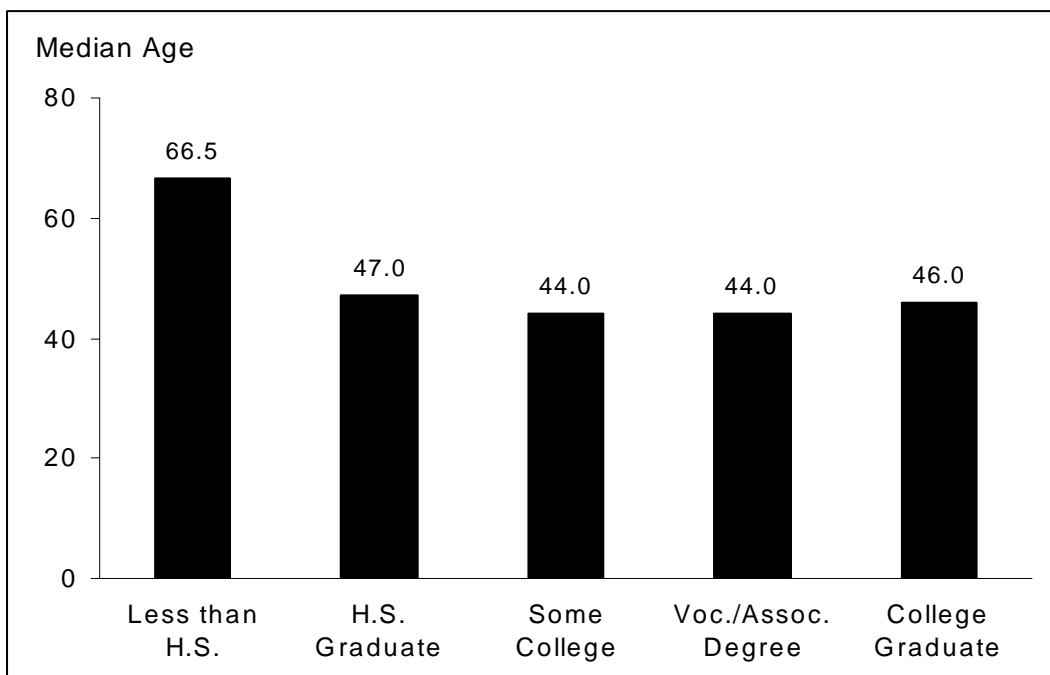
<sup>1</sup> 0.1% were missing.

<sup>2</sup> 23.1% were missing.

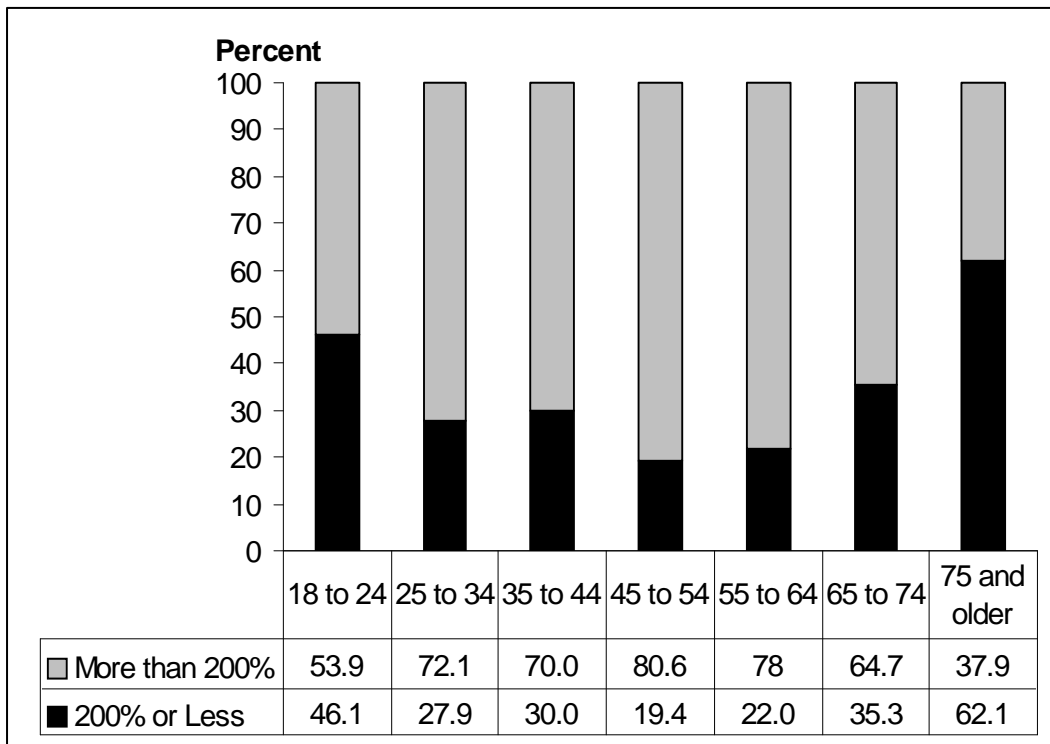
**Figure A.1 Age and Gender Distribution of Sample**



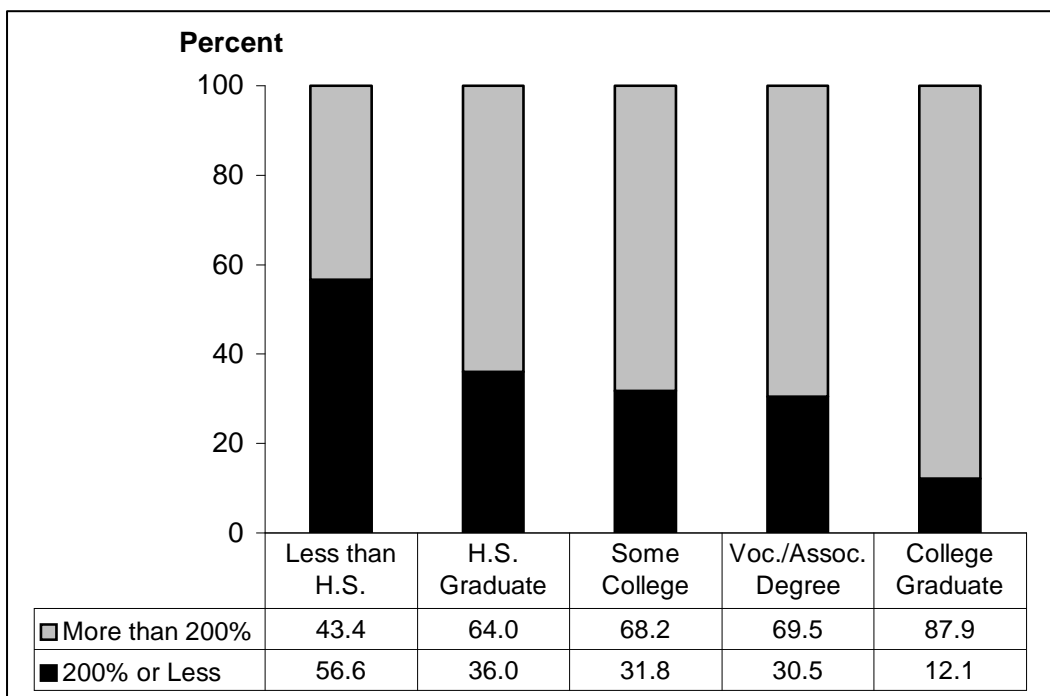
**Figure A.2 Median Age by Educational Attainment**



**Figure A.3 Poverty Status by Age**



**Figure A.4 Educational Attainment by Poverty Status**



## REFERENCES

1. U.S. Census Bureau, Population Estimates Program. Population estimates for counties by age and sex: annual time series July 1990 to July 1999. Washington D.C.: U.S. Census Bureau, 2000. Available at <http://www.census.gov/population/estimates/county/cas/> (cas 27 and 55). Accessed 2000 Apr 19.
2. U.S. Census Bureau. 1990 census lookup:1990 census summary tape file 1A. Washington D.C.: U.S. Census Bureau; 2000. Available at <http://venus.census.gov/cdrom/lookup>. Accessed 2000 May 12.
3. U.S. Census Bureau. 1990 census lookup: 1990 census summary tape file 3A. Washington D.C.: U.S. Census Bureau; 2000. Available at <http://venus.census.gov/cdrom/lookup>. Accessed 2000 May 12.



***BRIDGE TO HEALTH***  
***SURVEY 2000***  
***RESULTS***

***Second Edition***  
***May, 2001***



# **Chapter 1**

## **HEALTH STATUS**

- A. Perceived Health Status**
- B. Perceived Health Status Compared to Others of the Same Age**



# CHAPTER 1

## PERCEIVED HEALTH STATUS

One standard measurement for evaluating the health status of a population is how a person perceives his/her health. The *Bridge to Health Survey 2000* included two questions used in many validated survey instruments to measure perceived health status. One item assessed an individual's perception of his/her overall health and another asked respondents to compare their health to other people of the same age.

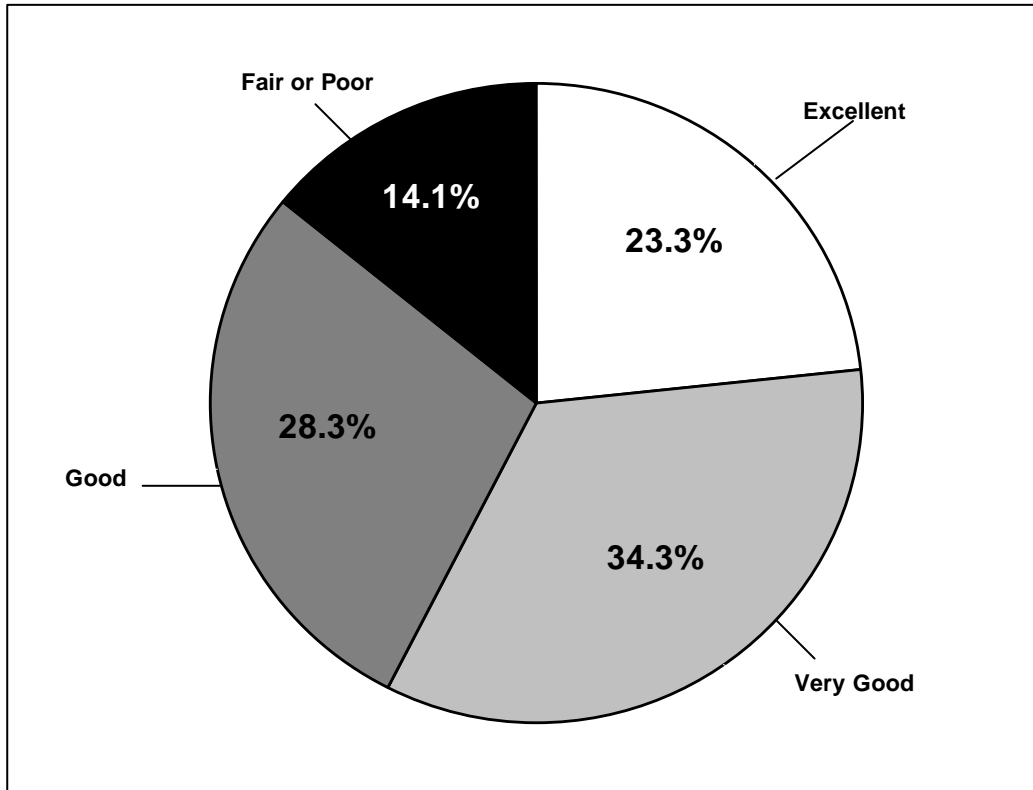
### A. PERCEIVED HEALTH STATUS (Table 1.1) (Figure 1.1-1.4)

- Overall, 23.3% of the respondents reported they were in excellent health (Figure 1.1). Respondents were more likely to say they were in excellent health compared to those surveyed in *Bridge to Health Survey 1995* (16.1%).
- Conversely, 14.1% of the respondents reported they were in fair or poor health (Figure 1.1). In comparison, 12.0% reported fair or poor health in *Bridge to Health Survey 1995*.
- Perceived health status generally decreased with age for both males and females. **Respondents age 18 to 24** were among those least likely to report fair or poor health. **Respondents age 75 and older** were most likely to say their health was fair or poor (Figure 1.2).
- Respondents who were **high school graduates** were three times more likely to report fair or poor health status than were **college graduates** (16.9% vs. 5.1%). Respondents with **less than a high school education** were six times more likely to report fair or poor health status than were **college graduates** (31.5% vs. 5.1%). Overall, perceived health status improved as education level increased (Figure 1.3).
- Respondents living in households with incomes **at or below 200% of poverty** were two and one-half times more likely to report fair or poor health status than respondents with incomes **above 200% of poverty** (24.0% vs. 8.9%) (Figure 1.4).

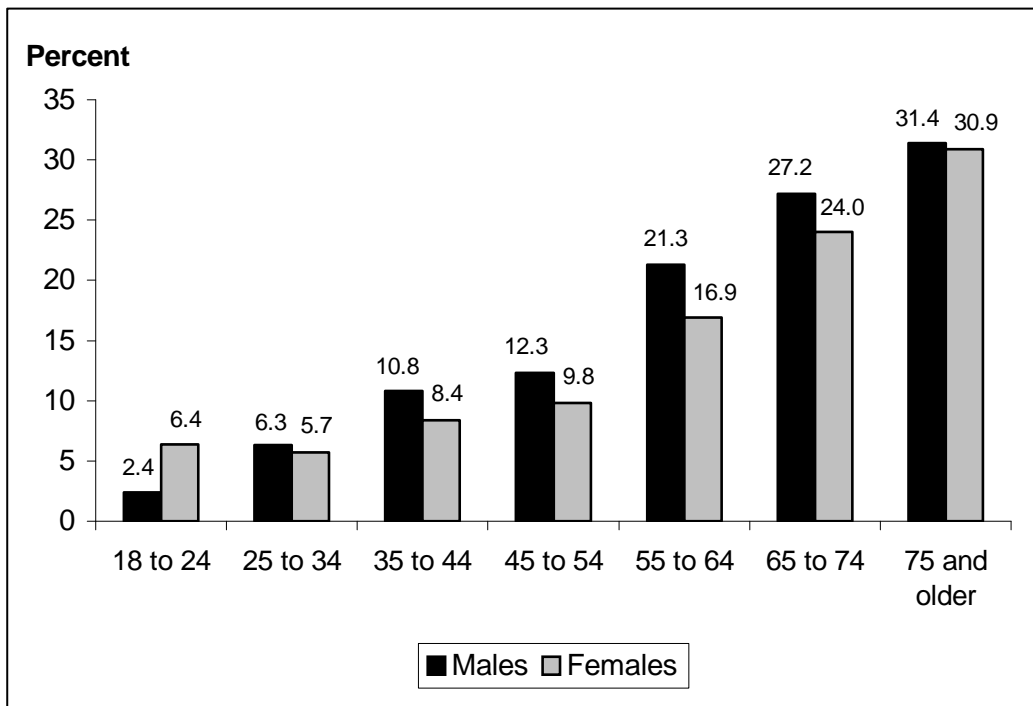
### B. PERCEIVED HEALTH STATUS COMPARED TO OTHERS OF THE SAME AGE (Table 1.2)

- Patterns of responses were similar to those for perceived health status discussed above for most age groups and for education level and poverty status.

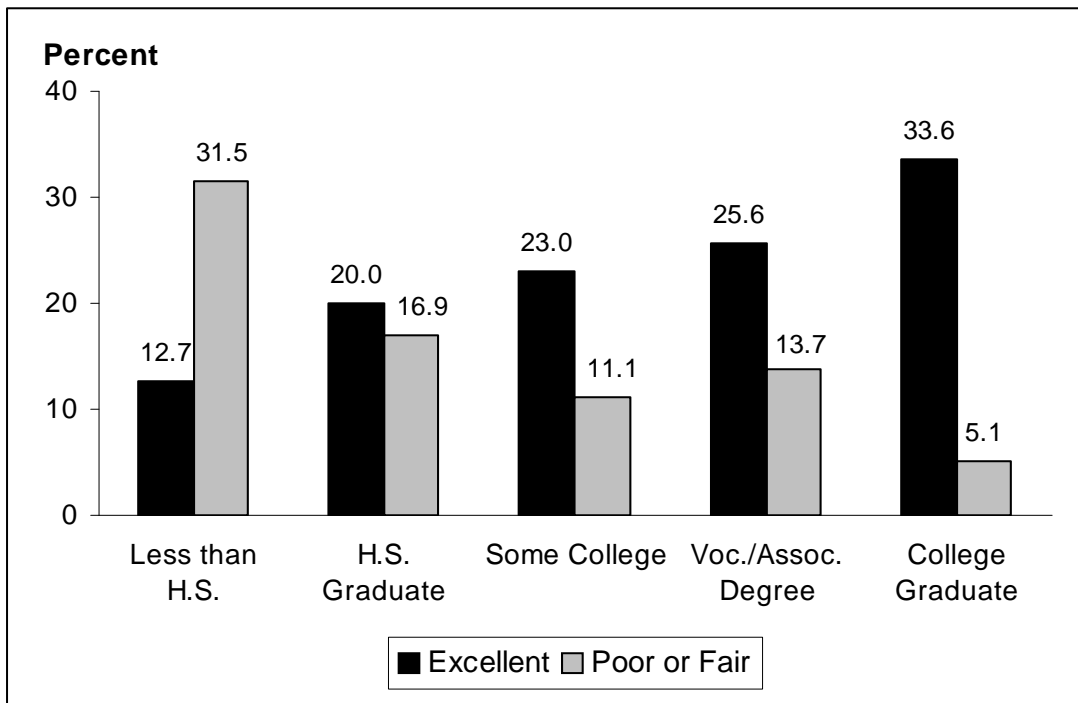
**Figure 1.1: Perceived Health Status**



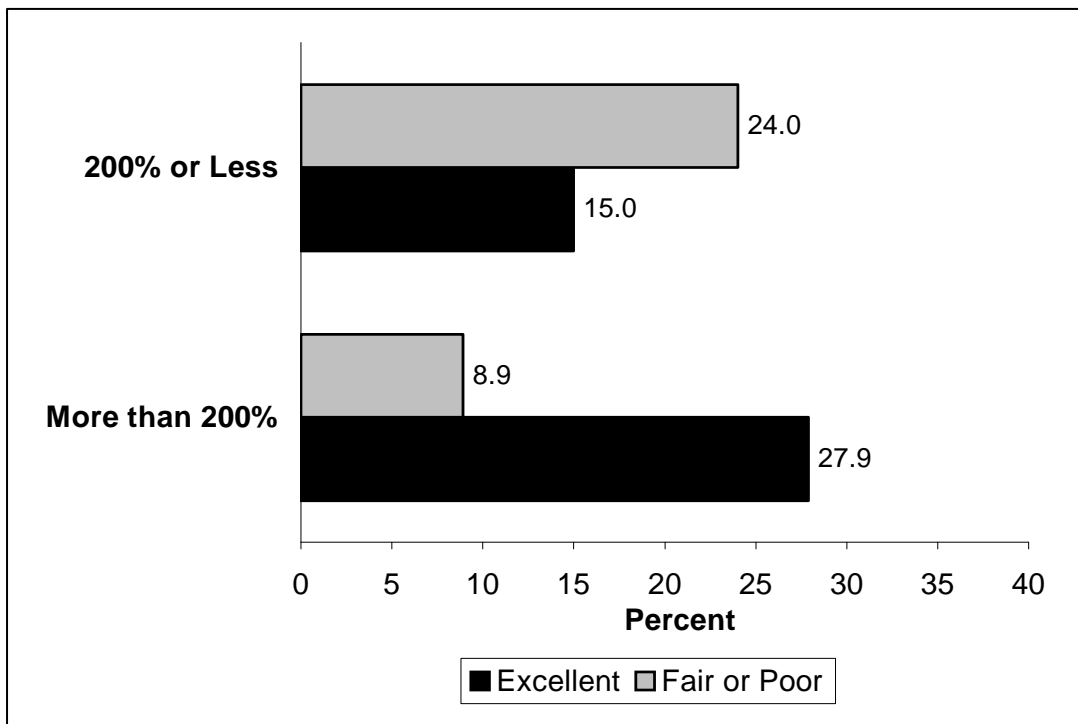
**Figure 1.2: Fair or Poor Health Status By Age and Gender**



**Figure 1.3: Perceived Health Status by Education Level**



**Figure 1.4: Perceived Health Status by Poverty Status**



**TABLE 1.1**  
**PERCEIVED HEALTH STATUS**  
 BRIDGE TO HEALTH SURVEY 2000  
 (n=6132)

**Question:** In general, would you say your health is excellent, very good, good, fair or poor?

<b>Demographic Characteristics</b>		Excellent	Very Good	Good	Fair/Poor <sup>1</sup>
<b>Overall results</b>		<b>23.3%</b>	<b>34.3%</b>	<b>28.3%</b>	<b>14.1%</b>
<b>Gender</b>					
	Male	24.8	32.2	28.6	14.4
	Female	21.8	36.4	27.9	13.9
<b>Males by Age</b>					
	18 to 24	37.9	36.4	23.3	2.4
	25 to 34	32.0	37.1	24.6	6.3
	35 to 44	25.5	36.1	27.6	10.8
	45 to 54	23.5	30.3	33.8	12.3
	55 to 64	20.6	32.5	25.6	21.3
	65 to 74	13.0	27.5	32.4	27.2
	75 and older	17.4	17.1	34.1	31.4
<b>Females by Age</b>					
	18 to 24	20.0	47.5	26.1	6.4
	25 to 34	31.4	44.7	18.2	5.7
	35 to 44	30.5	34.0	27.0	8.4
	45 to 54	24.7	39.1	26.3	9.8
	55 to 64	21.3	35.0	26.8	16.9
	65 to 74	9.8	33.5	32.7	24.0
	75 and older	5.1	23.0	41.0	30.9
<b>Education</b>					
	Less than H.S.	12.7	23.4	32.4	31.5
	H.S. Graduate	20.0	31.6	31.5	16.9
	Some College	23.0	39.3	26.6	11.1
	Voc./Assoc. Degree	25.6	32.7	28.0	13.7
	College Graduate	33.6	38.6	22.7	5.1
<b>Poverty status</b>					
	200% or less	15.0	31.6	29.3	24.0
	More than 200%	27.9	36.3	26.9	8.9
<b>Urban/Rural</b>					
	Duluth/Superior	24.5	39.5	23.0	12.9
	Rural NE Minnesota	23.4	31.9	30.1	14.6
	Rural NW Wisconsin	21.5	35.2	29.1	14.2
<b>Region</b>					
	NE Minnesota	23.8	33.9	28.3	14.0
	NW Wisconsin	21.8	35.6	28.1	14.5

<sup>1</sup> Responses of fair and poor were collapsed into a single category.



**TABLE 1.2**  
**PERCEIVED HEALTH STATUS**  
**COMPARED TO OTHERS OF THE SAME AGE**  
 BRIDGE TO HEALTH SURVEY 2000  
 (n=6088)

**Question:** Compared to others your age, would you say that your health is excellent, very good, good, fair or poor?

<b>Demographic Characteristics</b>		Excellent	Very Good	Good	Fair/Poor <sup>1</sup>
<b>Overall results</b>		<b>22.3%</b>	<b>35.7%</b>	<b>29.1%</b>	<b>12.9%</b>
<b>Gender</b>					
	Male	23.7	34.3	28.4	13.5
	Female	20.9	37.0	29.7	12.4
<b>Males by Age</b>					
	18 to 24	32.4	38.8	25.5	3.3
	25 to 34	28.0	34.3	28.0	9.6
	35 to 44	20.1	40.8	25.7	13.4
	45 to 54	22.1	33.4	30.8	13.7
	55 to 64	27.5	32.6	21.0	18.9
	65 to 74	15.8	27.8	37.2	19.2
	75 and older	22.9	23.6	35.7	17.8
<b>Females by Age</b>					
	18 to 24	10.8	37.8	40.9	10.5
	25 to 34	26.5	39.5	27.8	6.2
	35 to 44	28.2	36.7	26.6	8.5
	45 to 54	24.5	40.0	26.9	8.6
	55 to 64	21.5	37.0	25.8	15.7
	65 to 74	14.3	36.5	30.8	18.4
	75 and older	10.4	30.3	35.5	23.8
<b>Education</b>					
	Less than H.S.	13.5	25.4	37.0	24.1
	H.S. Graduate	18.4	34.4	32.7	14.6
	Some College	21.0	41.4	25.9	11.7
	Voc./Assoc. Degree	26.1	32.8	28.7	12.4
	College Graduate	33.7	36.3	23.3	6.7
<b>Poverty status</b>					
	200% or less	14.0	32.4	32.8	20.7
	More than 200%	26.7	38.0	26.3	9.0
<b>Urban/Rural</b>					
	Duluth/Superior	22.3	39.5	26.7	11.5
	Rural NE Minnesota	22.3	34.7	29.6	13.4
	Rural NW Wisconsin	22.4	34.3	30.1	13.3
<b>Region</b>					
	NE Minnesota	22.6	35.8	28.8	12.8
	NW Wisconsin	21.6	35.3	29.9	13.2

<sup>1</sup> Responses of fair and poor were collapsed into a single category.



## **Chapter 2**

# **CHRONIC CONDITIONS – PHYSICAL HEALTH**



## CHAPTER 2

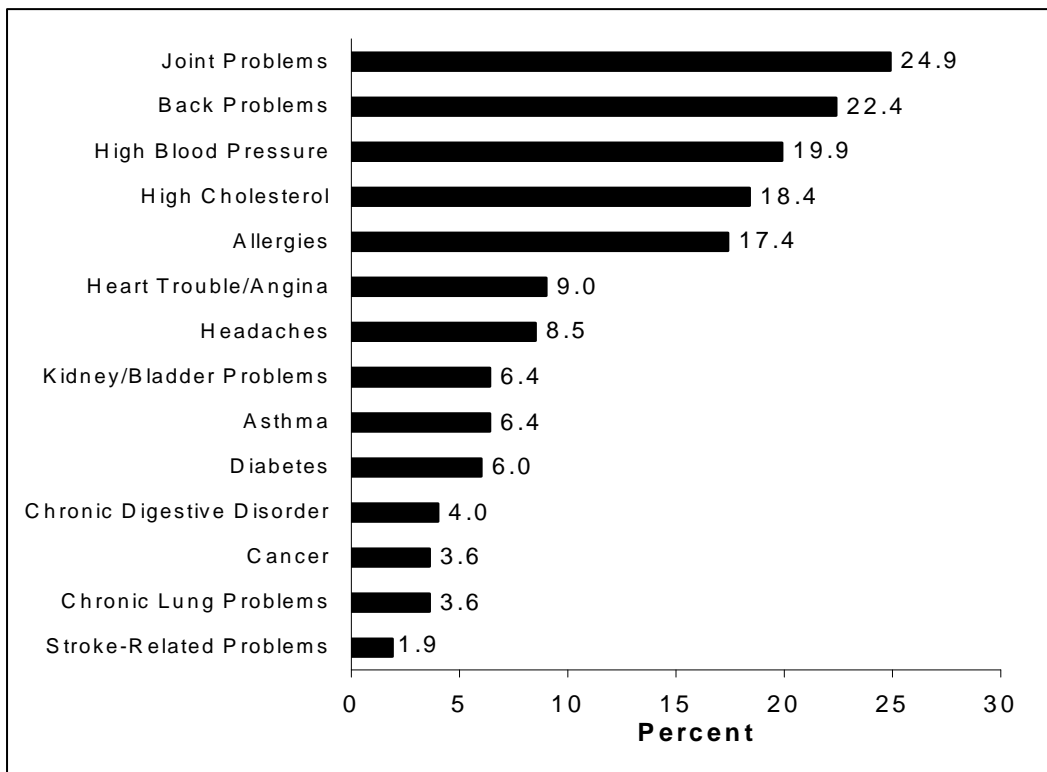
### CHRONIC CONDITIONS - PHYSICAL HEALTH

The Centers for Disease Control and Prevention broadly defines chronic disease as “illnesses that are prolonged, do not resolve spontaneously, and are rarely cured completely” (1). Chronic conditions, both physical and mental, have an impact on the quality of life for individuals and their families. These conditions also consume the largest share of the U.S. health care expenditures, accounting for more than 60% of the nation’s medical care costs (2). Only about one-quarter of people who live with chronic conditions are elderly (2).

*Bridge to Health Survey 2000* included information on the prevalence of fourteen chronic medical conditions that are primarily related to physical health. Conditions primarily related to mental health are described in Chapter 3. Survey respondents were asked to report whether a physician told them that they currently have [condition].<sup>1</sup> Prevalence is reported as the percentage of respondents who stated a physician had told them that they currently have a specific disease or medical condition.

In this survey, the most frequently reported physical conditions were **Joint Problems** (24.9%), **Back Problems** (22.4%), **High Blood Pressure** (19.9%), **High Cholesterol** (18.4%), and **Allergies** (17.4%) (Figure 2.1).

**Figure 2.1: Prevalence of Chronic and Other Medical Conditions**



<sup>1</sup> This question is worded differently than the question in *Bridge to Health Survey 1995* which asked “Do you currently have [condition]?”

Included below are noteworthy findings for each of the chronic conditions. Where comparable data is available, state and national prevalence figures are listed.

### **ALLERGIES (17.4%) (Table 2.1)**

- One-fifth of **females** (20.9%) reported having been told they have allergies, compared to only 13.8% of **males**.
- Residents of **Northwestern Wisconsin** reported a higher prevalence of allergies compared to those living in **Northeastern Minnesota** (19.6% and 16.6 % respectively).

### **ASTHMA (6.4%) (Table 2.1)**

- Overall, 6.4% of the respondents reported having been told they have asthma.
- **Females** (8.3%) were twice as likely to report having asthma as **males** (4.4%).
- Respondents with incomes **at or below 200% of poverty** more often reported having asthma compared to those with incomes **above 200% of poverty** (9.3% vs. 5.1%).

### **BACK PROBLEMS (22.4%) (Table 2.1)**

- **Female** respondents were more likely to report back problems than **males** (23.9% vs. 20.8%).
- **Older women** reported back problems more often than did **older men**. Among respondents age 55 and over, about one-third of women reported back problems.
- Respondents with household incomes **at or below 200% of the poverty** were more likely to have back problems compared to those with incomes **above 200% of poverty** (27.0% vs. 19.6%).
- Respondents in **rural areas**, particularly rural Northwestern Wisconsin, reported a higher prevalence of back problems compared to those residing in the **Duluth/Superior** (rural Northwestern Wisconsin: 24.1%; rural Northeastern Minnesota: 22.7%; and Duluth/Superior: 19.9%).

### **CANCER (3.6%) (Table 2.1)**

- The prevalence of cancer increased with age for both men and women, with the most dramatic increases in the older years. **Respondents age 65 to 74** were approximately three times more likely to report they have cancer than **those age 55 to 64**, increasing from 2.7% to 8.2% for males, and from 3.4% to 9.8% for females. Respondents age 75 and over had the highest prevalence of cancer, 18.6% of males and 10.4% of females.

### DIABETES (6.0%) (Table 2.1)

- Regionally, the prevalence of diabetes was 6.0% of those surveyed compared to rates from the 1999 Behavioral Risk Factor Surveillance System of 4.8% for Minnesota, 5.3% for Wisconsin and the national median of 5.6% (3).
- Like cancer, the prevalence of diabetes tended to increase with age for both males and females, with marked increases for those respondents age 65 and over. The percentage of **male respondents age 55 to 64** with diabetes was 8.7% and 17.4% for those **ages 65 to 74**. For **women**, 7.7% of respondents **age 55 to 64** reported having diabetes compared to 11.7% of **females age 65 to 74**. Those **75 years of age** and over had the highest prevalence of diabetes, 18.8% for **men** and 16.3% for **women**.

### DIGESTIVE DISORDERS (4.0%) (Table 2.2)

- Overall, **female** respondents reported having been told they have chronic digestive disorders more often than **males** (5.0% and 3.0% respectively).
- **Female respondents age 75 and older** were most likely to report this condition (10.4%). Among **males, respondents age 65 to 74** were most likely to report chronic digestive disorders (6.1%).

### HEADACHES (8.5%) (Table 2.2)

- **Females** reported chronic headaches more than twice as often as **males** (11.9% vs. 4.9%).
- Approximately 13% of female respondents age 18 to 54 said they had been diagnosed with chronic headaches. The prevalence of chronic headaches decreased in older women ranging from 10.6% among those age 55 to 64 to 7.4% among those 75 and older.
- Respondents with incomes **at or below 200% of poverty** were more likely to report chronic headaches than those with incomes **above 200% of poverty** (11.1% vs. 7.4%).

### HEART TROUBLE/ANGINA (9.0%) (Table 2.2)

- **Males** were more likely to report heart trouble or angina than **females** (10.1% vs. 7.8%).
- Like cancer and diabetes, the prevalence of heart disease or angina tended to increase with age for both males and females, with the most dramatic increases in the older years. **Male respondents age 55 to 64** were twice as likely to report heart disease or angina compared to **males age 45 to 54** (15.8% vs. 7.0%). The prevalence among **female respondents** increased from 3.5% for **females age 45 to 54** to 12.0% for those **age 55 to 64**.

**TABLE 2.1**  
**CHRONIC AND OTHER MEDICAL CONDITIONS**  
 BRIDGE TO HEALTH SURVEY 2000

**Question:** Have you been told by a physician that you currently have any of the following health conditions?

Demographic Characteristics		Allergies (n=6141)	Asthma (n=6139)	Back	Cancer (n=6144)	Diabetes (n=6151)
				Problems (n=6151)		
<b>Overall results</b>		<b>17.4%</b>	<b>6.4%</b>	<b>22.4%</b>	<b>3.6%</b>	<b>6.0%</b>
<b>Gender</b>						
	Male	13.8	4.4	20.8	3.2	5.9
	Female	20.9	8.3	23.9	3.9	6.0
<b>Males by Age</b>						
	18 to 24	11.8	3.0	4.8	0.0	1.2
	25 to 34	17.9	4.0	13.6	0.0	0.2
	35 to 44	14.7	4.1	20.0	0.1	1.4
	45 to 54	14.9	4.0	28.5	2.0	4.0
	55 to 64	12.9	5.9	25.0	2.7	8.7
	65 to 74	8.9	6.7	29.4	8.2	17.4
	75 and older	11.8	2.7	23.0	18.6	18.8
<b>Females by Age</b>						
	18 to 24	19.3	14.6	13.9	0.0	1.4
	25 to 34	17.0	7.5	15.1	1.8	1.8
	35 to 44	21.7	8.7	21.4	1.2	0.6
	45 to 54	20.7	7.2	21.2	2.6	6.1
	55 to 64	23.3	6.7	30.5	3.4	7.7
	65 to 74	24.3	8.2	31.7	9.8	11.7
	75 and older	19.4	6.7	34.7	10.4	16.3
<b>Education</b>						
	Less than H.S.	15.3	8.5	31.4	6.5	10.4
	H.S. Graduate	16.1	6.1	24.7	3.5	7.1
	Some College	19.3	6.6	20.1	2.7	5.4
	Voc./Assoc. Degree	18.1	8.1	20.5	2.7	4.7
	College Graduate	17.6	4.6	18.0	3.9	2.7
<b>Poverty status</b>						
	200% or less	16.3	9.3	27.0	4.5	6.9
	More than 200%	17.1	5.1	19.6	2.6	4.6
<b>Urban/Rural</b>						
	Duluth/Superior	17.2	6.8	19.9	3.6	5.7
	Rural NE Minnesota	16.8	6.4	22.7	3.6	6.3
	Rural NW Wisconsin	19.2	5.9	24.1	3.6	5.5
<b>Region</b>						
	NE Minnesota	16.6	6.4	21.8	3.6	6.1
	NW Wisconsin	19.6	6.4	24.1	3.5	5.6



### **HIGH BLOOD PRESSURE (19.9%) (Table 2.2)**

- One out of five (19.9%) adults in the region reported having been told they have high blood pressure, compared to state rates of 22% for Minnesota, 25% for Wisconsin and a national median of 23.9% in 1999 from the 1999 Behavioral Risk Factor Surveillance System (3).
- **Female respondents** were more likely than **males** to report high blood pressure (20.9% vs. 18.8%). Nearly 50% of females in the oldest age groups (65 to 74 and 75 and older) said a physician had told them they had high blood pressure (47.7% and 48.5%, respectively).
- Respondents with incomes **at or below 200% of poverty** (22.7%) more often reported high blood pressure than those with incomes **above 200% of poverty** (17.6%).

### **HIGH CHOLESTEROL (18.4%) (Table 2.2)**

- **Male** respondents reported that a physician told them they had high cholesterol more often than did **female** respondents (19.4% vs. 17.4%).
- About 30% of all male and female respondents in the oldest age groups (55 to 64, 65 to 74 and 75 and older) reported a physician told them they had high cholesterol.

**TABLE 2.2**  
**CHRONIC AND OTHER MEDICAL CONDITIONS**  
 BRIDGE TO HEALTH SURVEY 2000

**Question:** Have you been told by a physician that you currently have any of the following health conditions?

<b>Demographic Characteristics</b>		Digestive Disorder (chronic) (n=6146)	Headaches (chronic) (n=6155)	Heart Trouble or Angina (n=6142)	High Blood Pressure (n=6151)	High Cholesterol (n=6020)
<b>Overall results</b>		<b>4.0%</b>	<b>8.5%</b>	<b>9.0%</b>	<b>19.9%</b>	<b>18.4%</b>
<b>Gender</b>						
	Male	3.0	4.9	10.1	18.8	19.4
	Female	5.0	11.9	7.8	20.9	17.4
<b>Males by Age</b>						
	18 to 24	1.8	5.2	0.9	1.8	1.5
	25 to 34	1.8	3.6	0.9	5.6	6.0
	35 to 44	2.9	5.7	3.7	10.4	16.1
	45 to 54	3.5	5.3	7.0	16.6	23.2
	55 to 64	2.2	5.0	15.8	28.3	29.1
	65 to 74	6.1	3.7	30.8	41.5	34.9
	75 and older	3.1	5.4	27.8	46.4	31.0
<b>Females by Age</b>						
	18 to 24	0.7	13.5	0.0	0.7	1.7
	25 to 34	2.2	13.2	1.1	2.6	2.7
	35 to 44	3.7	13.1	2.3	5.8	7.8
	45 to 54	3.7	13.8	3.5	16.0	16.8
	55 to 64	6.3	10.6	12.0	34.5	31.8
	65 to 74	8.4	10.1	16.3	47.7	37.8
	75 and older	10.4	7.4	23.6	48.5	29.4
<b>Education</b>						
	Less than H.S.	5.5	11.5	19.5	33.6	23.2
	H.S. Graduate	4.6	8.4	10.4	22.3	18.7
	Some College	4.7	9.0	6.6	17.6	16.8
	Voc./Assoc. Degree	3.2	10.0	6.4	15.2	16.2
	College Graduate	1.6	5.3	6.0	14.0	18.9
<b>Poverty status</b>						
	200% or less	5.4	11.1	10.2	22.7	17.9
	More than 200%	3.5	7.4	7.0	17.6	17.9
<b>Urban/Rural</b>						
	Duluth/Superior	4.6	8.5	8.9	20.0	17.0
	Rural NE Minnesota	3.8	8.3	8.9	20.0	19.1
	Rural NW Wisconsin	4.0	8.8	9.1	19.4	17.8
<b>Region</b>						
	NE Minnesota	3.9	8.1	8.8	19.5	18.7
	NW Wisconsin	4.3	9.5	9.3	20.8	17.6

### **JOINT PROBLEMS (24.9%) (Table 2.3)**

- Joint problems were more prevalent among **females** (27.1%) compared to **males** (22.7%).
- Joint problems were most prevalent among older respondents. In the 65 and older age groups, more than two out of five males and over half of female respondents reported this condition.
- Respondents with incomes **at or below 200% of poverty** were significantly more likely to report joint problems than those with incomes **above 200% of poverty** (31.1% vs. 20.9%).
- Respondents living in **rural Northeastern Minnesota and rural Northwestern Wisconsin** were more likely to report joint problems than those in the **Duluth/Superior urban area** (26.2% and 26.5% vs. 20.4%, respectively).

### **KIDNEY/BLADDER PROBLEMS (6.4%) (Table 2.3)**

- For males and females, there was a general trend of higher prevalence of kidney or bladder problems with increasing age.
- Respondents with incomes **at or below 200% of poverty** were nearly twice as likely to have been told they have kidney or bladder problems than those with incomes **above 200% of poverty** (9.4% vs. 4.6%)

### **CHRONIC LUNG PROBLEMS (3.6%) (Table 2.3)**

- **Male respondents in the oldest age groups** (65 to 74 and 75 and older) were most likely to report having chronic lung disease (11.3% and 12.7%, respectively). By comparison, 7.6% of **females age 65-74** and 9.6% of **females age 75 and older** reported this condition.
- Respondents of **rural Northeastern Minnesota** were more likely to report having chronic lung disease (4.2%) compared to those in **rural Northwestern Wisconsin** (2.7%) and the **Duluth/Superior urban area** (3.1%).

### **STROKE-RELATED PROBLEMS (1.9%) (Table 2.3)**

- **Male** respondents were more likely than **females** to report having stroke-related problems (2.4% vs.1.4%).
- Males age 65 to 74 had the highest prevalence of stroke-related problems (11.3%).

**TABLE 2.3**  
**CHRONIC AND OTHER MEDICAL CONDITIONS**  
 BRIDGE TO HEALTH SURVEY 2000

**Question:** Have you been told by a physician that you currently have any of the following health conditions?

<b>Demographic Characteristics</b>		<b>Joint Problems (n=6142)</b>	<b>Kidney or Bladder Problems (n=6150)</b>	<b>Lung Problems (chronic) (n=6151)</b>	<b>Stroke Related Problems (n=6149)</b>
<b>Overall results</b>		<b>24.9%</b>	<b>6.4%</b>	<b>3.6%</b>	<b>1.9%</b>
<b>Gender</b>					
	Male	22.7	6.1	3.8	2.4
	Female	27.1	6.6	3.4	1.4
<b>Males by Age</b>					
	18 to 24	2.1	0.3	0.0	0.0
	25 to 34	5.6	0.0	0.0	0.0
	35 to 44	16.7	3.6	1.0	0.4
	45 to 54	23.5	4.0	2.9	0.9
	55 to 64	33.8	9.7	5.2	2.2
	65 to 74	45.4	11.6	11.3	11.3
	75 and older	46.9	22.6	12.7	6.5
<b>Females by Age</b>					
	18 to 24	6.1	2.4	0.0	0.0
	25 to 34	8.1	3.3	0.7	0.0
	35 to 44	13.3	5.8	0.9	0.5
	45 to 54	18.5	3.5	2.2	0.4
	55 to 64	41.4	5.8	4.8	1.2
	65 to 74	53.8	10.6	7.6	2.4
	75 and older	58.5	16.1	9.6	6.2
<b>Education</b>					
	Less than H.S.	41.1	13.1	9.3	6.0
	H.S. Graduate	27.9	5.8	3.6	2.2
	Some College	22.3	5.5	3.3	1.2
	Voc./Assoc. Degree	24.4	6.2	2.6	0.6
	College Graduate	15.7	5.5	1.9	1.1
<b>Poverty status</b>					
	200% or less	31.1	9.4	4.4	2.5
	More than 200%	20.9	4.6	2.6	1.0
<b>Urban/Rural</b>					
	Duluth/Superior	20.4	5.7	3.1	2.5
	Rural NE Minnesota	26.2	6.5	4.2	1.7
	Rural NW Wisconsin	26.5	6.8	2.7	1.8
<b>Region</b>					
	NE Minnesota	24.6	6.3	3.8	1.9
	NW Wisconsin	25.9	6.7	3.1	1.9

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## **Chapter 3**

# **CHRONIC CONDITIONS – MENTAL HEALTH**

**A. Anxiety or Panic Attacks and Depression**

**B. Self-Reported Mental Health Indicators**





## CHAPTER 3

### CHRONIC CONDITIONS – MENTAL HEALTH

*Mental Health: A Report of the Surgeon General* characterizes adulthood as a period when stress impacts a person's resilience and increases the chance of developing a mental disorder. For adults, the most prevalent of these problems are anxiety disorders and mood disorders (depression being most common). Anxiety disorders and many forms of depression affect twice as many women as men (1). Depression is associated with untold human suffering, lost work productivity, and premature death from suicide (2). It is estimated that 40% of Americans with a mental illness do not look for help through professional medical or mental health services (2). Increased public awareness of mental disorders and early treatment for at-risk individuals are important preventive strategies.

The Bridge to Health Collaborative added several new questions to the 2000 Survey to identify the prevalence of these mental health problems in the region. Mental health indicators included physician-diagnosed depression and anxiety or panic attacks as well as questions about whether emotional problems in the past four weeks affected respondents' productivity and emotional outlook. (These latter questions were part of the SF-12 standard set of questions that are explored in Chapter 10).

#### A. ANXIETY OR PANIC ATTACKS AND DEPRESSION (Table 3.1) (Figures 3.1, 3.2)

##### Anxiety or Panic Attacks (Table 3.1) (Figure 3.1)

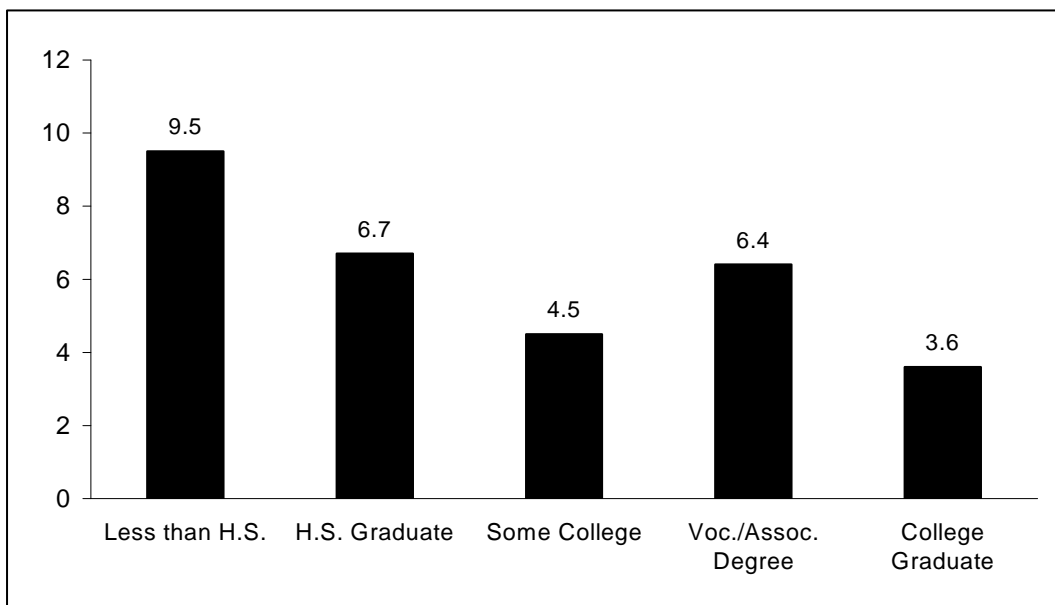
- Overall, 5.7% of the respondents reported that a physician told them they currently have anxiety or panic attacks.
- **Females** were nearly twice as likely as **males** to report that a physician told them they currently have anxiety or panic attacks (7.5% vs. 3.9%).
- Respondents with **less than a high school education** (9.5%) and **high school graduates** (6.7%) were more likely to report anxiety or panic attacks than **college graduates** (3.6%) (Figure 3.1).
- Respondents with incomes **at or below 200% of poverty** were more likely to report anxiety or panic attacks compared to those with incomes **above 200% of poverty** (8.2% vs. 4.9%).
- Respondents in **Northwestern Wisconsin** were more likely to report anxiety or panic attacks compared to those in **Northeastern Minnesota** (7.1% vs. 5.3%).

**TABLE 3.1**  
**ANXIETY AND DEPRESSION**  
BRIDGE TO HEALTH SURVEY 2000

**Question:** Have you been told by a physician that you currently have any of the following health conditions?

Demographic Characteristics	Anxiety or Panic Attacks (n=6148)	Depression (n=6146)
<b>Overall results</b>	<b>5.7%</b>	<b>9.6%</b>
<b>Gender</b>		
Male	3.9	7.7
Female	7.5	11.5
<b>Males by Age</b>		
18 to 24	3.9	5.2
25 to 34	0.9	5.8
35 to 44	3.7	6.6
45 to 54	4.8	8.3
55 to 64	7.7	7.2
65 to 74	2.1	8.9
75 and older	4.6	15.7
<b>Females by Age</b>		
18 to 24	4.4	7.5
25 to 34	7.9	8.6
35 to 44	8.6	12.3
45 to 54	6.1	12.2
55 to 64	8.7	12.0
65 to 74	9.5	14.1
75 and older	6.7	12.6
<b>Education</b>		
Less than H.S.	9.5	15.3
H.S. Graduate	6.7	10.0
Some College	4.5	9.2
Voc./Assoc. Degree	6.4	10.7
College Graduate	3.6	6.4
<b>Poverty status</b>		
200% or less	8.2	16.4
More than 200%	4.9	7.0
<b>Urban/Rural</b>		
Duluth/Superior	6.7	8.2
Rural NE Minnesota	5.0	10.1
Rural NW Wisconsin	6.7	10.2
<b>Region</b>		
NE Minnesota	5.3	9.6
NW Wisconsin	7.1	9.9

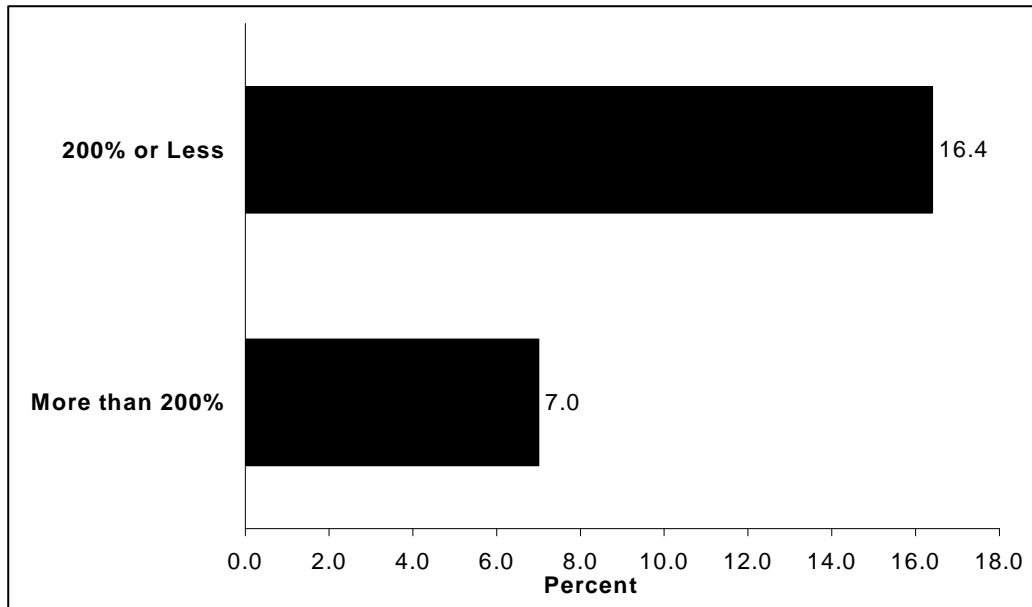
**Figure 3.1: Prevalence of Anxiety or Panic Attacks by Education Level**



**Depression (Table 3.1) (Figure 3.2)**

- About one-tenth (9.6%) of all respondents reported that a physician told them they currently have depression. The Depression Guideline Panel of the Agency for Health Care Policy and Research estimates that, “Up to one in eight individuals may require treatment for depression during their lifetimes” (3).
- As with anxiety, **females** were more likely than **males** to report that a physician told them they currently have depression (11.5% vs. 7.7%).
- About 12% of females in each age bracket over age 34 reported that a physician told them they currently have depression.
- Respondents with incomes **at or below 200% of poverty** (16.4%) were more than twice as likely to report depression as were respondents with incomes **above 200% of poverty** (7.0%) (Figure 3.2).

**Figure 3.2: Prevalence of Depression by Poverty Status**



## **B. SELF-REPORTED MENTAL HEALTH INDICATORS (Table 3.2)**

As part of a standard set of questions that form summary measures of health, the SF-12, respondents were asked about their mental health. Indicators included: accomplishing less due to emotional problems; not doing work or other activities as carefully as usual due to emotional problems; and feeling downhearted or blue.

### **Accomplished Less Due to Mental Health (Table 3.2)**

- Overall, 8.8% of all respondents reported that during the past 4 weeks they accomplished less than they would like as a result of emotional problems.
- **Females** were more likely than males to report that they accomplished less than they would like due to emotional problems (10.0% vs. 7.6%).
- Respondent with incomes **at or below 200% of poverty** (16.0%) were over twice as likely to report that they accomplished less than they would like due to emotional problems, compared to those with incomes **above 200% of poverty** (6.1%).

### **Did Not Work Carefully Due to Emotional Problems (Table 3.2)**

- Overall, 6.1% of all respondents reported that during the past 4 weeks they did not work or perform regular activities as carefully as usual as a result of emotional problems.
- Of all subgroups, **female respondents age 18 to 24** (13.5%) and respondents with incomes **at or below 200% of poverty** (11.2%) were most likely to report not working carefully due to emotional problems.

### Felt Downhearted and Blue (Table 3.2)

- Overall, 5.7% of all respondents reported that they felt downhearted and blue “all”, “most” or “a good bit of the time” during the past 4 weeks.
- Similar to previous indicators, respondents with incomes **at or below 200% of poverty** (10.6%) were more than twice as likely to report that they felt downhearted and blue compared to respondents with incomes **above 200% of poverty** (4.1%).
- Respondents in **rural Northwestern Wisconsin** (7.4%) were more likely to report that they felt downhearted and blue compared to respondents in **rural Northeastern Minnesota** (5.7%) and **Duluth/Superior** (4.4%).

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**TABLE 3.2**  
**SELF-REPORTED MENTAL HEALTH INDICATORS**  
 BRIDGE TO HEALTH SURVEY 2000

**Questions:** During the past 4 weeks, have you accomplished less than you would like as a result of any emotional problems, such as feeling depressed or anxious?  
 During the past 4 weeks, did you not do work or other regular activities as carefully as usual as a result of any emotional problems, such as feeling depressed or anxious?  
 How much of the time during the past 4 weeks have you felt downhearted and blue?

<b>Demographic Characteristics</b>		<b>Accomplished Less Due to Mental Health (n=6127)</b>	<b>Did Not Work Carefully Due to Emotional Problems (n=6126)</b>	<b>Felt Downhearted and Blue<sup>1</sup> (n=6119)</b>
<b>Overall results</b>		<b>8.8%</b>	<b>6.1%</b>	<b>5.7%</b>
<b>Gender</b>				
	Male	7.6	5.0	4.7
	Female	10.0	7.2	6.7
<b>Males by Age</b>				
	18 to 24	8.2	4.3	2.5
	25 to 34	5.8	3.4	6.3
	35 to 44	8.8	5.6	6.3
	45 to 54	8.3	5.1	4.2
	55 to 64	5.2	4.7	4.0
	65 to 74	4.6	5.8	3.1
	75 and older	12.4	6.6	5.0
<b>Females by Age</b>				
	18 to 24	15.9	13.5	4.7
	25 to 34	11.0	7.5	5.7
	35 to 44	10.1	7.1	9.3
	45 to 54	7.7	5.0	5.0
	55 to 64	8.2	5.0	6.8
	65 to 74	10.9	8.2	10.1
	75 and older	8.4	7.1	3.8
<b>Education</b>				
	Less than H.S.	9.9	7.2	8.2
	H.S. Graduate	9.8	6.5	6.5
	Some College	8.3	6.3	4.4
	Voc./Assoc. Degree	9.8	6.7	8.0
	College Graduate	6.6	4.3	3.7
<b>Poverty status</b>				
	200% or less	16.0	11.2	10.6
	More than 200%	6.1	4.0	4.1
<b>Urban/Rural</b>				
	Duluth/Superior	8.6	6.2	4.4
	Rural NE Minnesota	8.9	6.4	5.7
	Rural NW Wisconsin	8.6	5.4	7.4
<b>Region</b>				
	NE Minnesota	8.8	6.3	5.3
	NW Wisconsin	9.0	5.6	6.9

<sup>1</sup> This column includes those who responded they felt downhearted or blue all, most or a good bit of the time.

# **Chapter 4**

## **PREVENTIVE HEALTH PRACTICES**

- A. Nutrition**
- B. Weight Status**
- C. Physical Activity**
- D. Flu Vaccination**





# CHAPTER 4

## PREVENTIVE HEALTH PRACTICES

This chapter examines the self-reported behaviors of adult respondents in the areas of nutrition, physical activity and flu immunization. The chapter also addresses weight status, oral health status and the prevalence of household food insecurity across the region.

### A. NUTRITION (Tables 4.1-4.3) (Figures 4.1-4.2)

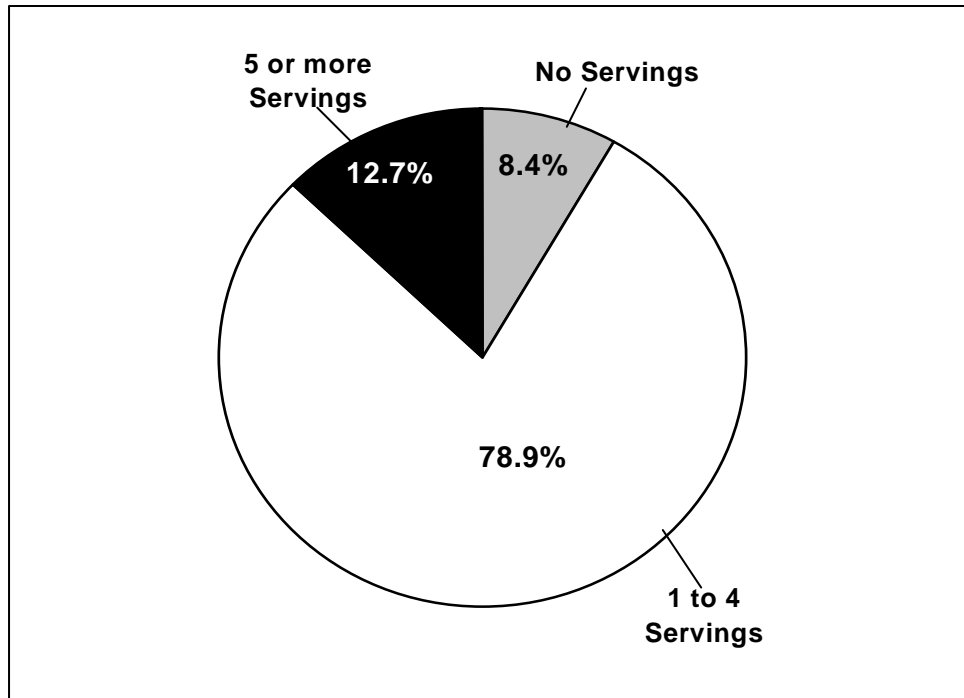
Dietary factors contribute substantially to preventable illness and premature death in the United States. The major causes of death associated with poor diet are coronary heart disease, coronary artery disease, some forms of cancer, stroke and non-insulin-dependent diabetes (1). The *Bridge to Health Survey 2000* included three items related to nutrition: eating fruits and vegetables, avoidance of certain foods due to tooth or gum pain and having an adequate food supply. Food avoidance due to tooth or gum pain can affect nutritional intake and wellbeing. An inadequate food supply is an issue particularly for low-income, elderly and/or isolated households.

#### Eating Fruits and Vegetables (Table 4.1) (Figures 4.1- 4.2)

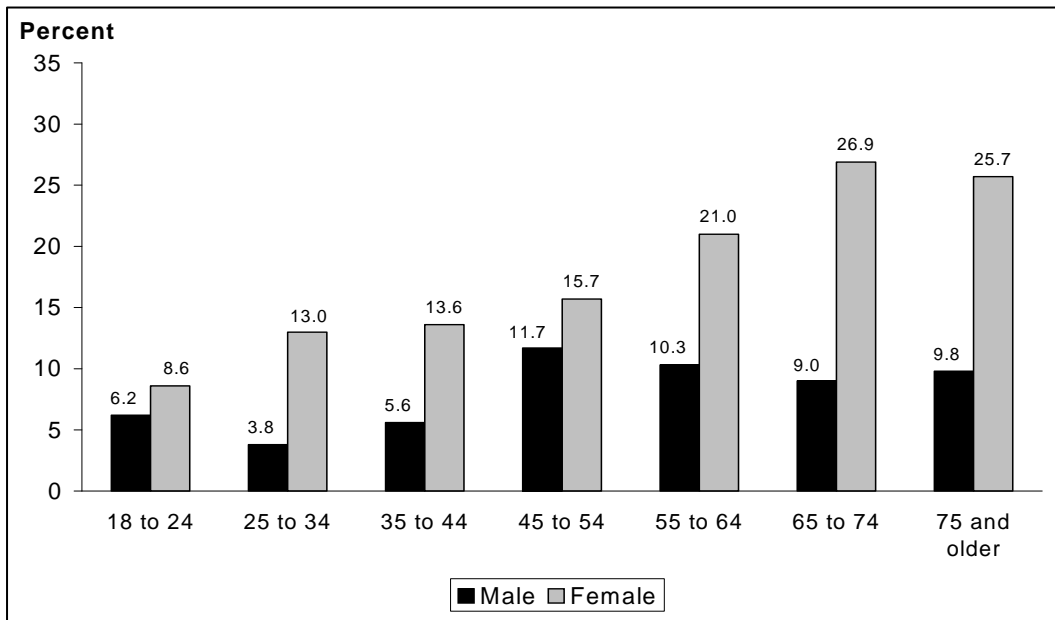
The 2000 Dietary Guidelines for Americans encourage individuals to increase their consumption of fruits, vegetables and other fiber-rich foods to prevent many diet-related health conditions. The guidelines suggest that all Americans eat 5 or more servings of fruits and vegetables daily for good health (2).

- Overall, one out of eight (12.7%) respondents reported that they ate 5 or more servings of fruits and vegetables the day prior to being surveyed. About four out of five (78.9%) respondents reported that they ate 1-4 servings of fruits and vegetables. Less than one out of ten (8.4%) respondents ate no fruits or vegetables the day prior to being surveyed (Figure 4.1)
- **Female respondents** were twice as likely to report that they ate 5 or more servings of fruits and vegetables than **males** (17.5% vs. 7.8%).
- The percentage of female respondents eating 5 or more servings of fruits and vegetables generally increased with age but this trend was less apparent for males across age groups (Figure 4.2).
- The percentage of respondents eating 5 or more servings of fruits and vegetables increased with education level. **College graduates** were twice as likely to report they ate 5 or more servings of fruits and vegetables than were **high school graduates** (18.6% vs. 9.2%).
- The percentage of respondents eating 5 or more servings of fruits and vegetables was similar for respondents with incomes **at or below 200% of poverty** (11.2%) and those with incomes **above 200% of poverty** (12.8%). However, respondents with incomes **at or below 200% of poverty** were more likely to report that they ate *no* fruits and vegetables on the day prior to being surveyed compared to those with **incomes above 200% of poverty** (11.7% vs. 6.6%).

**Figure 4.1: Fruit and Vegetable Consumption**



**Figure 4.2: Eating 5 or More Servings of Fruits and Vegetables By Age and Gender**



**TABLE 4.1**  
**EATING FRUITS & VEGETABLES**  
 BRIDGE TO HEALTH SURVEY 2000  
 (n=6055)

**Question:** Yesterday, how many servings of fruits and vegetables did you eat?

Demographic Characteristics		Servings of Fruits and Vegetables:		
		None	1 to 4 servings	5 or more servings
<b>Overall results</b>		<b>8.4%</b>	<b>78.9%</b>	<b>12.7%</b>
<b>Gender</b>				
	Male	10.0	82.2	7.8
	Female	6.9	75.6	17.5
<b>Males by Age</b>				
	18 to 24	8.6	85.2	6.2
	25 to 34	14.7	81.5	3.8
	35 to 44	11.3	83.1	5.6
	45 to 54	6.2	82.1	11.7
	55 to 64	9.3	80.5	10.3
	65 to 74	8.0	83.0	9.0
	75 and older	11.4	78.8	9.8
<b>Females by Age</b>				
	18 to 24	11.6	79.8	8.6
	25 to 34	7.4	79.6	13.0
	35 to 44	8.8	77.5	13.6
	45 to 54	7.9	76.4	15.7
	55 to 64	5.5	73.5	21.0
	65 to 74	2.5	70.6	26.9
	75 and older	4.1	70.2	25.7
<b>Education</b>				
	Less than H.S.	12.0	79.3	8.6
	H.S. Graduate	10.1	80.7	9.2
	Some College	7.6	79.3	13.1
	Voc./Assoc. Degree	7.2	76.2	16.6
	College Graduate	5.4	76.0	18.6
<b>Poverty status</b>				
	200% or less	11.7	77.1	11.2
	More than 200%	6.6	80.6	12.8
<b>Urban/Rural</b>				
	Duluth/Superior	9.2	78.3	12.5
	Rural NE Minnesota	7.8	79.9	12.3
	Rural NW Wisconsin	9.2	76.7	14.1
<b>Region</b>				
	NE Minnesota	8.1	79.3	12.6
	NW Wisconsin	9.3	77.6	13.1

## Avoidance of Certain Foods Due to Tooth or Gum Pain (Table 4.2)

Oral diseases and discomforts affect an individual's physical, social and psychological wellbeing. Studies of subjective indicators of oral health status have generally focused on older adults (age 50 and older). One survey of subjective oral health indicators among adults age 18 and over showed that younger adults (age 18 to 49) are just as likely as older adults to experience problems with eating, oral and facial pain, social problems and psychological distress related to oral disorders (3).

- Overall, 7.1% of all respondents reported that they avoid eating or have trouble eating or drinking certain foods because their teeth or gums hurt.
- Respondents with **less than a high school education** were more than three times as likely as **college graduates** to report avoiding eating because their teeth or gums hurt (12.9% vs. 4.1%).
- Respondents with incomes **at or below 200% of poverty** were more than twice as likely to report avoiding eating because their teeth or gums hurt compared to those with incomes **above 200% of poverty** (13.0% vs. 5.0%)

## Inadequate Food Supply (Table 4.3)

Based on findings of the Food Security Supplement of the Current Population Survey, about 31 million Americans or 10.1% of U.S. households were food insecure in 1999. Food insecurity is defined as "uncertain of having, or unable to acquire adequate food sufficient to meet basic needs at all times due to inadequate household resources for food" at some time in the previous year (4). Use of emergency food assistance, commonly known in this region as a community food shelf, is a proxy indicator used in many surveys to determine whether a household is food insecure or has an inadequate food supply.

- Overall, 3.4% of the respondents reported using a community food shelf in the past year, which is similar to the rate from the *Bridge to Health Survey 1995* (3.2% in 1995).
- As expected, respondents with incomes **at or below 200% of poverty** were six times more likely to report using a community food shelf in the past year compared to those with incomes **above 200% of poverty** (8.2% vs. 1.2%).

**TABLE 4.2**  
**AVOID EATING BECAUSE TEETH OR GUMS HURT**  
 BRIDGE TO HEALTH SURVEY 2000  
 (n=6155)

**Question:** Do you avoid eating or have trouble eating or drinking certain foods because your teeth or gums hurt?

Demographic Characteristics	Yes
<b>Overall results</b>	<b>7.1%</b>
<b>Gender</b>	
Male	6.4
Female	7.8
<b>Males by Age</b>	
18 to 24	9.5
25 to 34	4.5
35 to 44	7.7
45 to 54	6.6
55 to 64	3.7
65 to 74	5.5
75 and older	7.3
<b>Females by Age</b>	
18 to 24	5.4
25 to 34	9.9
35 to 44	10.4
45 to 54	7.7
55 to 64	7.2
65 to 74	6.0
75 and older	4.9
<b>Education</b>	
Less than H.S.	12.9
H.S. Graduate	6.4
Some College	8.2
Voc./Assoc. Degree	6.8
College Graduate	4.1
<b>Poverty status</b>	
200% or less	13.0
More than 200%	5.0
<b>Urban/Rural</b>	
Duluth/Superior	7.4
Rural NE Minnesota	6.3
Rural NW Wisconsin	8.9
<b>Region</b>	
NE Minnesota	6.6
NW Wisconsin	8.5

**TABLE 4.3**  
**USE OF COMMUNITY FOOD SHELF PROGRAM**  
 BRIDGE TO HEALTH SURVEY 2000  
 (n=6153)

**Question:** In the past year, have you used a community food shelf program?

<b>Demographic Characteristics</b>		Yes
<b>Overall results</b>		<b>3.4%</b>
<b>Gender</b>		
	Male	2.9
	Female	3.9
<b>Males by Age</b>		
	18 to 24	2.4
	25 to 34	3.6
	35 to 44	3.3
	45 to 54	2.2
	55 to 64	2.2
	65 to 74	3.7
	75 and older	2.7
<b>Females by Age</b>		
	18 to 24	6.1
	25 to 34	5.9
	35 to 44	4.4
	45 to 54	2.9
	55 to 64	3.3
	65 to 74	1.6
	75 and older	3.0
<b>Education</b>		
	Less than H.S.	6.5
	H.S. Graduate	4.8
	Some College	2.8
	Voc./Assoc. Degree	1.4
	College Graduate	1.2
<b>Poverty status</b>		
	200% or less	8.2
	More than 200%	1.2
<b>Urban/Rural</b>		
	Duluth/Superior	3.1
	Rural NE Minnesota	3.4
	Rural NW Wisconsin	3.6
<b>Region</b>		
	NE Minnesota	3.4
	NW Wisconsin	3.4

## B. WEIGHT STATUS (Table 4.4) (Figure 4.3)

Being overweight is a recognized risk factor for many chronic conditions including hypertension, cardiovascular disease, some forms of cancer, non-insulin-dependent diabetes, osteoarthritis and gall bladder disease (1).

Self-reported height and weight data were used to calculate **Body Mass Index** (BMI). BMI is defined as weight (kilograms) divided by height (meters) squared. According to NHANES II definitions, overweight for men is a BMI of greater than or equal to 27.8 kg/m<sup>2</sup> (5). For women, overweight is defined as a BMI greater than or equal to 27.3 kg/m<sup>2</sup> (5).

The 1999 Behavioral Risk Factor Surveillance System used these same definitions and reported that one-third (33.7% national median) of U.S. adults were overweight (6). The prevalence of overweight among Minnesota adults was 29.2% and the prevalence of overweight among Wisconsin adults was 33.8% (6).

- Overall, 35.3% of the respondents in the Bridge to Health region were currently overweight, according to their BMI.
- **Male** were more likely to be overweight than **females** (38.4% vs. 32.2%).
- For **males**, the prevalence of overweight increased steadily with age from age 18 to 64, then decreased for age 65 and older. Males age 55 to 64 were the most likely to be overweight (57.7%). For **females**, there was a more gradual increase in the prevalence of overweight from age 18 to 74, with the prevalence decreasing for those aged 75 and older (Figure 4.3).
- The figures above were based on the NHANES II definitions of overweight. Healthy People 2010 used a different definition called the New Body Mass Index that includes two categories of overweight. People with a BMI of 25 and over but less than 30 are considered *overweight*, and people with a BMI of 30 and over are considered *obese*. According to the New Body Mass Index, over one-third (36.8%, national median) of Americans were overweight and an additional one out of five (19.8%, national median) were obese (7). In Minnesota, the prevalence of overweight was 40.4% and the prevalence of obesity was an additional 15.5% (7). In Wisconsin, the prevalence of overweight was 35.7% and the prevalence of obesity was an additional 19.9% (7). Based on the New Body Mass Index used in the Healthy People 2010 goals, 38.3% of the respondents in the Bridge to Health region were overweight, and an additional 20.3% were obese. The Healthy People 2010 goal is to reduce to 15% the proportion of adults who are obese (1).

**TABLE 4.4**  
**WEIGHT STATUS**  
 BRIDGE TO HEALTH SURVEY 2000  
 (n=5907)<sup>2</sup>

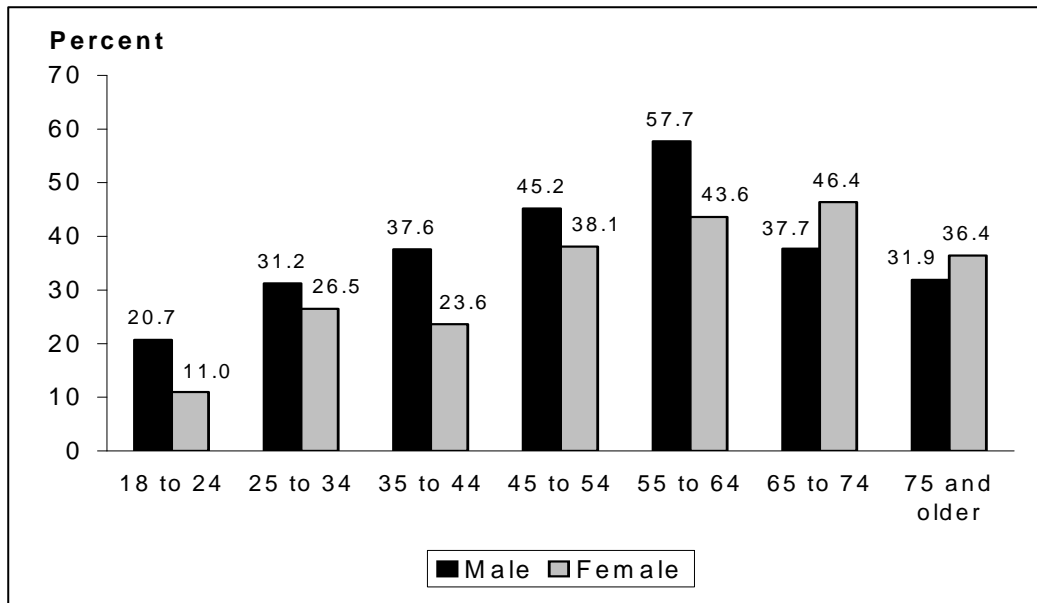
**Questions:** How tall are you without shoes?  
 Approximately how much do you weigh?

<b>Demographic Characteristics</b>		<b>Overweight</b>
<b>Overall results</b>		<b>35.3%</b>
<b>Gender</b>		
	Male	38.4
	Female	32.2
<b>Males by Age</b>		
	18 to 24	20.7
	25 to 34	31.2
	35 to 44	37.6
	45 to 54	45.2
	55 to 64	57.7
	65 to 74	37.7
	75 and older	31.9
<b>Females by Age</b>		
	18 to 24	11.0
	25 to 34	26.5
	35 to 44	23.6
	45 to 54	38.1
	55 to 64	43.6
	65 to 74	46.4
	75 and older	36.4
<b>Education</b>		
	Less than H.S.	35.1
	H.S. Graduate	38.0
	Some College	34.5
	Voc./Assoc. Degree	34.7
	College Graduate	32.2
<b>Poverty status</b>		
	200% or less	37.0
	More than 200%	36.5
<b>Urban/Rural</b>		
	Duluth/Superior	31.1
	Rural NE Minnesota	35.4
	Rural NW Wisconsin	39.9
<b>Region</b>		
	NE Minnesota	34.2
	NW Wisconsin	38.7

<sup>2</sup> Number of respondents who reported current weight and height: Calculations for weight status are based on Body Mass Index (BMI).



**Figure 4.3: Prevalence of Overweight By Age and Gender**



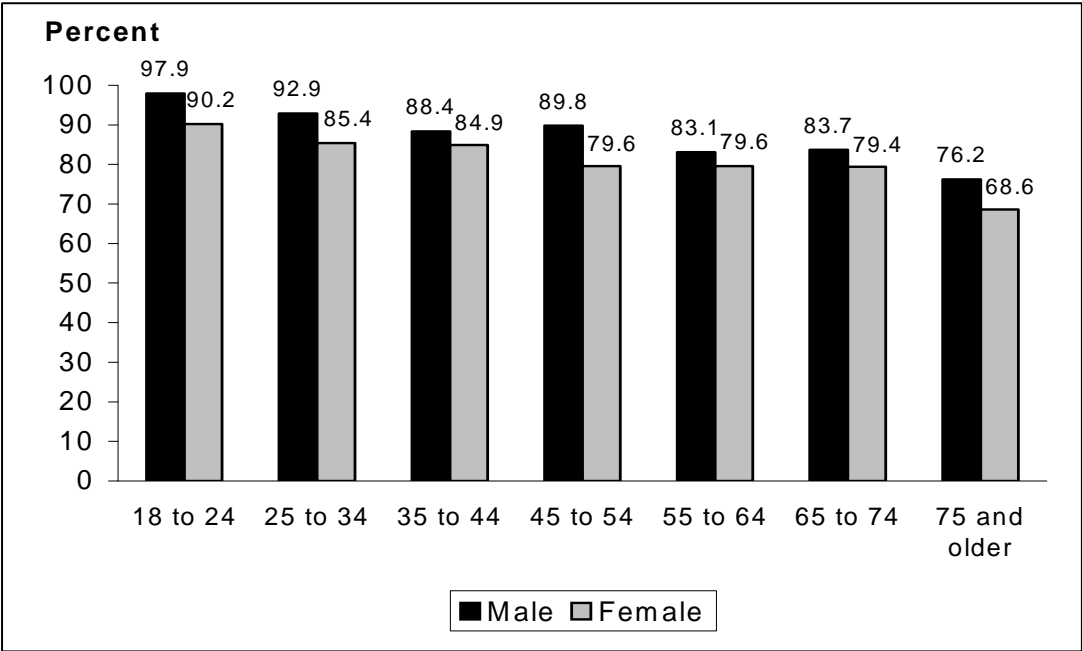
### **C. PHYSICAL ACTIVITY (Table 4.5) (Figure 4.4)**

Physical activity is widely recognized as an important preventive measure against chronic disease, death and disability. A regular exercise routine helps maintain normal range of motion and joint mobility prevents postural problems and decreases muscle soreness. Maintaining muscle mass through regular activity helps to keep older people feeling well and reduces their risk of falls and fractures (8).

- Overall, 84.6% of the respondents reported moderate or vigorous physical activity 3 or more days a week.
- **Males** were more likely than **females** to report moderate or vigorous physical activity three or more days a week (88.1% vs. 81.2%).
- The percentage of respondents who reported moderate or vigorous physical activity 3 or more days a week decreased gradually as age increased for both males and females (Figure 4.4).
- Overall, 17.7% of those respondents who did not engage in moderate and/or vigorous activity 3 or more times per week reported that *not having enough time* prevented them from exercising.
- Of those who did not engage in moderate and/or vigorous physical activity 3 or more days a week, **females** were more likely than **males** to report that *not having enough time* prevented them from exercising (20.0% vs. 14.9%).

- Overall, 12.6% of those respondents who did not engage in moderate and/or vigorous activity 3 or more times per week reported that *being disabled or sick* prevented them from exercising.
- Of those who did not engage in moderate and/or vigorous physical activity 3 or more days a week, respondents in **rural Northwestern Wisconsin** were more likely to report *not having enough time* and *being disabled or sick* than respondents in **rural Northeastern Minnesota** and **Duluth/Superior**.

**Figure 4.4: Moderate or Vigorous Physical Activity 3 or More Days a Week By Age and Gender**



**TABLE 4.5**  
**PHYSICAL ACTIVITY**  
BRIDGE TO HEALTH SURVEY 2000

**Questions:** In an average week how many days do you get at least 30 minutes of moderate physical activity like walking, cycling and vacuuming?  
 In an average week how many days do you participate in vigorous physical activity that lasts at least 20 minutes like stair-master, lap swimming, skiing machine or jogging.  
 (For those who do not engage in moderate and/or vigorous exercise totaling 3 or more times per week) What prevents you from exercising 3 or more times per week?

Demographic Characteristics	Moderate or Vigorous Activity 3 or More Days a Week (n=6056)	Barriers to Physical Activity:	
		Not Enough Time (n=1965)	Disabled or Sick (n=1965)
<b>Overall results</b>	<b>84.6%</b>	<b>17.7%</b>	<b>12.6%</b>
<b>Gender</b>			
Male	88.1	14.9	11.5
Female	81.2	20.0	13.5
<b>Males by Age</b>			
18 to 24	97.9	11.5	0.0
25 to 34	92.9	9.0	3.6
35 to 44	88.4	21.3	2.0
45 to 54	89.8	19.1	9.2
55 to 64	83.1	27.5	17.4
65 to 74	83.7	7.2	19.8
75 and older	76.2	0.0	34.3
<b>Females by Age</b>			
18 to 24	90.2	20.0	0.0
25 to 34	85.4	42.6	3.9
35 to 44	84.9	26.4	4.2
45 to 54	79.6	31.7	7.2
55 to 64	79.6	10.0	16.1
65 to 74	79.4	6.3	23.8
75 and older	68.6	5.6	30.8
<b>Education</b>			
Less than H.S.	79.0	5.0	33.5
H.S. Graduate	85.3	14.0	15.6
Some College	86.4	18.7	8.7
Voc./Assoc. Degree	83.8	16.1	12.8
College Graduate	83.5	28.1	3.9
<b>Poverty status</b>			
200% or less	82.7	13.4	23.0
More than 200%	86.1	21.5	6.9
<b>Urban/Rural</b>			
Duluth/Superior	83.3	13.3	5.9
Rural NE	85.1	20.3	17.0
Rural NW	84.6	25.1	22.6
<b>Region</b>			
NE Minnesota	85.0	16.0	10.3
NW Wisconsin	83.4	27.0	25.2

#### D. FLU VACCINATION (Table 4.6)

The Centers for Disease Control's Advisory Committee on Immunization Practices recommends flu shots for individuals at increased risk for complications from the flu, including all adults age 65 and older with chronic health problems like heart disease, diabetes and lung disease (9). The Behavioral Risk Factor Surveillance System reports that the prevalence of adults receiving flu vaccinations was 31.3% for the national median, 30.3% for Wisconsin and 28.9% for Minnesota in 1999 (6).

- Overall, 40.5% of all respondents reported they had a flu shot in the last year.
- **Females** were more likely than **males** to report they had a flu shot in the last year (43.3% vs. 37.6%).
- As expected, the percentage of respondents receiving flu shots generally increased with age for both males and females (males age 35 to 44 were the exception). More than three-quarters of the **respondents age 65 and older** reported having had a flu shot in the last year.

**TABLE 4.6**  
**FLU VACCINE**  
 BRIDGE TO HEALTH SURVEY 2000  
 (n=6153)

**Question:** In the last year, have you had a flu shot?

		Yes
<b>Overall results</b>		<b>40.5%</b>
<b>Gender</b>		
	Male	37.6
	Female	43.3
<b>Males by Age</b>		
	18 to 24	21.5
	25 to 34	24.9
	35 to 44	19.1
	45 to 54	31.7
	55 to 64	45.8
	65 to 74	73.5
	75 and older	84.3
<b>Females by Age</b>		
	18 to 24	17.0
	25 to 34	18.5
	35 to 44	28.1
	45 to 54	41.4
	55 to 64	48.9
	65 to 74	76.4
	75 and older	81.0
<b>Education</b>		
	Less than H.S.	51.5
	H.S. Graduate	41.9
	Some College	34.0
	Voc./Assoc. Degree	40.5
	College Graduate	42.1
<b>Poverty status</b>		
	200% or less	39.5
	More than 200%	37.9
<b>Urban/Rural</b>		
	Duluth/Superior	44.2
	Rural NE Minnesota	40.4
	Rural NW Wisconsin	36.7
<b>Region</b>		
	NE Minnesota	41.3
	NW Wisconsin	38.2

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# **Chapter 5**

## **PREVENTIVE SCREENINGS**

- A. Cancer Screening**
- B. Cardiovascular Risk Screenings**





# CHAPTER 5

## PREVENTIVE SCREENINGS

The top two leading causes of death nationally and in this region are cardiovascular disease and cancer (1,2,3). Risk factor reduction and early detection are key strategies in the prevention of premature deaths from these health problems. The *Bridge to Health Survey 2000* asked respondents to report their recent health screenings to detect signs and symptoms related to cancer and cardiovascular disease. Screening tests are used to check for a disease or condition in people who have not previously had the disease or condition and who do not have symptoms to suggest that condition or disease. Good screening tests can correctly detect a disease or condition early and improve the chance of successful treatment and health. For some screening tests, there is controversy about the extent that they are useful and/or cost beneficial.

The *Bridge to Health Survey 2000* provided information about respondents' most recent health screenings. When appropriate, findings are compared to the goals for cancer and heart disease prevention set forth in Healthy People 2010 (4,5). Screening guidelines by other health organizations are also highlighted to demonstrate the differences among these recommendations.

### A. CANCER SCREENING (Tables 5.1-5.5) (Figures 5.1-5.4)

#### Breast Cancer: Mammogram, Breast Self-Exam (Tables 5.1 - 5.2) (Figures 5.1 - 5.2)

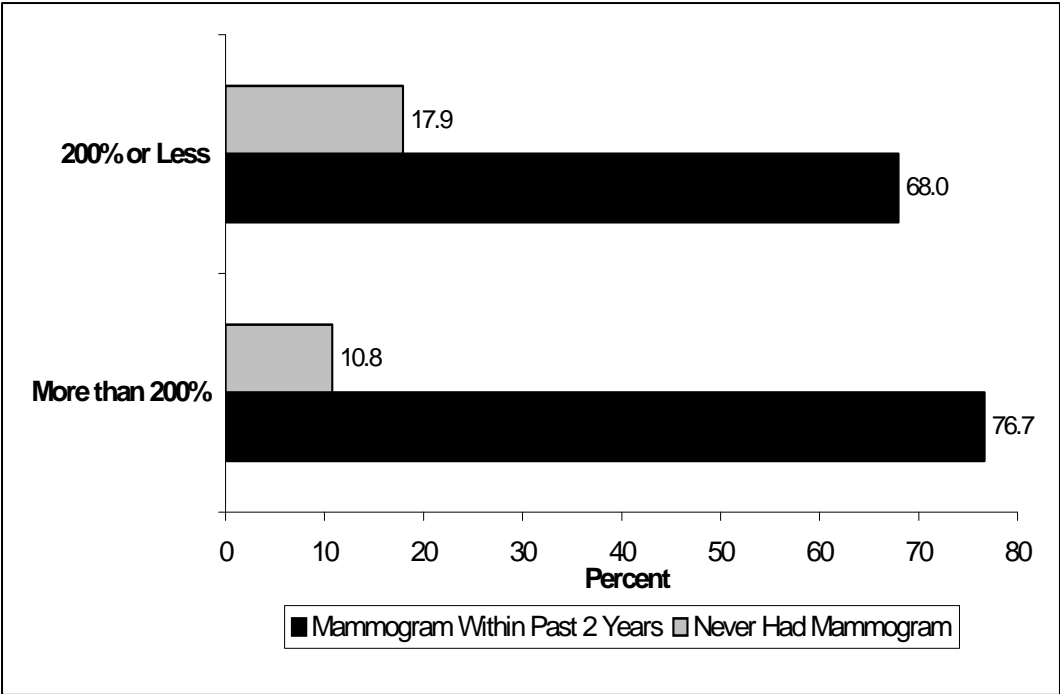
##### Mammogram Screening – Females age 40 and older (Table 5.1) (Figure 5.1)

There are various recommendations for how often women should have mammogram screenings. For women 40 years of age and older, the American Cancer Society recommends yearly mammogram screenings (6) while the National Cancer Institute recommends screenings every one to two years (7). The Healthy People 2010 goal is for 70% of women age 40 and older to have received a mammogram screening within the preceding two years (4).

- Overall, 75.1% of female respondents age 40 and older reported having had a mammogram screening within the past two years.
- One out of eight (12.5%) females age 40 and older reported *never* having a mammogram screening.
- The *Bridge to Health Survey 1995* considered “appropriate” mammogram screening as every two years for females age 40 to 49 and yearly for those age 50 and older. Using that standard, 54.5% of females age 40 and older had appropriate screening in 1995 compared to 64.1% in the present survey.
- Of all female respondents age 40 and older, females age 40 to 49 were least likely to have had a mammogram screening within the past two years (65.1%).

- Female respondents age 40 and older who had **less than a high school education** (70.8%) were less likely to have had a mammogram within the past two years than those who were **high school graduates** (74.1%) and **college graduates** (81.8%).
- Of all females age 40 and older, respondents with incomes **at or below 200% of poverty** were more likely to report that they had *never* had a mammogram screening compared to those with incomes **above 200% of poverty** (17.9% vs. 10.8%). Conversely, a smaller percentage of female respondents with incomes **at or below 200% of poverty** reported that they had a mammogram screening within the past two years compared to those with incomes **above 200% of poverty** (68.0% vs. 76.7%) (Figure 5.1).
- Female respondents age 40 and older living in **Duluth/Superior** (78.4%) were more likely to report that they had a mammogram screening within the past two years than those living in **rural Northwestern Wisconsin** (72.7%) and **Northeastern Minnesota** (74.6%).

**Figure 5.1: Mammogram Screenings By Poverty Status (Females Age 40 and Older Only)**



**TABLE 5.1**  
**PREVENTIVE SCREENING: MAMMOGRAM**  
**(FEMALES AGE 40 AND OLDER)**  
 BRIDGE TO HEALTH SURVEY 2000  
**(n=2077)**

**Question:** Have you had a mammogram within the past year, within the past 2 years, within the past 5 years, 5 or more years ago, never or not applicable?

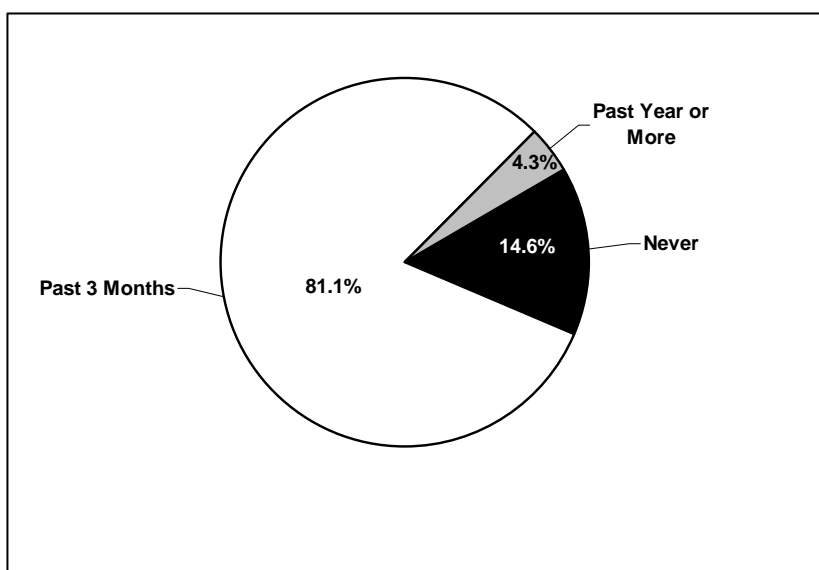
<b>Demographic Characteristics</b>	Never Had Mammogram	Mammogram Within The Past 2 Years
<b>Overall results</b>	<b>12.5%</b>	<b>75.1%</b>
<b>Females by Age</b>		
40 to 49	22.1	65.1
50 to 59	6.1	82.3
60 to 69	6.8	85.8
70 and older	10.6	73.4
<b>Education</b>		
Less than H.S.	16.9	70.8
H.S. Graduate	12.6	74.1
Some College	13.5	72.2
Voc./Assoc. Degree	12.0	79.5
College Graduate	8.2	81.8
<b>Poverty status</b>		
200% or less	17.9	68.0
More than 200%	10.8	76.7
<b>Urban/Rural</b>		
Duluth/Superior	10.8	78.4
Rural NE Minnesota	12.1	74.6
Rural NW Wisconsin	15.3	72.7
<b>Region</b>		
NE Minnesota	11.8	75.6
NW Wisconsin	14.7	73.3

Breast Self-Exam - Females age 18 and older (Table 5.2) (Figure 5.2)

The National Cancer Institute has no recommendations regarding breast self-examination. On the other hand, the American Cancer Society suggests that women 20 years of age and older perform monthly breast self-exams (6). Both organizations recommend clinical breast examinations by a health-care provider as part of routine health care (6,7). Healthy People 2010 offers no goal regarding breast self-examination.

- More than three-fourths (81.1%) of female respondents (age 18 and older) reported they performed a breast self-exam within the past three months (Figure 5.2). In the *Bridge to Health Survey 1995*, under half (48.3%) of females age 18 and older reported that they performed a breast self-exam within the past three months. Changing the methodology from a written survey to a telephone survey could have influenced this result.
- Of all females age 18 and older, 14.6% reported that they had *never* performed a breast self-exam (Figure 5.2).
- **Female respondents age 18 to 29** were least likely to report that they performed a breast self-exam within the past three months (66.5%) and most likely to report that they had *never* performed a breast self-exam (28.8%).
- There were no major differences in the percentage of female respondents who reported that they *never* performed a breast self-exam by poverty status or geographic area. However, female respondents with incomes **at or below 200% of poverty** were slightly less likely to report that they performed a breast self-exam within the past three months compared to those with incomes **above 200% of poverty** (78.8% vs. 82.5%).

**Figure 5.2: Frequency of Breast Self-Exam<sup>1</sup>  
(Females Age 18 and Older)**



<sup>1</sup> The percentage of respondents who reported they performed a breast self-exam in the *past year or more* included 2.6% of all respondents who answered *within the past year*, 1.2% *within the past two years* and 0.5% *two or more years ago*.

**TABLE 5.2**  
**PREVENTIVE SCREENING: BREAST SELF EXAM**  
**(FEMALES AGE 18 AND OLDER)**  
 BRIDGE TO HEALTH SURVEY 2000  
**(n=3110)**

**Question:** Have you performed a breast self-exam within the past 3 months, within the past year, within the past 2 years, 2 or more years ago, never or not applicable?

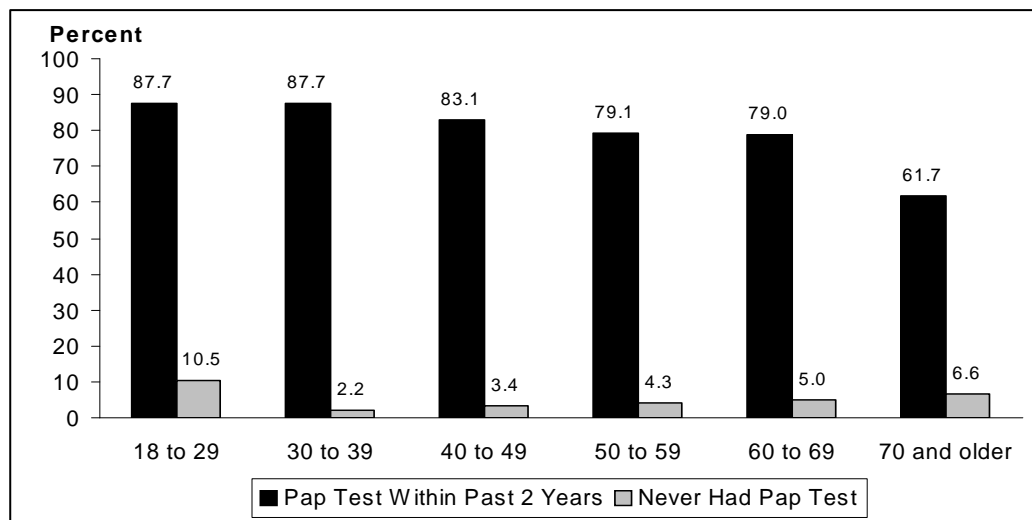
Demographic Characteristics	Never Performed Breast Self-Exam	Performed Breast Self Exam:			
		Within the Past 3 Months	Within the Past Year	Within the Past 2 Years	
<b>Overall results</b>	<b>14.6%</b>	<b>81.1%</b>	<b>83.7%</b>	<b>84.9%</b>	
<b>Females by Age</b>					
	18 to 29	28.8	66.5	70.7	70.8
	30 to 39	10.4	86.3	88.1	89.2
	40 to 49	8.0	87.9	90.7	91.6
	50 to 59	11.8	83.3	86.3	87.1
	60 to 69	13.4	83.8	85.7	86.0
	70 and older	17.0	77.4	79.7	82.5
<b>Education</b>					
	Less than H.S.	22.7	68.2	74.6	75.7
	H.S. Graduate	13.8	83.3	85.3	86.1
	Some College	16.8	78.6	80.8	83.0
	Voc./Assoc. Degree	8.4	87.5	90.6	90.9
	College Graduate	12.9	83.1	85.8	86.6
<b>Poverty status</b>					
	200% or less	15.6	78.8	81.9	83.6
	More than 200%	13.3	82.5	85.4	86.6
<b>Urban/Rural</b>					
	Duluth/Superior	13.8	81.0	84.1	85.6
	Rural NE Minnesota	15.4	80.5	83.1	84.2
	Rural NW Wisconsin	13.6	82.8	85.1	86.0
<b>Region</b>					
	NE Minnesota	14.9	80.6	83.4	84.6
	NW Wisconsin	13.7	82.6	84.9	85.9

## Cervical Cancer: Pap Test - Females Age 18 and Older (Table 5.3) (Figure 5.3)

The American Cancer Society recommends that women who have been sexually active or are at least 18 years old should have an annual Pap test and pelvic examination. After three or more consecutive normal annual examinations, the Pap test may be performed less frequently at the discretion of the physician (6). The National Cancer Institute and the American Academy of Obstetrics and Gynecology recommend that women age 18 and over and sexually active women should have a *regular* Pap test but these organizations do not specify how often the screening should be performed (7,8). The Healthy People 2010 goal is to increase to 97% the proportion of women age 18 and older who received a Pap test within the preceding three years (4). The *Bridge to Health Survey 2000* did not specify the three year period so the figure and table below reflect women who had a Pap test within a two year period prior to the survey.

- Overall, 80.0% of female respondents age 18 and older reported that they had a Pap test screening within the past two years. Only 5.2% of female respondents age 18 and older reported that they had *never* had a Pap test screening.
- About one in ten (10.5%) **females age 18 to 29** reported they had *never* had a Pap test screening compared to less than one in fifteen (6.6%) for **females age 70 and over** (Figure 5.3). However, **younger females (age 18 to 39)** were more likely to have had a Pap test within the past two years than **older females (age 40 and over)** (Figure 5.3).
- The percentage of females age 18 and older who reported they had a Pap test within the past two years increased as education level increased. For example, females (18 and older) who were **high school graduates** were less likely to have had a Pap test within the past two years compared to those who were **college graduates** (77.7% vs. 88.3%).
- Females (age 18 and older) with incomes **at or below 200% of poverty** were less likely to report that they had a Pap test screening within the past two years compared to those with incomes **above 200% of poverty** (75.3% vs. 84.6%).
- Female respondents living in **Duluth/Superior** (82.0%) were more likely to report that they had a Pap test screening within the past two years than those in **rural Northeastern Minnesota** (80.7%) and **Northwestern Wisconsin** (75.6%).

**Figure 5.3: Pap Test Screening By Age Groups (Females Age 18 and Older)**



**TABLE 5.3**  
**PREVENTIVE SCREENING: PAP TEST**  
**(FEMALES AGE 18 AND OLDER)**  
 BRIDGE TO HEALTH SURVEY 2000  
 (n=3013)

Question: Have you had a Pap Test within the past year, within the past 2 years, within the past 5 years, 5 or more years ago, never or not applicable?

Demographic Characteristics	Never Had Pap Test	Pap Test Within Past 2 Years
<b>Overall results</b>	<b>5.2%</b>	<b>80.0%</b>
<b>Females by Age</b>		
18 to 29	10.5	87.7
30 to 39	2.2	87.7
40 to 49	3.4	83.1
50 to 59	4.3	79.1
60 to 69	5.0	79.0
70 and older	6.6	61.7
<b>Education</b>		
Less than H.S.	8.8	64.3
H.S. Graduate	5.5	77.7
Some College	5.8	81.1
Voc./Assoc. Degree	5.7	84.0
College Graduate	1.6	88.3
<b>Poverty status</b>		
200% or less	6.2	75.3
More than 200%	3.3	84.6
<b>Urban/Rural</b>		
Duluth/Superior	4.2	82.0
Rural NE Minnesota	4.8	80.7
Rural NW Wisconsin	7.7	75.6
<b>Region</b>		
NE Minnesota	4.5	81.3
NW Wisconsin	7.2	76.4

### Prostate Cancer: Prostate Exam – Males Age 50 and Older (Table 5.4)

As with many screening tests, there are various recommendations about prostate screening. The American Urological Association recommends yearly screening of all men age 50 and older (9). This organization additionally recommends that men age 40 or older with a family history of prostate cancer have yearly screenings. The American College of Physicians does not recommend *routine* screening of all men for prostate cancer (10). The American Cancer Society recommends that, beginning at age 50, an annual prostate examination should be *offered* to men who have a life expectancy of at least ten years, and to younger men who are at high risk for prostate cancer (6). Healthy People 2010 does not include a goal for prostate screening.

- Over half (56.1%) of all male respondents age 50 and older reported having a prostate exam in the past year.
- Of all males age 50 and older, 17.2% reported they had *never* had a prostate exam.
- **Males age 60 and over** (age 60 to 69: 63.9%; age 70 and older: 61.5%) were more likely to report that they had a prostate exam in the past year than **males age 50 to 59** (44.4%).

### Colon Cancer: Colon Screening – Males and Females Age 50 and Older (Table 5.5)

Screening exams to detect colon cancer include fecal occult blood tests, digital rectal examinations, sigmoidoscopy and colonoscopy. The National Cancer Institute does not have specific guidelines for when these tests should be done but suggests that patients discuss these tests with their physician (7). The American Cancer Society suggests that beginning at age 50, both men and women should follow one of three screening options: 1) yearly fecal occult blood test plus flexible sigmoidoscopy with digital rectal exam every 5 years; 2) colonoscopy with digital rectal exam every ten years; or 3) double contrast barium enema every five to ten years (6).

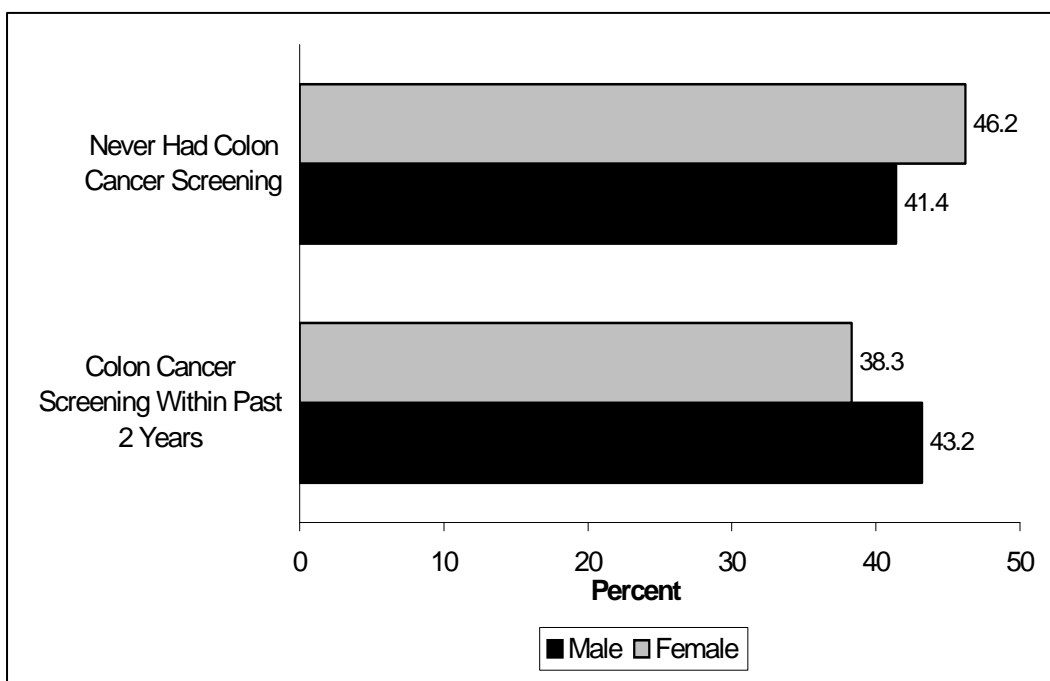
Healthy People 2010 has two goals related to colon cancer screening: 1) to increase the proportion of adults age 50 years and older who had a fecal occult blood test within the preceding two years to 50%; and 2) to increase the proportion of adults age 50 years and older who have *ever* received a sigmoidoscopy to 50% (4). *Bridge to Health Survey 2000* asked respondents if they had *any* type of screening for colon cancer (examples provided included proctoscopic exam, sigmoidoscopy, fecal occult blood tests and barium enema).

- About one-quarter (27.6%) of all respondents age 50 and older reported that they had colon cancer screening in the past year. Further, 40.5% of all respondents in this age group reported they had been screened for colon cancer within the past two years.
- Overall, 44.1% of all male and female respondents age 50 and older reported that they had *never* been screened for colon cancer.
- **Females age 50 and older** were slightly more likely than **males age 50 and older** to report that they had *never* been screened for colon cancer (46.2% vs. 41.4%) (Figure 5.4). **Females age 50 and older** were also less likely than **males** of the same age to report that they had been screened for colon cancer within all time periods surveyed. For example, 38.3% of **females age 50 and older** were screened for colon cancer within the past two years compared to 43.2% of **males of the same age** (Figure 5.4).



- Respondents with **less than a high school education** (53.1%) were more likely to report that they had *never* been screened for colon cancer compared to **high school graduates** (42.8%) and **college graduates** (38.3%).
- Respondents with incomes **at or below 200% of poverty** were less likely to report that they had been screened for colon cancer within the past two years compared to those with incomes **above 200% of poverty** (37.4% vs. 45.1%).
- Respondents living in **rural Northwestern Wisconsin** (30.4%) were more likely to report that they had been screened for colon cancer within the past year than those living in **Duluth/Superior** (27.1%) and **rural Northeastern Minnesota** (26.8%). However, there was no major difference in the percentage of respondents living in these areas who had been screened for colon cancer within the past two years (41.4%, 41.9% and 39.7%, respectively).

**Figure 5.4: Colon Cancer Screening By Gender  
(Males and Females Age 50 and Older Only)**



**TABLE 5.4**  
**PREVENTIVE SCREENING: PROSTATE EXAM**  
**(MALES AGE 50 AND OLDER)**  
 BRIDGE TO HEALTH SURVEY 2000  
 (n=1186)

**Question:** Have you had a prostate exam within the past year, within the past 2 years, within the past 5 years, five or more years ago or never?

Demographic Characteristics	Never had Prostate Exam	Prostate Exam In Past Year
<b>Overall results</b>	<b>17.2%</b>	<b>56.1%</b>
<b>Men by Age</b>		
50 to 59	19.9	44.4
60 to 69	13.2	63.9
70 and older	17.8	61.5
<b>Education</b>		
Less than H.S.	21.5	47.5
H.S. Graduate	23.8	56.3
Some College	15.5	57.4
Voc./Assoc. Degree	9.5	58.9
College Graduate	9.0	59.4
<b>Poverty status</b>		
200% or less	20.2	57.4
More than 200%	14.0	57.4
<b>Urban/Rural</b>		
Duluth/Superior	13.9	56.7
Rural NE Minnesota	17.6	57.3
Rural NW Wisconsin	18.8	52.7
<b>Region</b>		
NE Minnesota	17.2	56.6
NW Wisconsin	17.0	54.8

**TABLE 5.5**  
**PREVENTIVE SCREENING: COLON CANCER**  
**(MALES AND FEMALES AGE 50 AND OLDER)**  
 BRIDGE TO HEALTH SURVEY 2000  
**(n=2557)**

**Question:** Have you had any screening for colon cancer within the past year, within the past 2 years, within the past 5 years, 5 or more years ago or never?

Demographic Characteristics	Never had Colon Cancer Screening	Had Colon Cancer Screening:		
		Within Past Year	Within Past 2 Years	Within Past 5 Years
<b>Overall results</b>	<b>44.1%</b>	<b>27.6%</b>	<b>40.5%</b>	<b>51.3%</b>
<b>Gender</b>				
Males	41.4	30.7	43.2	53.7
Females	46.2	25.1	38.3	49.3
<b>Males by Age</b>				
50 to 59	48.8	22.5	37.3	47.8
60 to 69	34.4	37.7	49.5	58.8
70 and older	40.4	32.5	43.4	54.8
<b>Females by Age</b>				
50 to 59	53.9	24.5	38.4	43.3
60 to 69	44.5	26.0	38.3	51.7
70 and older	41.1	25.1	38.2	52.5
<b>Education</b>				
Less than H.S.	53.1	24.1	34.6	41.6
H.S. Graduate	42.8	29.0	41.3	53.7
Some College	44.4	24.6	39.3	49.4
Voc./Assoc. Degree	44.9	29.0	43.0	48.1
College Graduate	38.3	31.1	43.7	58.1
<b>Poverty status</b>				
200% or less	44.6	23.6	37.4	49.4
More than 200%	42.1	31.2	45.1	54.9
<b>Urban/Rural</b>				
Duluth/Superior	45.3	27.1	41.9	49.8
Rural NE Minnesota	43.3	26.8	39.7	52.4
Rural NW Wisconsin	44.8	30.4	41.4	49.9
<b>Region</b>				
NE Minnesota	43.7	26.6	40.1	51.7
NW Wisconsin	45.1	30.3	41.7	50.1

## B. CARDIOVASCULAR RISK SCREENINGS (Table 5.6) (Figure 5.5)

### Blood Pressure – Males and Females Age 18 and Over (Table 5.6)

Hypertension, an important risk factor for heart disease and stroke, can be modified through lifestyle changes and medication (5). While some organizations have guidelines recommending measurement of blood pressure at each encounter with a health care practitioner (11), others such as the U. S. Preventive Services Task Force (12) and the American Heart Association (13) recommend screening people without preexisting hypertension at least once every two years. A Healthy People 2010 goal is to increase to 95% the proportion of adults age 18 and over who have had their blood pressure measured within the preceding two years and can state whether their blood pressure was normal or high (5).

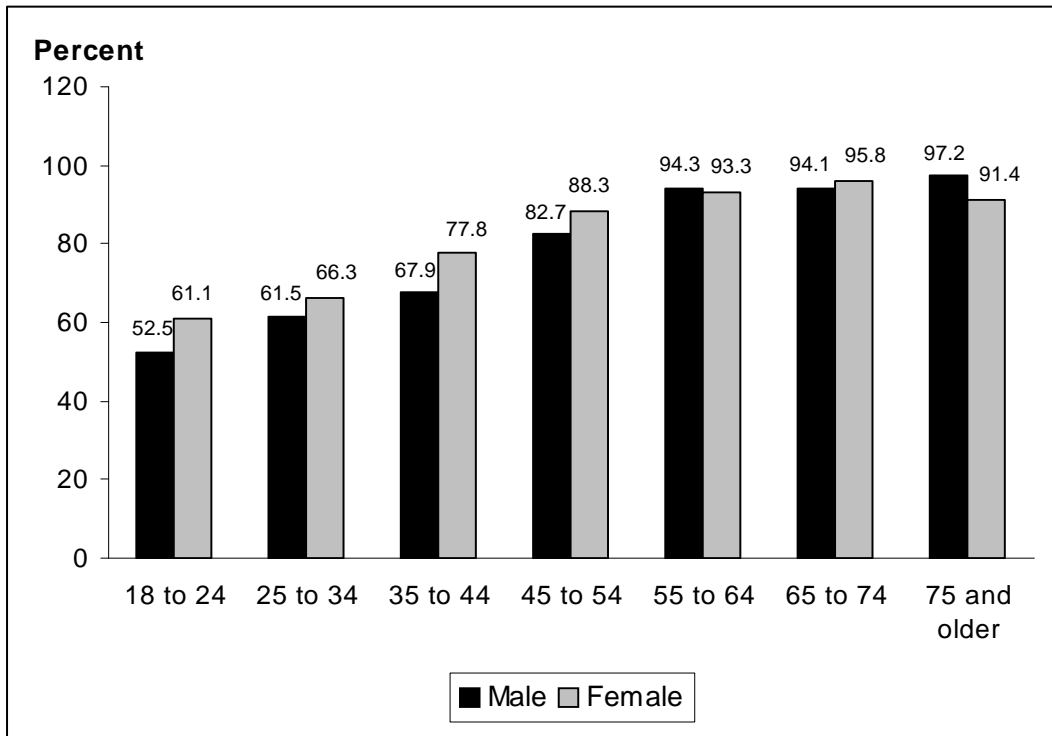
- Overall, 95.6% of all respondents reported that they had their blood pressure checked in the past two years. Less than 1% (0.8%) of all respondents reported they had *never* had their blood pressure checked.
- **Males age 18 to 24** (92.7%) and **age 35 to 44** (92.3%) were least likely of all groups to report they had their blood pressure checked in the past two years.
- There were no major differences in the percentage of respondents who reported that they had their blood pressure checked in the past two years by gender, education level, poverty status and geographic area.

### Blood Cholesterol – Males and Females Age 18 and Over (Table 5.6) (Figure 5.5)

Like blood pressure, blood cholesterol is a risk factor for heart disease and stroke. The American Heart Association suggests that all adults age 20 and older have their blood cholesterol checked at least every five years (13). The Healthy People 2010 goal is 80% of the adult population (age 18 and over) having had their blood cholesterol checked within the preceding five years (5).

- Overall, 70.6% of all respondents reported that they had their blood cholesterol checked within the past two years and 80.1% reported that they had their cholesterol checked within the past five years.
- About one out of six (15.8%) respondents reported that they had *never* had their blood cholesterol checked.
- The percentage of respondents who had their blood cholesterol checked within the past five years generally increased with age for both males and females (Figure 5.5).
- Respondents with incomes **at or below 200% of poverty** were less likely to report that they had their blood cholesterol checked within the past five years compared to those with incomes **above 200% of poverty** (73.7% vs. 81.3%).
- There were no major differences in the percentage of respondents who reported that they had their blood cholesterol checked within the past five years by education or geographic area.

**Figure 5.5: Blood Cholesterol Checked Within the Past 5 Years by Age and Gender**



**TABLE 5.6**  
**PREVENTIVE SCREENINGS: BLOOD PRESSURE & BLOOD CHOLESTEROL**  
**(MEN & WOMEN)**  
 BRIDGE TO HEALTH SURVEY 2000

Questions: Have you had your blood pressure checked within the past year, within the past 2 years, within the past 5 years, 5 or more years ago or never?  
 Have you had your blood cholesterol checked within the past year, within the past 2 years, within the past 5 years, 5 or more years ago or never?

		Blood Pressure:		Blood Cholesterol:		
		Never had Blood Pressure Checked (n=6135)	Checked Within Past 2 Years (n=6135)	Never Had Cholesterol Checked (n=5858)	Checked Within Past 2 Years (n=5858)	Checked Within Past 5 Years (n=5858)
<b>Overall results</b>		<b>0.8%</b>	<b>95.6%</b>	<b>15.8%</b>	<b>70.6%</b>	<b>80.1%</b>
<b>Gender</b>						
	Male	0.8	94.6	17.8	67.0	77.4
	Female	0.9	96.5	14.0	74.1	82.6
<b>Males by Age</b>						
	18 to 24	2.1	92.7	43.2	43.9	52.5
	25 to 34	1.6	93.7	32.5	51.8	61.5
	35 to 44	0.6	92.3	22.4	53.5	67.9
	45 to 54	1.3	94.6	13.6	67.4	82.7
	55 to 64	0.0	94.5	3.2	85.3	94.3
	65 to 74	0.0	98.8	4.4	91.2	94.1
	75 and older	0.0	99.2	2.0	92.5	97.2
<b>Females by Age</b>						
	18 to 24	2.4	95.5	38.0	55.5	61.1
	25 to 34	0.7	95.3	31.5	53.1	66.3
	35 to 44	0.6	96.5	16.4	66.1	77.8
	45 to 54	1.1	94.7	7.2	79.8	88.3
	55 to 64	0.5	98.1	3.2	85.5	93.3
	65 to 74	0.5	98.1	2.8	91.4	95.8
	75 and older	0.7	98.0	5.6	87.1	91.4
<b>Education</b>						
	Less than H.S.	0.9	96.0	14.7	76.2	80.7
	H.S. Graduate	1.1	95.2	17.4	70.1	78.0
	Some College	1.1	95.2	18.0	68.6	78.4
	Voc./Assoc. Degree	0.6	96.8	11.8	73.3	83.6
	College Graduate	0.3	96.0	12.6	70.4	83.9
<b>Poverty status</b>						
	200% or less	1.4	93.6	21.4	65.6	73.7
	More than 200%	0.7	95.8	14.3	71.5	81.3
<b>Urban/Rural</b>						
	Duluth/Superior	0.6	95.8	17.3	69.7	79.2
	Rural NE Minnesota	1.0	95.5	15.3	71.1	80.7
	Rural NW Wisconsin	0.7	95.5	15.7	70.4	79.4
<b>Region</b>						
	NE Minnesota	0.9	95.7	15.8	70.7	80.3
	NW Wisconsin	0.7	95.4	15.9	70.5	79.6

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# **Chapter 6**

## **INJURY PREVENTION AND VIOLENCE**

- A. Seat Belt Use**
- B. Safety Equipment in the Home**
- C. Victims of Violence or Crime Against Property**



# CHAPTER 6

## INJURY PREVENTION AND VIOLENCE

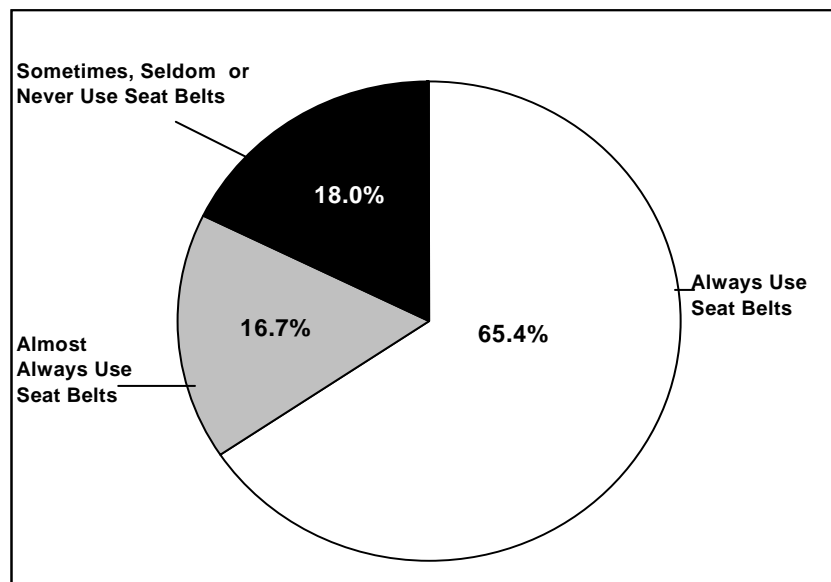
The *Bridge to Health Survey 2000* included questions that address injury prevention and violence. First, information is provided about personal seat belt use and the availability of home safety equipment. These are key safety measures in the prevention of unintentional injuries, which are the leading cause of death for individuals ages 1 to 34 (1). Next, results are shown for the prevalence of both violence and crimes against property. Violence and crime against property, as well as perceptions about their pervasiveness, threaten the health and wellbeing of citizens across the age span. Health-related organizations need data about injury prevention and violence in order to plan interventions and to garner support for community-wide prevention programs.

### A. SEAT BELT USE (Table 6.1) (Figures 6.1 - 6.3)

Seat belt use reduces the risk of injury and death in motor vehicle crashes. Even in vehicles equipped with air bags, the use of seat belts is necessary to reduce injury and death in motor vehicle crashes. State laws in Minnesota and Wisconsin require that all drivers and passengers use seat belts or child safety seats while driving and riding in a motor vehicle. The U.S. Department of Transportation's National Occupant Protection Use Survey found that 69% of the U.S. population used safety belts in 1998 (2). The Healthy People 2010 goal is to increase the proportion of the total population that uses safety belts to 92% (3).

- Overall, nearly two-thirds (65.4%) of the respondents reported they always use seat belts when driving or riding in a car. In contrast, 18.0% of the respondents reported they sometimes, seldom or never use seat belts (Figure 6.1). Sometimes, seldom or never using seat belts is referred to as seat belt non-use throughout this section.
- Concerning non-use of seat belts, more than one-fourth (26.3%) of **male** respondents reported sometimes, seldom or never using seat belts, almost three times the percentage of **females** (9.9%).

**Figure 6.1: Prevalence of Seat Belt Use**



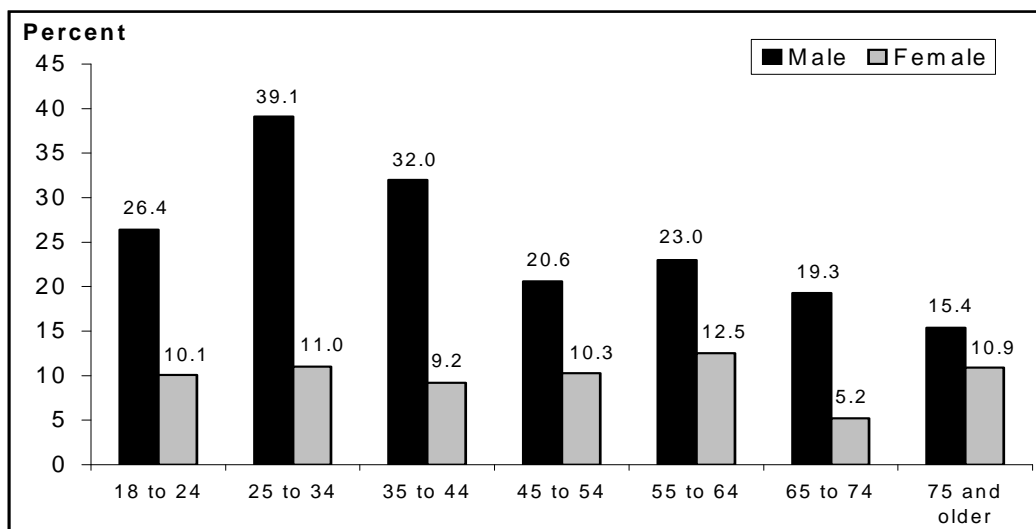
**TABLE 6.1**  
**SEAT BELT USE**  
Bridge to Health Survey 2000  
(N=6132)

**Question:** How often do you use seat belts when you drive or ride in a car?

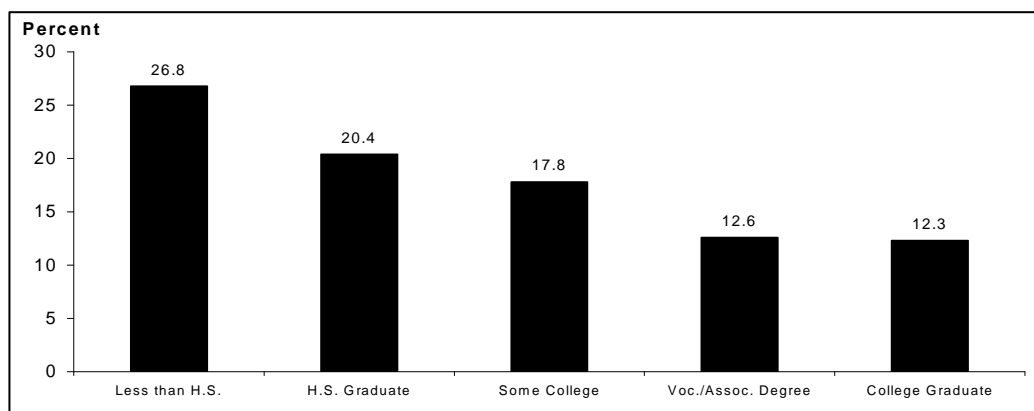
Demographic Characteristics		Always	Almost Always	Sometimes, Seldom or Never
<b>Overall results</b>		<b>65.4%</b>	<b>16.7%</b>	<b>18.0%</b>
<b>Gender</b>				
	Male	54.7	18.9	26.3
	Female	75.6	14.5	9.9
<b>Males by Age</b>				
	18 to 24	50.6	23.0	26.4
	25 to 34	45.1	15.8	39.1
	35 to 44	46.0	22.0	32.0
	45 to 54	62.4	17.1	20.6
	55 to 64	61.1	15.8	23.0
	65 to 74	61.8	19.0	19.3
	75 and older	64.9	19.7	15.4
<b>Females by Age</b>				
	18 to 24	60.1	29.7	10.1
	25 to 34	73.4	15.6	11.0
	35 to 44	77.3	13.5	9.2
	45 to 54	76.8	12.9	10.3
	55 to 64	75.1	12.5	12.5
	65 to 74	83.4	11.3	5.2
	75 and older	78.2	10.9	10.9
<b>Education</b>				
	Less than H.S.	55.3	17.9	26.8
	H.S. Graduate	63.6	16.0	20.4
	Some College	65.2	17.0	17.8
	Voc./Assoc. Degree	70.7	16.7	12.6
	College Graduate	70.8	16.9	12.3
<b>Poverty Status</b>				
	200% or less	59.4	18.7	21.9
	More than 200%	64.8	17.6	17.6
<b>Urban/Rural</b>				
	Duluth/Superior	68.2	15.7	16.1
	Rural NE Minnesota	65.3	16.6	18.1
	Rural NW Wisconsin	62.3	18.0	19.7
<b>Region</b>				
	NE Minnesota	66.1	16.5	17.5
	NW Wisconsin	63.4	17.2	19.4

- For male respondents, the data indicated a general trend of greater seat belt use with increasing age, while rates for females were similar across all age groups. **Males age 25 to 34 years** were most likely not to use seat belts (39.1%), compared to only 15.4% of **males age 75 and older** (Figure 6.2).
- The proportion of respondents who do not use seat belts decreased with higher levels of educational attainment. Over one-quarter (26.8%) of the respondents with **less than a high school education** did not use seat belts. This was more than twice the rate of seat belt non-use for adults with a **vocational or associate degree** (12.6%) or a **college degree** (12.3%) (Figure 6.3).
- No major differences in seat belt non-use were observed between **urban and rural areas** or between **Northeastern Minnesota and Northwestern Wisconsin**.

**Figure 6.2: Seat Belt Non-Use<sup>3</sup> By Age and Gender**



**Figure 6.3: Seat Belt Non-Use<sup>1</sup> By Education Level**



<sup>3</sup> Non-use is defined as responses of sometimes, seldom or never using seat belts.

## B. SAFETY EQUIPMENT IN THE HOME (Table 6.2)

About 80% of fire related deaths occur in the home and the home is a major site for carbon monoxide poisoning (4,5). Home safety equipment such as smoke alarms and carbon monoxide detectors play an important role in preventing injury and death in the home. For example, studies have found that homes with smoke alarms have about half the rate of fire related deaths as homes without smoke alarms (4,5,6).

### Working Smoke Detector in the Home

- Just over 95% (95.2%) of the respondents reported having a working smoke detector in their home. There is no way of knowing what percent of these smoke alarms were actually in working order. Past studies have found that about 50% of smoke alarms are no longer functional 12 months after they are installed (4).
- **Female respondents age 18 to 24** were the least likely to have a working smoke detector (89.7%), followed by **male and female respondents age 75 and older** (91.9% and 91.6%, respectively).

### Fire Extinguisher in Home

- Four out of five (79.9%) respondents reported that they had a fire extinguisher in their home.
- The youngest and the oldest female respondents were the least likely to report that they had a fire extinguisher (63.4% for **females age 18 to 24** and 73.0% for **females age 75 and older**).
- Respondents with incomes **at or below 200% of poverty** were less likely to report that they had a fire extinguisher in their home than were respondents with **incomes above 200% of poverty** (74.7% vs. 81.6%).
- **Urban** respondents (Duluth/Superior residents) were less likely to report that they had a fire extinguisher than residents of **rural Northeastern Minnesota** and **rural Northwestern Wisconsin** (74.1% compared to 82.3% and 80.0%, respectively).

### Carbon Monoxide Detector in Home

- Less than half (46.9%) of the respondents reported having a carbon monoxide detector in their home. **Female respondents age 75 and older** were the least likely of all age groups to have a carbon monoxide detector in their homes (35.6%).
- **Males and females between the ages of 25 to 34** were considerably more likely than **all other age groups** to have a carbon monoxide detector in their home (54.5% and 54.3%, respectively, compared to 46.9% for all respondents). This may be related to the higher likelihood of households with younger adults having small children.
- Respondents with incomes **at or below 200% of poverty** (40.4%) were less likely than respondents with incomes **above 200% of poverty** (49.0%) to have a carbon monoxide detector in their home.

**TABLE 6.2**  
**SAFETY EQUIPMENT IN HOME**  
 Bridge to Health Survey 2000

**Question:** Do you have any of the following in your home?

- Working smoke detector
- Fire extinguisher
- Carbon monoxide detector

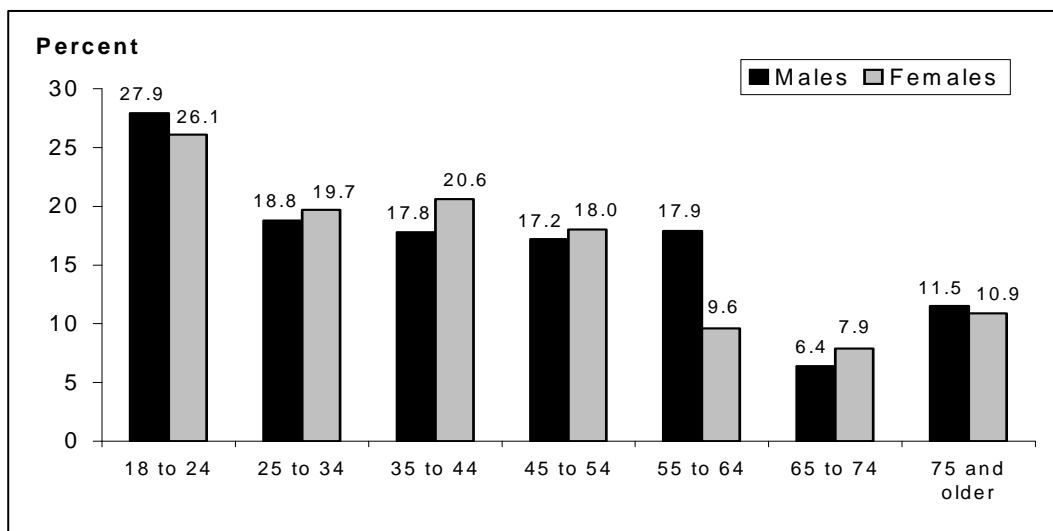
<b>Demographic Characteristics</b>		Working Smoke Detector (n=6140)	Fire Extinguisher (n=6131)	Carbon Monoxide Detector (n=6106)
<b>Overall results</b>		<b>95.2%</b>	<b>79.9%</b>	<b>46.9%</b>
<b>Gender</b>				
	Male	95.4	82.1	46.9
	Female	95.1	77.8	46.8
<b>Males by Age</b>				
	18 to 24	93.9	81.2	45.5
	25 to 34	97.7	77.0	54.5
	35 to 44	96.9	78.3	46.5
	45 to 54	94.7	86.6	42.8
	55 to 64	94.0	82.7	44.9
	65 to 74	96.6	86.0	49.2
	75 and older	91.9	87.0	45.6
<b>Females by Age</b>				
	18 to 24	89.7	63.4	41.6
	25 to 34	96.5	73.7	54.3
	35 to 44	97.4	84.7	46.9
	45 to 54	95.4	83.3	49.4
	55 to 64	94.7	80.2	48.1
	65 to 74	97.0	76.9	48.4
	75 and older	91.6	73.0	35.6
<b>Education</b>				
	Less than H.S.	92.7	74.5	44.8
	H.S. Graduate	94.9	80.7	47.4
	Some College	94.5	79.1	43.5
	Voc./Assoc. Degree	97.7	83.9	52.9
	College Graduate	96.8	80.3	48.3
<b>Poverty Status</b>				
	200% or less	92.3	74.7	40.4
	More than 200%	96.6	81.6	49.0
<b>Urban/Rural</b>				
	Duluth/Superior	96.1	74.1	41.6
	Rural NE Minnesota	95.6	82.3	49.5
	Rural NW Wisconsin	93.3	80.0	45.5
<b>Region</b>				
	NE Minnesota	95.9	80.9	47.7
	NW Wisconsin	93.5	77.4	44.4

### C. VICTIMS OF VIOLENCE OR CRIME AGAINST PROPERTY (Table 6.3) (Figure 6.4)

Violence and crime against property have received increasing attention as public health issues. These issues affect physical and mental health and have economic consequences. Violence and crime against property directly affect the economic wellbeing of individuals and the community at large. They can also have a profound effect on residents' sense of community and social cohesion.

- Overall, one out of six (16.8%) respondents reported being a victim of violence and/or a victim of crime against property in the past year.
- Overall, crimes against property (11.6%) were more prevalent than violence against another person (7.5%).
- Of all respondent groups, **young respondents age 18 to 24** were most likely to be victims of violence or crime against property (27.9% for males and 26.1% for females) (Figure 6.4).
- Both **male and female respondents age 75 and older** were more likely than those **age 65 to 74** to be victims of violence or crime against property (11.5 and 10.9% vs. 6.4% and 7.9%, respectively) (Figure 6.4).
- Respondents with household incomes **at or below 200% of poverty** were more likely to be victims of violence or crime against property compared to those with incomes **above 200% of poverty** (19.7% vs. 15.8%).
- Respondents living in the **urban** cities of Duluth/Superior were more likely to be victims of violence or crime against property than respondents living in **rural Northeastern Minnesota and rural Northwestern Wisconsin** (22.6% vs. 15.4% and 14.2, respectively).

**Figure 6.4: Victims of Violence or Crime Against Property  
By Age and Gender**





**TABLE 6.3**  
**Victims of Violence or Crime Against Property**  
 Bridge to Health Survey 2000  
 (n=6159)

**Question:** In the past year have you been:

- A victim of violence<sup>1</sup>
- A victim of crime against property<sup>2</sup>

Demographic Characteristics	Victims of Violence	Victims of Crime Against Property	Victims of Violence and/or Crime Against Property
<b>Overall Results</b>	<b>7.5%</b>	<b>11.6%</b>	<b>16.8%</b>
<b>Gender</b>			
Male	8.0	11.4	17.2
Female	7.0	11.7	16.4
<b>Males by Age</b>			
18 to 24	18.2	14.8	27.9
25 to 34	8.5	13.4	18.8
35 to 44	7.4	12.8	17.8
45 to 54	8.4	11.2	17.2
55 to 64	5.4	13.4	17.9
65 to 74	2.7	4.6	6.4
75 and older	6.1	6.5	11.5
<b>Females by Age</b>			
18 to 24	10.1	19.9	26.1
25 to 34	12.3	12.5	19.7
35 to 44	10.8	13.5	20.6
45 to 54	6.6	13.1	18.0
55 to 64	2.4	7.9	9.6
65 to 74	2.2	6.3	7.9
75 and older	2.5	9.1	10.9
<b>Education</b>			
Less than H.S.	8.3	9.3	15.5
H.S. Graduate	6.9	10.8	15.7
Some College	7.7	13.6	19.0
Voc./Assoc. Degree	7.5	9.9	14.5
College Graduate	8.1	12.3	17.6
<b>Poverty Status</b>			
200% or less	10.1	13.4	19.7
More than 200%	6.3	11.3	15.8
<b>Urban/Rural</b>			
Duluth/Superior	8.4	17.4	22.6
Rural NE Minnesota	7.6	9.8	15.4
Rural NW Wisconsin	6.4	10.1	14.2
<b>Region</b>			
NE Minnesota	7.7	11.5	17.0
NW Wisconsin	7.0	11.9	16.1

<sup>1</sup> Victims of violence included those physically injured by another person, threatened or intimidated, sexually harassed or sexually assaulted.

<sup>2</sup> Victims of crime against property included those robbed or burglarized and victims of property damage or vandalism by another person.

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# **Chapter 7**

## **TOBACCO USE**

- A. Cigarette Smoking**
- B. Smoking in the Home**
- C. Other Tobacco Use**
- D. Attitudes Towards Smoking Regulations**



# CHAPTER 7

## TOBACCO USE

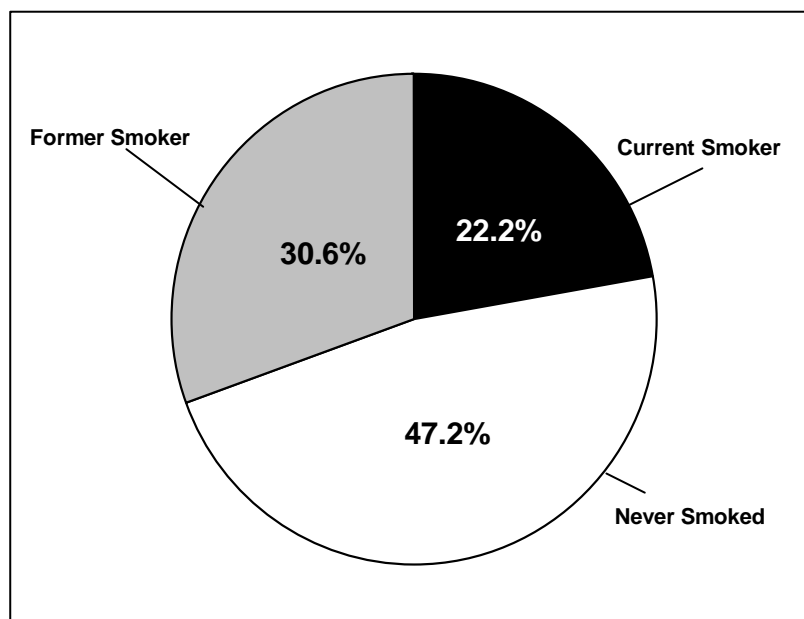
The effects of cigarette smoking and other tobacco use on health are well documented. Smoking is a significant contributor to coronary heart disease, cancers (especially lung cancer), and pulmonary diseases (bronchitis and emphysema). Smoking during pregnancy is associated with low birth weight, spontaneous abortion, fetal death and neonatal death. Second hand smoke also poses health risks for children and non-smokers.

The Healthy People 2010 goal is to reduce the proportion of the U.S. adult population smoking cigarettes to 12% (1). In 1998, based on findings of the Centers for Disease Control's National Health Interview Survey, 24.1% of the U.S. adult population smoked cigarettes (2). According to the Behavioral Risk Factor Surveillance System, the rate of current cigarette smokers in Minnesota was 19.5% and 23.7% in Wisconsin in 1999 (3).

### A. CIGARETTE SMOKING (Table 7.1) (Figures 7.1 - 7.3)

- A little over one-fifth (22.2%) of the respondents **currently smoke cigarettes** (Figure 7.1).
- Nearly one-half (47.2%) of the respondents have **never smoked cigarettes** (Figure 7.1).
- Nearly a third (30.6%) of the respondents **used to smoke cigarettes but quit** (Figure 7.1).
- More **females** have never smoked cigarettes compared to **males** (52.3% vs. 41.9%).

Figure 7.1: Prevalence of Cigarette Smoking



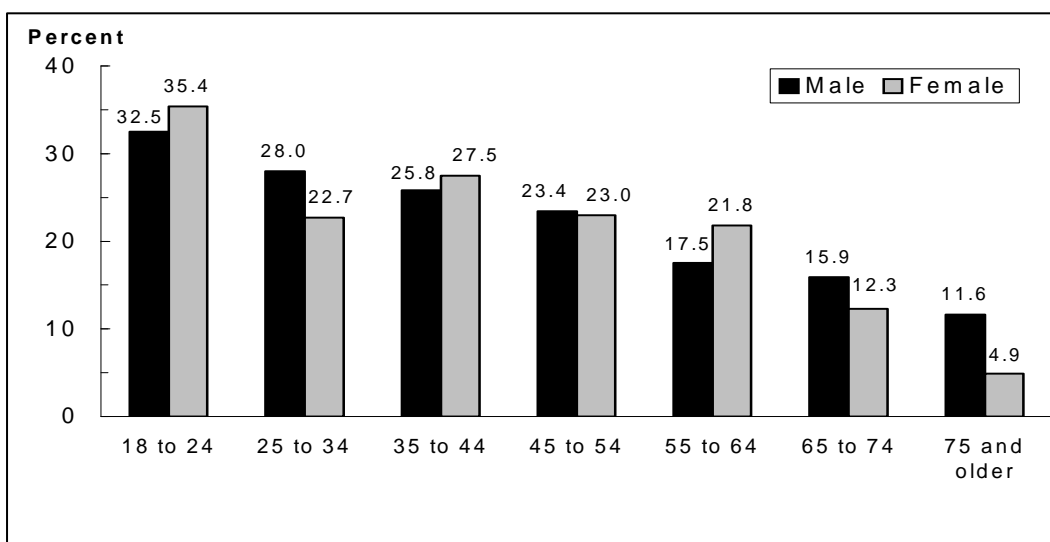
**TABLE 7.1  
CIGARETTE SMOKING**

**Questions:** Have you smoked at least 100 cigarettes in your entire life?  
 (If yes, smoked at least 100 cigarettes) Are you currently a smoker?  
 (For current smokers) Last year, how many times have you quit smoking for at least one day?  
 (For current smokers) Are you seriously thinking of quitting smoking?

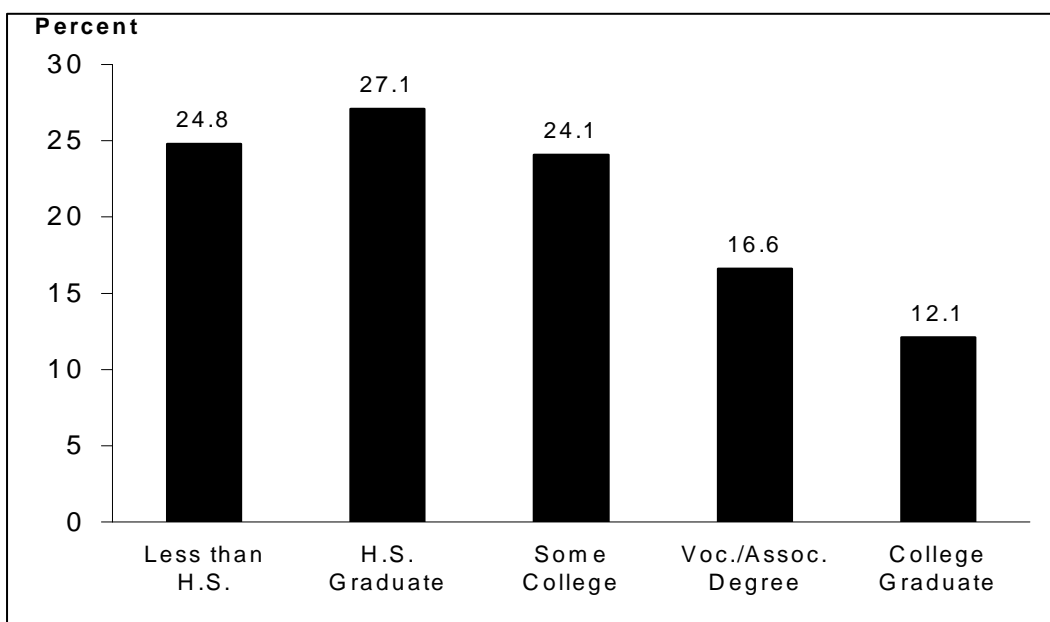
Demographic Characteristics	Never Smoked (n=6128)	Former Smoker (n=6128)	Current Smoker (n=6128)	Current Smokers:	
				Tried to Quit in Past Year (n=1300)	Seriously Thinking of Quitting in the Next 30 Days (n=1304)
<b>Overall Results</b>	<b>47.2%</b>	<b>30.6%</b>	<b>22.2%</b>	<b>56.7%</b>	<b>26.7%</b>
<b>Gender</b>					
Male	41.9	35.0	23.1	54.4	27.2
Female	52.3	26.4	21.3	59.2	26.1
<b>Males by Age</b>					
18 to 24	55.3	12.2	32.5	74.8	39.3
25 to 34	47.8	24.2	28.0	57.9	31.4
35 to 44	47.7	26.5	25.8	42.5	23.4
45 to 54	39.4	37.2	23.4	44.6	24.3
55 to 64	30.1	52.4	17.5	65.2	13.2
65 to 74	32.8	51.3	15.9	48.0	42.0
75 and older	34.4	54.1	11.6	65.0	9.7
<b>Females by Age</b>					
18 to 24	50.3	14.3	35.4	90.2	27.2
25 to 34	53.9	23.4	22.7	48.9	29.1
35 to 44	48.5	24.1	27.5	47.7	20.0
45 to 54	49.2	27.8	23.0	56.6	19.7
55 to 64	46.5	31.7	21.8	62.8	35.6
65 to 74	54.4	33.3	12.3	61.9	40.0
75 and older	65.9	29.1	4.9	37.5	26.3
<b>Education</b>					
Less than H.S.	41.4	33.8	24.8	49.2	34.3
H.S. Graduate	43.5	29.3	27.1	58.0	25.3
Some College	45.4	30.5	24.1	64.0	24.7
Voc./Assoc. Degree	52.4	30.9	16.6	52.9	35.0
College Graduate	56.5	31.4	12.1	39.5	23.8
<b>Poverty Status</b>					
200% or less	44.0	26.3	29.7	54.6	28.5
More than 200%	45.1	34.1	20.8	57.3	26.7
<b>Urban/Rural</b>					
Duluth/Superior	48.8	29.3	21.9	58.0	28.6
Rural NE Minnesota	45.8	31.5	22.7	56.4	27.9
Rural NW Wisconsin	49.1	29.7	21.2	56.1	21.3
<b>Region</b>					
NE Minnesota	46.9	30.9	22.2	56.1	28.6
NW Wisconsin	48.0	29.9	26.3	58.6	21.4

- The prevalence of current cigarette smoking was highest in the **youngest age groups for both males and females** and decreased with age. In the **18 to 24 year old age group**, 35.4% of the females and 32.5% of the males currently smoke (Figure 7.2). This age group also had the highest proportion of current smokers who responded they tried to quit smoking in the past year (males: 74.8%, females: 90.2%) (Table 7.1).
- Respondents who were **high school graduates** were over two times more likely to report they currently smoke compared to **college graduates** (27.1% vs. 12.1%). Overall, the data indicated a general trend of lower smoking rates with increasing education level (Figure 7.3).

**Figure 7.2: Cigarette Smoking Prevalence By Age and Gender**



**Figure 7.3: Cigarette Smoking Prevalence By Education Level**

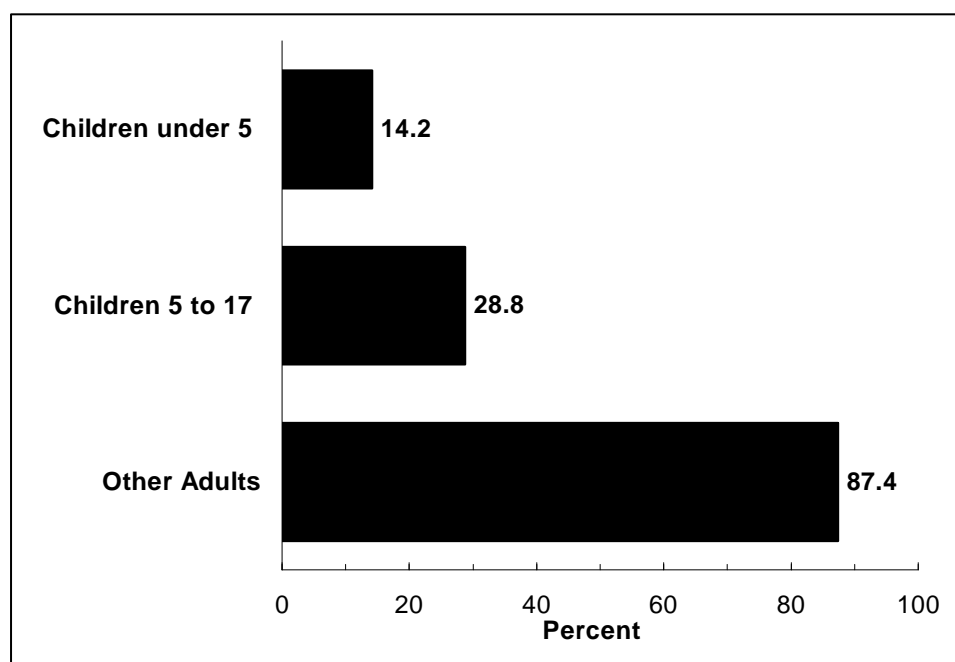


- No major differences in smoking rates were observed between **urban and rural areas** or between **Northeastern Minnesota and Northwestern Wisconsin**.
- Nearly one in three (29.7%) respondents with incomes **at or below 200% of poverty** responded they currently smoke compared to about one in five (20.8%) for those with incomes **above 200% of poverty**.
- A higher percentage of **current smokers** reported that they tried to quit smoking in the past year compared to the **1995 survey** (56.7% vs. 50.6%). This increase in the percentage of smokers who reported they tried to quit smoking in the past year was observed at almost all ages for both males and females.
- Over one-quarter of the **current smokers** (26.7%) reported that they were seriously thinking of quitting in the next 30 days.

#### **B. SMOKING IN THE HOME (Tables 7.2 - 7.3) (Figure 7.4)**

- Of all respondents, 23.8% reported someone regularly smokes inside their home, compared to 28.6% in the *Bridge to Health Survey 1995*.
- Among respondents reporting that someone regularly smokes inside the home, 14.2% had children under 5 years old living in the home and 28.8% had children 5 to 17 years old living in the home (Figure 7.4). Younger respondents were more likely to have children living in the home. For example, nearly half (48.6%) of females age 25 to 34 in households where someone regularly smokes inside the home said that there were children under 5 years old living in the home (Table 7.2).

**Figure 7.4: Smoking in the Home: Presence of Others in the Household Among Households with Regular Smoker(s)**





**TABLE 7.2**  
**SMOKING IN THE HOME: EXPOSURE TO SECOND-HAND SMOKE**  
 Bridge to Health Survey 2000  
**(N=6155)**

**Questions:** Does anyone, including yourself, regularly smoke inside your home?  
 Including yourself, how many adults and how many children live in your household?

Demographic Characteristics	Someone Regularly Smokes Inside Home (n=6155)	Presence of Others in Households with Regular Smoker(s):		
		Other Adults Live in Home (n=1464)	Children < 5 Live in Home (n=1441)	Children 5-17 Live in Home (n=1459)
<b>Overall results</b>	<b>23.8%</b>	<b>87.4%</b>	<b>14.2%</b>	<b>28.8%</b>
<b>Gender</b>				
Male	25.1	86.2	13.5	25.2
Female	22.5	88.7	14.9	32.8
<b>Males by Age</b>				
18 to 24	41.2	97.1	29.4	19.3
25 to 34	25.7	87.8	28.8	33.0
35 to 44	21.9	78.6	10.4	42.2
45 to 54	25.4	84.2	10.6	38.1
55 to 64	25.1	89.1	0.0	7.9
65 to 74	21.3	80.0	0.0	1.4
75 and older	17.2	84.4	0.0	0.0
<b>Females by Age</b>				
18 to 24	27.5	96.3	22.2	40.7
25 to 34	23.1	93.3	48.6	57.1
35 to 44	24.8	93.2	17.9	55.6
45 to 54	24.1	94.7	4.7	27.3
55 to 64	27.3	85.1	0.0	7.1
65 to 74	17.1	76.2	0.0	1.6
75 and older	12.2	59.2	0.0	6.0
<b>Education</b>				
Less than H.S.	32.0	82.4	9.7	24.4
H.S. Graduate	28.0	89.1	17.2	28.6
Some College	24.5	85.9	9.6	28.2
Voc./Assoc. Degree	20.5	88.1	20.7	40.0
College Graduate	12.6	89.5	13.1	26.2
<b>Poverty Status</b>				
200% or less	28.2	80.4	15.3	29.5
More than 200%	22.4	90.6	15.1	27.1
<b>Urban/Rural</b>				
Duluth/Superior	22.8	83.2	8.1	27.1
Rural NE Minnesota	24.4	89.2	17.0	29.0
Rural NW Wisconsin	23.4	86.8	12.9	30.1
<b>Region</b>				
NE Minnesota	23.8	88.3	14.8	28.2
NW Wisconsin	23.7	84.7	12.4	30.6

**TABLE 7.3**  
**SMOKING IN THE HOME: RULES AT HOME**  
 Bridge to Health Survey 2000  
 (n=6158)

**Question:** Which of the following statements best describes the rules about smoking inside your home (not including decks, garages or porches)?

- Smoking is allowed anywhere and at any time
- Smoking is allowed in some places or at some times
- Smoking is not allowed in any place or at any time

<b>Demographic Characteristics</b>		Smoking Allowed Anywhere and Any Time	Smoking Allowed in Some Places, at Some Times	Smoking Not Allowed in Any Place at Any Time
<b>Overall results</b>		<b>20.2%</b>	<b>24.0%</b>	<b>55.8%</b>
<b>Gender</b>				
	Male	24.0	23.4	52.6
	Female	16.5	24.5	59.0
<b>Males by Age</b>				
	18 to 24	28.2	17.0	54.8
	25 to 34	23.2	24.8	52.0
	35 to 44	21.2	25.5	53.3
	45 to 54	27.0	18.5	54.5
	55 to 64	22.5	25.2	52.2
	65 to 74	24.0	24.0	52.0
	75 and older	23.8	30.0	46.2
<b>Females by Age</b>				
	18 to 24	17.2	30.7	52.0
	25 to 34	11.9	20.9	67.3
	35 to 44	18.0	23.7	58.3
	45 to 54	17.1	25.0	57.9
	55 to 64	19.9	28.8	51.3
	65 to 74	17.9	22.2	59.9
	75 and older	13.1	22.5	64.4
<b>Education</b>				
	Less than H.S.	29.3	23.8	46.9
	H.S. Graduate	24.5	25.9	49.6
	Some College	19.7	24.9	55.4
	Voc./Assoc. Degree	15.1	22.2	62.7
	College Graduate	11.1	20.3	68.6
<b>Poverty Status</b>				
	200% or less	22.8	25.5	51.7
	More than 200%	19.6	24.5	55.9
<b>Urban/Rural</b>				
	Duluth/Superior	16.1	22.6	61.3
	Rural NE Minnesota	21.8	24.5	53.7
	Rural NW Wisconsin	20.3	24.1	55.5
<b>Region</b>				
	NE Minnesota	20.4	23.8	55.8
	NW Wisconsin	19.4	24.6	56.0

- One in five (20.2%) of the respondents reported that smoking is allowed anywhere and at any time in their home. **Males** were more likely than **females** to say smoking is allowed anywhere and at any time in their home (24.0% versus 16.5%).
- Respondents who were **high school graduates** were over two times more likely to report that someone regularly smokes in the home (28.0%) and to report that smoking was allowed anywhere and at any time in the home (24.5%) than did respondents who were **college graduates** (12.6% and 11.1%, respectively).

#### C. OTHER TOBACCO USE (Table 7.4)

- Use of smokeless tobacco or cigars was almost entirely confined to males. **Males** were 36 times more likely than **females** to report having used smokeless tobacco in the past month (10.9% versus 0.3%). **Males** were 13 times more likely than **females** to report having smoked cigars in the past month (6.7% versus 0.5%)
- About one-quarter of **males age 18 to 34** (18 to 24 year olds: 22.1% and 25 to 34 year olds: 27.9%) reported that they had used smokeless tobacco in the past month.

#### D. ATTITUDES TOWARDS SMOKING REGULATIONS (Tables 7.5 - 7.8)

- Three out of four respondents (76.5%) said smoking should not be allowed at all in an **indoor work area**. Only 1.9% responded that smoking should be allowed in all areas of an indoor work area.
- **Females**, more than **males**, (82.1% versus 70.5%) were in favor of a complete ban on smoking in **indoor work areas**.
- Respondents in **urban areas** (Duluth/Superior) were slightly more likely to support a complete ban on smoking in **indoor work areas** compared to respondents from **rural Northeastern Minnesota and rural Northwestern Wisconsin** (81.2% compared to 75.3% and 74.3%, respectively).
- Only 3.1% of respondents said smoking should be allowed in all areas of a **restaurant**. Those who supported restrictions on smoking in restaurants were evenly divided between allowing smoking in some areas (48.3%) and not allowing any smoking in restaurants (48.5%).
- Over two-thirds of the respondents (70.8%) supported some restrictions on smoking in **bars**. Approximately one out of five respondents (22.1%) supported a complete ban on smoking in bars, and around half (48.7%) would allow smoking in some areas of a bar.
- **Females** were more likely than **males** to support some restriction on smoking in **bars** (75.2% vs. 66.4%).
- **Younger adults** tended to show more support for allowing smoking in all areas of a **bar** than did **older adults**.
- Nearly two out of three respondents (65.3%) favored some restriction on smoking at **outdoor events** with 27.2% responding that no smoking should be allowed at outdoor events.

**TABLE 7.4**  
**OTHER TOBACCO USE**  
Bridge to Health Survey 2000

**Questions:** How many times in the past month did you use smokeless tobacco?  
How many times in the past month did you smoke cigars?

<b>Demographic Characteristics</b>		Used Smokeless Tobacco in Past Month (n=6158)	Smoked Cigars in the Past Month (n=6155)
<b>Overall results</b>		<b>5.5%</b>	<b>3.6%</b>
<b>Gender</b>			
	Male	10.9	6.7
	Female	0.3	0.5
<b>Males by Age</b>			
	18 to 24	22.1	6.1
	25 to 34	27.9	13.4
	35 to 44	8.7	7.5
	45 to 54	4.0	5.3
	55 to 64	5.5	6.4
	65 to 74	1.5	4.3
	75 and older	8.4	0.8
<b>Females by Age</b>			
	18 to 24	0.7	0.0
	25 to 34	1.1	2.9
	35 to 44	0.2	0.5
	45 to 54	0.0	0.0
	55 to 64	0.2	0.0
	65 to 74	0.0	0.0
	75 and older	0.0	0.0
<b>Education</b>			
	Less than H.S.	4.0	0.7
	H.S. Graduate	7.3	3.4
	Some College	5.1	3.9
	Voc./Assoc. Degree	5.2	4.1
	College Graduate	3.5	4.5
<b>Poverty Status</b>			
	200% or less	4.4	2.1
	More than 200%	7.0	4.6
<b>Urban/Rural</b>			
	Duluth/Superior	4.1	2.6
	Rural NE Minnesota	6.4	4.2
	Rural NW Wisconsin	4.5	2.9
<b>Region</b>			
	NE Minnesota	5.7	3.9
	NW Wisconsin	4.9	2.6

**TABLE 7.5**  
**ATTITUDES TOWARD SMOKING REGULATIONS IN INDOOR WORK AREAS**  
 Bridge to Health Survey 2000  
 (N=6023)

**Question:** For indoor work areas, do you think that smoking should be allowed in all areas, in some areas or not allowed at all?

Demographic Characteristics		Allowed in All Areas	Allowed in Some Areas	Not Allowed At All
<b>Overall results</b>		<b>1.9%</b>	<b>21.6%</b>	<b>76.5%</b>
<b>Gender</b>				
	Male	2.6	26.8	70.5
	Female	1.2	16.7	82.1
<b>Males by Age</b>				
	18 to 24	0.3	28.5	71.2
	25 to 34	1.4	29.0	69.6
	35 to 44	3.3	31.4	65.3
	45 to 54	4.5	23.5	72.1
	55 to 64	3.0	27.4	69.6
	65 to 74	2.6	22.1	75.3
	75 and older	2.4	20.3	77.2
<b>Females by Age</b>				
	18 to 24	0.0	13.8	86.2
	25 to 34	1.3	13.8	84.8
	35 to 44	2.0	20.3	77.6
	45 to 54	1.1	17.3	81.5
	55 to 64	1.5	13.4	85.1
	65 to 74	1.1	15.9	83.0
	75 and older	0.5	18.9	80.5
<b>Education</b>				
	Less than H.S.	5.7	24.4	69.9
	H.S. Graduate	2.1	26.9	71.0
	Some College	1.2	18.8	79.9
	Voc./Assoc. Degree	1.8	21.3	76.9
	College Graduate	0.8	14.4	84.8
<b>Poverty Status</b>				
	200% or less	3.2	23.8	73.1
	More than 200%	1.3	20.6	78.1
<b>Urban/Rural</b>				
	Duluth/Superior	1.2	17.6	81.2
	Rural NE Minnesota	2.1	22.6	75.3
	Rural NW Wisconsin	2.1	23.6	74.3
<b>Region</b>				
	NE Minnesota	1.9	21.0	77.1
	NW Wisconsin	2.1	23.3	74.6

**TABLE 7.6**  
**ATTITUDES TOWARD SMOKING REGULATIONS IN RESTAURANTS**  
 Bridge to Health Survey 2000  
 (N=6057)

**Question:** For restaurants, do you think that smoking should be allowed in all areas, in some areas or not allowed at all?

Demographic Characteristics		Allowed in All Areas	Allowed in Some Areas	Not Allowed At All
<b>Overall results</b>		<b>3.1%</b>	<b>48.3%</b>	<b>48.5%</b>
<b>Gender</b>				
	Male	4.0	50.3	45.7
	Female	2.3	46.4	51.3
<b>Males by Age</b>				
	18 to 24	3.3	67.3	29.4
	25 to 34	2.2	56.6	41.1
	35 to 44	3.2	52.2	44.6
	45 to 54	4.3	46.2	49.5
	55 to 64	4.3	42.8	52.9
	65 to 74	6.9	44.4	48.8
	75 and older	6.0	39.6	54.4
<b>Females by Age</b>				
	18 to 24	2.8	60.9	36.3
	25 to 34	2.2	46.4	51.4
	35 to 44	2.5	50.4	47.1
	45 to 54	2.6	41.3	56.1
	55 to 64	2.2	42.4	55.4
	65 to 74	2.5	45.9	51.6
	75 and older	1.1	40.5	58.4
<b>Education</b>				
	Less than H.S.	6.1	49.7	44.2
	H.S. Graduate	4.1	52.4	43.5
	Some College	2.6	50.5	46.8
	Voc./Assoc. Degree	2.0	43.3	54.8
	College Graduate	1.2	39.7	59.1
<b>Poverty Status</b>				
	200% or less	4.5	49.9	45.6
	More than 200%	2.4	48.0	49.6
<b>Urban/Rural</b>				
	Duluth/Superior	2.5	49.6	47.9
	Rural NE Minnesota	3.1	48.2	48.7
	Rural NW Wisconsin	4.1	47.2	48.7
<b>Region</b>				
	NE Minnesota	2.9	48.3	48.8
	NW Wisconsin	4.0	48.2	47.8

**TABLE 7.7**  
**ATTITUDES TOWARD SMOKING REGULATIONS IN BARS**  
 Bridge to Health Survey 2000  
 (N=5724)

**Question:** For bars, do you think that smoking should be allowed in all areas, in some areas or not allowed at all?

<b>Demographic Characteristics</b>		<b>Allowed in All Areas</b>	<b>Allowed in Some Areas</b>	<b>Not Allowed At All</b>
<b>Overall results</b>		<b>29.2%</b>	<b>48.7%</b>	<b>22.1%</b>
<b>Gender</b>				
	Male	33.6	47.2	19.2
	Female	24.8	50.1	25.1
<b>Males by Age</b>				
	18 to 24	51.4	43.7	4.9
	25 to 34	41.8	48.2	10.0
	35 to 44	34.5	46.8	18.7
	45 to 54	26.0	49.3	24.7
	55 to 64	31.1	50.6	18.3
	65 to 74	26.9	43.5	29.6
	75 and older	18.7	46.6	34.7
<b>Females by Age</b>				
	18 to 24	29.0	62.2	8.7
	25 to 34	30.3	52.3	17.4
	35 to 44	30.6	50.9	18.6
	45 to 54	21.2	50.0	28.8
	55 to 64	23.7	46.5	29.8
	65 to 74	15.4	49.8	34.8
	75 and older	17.8	38.8	43.4
<b>Education</b>				
	Less than H.S.	32.9	42.5	24.6
	H.S. Graduate	34.5	47.1	18.4
	Some College	29.8	48.9	21.3
	Voc./Assoc. Degree	27.7	46.9	25.4
	College Graduate	17.3	54.9	27.8
<b>Poverty Status</b>				
	200% or less	34.0	44.9	21.1
	More than 200%	28.0	51.4	20.6
<b>Urban/Rural</b>				
	Duluth/Superior	28.2	51.1	20.7
	Rural NE Minnesota	29.1	47.9	22.9
	Rural NW Wisconsin	30.5	47.8	21.7
<b>Region</b>				
	NE Minnesota	28.7	48.8	22.6
	NW Wisconsin	30.7	48.3	21.0

**TABLE 7.8**  
**ATTITUDES TOWARD SMOKING REGULATIONS IN OUTDOOR EVENTS**  
 Bridge to Health Survey 2000  
 (N=5932)

**Question:** For outdoor events, do you think that smoking should be allowed in all areas, in some areas or not allowed at all?

<b>Demographic Characteristics</b>		Allowed in All Areas	Allowed in Some Areas	Not Allowed At All
<b>Overall results</b>		<b>34.8%</b>	<b>38.1%</b>	<b>27.2%</b>
<b>Gender</b>				
	Male	38.4	36.5	25.2
	Female	31.3	39.6	29.1
<b>Males by Age</b>				
	18 to 24	35.2	43.6	21.2
	25 to 34	39.9	38.1	22.0
	35 to 44	45.6	36.2	18.2
	45 to 54	33.7	36.9	29.4
	55 to 64	36.8	36.8	26.3
	65 to 74	34.0	32.7	33.3
	75 and older	37.8	27.4	34.9
<b>Females by Age</b>				
	18 to 24	34.1	36.6	29.3
	25 to 34	33.7	44.3	22.0
	35 to 44	31.4	46.7	21.9
	45 to 54	25.5	43.3	31.3
	55 to 64	29.1	37.2	33.7
	65 to 74	33.0	30.4	36.5
	75 and older	35.2	29.3	35.5
<b>Education</b>				
	Less than H.S.	44.2	32.1	23.7
	H.S. Graduate	38.8	36.0	25.2
	Some College	35.1	35.8	29.2
	Voc./Assoc. Degree	31.8	41.9	26.3
	College Graduate	23.9	45.9	30.2
<b>Poverty Status</b>				
	200% or less	40.2	36.4	23.4
	More than 200%	33.8	39.5	26.8
<b>Urban/Rural</b>				
	Duluth/Superior	33.4	40.3	26.3
	Rural NE Minnesota	35.8	36.8	27.4
	Rural NW Wisconsin	33.5	39.0	27.5
<b>Region</b>				
	NE Minnesota	35.0	37.5	27.5
	NW Wisconsin	34.0	39.7	26.3



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# **Chapter 8**

## **ALCOHOL USE**

- A. Alcohol Consumption Patterns Among All Respondents**
- B. Alcohol Consumption Among Respondents Who Drink**



# CHAPTER 8

## ALCOHOL USE

Alcohol misuse and abuse is closely associated with several leading causes of death including cirrhosis of the liver, motor vehicle and other accidents, suicide and homicide (1). Heavy consumption of alcohol is associated with an increased risk of cancer, cardiovascular conditions, depression, aggression and domestic and other abuse (1). During pregnancy, heavy use of alcohol contributes to adverse birth outcomes such as low birth weight, fetal death and fetal alcohol syndrome (1). While all levels of society are impacted by alcohol, males are at highest risk for alcohol misuse, particularly binge drinking and driving after drinking (2).

The *Bridge to Health Survey 2000* included questions related to the following indicators of alcohol use:

**Abstaining from alcohol use:** No alcoholic beverages in the past month.

**Chronic drinking:** Consuming sixty (60) or more alcoholic drinks in the past month.

**Binge drinking:** Consuming five or more drinks on a single occasion at least once in the past month.

**Drinking and driving or riding in a car or truck:** In the past year, driving or being a passenger in a car or truck when the respondent thought the driver had too much to drink.

The results on alcohol use are reported in two ways: Table 8.1 reports alcohol use and type of use for *all* survey respondents; and Table 8.2 reports alcohol consumption patterns only for those who reported that they have consumed at least one alcoholic beverage in the past month.

### A. ALCOHOL CONSUMPTION PATTERNS AMONG ALL RESPONDENTS (Table 8.1) (Figures 8.1 - 8.5)

#### Abstaining from Alcohol Use (Table 8.1) (Figure 8.1)

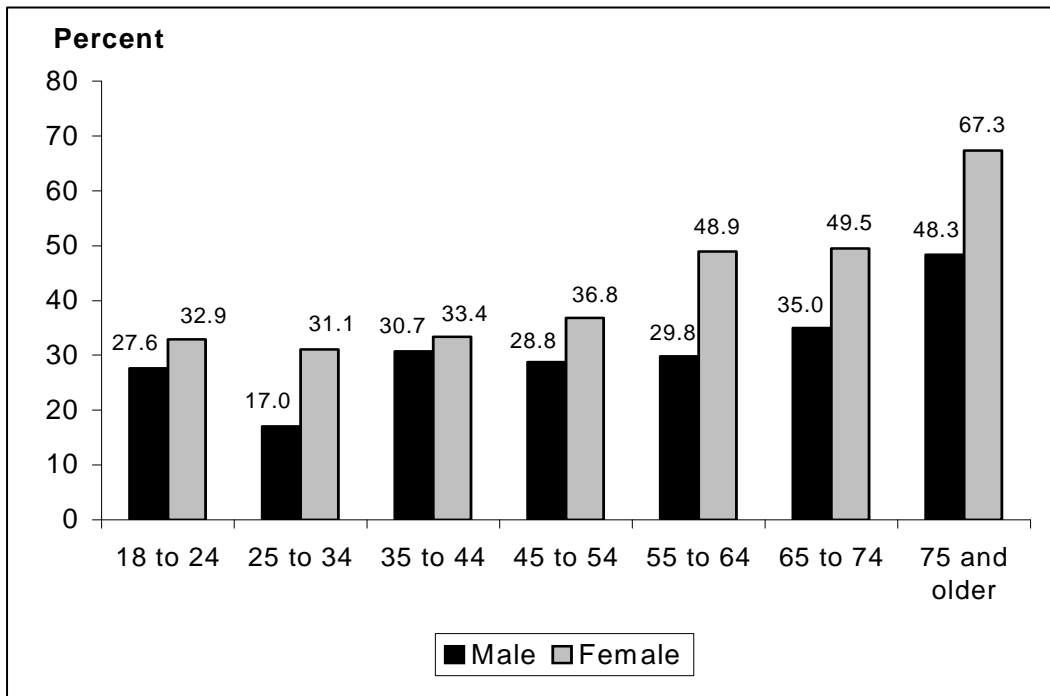
- Overall, about one-third (36.0%) of the respondents reported abstaining from alcohol in the past month.
- **Female respondents** were more likely to abstain from alcohol in the past month than **males** (41.9% vs. 29.8%).
- The percentage of respondents that reported abstaining from alcohol over the past month generally increased with age (Figure 8.1). **Males age 25 to 34** are an exception to this trend with only 17.0% of respondents in this age group abstaining from alcohol in the past month compared to 27.6% of **males age 18 to 24**.
- **High school graduates** (41.0%) were more likely to report abstaining from alcohol in the past month than **college graduates** (26.9%). The percentage of respondents abstaining from alcohol use decreased as education level increased.
- A larger percentage of respondents with household incomes **at or below 200% of poverty** abstained from alcohol use in the past month (41.9%) compared to respondents with incomes **above 200% of poverty** (30.9%).

**TABLE 8.1**  
**ALCOHOL CONSUMPTION AMONG ALL RESPONDENTS**  
 BRIDGE TO HEALTH SURVEY 2000

Question: During the past month, have you had at least one drink of any alcoholic beverage?  
 (For those who had at least one drink) How many days per week or per month did you drink any alcoholic beverages, on average? And On the days that you drink, about how many drinks do you have on average?  
 (For those who had at least one drink) How many times in the past month did you have 5 or more drinks on one occasion?  
 How many times in the past year did you drive or ride in a car or truck when you thought the driver had too much to drink?

Demographic Characteristics		Abstaining from Alcohol (n=6146)	Chronic Drinking (n=6146)	Binge Drinking (n=6146)	Drinking & Driving (Driver or Passenger) (n=6055)
<b>Overall results</b>		<b>36.0%</b>	<b>3.8%</b>	<b>22.9%</b>	<b>9.4%</b>
<b>Gender</b>					
	Male	29.8	6.4	32.0	13.2
	Female	41.9	1.3	14.2	5.7
<b>Males by Age</b>					
	18 to 24	27.6	12.7	54.5	23.5
	25 to 34	17.0	8.5	57.0	26.7
	35 to 44	30.7	6.3	36.8	16.3
	45 to 54	28.8	5.1	25.8	9.0
	55 to 64	29.8	5.0	19.0	6.3
	65 to 74	35.0	4.9	10.8	0.6
	75 and older	48.3	1.9	7.7	4.2
<b>Females by Age</b>					
	18 to 24	32.9	5.4	42.4	15.9
	25 to 34	31.1	0.9	25.6	12.4
	35 to 44	33.4	0.9	15.5	6.4
	45 to 54	36.8	0.6	10.8	3.9
	55 to 64	48.9	1.9	7.2	1.9
	65 to 74	49.5	0.0	2.7	1.1
	75 and older	67.3	0.5	0.5	0.0
<b>Education</b>					
	Less than H.S.	50.0	3.6	17.2	3.5
	H.S. Graduate	41.0	4.3	24.9	9.8
	Some College	33.0	4.5	25.9	11.5
	Voc./Assoc. Degree	30.7	2.4	25.2	10.6
	College Graduate	26.9	2.8	16.3	7.7
<b>Poverty status</b>					
	200% or less	41.9	5.0	23.2	8.6
	More than 200%	30.9	4.3	26.1	11.3
<b>Urban/Rural</b>					
	Duluth/Superior	31.6	5.2	24.0	9.6
	Rural NE Minnesota	37.1	2.5	22.1	9.7
	Rural NW Wisconsin	37.9	5.8	24.0	8.2
<b>Region</b>					
	NE Minnesota	35.6	3.0	22.2	9.5
	NW Wisconsin	37.1	6.1	24.9	9.1

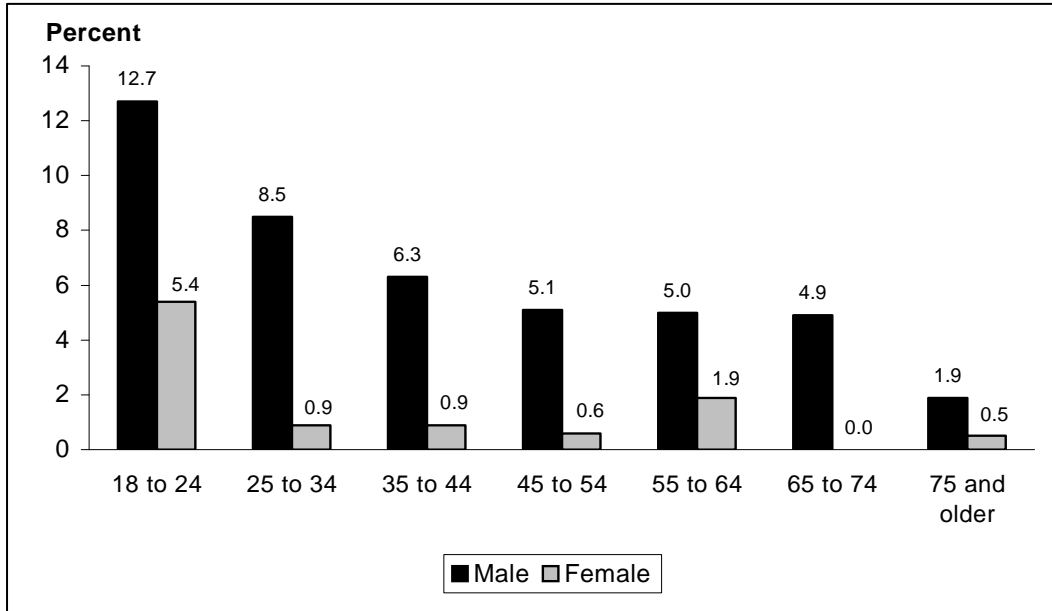
**Figure 8.1: Abstaining from Alcohol Use During the Past Month  
By Age and Gender**



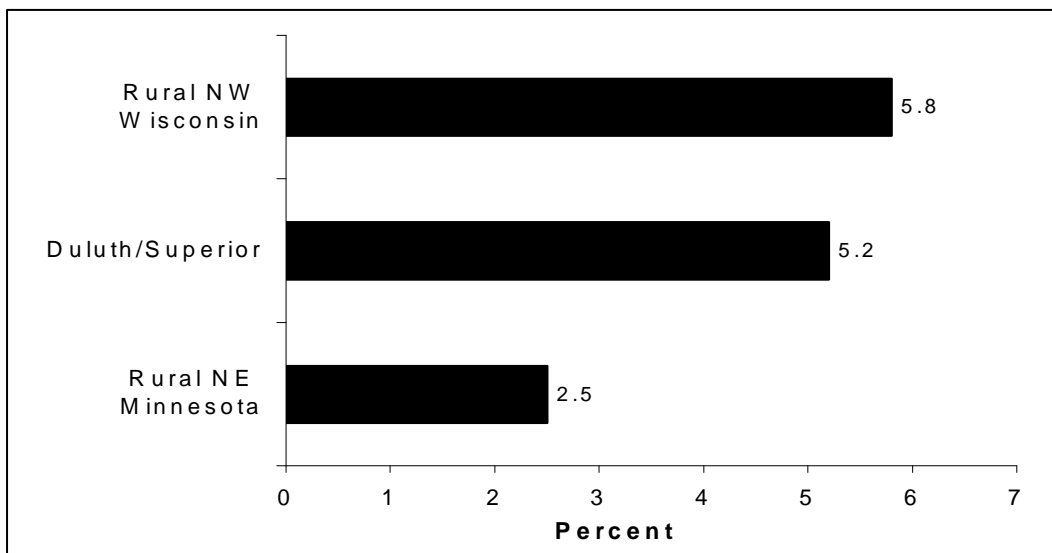
**Chronic Drinking (Table 8.1) (Figure 8.2-8.3)**

- Overall, 3.8% of the respondents reported chronic drinking (60 or more alcoholic beverages in the past month).
- **Male respondents** were about five times more likely to report chronic drinking than **females** (6.4% vs. 1.3%).
- Male respondents age 18 to 24 were the most likely to report chronic drinking (12.7%), followed by males age 25 to 34 (8.5%). The prevalence of chronic drinking generally decreased as age increased for both males and females (Figure 8.2).
- Respondents in **Northwestern Wisconsin** were twice as likely to report chronic drinking compared to respondents in **Northeastern Minnesota** (6.1% vs. 3.0%).
- Respondents in **rural Northwestern Wisconsin** (5.8%) and **Duluth/Superior** (5.2%) were more than twice as likely to report chronic drinking as respondents in **rural Northeastern Minnesota** (2.5%) (Figure 8.3).
- The national and state rates for chronic and binge drinking, from surveys using the same question wording, are for chronic drinking U.S.- 3.6%, WI- 5.0% and MN- 4.7%, and for binge drinking U.S.- 14.9%, WI- 27% and MN 16.3% (3)

**Figure 8.2: Chronic Drinking Among All Respondents  
By Age and Gender**



**Figure 8.3: Chronic Drinking Among All Respondents  
By Geographic Area**

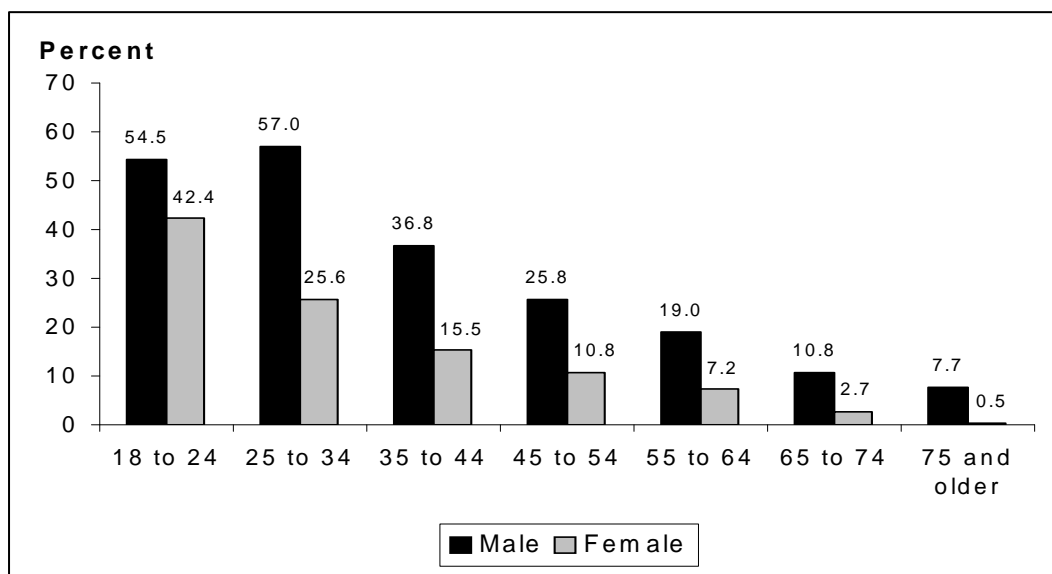




### Binge Drinking (Table 8.1) (Figure 8.4)

- Over one out of five (22.9%) respondents reported binge drinking (5 or more drinks on a single occasion) at least once in the past month.
- **Males** were more than two times as likely to report binge drinking in the past month as **females** (32.0% vs. 14.2%).
- More than half of **male respondents age 18 to 34** reported binge drinking in the past month: 54.5% of males age 18 to 24 and 57.0% of those age 25 to 34. The prevalence of binge drinking generally decreased as age increased for both males and females (Figure 8.4).
- Respondents with a **high school education** (24.9%), **some college** (25.9%) or a **vocational/associate degree** (25.2%) were more likely to report binge drinking than **college graduates** (16.3%) or respondents with **less than a high school education** (17.2%).

**Figure 8.4: Binge Drinking Among All Respondents  
By Age and Gender**

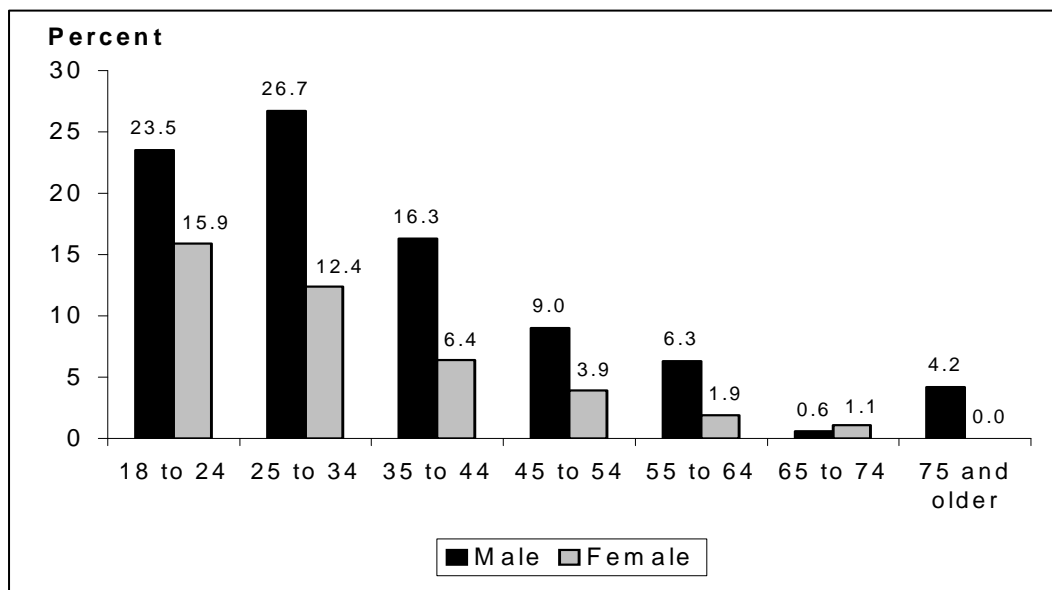


### Drinking and Driving or Riding in a Car or Truck (Table 8.1) (Figure 8.5)

- Overall, 9.4% of the respondents reported driving or riding in a car or truck when they thought the driver had too much to drink in the past year. This percentage is lower than the 14.0% found in the *Bridge to Health Survey 1995*.
- **Male respondents** were more than two times as likely to report driving or riding in a vehicle when they thought the driver had too much to drink than **females** (13.2% vs. 5.7%).
- About one-quarter of **male respondents age 18 to 34** reported drinking and driving or riding in a car or truck when the driver had too much to drink: 23.5% for males age 18 to 24 and 26.7% for males age 25 to 34 (Figure 8.5).

- Respondents with incomes **at or below 200% of poverty** were less likely to report driving or riding in a vehicle when they thought the driver had too much to drink than those with incomes **above 200% of poverty** (8.6% vs. 11.3%).

**Figure 8.5: Driving or Riding in a Car or Truck when the Driver Had Too Much To Drink Among All Respondents By Age and Gender**



## B. ALCOHOL CONSUMPTION AMONG RESPONDENTS WHO DRINK (Table 8.2)

### Chronic Drinking (Table 8.2)

- Overall, 5.9% of the respondents who drank in the past month reported chronic drinking, (60 or more alcoholic beverages in the past month).
- Chronic drinking patterns among respondents who drank were similar to those for all respondents.

### Binge Drinking (Table 8.2)

- Of all respondents who drank in the past month, 36.0% reported binge drinking (consuming 5 or more drinks of alcohol on a single occasion).
- Three-fourths (75.6%) of **young males age 18 to 24** who drank in the past month reported binge drinking compared to 63.1% of **young females** the same age who drank.
- Respondents from **Northwestern Wisconsin** who drank were slightly more likely to report binge drinking compared to those from **Northeastern Minnesota** (39.9% vs. 34.7%).

**TABLE 8.2**  
**ALCOHOL CONSUMPTION AMONG RESPONDENTS WHO DRINK<sup>4</sup>**  
 BRIDGE TO HEALTH SURVEY 2000

**Questions:** *(For those who had at least one drink)* How many days per week or per month did you drink any alcoholic beverages, on average? And On the days that you drink, about how many drinks do you have on average?  
*(For those who had at least one drink)* How many times in the past month did you have 5 or more drinks on one occasion?  
 How many times in the past year did you drive or ride in a car or truck when you thought the driver had too much to drink?

Demographic Characteristics	Chronic Drinking (n=3933)	Binge Drinking (n=3868)	Drinking & Driving (Driver or Passenger) (n=3830)
<b>Overall results</b>	<b>5.9%</b>	<b>36.0%</b>	<b>14.8%</b>
<b>Gender</b>			
Male	9.1	45.9	19.1
Female	2.3	24.6	9.9
<b>Males by Age</b>			
18 to 24	17.6	75.6	32.8
25 to 34	10.2	69.0	32.3
35 to 44	9.0	53.2	23.8
45 to 54	7.3	36.3	12.9
55 to 64	7.1	27.1	9.1
65 to 74	7.5	16.9	1.0
75 and older	3.7	14.9	8.2
<b>Females by Age</b>			
18 to 24	8.1	63.1	23.6
25 to 34	1.3	37.1	18.1
35 to 44	1.4	23.5	9.8
45 to 54	0.9	17.3	6.3
55 to 64	3.8	14.2	3.8
65 to 74	0.0	5.4	2.2
75 and older	1.5	1.6	0.0
<b>Education</b>			
Less than H.S.	7.2	35.4	7.0
H.S. Graduate	7.2	42.7	16.8
Some College	6.8	38.8	17.4
Voc./Assoc. Degree	3.5	36.4	15.5
College Graduate	3.9	22.3	10.6
<b>Poverty status</b>			
200% or less	8.6	40.3	15.2
More than 200%	6.2	37.9	16.4
<b>Urban/Rural</b>			
Duluth/Superior	7.6	35.3	14.2
Rural NE Minnesota	4.0	35.3	15.7
Rural NW Wisconsin	9.4	38.9	13.5
<b>Region</b>			
NE Minnesota	4.6	34.7	14.9
NW Wisconsin	9.8	39.9	14.7

<sup>4</sup> Percentages reflect only respondents who consumed at least one drink of alcohol during the past month.

### Drinking and Driving or Riding in a Car or Truck (Table 8.2)

- Overall, 14.8% of the respondents who drank in the past month reported driving or riding in a vehicle when they thought the driver had too much to drink. This rate is lower than the 19.1% found in the *Bridge to Health Survey 1995*.
- Of those who drank in the past month, **young men age 18 to 34** were most likely to report driving or riding in a vehicle when they thought the driver had too much to drink: 32.8% of men age 18 to 24 and 32.3% of those age 25 to 34.

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# **Chapter 9**

## **HEALTH CARE ACCESS**

- A. Health Insurance Coverage**
- B. Failure to Receive Medical Care**
  - Failure to Fill a Prescription**
  - Postponement of Dental Work**



# CHAPTER 9

## HEALTH CARE ACCESS

Lack of access to health care services can have a significant effect on an individual's overall health status. Individuals who lack access to health care generally do not receive preventive screenings, early intervention, or routine care. They also tend to delay receiving care for a variety of reasons, most commonly lack of insurance and cost. When a person who has delayed care eventually seeks medical attention, his/her condition may have progressed, opportunities for treatment may be reduced and additional health care resources may be required. Cost to the health care system might have been reduced if earlier treatment had been sought.

Health care access is generally measured by current health insurance coverage, gaps in insurance coverage, distance and transportation issues that limit access, availability of health care professionals, and cost. Indicators addressing limited health care access in the *Bridge to Health Survey 2000* included items such as failure to receive medical care, failure to fill a prescription and postponement of dental work.

### A. HEALTH INSURANCE COVERAGE (Tables 9.1-9.2) (Figures 9.1-9.4)

- The *Bridge to Health Survey 2000* data from **Northwestern Wisconsin** shows that in this region, 10.9% of the adult population was uninsured at the time of the survey, 8.2% lacked insurance coverage for the entire previous year and 9.5% lacked it for a portion of the previous year. A 1999 survey in the state of Wisconsin reported rates for adults of 7% currently uninsured, 5% lacking insurance for the entire previous year and 7% having no insurance for part of the previous year (1). The *Bridge to Health Survey 2000* findings for Northwestern Wisconsin thus show higher rates of uninsurance for this region than for the state as a whole, and these differences are statistically significant ( $p < .05$ ) (see endnote 1).
- A 1999 statewide study of health insurance coverage in Minnesota found that 6.0% of adults had no insurance at the time of the survey, 3.9% had no insurance for the entire previous year and 5.3% had lacked insurance for a portion of the previous year (2). The *Bridge to Health Survey 2000* findings for **Northeastern Minnesota** show rates of 6.9% currently uninsured, 4.6% uninsured for the entire previous year and 5.5% uninsured for part of the previous year. In contrast to the results for Wisconsin, the differences between the regional and state results for Minnesota are not statistically significant, suggesting that the scope of the uninsurance issue is about the same in the region as in the state of Minnesota as a whole (see endnote 1).

**TABLE 9.1**  
**LACK OF INSURANCE**  
Bridge to Health Survey 2000

**Question:** Concerning your health insurance status for the past year, would you say you were insured for the entire year, you were insured for part of the year and uninsured for part of the year, or you were uninsured for the entire year.

Demographic Characteristics	Uninsured Entire Year (n=6138)	Uninsured for part of year (n=6138)	Currently Uninsured <sup>5</sup> (n=6142)
<b>Overall results</b>	<b>5.5%</b>	<b>6.6%</b>	<b>7.9%</b>
<b>Gender</b>			
Male	6.6	7.1	9.5
Female	4.5	6.1	6.4
<b>Males by Age</b>			
18 to 24	8.7	21.8	21.3
25 to 34	10.3	8.8	14.3
35 to 44	8.5	6.7	9.7
45 to 54	6.2	6.8	10.1
55 to 64	6.2	2.2	7.4
65 to 74	0.6	1.8	0.3
75 and older	1.5	1.5	0.0
<b>Females by Age</b>			
18 to 24	6.8	16.6	16.2
25 to 34	5.3	10.4	9.2
35 to 44	5.7	7.3	7.0
45 to 54	4.2	3.9	5.7
55 to 64	5.8	3.8	6.0
65 to 74	1.1	1.4	0.8
75 and older	2.2	1.2	1.7
<b>Education</b>			
Less than H.S.	7.5	5.6	7.8
H.S. Graduate	6.8	8.1	10.7
Some College	5.7	7.4	7.6
Voc./Assoc. Degree	3.7	5.8	6.0
College Graduate	3.0	3.4	4.4
<b>Poverty Status</b>			
200% or less	9.1	10.8	12.4
More than 200%	4.2	5.5	6.9
<b>Urban/Rural</b>			
Duluth/Superior	4.3	7.2	7.0
Rural NE Minnesota	5.0	5.5	7.4
Rural NW Wisconsin	8.4	8.8	10.3
<b>Region</b>			
NE Minnesota	4.6	5.5	6.9
NW Wisconsin	8.2	9.5	10.9

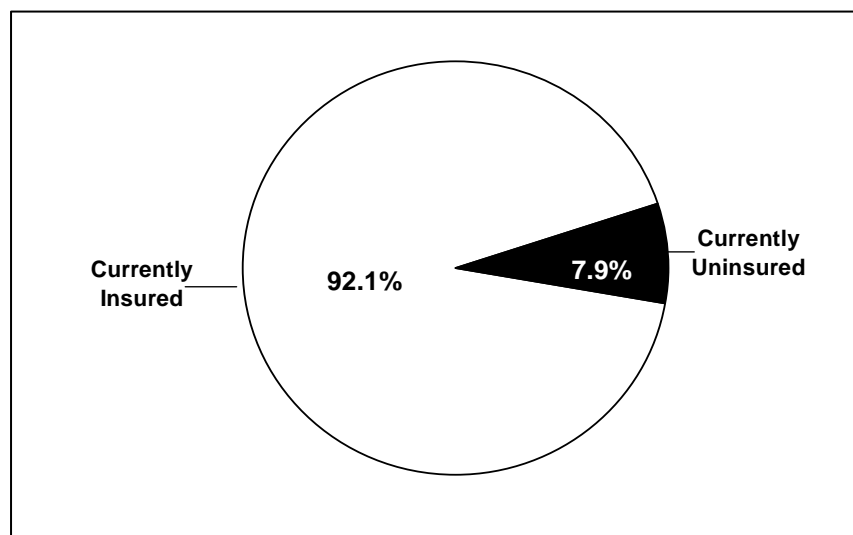
<sup>5</sup> Respondents categorized as currently uninsured answered *no* to: Please answer *yes* or *no* as to whether you personally have each type of insurance right now. (15 different types of public and private insurance were probed, including none or other.)



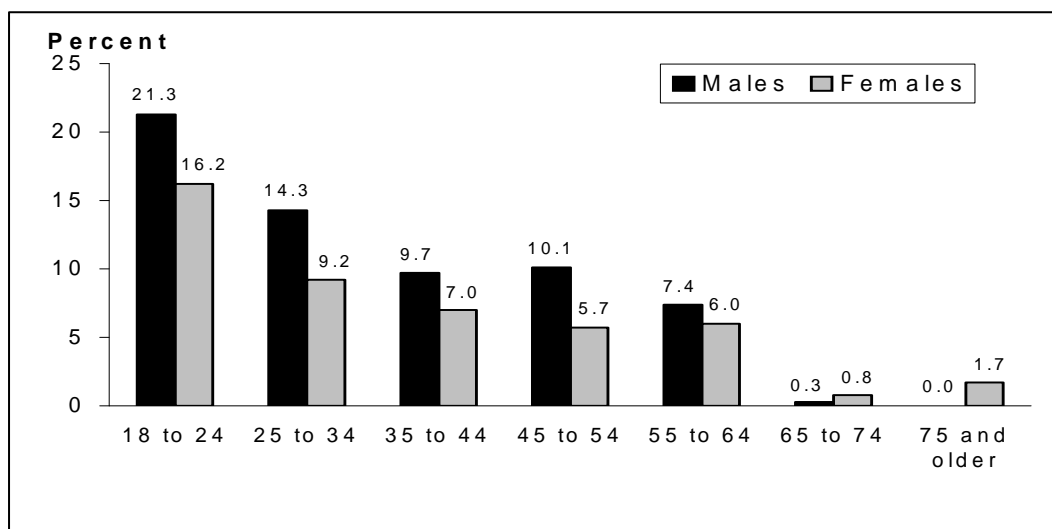
### Current Health Insurance Status (Table 9.1) (Figures 9.1-9.4)

- Overall, 7.9% of respondents reported being currently uninsured (having no health insurance at the time of the survey) (Figure 9.1).
- **Males** were more likely to be currently uninsured (9.5%) than **females** (6.4%).
- The likelihood of being currently uninsured decreased sharply with age. Among both males and females, those **age 18 to 24** were more than twice as likely to be currently uninsured as those **age 35 to 64**. **Males age 18 to 24** had the highest current uninsurance rate of all groups (21.3%) (Figure 9.2).

**Figure 9.1: Currently Uninsured**

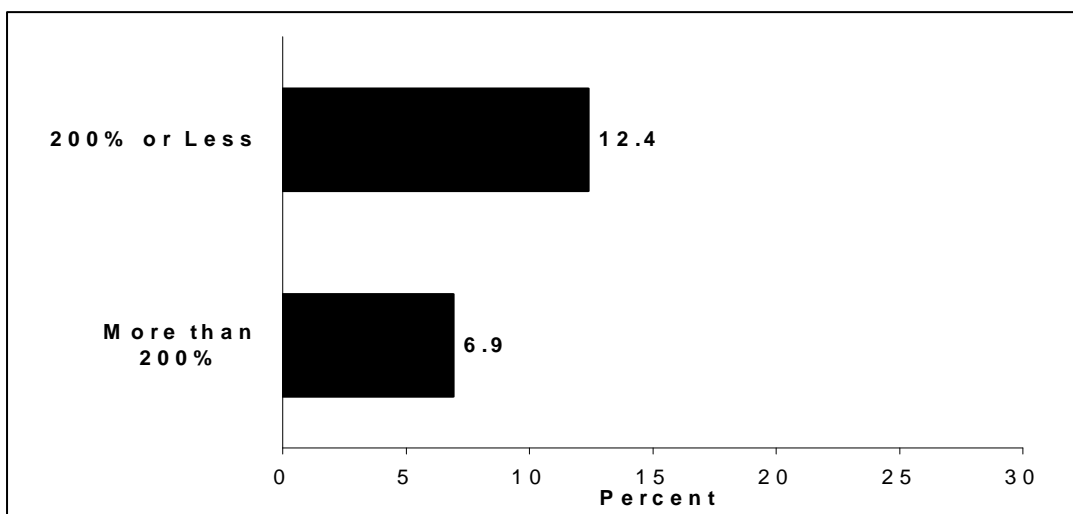


**Figure 9.2: Currently Uninsured By Age and Gender**

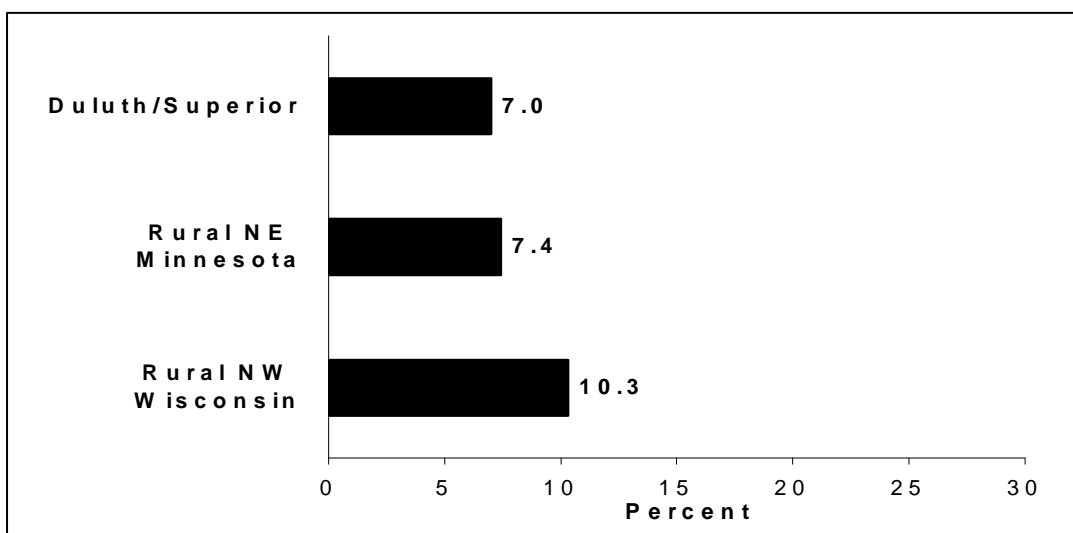


- Respondents with **vocational or associate degrees** and **college graduates** were less likely to be without insurance at the time of the survey compared to **high school graduates and those with less than a high school education** (6.0% and 4.4% vs. 10.7% and 7.8, respectively).
- Poverty status was related to health insurance coverage. Respondents with incomes **at or below 200% of poverty** were nearly two times as likely not to have had insurance coverage at the time of the survey (12.4%) as those with incomes **above 200% of poverty** (6.9%) (Figure 9.3).
- Respondents living in **rural Northwestern Wisconsin** were more likely to be currently uninsured (10.3%) than respondents from either **rural Northeastern Minnesota** (7.4%) or the **Duluth/Superior** area (7.0%) (Figure 9.4).

**Figure 9.3: Currently Uninsured By Poverty Status**



**Figure 9.4: Currently Uninsured By Geographic Area**



### Health Insurance Status over the Past Year (Table 9.1)

- In the region overall, 5.5% of all respondents reported having no health insurance for the entire previous year. Another 6.6% of the respondents indicated that they were uninsured for part of the previous year.
- **Males** were more likely to have had no insurance during all or part of the past year than **females**.
- Generally, the likelihood of being uninsured during the previous year tended to decrease as age increased. In other words, **older** respondents were generally less likely than **younger** respondents to have been uninsured for all or part of the previous year. A notable exception is found among **females age 55 to 64** (5.8%), who were just as likely as **females age 25 to 44** to have been uninsured for all of the previous year.
- Respondents with **vocational or associate degrees** and **college graduates** were less likely to be without insurance during the previous year compared to respondents with **less education**.
- Respondents with incomes **at or below 200% of poverty** were over two times more likely not to have had insurance coverage during all or part of the previous year (19.9%) as those with incomes **above 200% of poverty** (9.7%).
- **Rural Northwestern Wisconsin** respondents were more likely to report having no insurance during all or part of the past year than respondents living in **rural Northeastern Minnesota** or in the **Duluth/Superior** area.

### Type of Health Insurance (Table 9.2)

Respondents were asked about many types of health insurance coverage. Many insured respondents reported having more than one form of insurance coverage.

- Over two-thirds of the respondents had private insurance (79.5%), about one-fifth had Medicare (21.9%), 4.0% had Medical Assistance and 9.5% had health insurance through some other public source.
- **Females** were more likely to have Medicare coverage than **males** (24.3% vs. 19.3%).
- The percentage of respondents with private insurance steadily increased as education level increased. Conversely, the percentage with Medicare, Medical Assistance and other public insurance coverage decreased as education level increased.
- A smaller percentage of respondents with incomes **at or below 200% of poverty** had private insurance coverage (62.0%) as compared to those with incomes **above 200% of poverty** (86.9%).
- Nearly one-third of the respondents with incomes **at or below 200% of poverty** received Medicare coverage (29.6%), as compared to 14.7% of respondents with incomes **above 200% of poverty**.

- Respondents living in **rural Northeastern Minnesota and rural Northwestern Wisconsin** were more likely to have some other source of public insurance than respondents living in **Duluth/Superior** (10.5% and 10.1% vs. 6.5%, respectively).
- Respondents living in **Northwestern Wisconsin** were less likely to have private insurance coverage (75.7%) than respondents living in **Northeastern Minnesota** (80.9%).

**TABLE 9.2**  
**INSURANCE TYPES**  
Bridge to Health Survey 2000  
(n=6123)

**Question:** I will read a list of different types of health insurance. Please answer *yes* or *no* as to whether you personally have each type of insurance right now. (15 different types of public and private insurance were probed, including none or other.)<sup>1</sup>

Demographic Characteristics		Private	Medicare	Medical Assistance	Other Public <sup>2</sup>
<b>Overall results</b>		<b>79.5%</b>	<b>21.9%</b>	<b>4.0%</b>	<b>9.5%</b>
<b>Gender</b>					
	Male	78.4	19.3	3.6	10.5
	Female	80.5	24.3	4.3	8.5
<b>Males by Age</b>					
	18 to 24	71.2	4.6	2.5	5.8
	25 to 34	80.7	0.2	0.7	9.2
	35 to 44	77.5	0.4	2.0	15.4
	45 to 54	82.3	4.2	3.0	6.4
	55 to 64	84.8	12.2	4.0	6.5
	65 to 74	68.5	85.2	8.7	12.8
	75 and older	80.5	80.8	8.8	18.0
<b>Females by Age</b>					
	18 to 24	75.7	6.4	4.7	10.5
	25 to 34	79.1	1.1	5.1	9.5
	35 to 44	84.9	2.1	4.1	9.0
	45 to 54	87.8	2.2	1.1	8.1
	55 to 64	81.2	7.7	1.9	7.9
	65 to 74	76.4	86.6	5.8	7.3
	75 and older	72.1	89.8	9.0	7.1
<b>Education</b>					
	Less than H.S.	63.3	49.9	7.9	13.6
	H.S. Graduate	73.8	24.4	5.0	12.2
	Some College	82.6	18.3	3.5	7.4
	Voc./Assoc. Degree	85.0	11.9	2.4	9.1
	College Graduate	90.6	14.2	1.6	5.6
<b>Poverty Status</b>					
	200% or less	62.0	29.6	9.0	17.6
	More than 200%	86.9	14.7	1.7	5.9
<b>Urban/Rural</b>					
	Duluth/Superior	81.6	21.6	4.5	6.5
	Rural NE Minnesota	80.2	21.9	3.6	10.5
	Rural NW Wisconsin	75.4	22.2	4.4	10.1
<b>Region</b>					
	NE Minnesota	80.9	21.7	3.9	9.7
	NW Wisconsin	75.7	22.5	4.1	9.0

<sup>1</sup> Respondents could indicate more than one type of insurance.

<sup>2</sup> Other public insurance included Indian or Tribal Health Service, Health Insurance Risk Sharing Plan (HIRSP) (WI), BadgerCare, MinnesotaCare, Minnesota Comprehensive Health Association (MCHA), Healthy Start, General Assistance Medical Care (GAMC), and Champus or Veterans' benefits.

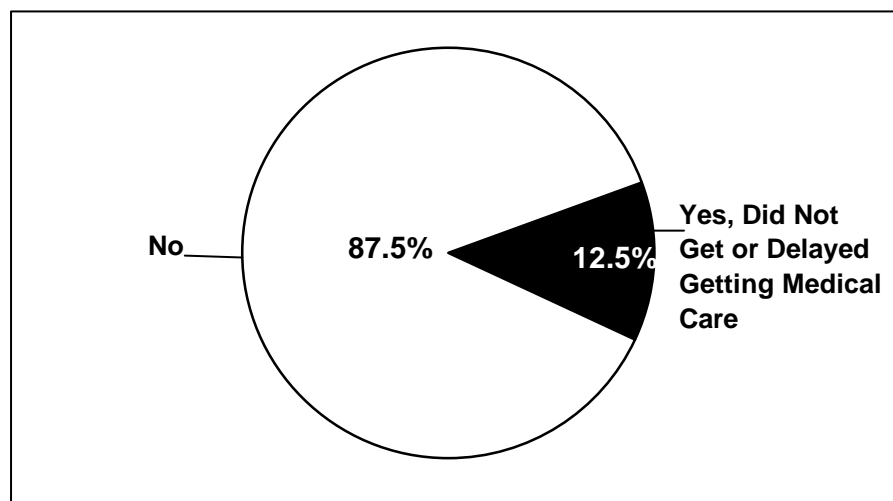
**B. FAILURE TO RECEIVE MEDICAL CARE, FAILURE TO FILL A PRESCRIPTION, POSTPONEMENT OF DENTAL WORK (Tables 9.3-9.5) (Figures 9.5-9.14)**

**Medical Care (Table 9.3) (Figures 9.5-9.9)**

Respondents were asked if there was a time during the past year when they thought they needed medical care but did not get it or delayed getting it. The percentage responding yes to this question was much lower in the *Bridge to Health Survey 2000* than in the 1995 Survey (12.5% vs. 25.9% for the region overall). This difference may be due to the change in the survey format from mail to telephone (see endnote 2).

- More than 1 in 10 respondents reported that there was a time in the past year when they thought that they needed medical care, but did not get it or delayed getting it (12.5%). (Figure 9.5)

**Figure 9.5: Did Not Get or Delayed Getting Needed Medical Care**



- Respondents **under age 65** were more likely to have delayed getting needed medical care than respondents **age 65 and older**.
- **Younger females (age 18 to 44)** were substantially more likely to have delayed getting needed medical care than **males** of the same age. **Females age 18 to 24** were more likely than any other group to have delayed getting care (23.3%) (Figure 9.6).
- About one in five (19.8%) respondents with incomes **at or below 200% of poverty** did not receive or delayed getting needed medical care, as compared to 11.2% of those with incomes **above 200% of poverty** (Figure 9.7).
- The primary reasons for not receiving or delaying needed care were *it cost too much* (24.9%) and *insurance did not cover it* (24.6%).
- **Males** were more likely than **females** to indicate *it cost too much* and *insurance did not cover it* for not getting or delaying medical care.

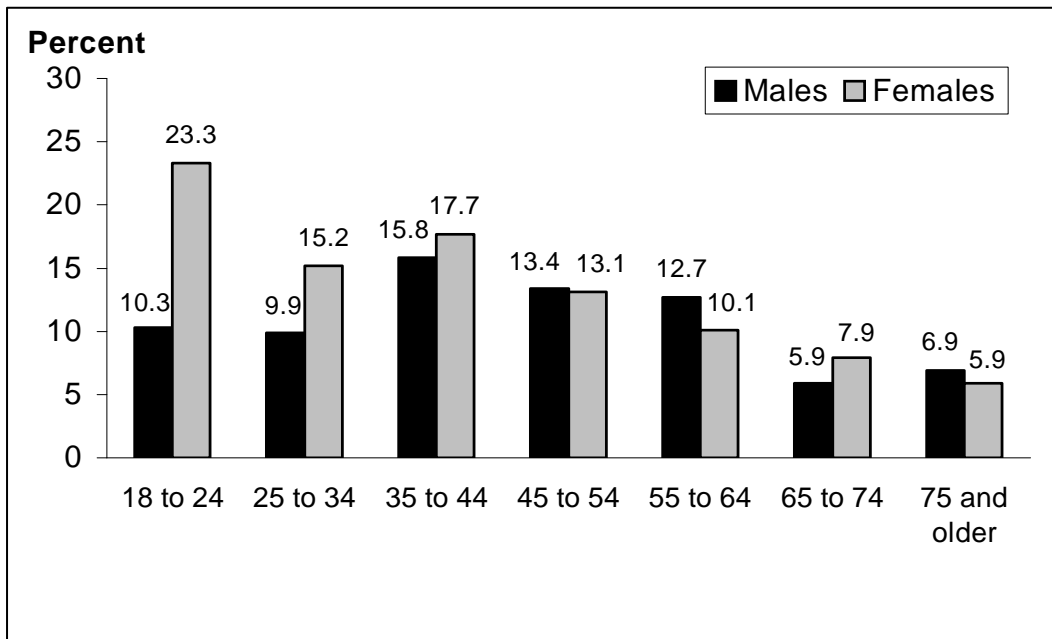
**TABLE 9.3**  
**FAILURE TO RECEIVE MEDICAL CARE: TOP THREE REASONS**

Bridge to Health Survey 2000

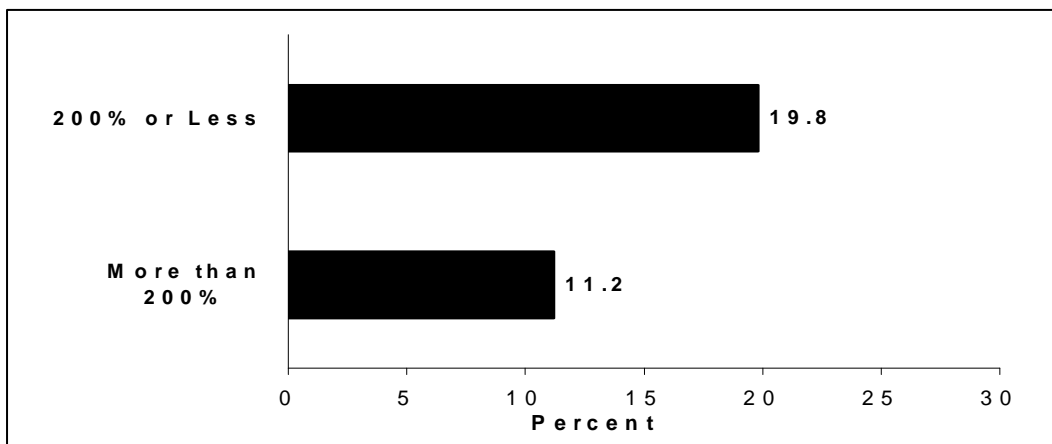
**Question:** In the past year, was there a time when you thought that you needed medical care but did not get it or delayed getting it? If so, why was that?

Demographic Characteristics		Needed But Did Not Get or Delayed Getting Medical Care (n=6144)	Reasons:		
			Cost Too Much (n=771)	Insurance Did Not Cover It (n=771)	Not Serious Enough (n=771)
<b>Overall results</b>		<b>12.5%</b>	<b>24.9%</b>	<b>24.6%</b>	<b>9.7%</b>
<b>Gender</b>					
	Male	11.6	29.1	29.1	11.7
	Female	13.4	21.4	21.0	8.1
<b>Males by Age</b>					
	18 to 24	10.3	0.0	50.0	26.5
	25 to 34	9.9	31.8	18.2	15.6
	35 to 44	15.8	40.2	36.6	12.5
	45 to 54	13.4	33.3	27.4	2.8
	55 to 64	12.7	25.5	21.6	5.8
	65 to 74	5.9	15.0	10.0	21.1
	75 and older	6.9	16.7	17.6	16.7
<b>Females by Age</b>					
	18 to 24	23.3	17.4	18.8	7.4
	25 to 34	15.2	16.2	22.1	2.9
	35 to 44	17.7	24.1	22.4	12.1
	45 to 54	13.1	25.0	23.6	9.9
	55 to 64	10.1	32.6	18.6	2.4
	65 to 74	7.9	10.3	30.0	0.0
	75 and older	5.9	20.8	8.0	16.7
<b>Education</b>					
	Less than H.S.	15.4	26.2	22.6	7.1
	H.S. Graduate	9.8	32.2	18.0	8.5
	Some College	15.6	14.0	24.8	14.0
	Voc./Assoc. Degree	15.6	33.0	28.4	7.8
	College Graduate	10.3	27.6	33.6	5.2
<b>Poverty Status</b>					
	200% or less	19.8	31.3	28.3	6.9
	More than 200%	11.2	17.5	18.3	11.9
<b>Urban/Rural</b>					
	Duluth Superior	13.4	23.0	18.6	16.0
	Rural NE Minnesota	12.0	23.9	27.5	8.2
	Rural NW Wisconsin	13.0	29.8	24.3	6.5
<b>Region</b>					
	NE Minnesota	12.3	23.2	24.8	10.4
	NW Wisconsin	13.2	29.4	24.3	7.9

**Figure 9.6: Did Not Get or Delayed Getting Medical Care  
By Age and Gender**



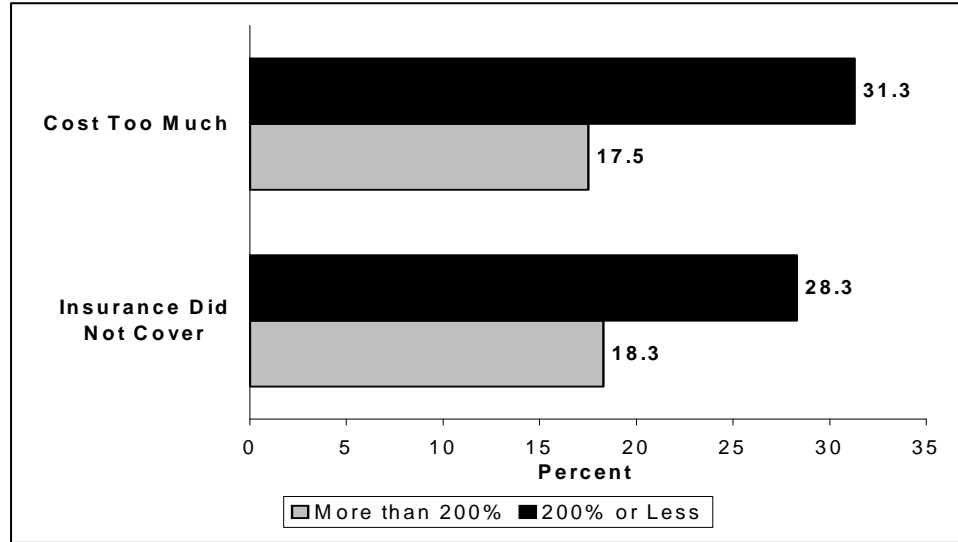
**Figure 9.7: Did Not Get or Delayed Getting Medical Care  
By Poverty Status**



- Generally, those **age 65 and older** were less likely than **younger** respondents to indicate *cost too much* or *insurance not covering* as reasons for the delay of care.
- Both *cost too much* and *insurance not covering* were cited much more frequently among those respondents living **at or below 200% of poverty** than among respondents of **higher income** (Figure 9.8).



**Figure 9.8: Reasons for Not Getting or Delaying Medical Care By Poverty Status**



#### Prescriptions (Table 9.4)

- A small percentage of *all* respondents (4.5%) failed to fill at least one prescription in the last six months. This is somewhat lower than the same rate found in the *Bridge to Health Survey 1995* (6.4%).
- **Females** were somewhat more likely to not have a prescription filled than **males** (5.4% vs. 3.6%).
- For **females**, the likelihood of not filling a prescription tended to decrease with age. No clear age pattern appeared for males.
- Respondents with incomes **at or below 200% of poverty** were nearly twice as likely not to have had a prescription filled as those with incomes **above 200% of poverty** (7.4% vs. 3.8%).
- The primary reasons for not filling a prescription were *it cost too much* (25.8%) and *insurance did not cover it* (12.1%).

**TABLE 9.4**  
**FAILURE TO FILL A MEDICATION PRESCRIPTION: TOP TWO REASONS**  
 Bridge to Health Survey 2000

Question: Which of the following statements best describes you. In the last 6 months:

- I had no prescriptions written for me
- I had prescriptions written for me and filled them all
- I had prescriptions written for me and did not fill at least one of them

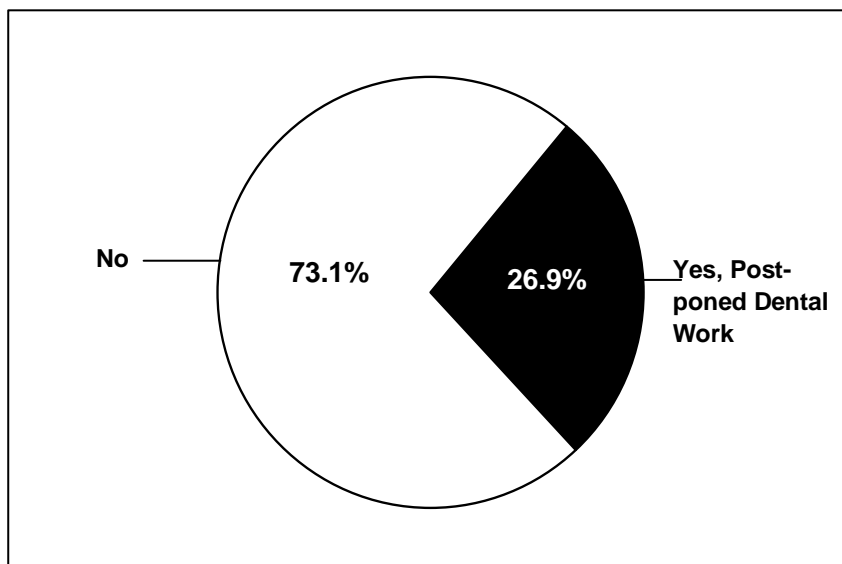
If you did not fill a prescription, why was that?

Demographic Characteristics	Failed to Fill Prescription (n=6139)	Reasons:	
		It Cost Too Much (n=276)	Insurance Did Not Cover It (n=276)
<b>Overall results</b>	<b>4.5%</b>	<b>25.8%</b>	<b>12.1%</b>
<b>Gender</b>			
Male	3.6	24.5	14.0
Female	5.4	26.6	10.7
<b>Males by Age</b>			
18 to 24	2.1	0.0	0.0
25 to 34	2.3	20.0	11.1
35 to 44	5.1	13.9	8.3
45 to 54	3.9	33.3	4.8
55 to 64	4.7	20.0	31.6
65 to 74	2.1	71.4	28.6
75 and older	2.7	57.1	28.6
<b>Females by Age</b>			
18 to 24	8.4	7.7	7.7
25 to 34	7.3	36.4	6.1
35 to 44	7.3	27.1	8.3
45 to 54	3.9	15.0	5.0
55 to 64	5.5	34.8	17.4
65 to 74	3.5	38.5	30.8
75 and older	1.5	33.3	28.6
<b>Education</b>			
Less than H.S.	5.1	46.4	17.9
H.S. Graduate	4.2	22.2	12.1
Some College	5.0	31.7	18.1
Voc./Assoc. Degree	3.8	32.0	8.0
College Graduate	4.4	6.0	2.0
<b>Poverty Status</b>			
200% or less	7.4	34.9	9.2
More than 200%	3.8	19.7	13.9
<b>Urban/Rural</b>			
Duluth/Superior	5.0	27.1	12.9
Rural NE Minnesota	4.6	22.4	12.5
Rural NW Wisconsin	3.6	37.0	8.9
<b>Region</b>			
NE Minnesota	4.7	22.4	11.8
NW Wisconsin	4.0	36.9	13.8

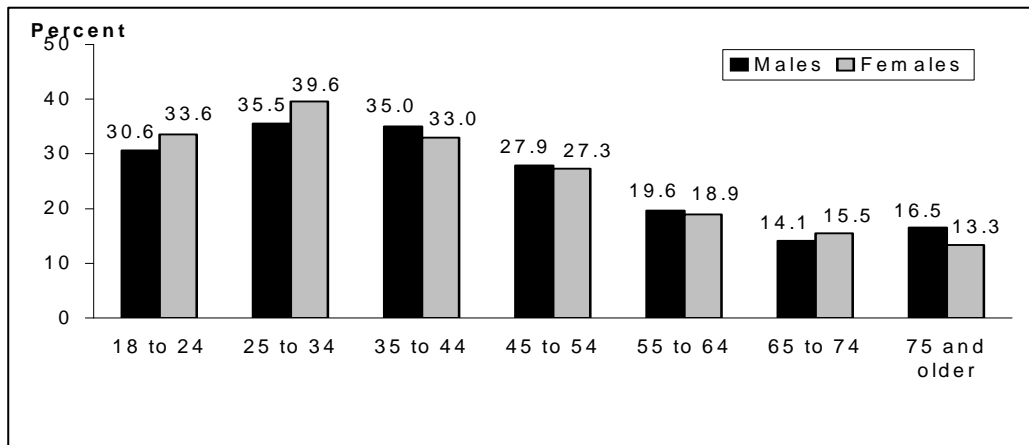
### Dental Work (Table 9.5) (Figures 9.9-9.13)

- Overall, more than one-quarter (26.9%) of the respondents reported having postponed dental work in the past year. This is a lower percentage than was found in the *Bridge to Health Survey 1995* (33.4%) (Figure 9.9).
- The likelihood of postponing dental work tended to decrease with age. Respondents **age 55 and older** were much less likely to have postponed dental work than **younger** respondents (Figure 9.10).

**Figure 9.9: Postponed Dental Work in the Past Year**



**Figure 9.10: Postponed Dental Work in the Past Year By Age and Gender**



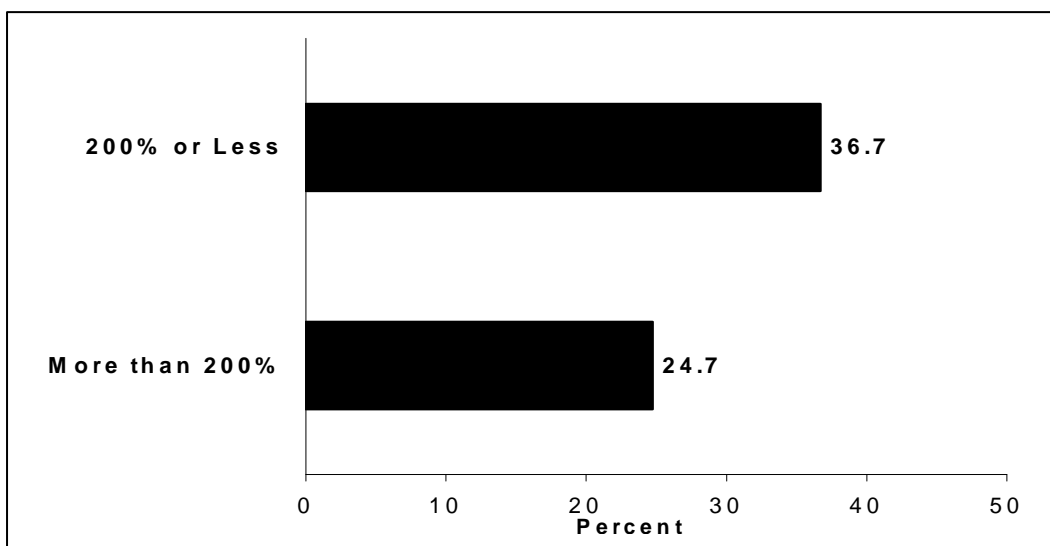
**TABLE 9.5**  
**POSTPONEMENT OF DENTAL WORK: TOP THREE REASONS**  
 Bridge to Health Survey 2000

**Question:** In the past year, have you postponed dental work? If so, why was that?

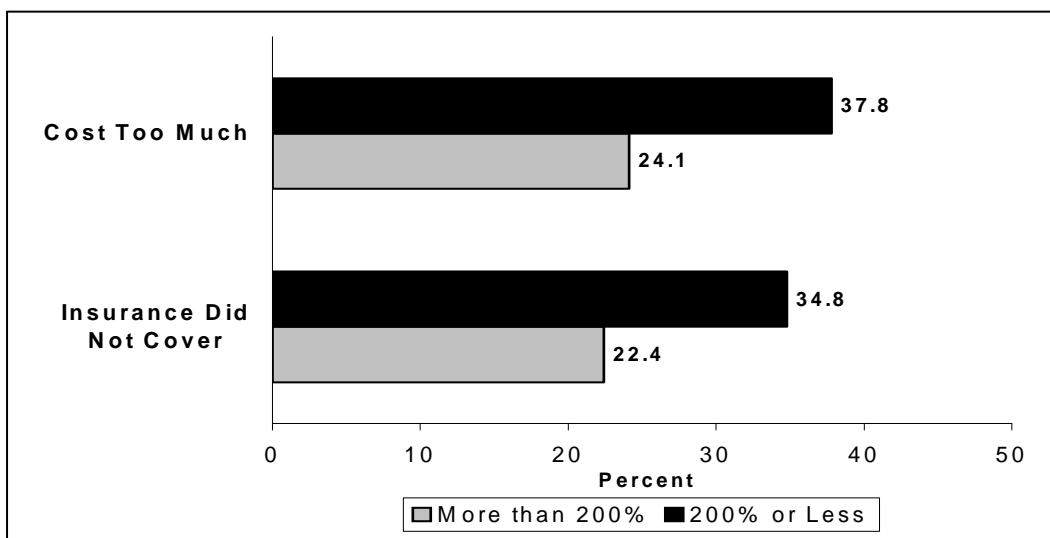
Demographic Characteristics		Postponed Dental Work in Past Year (n=6153)	Reasons:		
			Cost Too Much (n=1658)	Insurance Did Not Cover (n=1658)	Nervous or Afraid (n=1658)
<b>Overall results</b>		<b>26.9%</b>	<b>29.8%</b>	<b>26.5%</b>	<b>13.2%</b>
<b>Gender</b>					
	Males	27.4	29.9	23.6	11.6
	Females	26.5	29.7	29.4	14.8
<b>Males by Age</b>					
	18 to 24	30.6	11.9	6.9	15.0
	25 to 34	35.5	23.9	28.3	10.8
	35 to 44	35.0	34.1	29.7	11.0
	45 to 54	27.9	29.6	22.4	6.6
	55 to 64	19.6	33.8	24.1	10.1
	65 to 74	14.1	54.3	26.1	25.5
	75 and older	16.5	38.1	9.3	11.9
<b>Females by Age</b>					
	18 to 24	33.6	18.2	31.6	8.1
	25 to 34	39.6	22.2	32.2	12.8
	35 to 44	33.0	37.7	32.4	13.0
	45 to 54	27.3	29.1	27.0	20.3
	55 to 64	18.9	28.8	26.6	22.8
	65 to 74	15.5	39.3	25.0	23.2
	75 and older	13.3	37.0	18.5	7.3
<b>Education</b>					
	Less than H.S.	29.0	37.7	25.8	14.5
	H.S. Graduate	25.8	31.9	25.4	17.6
	Some College	28.2	25.8	23.2	11.2
	Voc./Assoc. Degree	27.2	36.3	40.2	8.9
	College Graduate	26.0	24.1	25.5	10.2
<b>Poverty Status</b>					
	200% or less	36.7	37.8	34.8	8.9
	More than 200%	24.7	24.1	22.4	15.8
<b>Urban/Rural</b>					
	Duluth/Superior	26.9	24.3	21.4	11.9
	Rural NE Minnesota	27.5	30.0	25.5	13.2
	Rural NW Wisconsin	25.6	35.3	35.0	14.8
<b>Region</b>					
	NE Minnesota	27.3	27.8	24.8	12.9
	NW Wisconsin	26.0	35.6	31.6	14.2

- Respondents with incomes **at or below 200% of poverty** were more likely to have postponed dental work than those with incomes **above 200% of poverty** (36.7% vs. 24.7%) (Figure 9.11).
- The primary reasons for postponing dental work were *it cost too much* (29.8%) and *insurance did not cover it* (26.5%).
- Both *cost too much* and *insurance not covering* were cited much more frequently among those respondents with incomes **at or below 200% of poverty** than among respondents with incomes **above 200% of poverty** (Figure 9.12).

**Figure 9.11: Postponed Dental Work in the Past Year  
By Poverty Status**

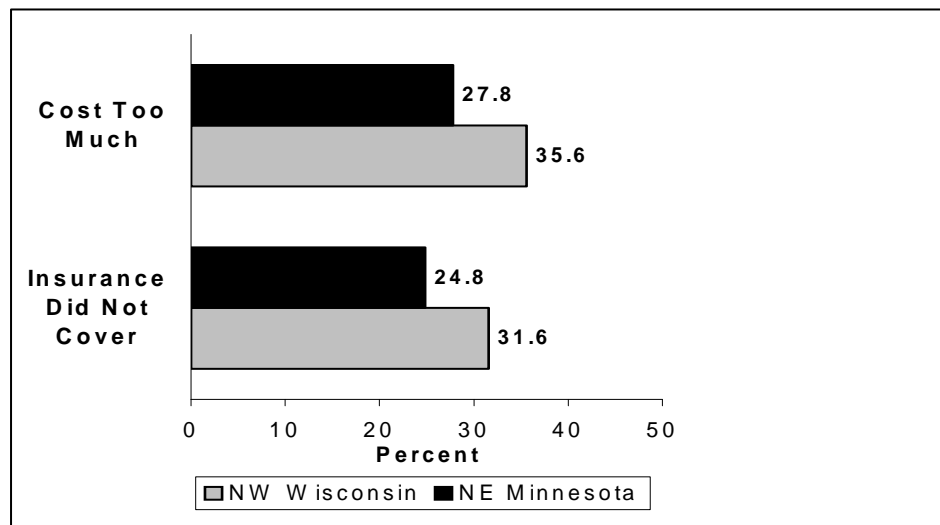


**Figure 9.12: Reasons for Postponing Dental Work  
By Poverty Status**



- Respondents in **rural** areas were more likely to cite *cost too much* and *insurance not covering* as reasons for postponing dental work than **urban** respondents (Duluth/Superior).
- Respondents in **Northwestern Wisconsin** were more likely to cite *cost too much* and *insurance not covering* as reasons for postponing dental work than respondents in **Northeastern Minnesota** (Figure 9.13).

**Figure 9.13: Reasons for Postponing Dental Work  
By Geographic Area**



## NOTES

1. The questions used in the Minnesota and Wisconsin statewide surveys of health insurance status are not identical to those used in the *Bridge to Health Survey 2000*, so caution must be used in comparing statewide to regional results.
2. While the question wording was identical, in the 1995 mail survey respondents could view a list of possible reasons why they might have delayed seeking medical care, which may have reminded some of them of such a delay. In the 2000 telephone survey, respondents were not given a list of possible reasons why they might have delayed getting care. It is worth noting that the *Bridge to Health 2000* result for this question (12.5% answering “yes” for the region overall) is similar to results found in other recently conducted county-level telephone surveys in Minnesota (Hennepin County, 1997 - 13.8%; Washington County, 1998 - 13.8%; Carver County, 1998 - 18.3%).

## REFERENCES

1. Wisconsin Department of Health and Family Services, Division of Health Care Financing. Wisconsin health insurance coverage, 1999. Madison: Wisconsin Department of Health and Family Services; 2000.
2. University of Minnesota School of Public Health, Division of Health Services Research and Policy. Minnesota Health Access Survey 1999. Minneapolis: University of Minnesota; 1999.

# **Chapter 10**

## **Physical and Mental Health Component Summary Measures**

- A. Physical Health Status**
- B. Mental Health Status**





# CHAPTER 10

## PHYSICAL AND MENTAL HEALTH COMPONENT SUMMARY MEASURES

### BACKGROUND

Over the past 20 years, there has been increased attention given to the individual's point of view in measuring and monitoring health care outcomes (1). The individual is typically the best judge of whether the goals of intervention have been achieved. The preservation of physical functioning and wellbeing is a prime concern in effective intervention (2,3,4,5). Measures of health that are not specific to age or disease are useful for comparing the health of diverse populations. Primarily, these measures are used to compare the relative burden of diseases, or conditions, and the benefits of treatment options (6).

The Medical Outcomes Study is an observational study of functional status and wellbeing of individuals involved in various systems of care (7). The 36-item short-form survey, known as the SF-36 utilized during the Medical Outcomes Study, measures eight domains of health status: physical functioning, role limitations due to physical health problems, bodily pain, general health perceptions, vitality (energy/fatigue), social functioning, role limitations due to emotional health and general mental health (psychological distress and wellbeing). This survey has existed for over 20 years, and it is widely used in the United States and throughout the world. To date, there are over 300 published articles that reference the SF-36 instrument.

### APPLICATION FOR BRIDGE TO HEALTH SURVEY 2000

The *Bridge to Health Survey 2000* includes a shortened version of the SF-36 known as the SF-12, which was developed by researchers at The Health Institute at the New England Medical Center in 1994 (8). Responses to the SF-12 questions were combined to form two summary measures: a physical health summary measure, and a mental health summary measure. The two summary measures, or scores, were standardized to national norms so that the results from the specific surveys can be meaningfully compared to national results. In this instance, *standardization* means that a score of 50 on a summary score is the "average" as compared to adults in the nation as a whole. A score greater than 50 indicates better health, whereas a score less than 50 indicates poorer health.) The scores have a possible range of 0 to 100. In the *Bridge to Health Survey 2000* data, the physical health summary score ranged from 10.6 to 65.3, and the mental health summary score ranged from 10.5 to 72.0. (In national data, the scores ranged from 13 to 69 for physical health and from 10 to 70 for mental health (8).)

The physical health and mental health summary measures are defined using the following eight health domains:

Physical Functioning	Limited in moderate activities, such as pushing a vacuum cleaner or playing golf.  Limited in climbing several flights of stairs.
Role-Physical	Extent of accomplishing less than one would like due to physical health. Limited in doing work or regular daily activities due to physical health.

Bodily Pain	Extent of bodily pain interfering with normal work.
General Health	Perceived general health status, ranging from excellent to poor.
Vitality	Extent of having a lot of energy.
Social Functioning	Extent of physical health or emotional problems interfering with social activities like visiting with friends or relatives.
Role-Emotional	Extent of accomplishing less than one would like due to emotional problems.
	Not doing work or regular activities as carefully as usual due to emotional problems.
Mental Health	Extent of feeling calm and peaceful.
	Extent of feeling downhearted and blue.

In the *Bridge to Health Survey 2000* data, a respondent who has been told by a physician that he or she has hypertension will, on average, score 6.6 fewer points on the physical health summary measure than a respondent who has not been told this. Similarly, a respondent who has been told by a physician that he or she has depression will score an average of 11.2 fewer points on the mental health summary measure than a respondent who does not have depression. This shows that even small differences in the physical health score can reflect large differences in actual physical health status. Differences in the mental health score may need to be larger to reflect meaningful differences in actual mental health status.

## RESULTS

Results are summarized below by differences in demographic characteristics.

### A. PHYSICAL HEALTH STATUS (Table 10.1)

- **Males** (50.7) had slightly higher physical health summary scores, on average, than **females** (49.5).
- The physical health of older adults was poorer, on average, than the physical health of younger adults. For example, among the region's adults, **males age 18 to 34** had considerably higher scores than **males age 75 and older**, 54.2 and 46.9, respectively. The same trend was observed for **females**, 53.2 and 42.4, respectively, for the same age groups.
- Among the region's adults, physical health scores tended to increase as education level increased. Respondents with **less than a high school education** scored about 6 points lower, on average, than those with a **college education**. (This is not surprising due to the older average age of respondents with lower educational attainment levels.)
- Respondents with incomes **at or below 200% of poverty** scored lower, on average, than those with incomes **above 200% of poverty** (47.5 vs. 51.4).

**TABLE 10.1**  
**PHYSICAL AND MENTAL HEALTH SUMMARY MEASURES**  
 BRIDGE TO HEALTH SURVEY 2000  
 (N=5784)

Demographic Characteristics	Physical Health Summary Measure (mean score)	Mental Health Summary Measure (mean score)
<b>Overall results</b>	<b>50.1</b>	<b>53.9</b>
<b>Gender</b>		
Male	50.7	54.5
Female	49.5	53.4
<b>Males by Age</b>		
18 to 24	54.2	54.5
25 to 34	54.2	54.5
35 to 44	51.7	53.6
45 to 54	50.1	53.8
55 to 64	48.2	55.3
65 to 74	46.6	56.1
75 and older	46.9	55.1
<b>Females by Age</b>		
18 to 24	53.2	51.0
25 to 34	52.4	52.3
35 to 44	51.0	52.0
45 to 54	50.4	54.0
55 to 64	48.2	55.0
65 to 74	46.3	54.5
75 and older	42.4	55.5
<b>Education</b>		
Less than H.S.	46.4	53.3
H.S. Graduate	49.4	53.9
Some College	50.2	54.0
Voc./Assoc. Degree	50.5	53.3
College Graduate	52.6	54.4
<b>Poverty status</b>		
200% or less	47.5	52.0
More than 200%	51.4	54.5
<b>Urban/Rural</b>		
Duluth/Superior	50.7	53.8
Rural NE Minnesota	49.7	54.0
Rural NW Wisconsin	50.4	53.8
<b>Region</b>		
NE Minnesota	50.0	54.0
NW Wisconsin	50.4	53.7

## B. MENTAL HEALTH STATUS (Table 10.1)

- As with physical health, **males** (54.5) had slightly higher mental health summary scores, on average, than **females** (53.4).
- In contrast to physical health, the average mental health summary scores of Bridge to Health adult residents tended to *increase* with age. In other words, **older** adults in the region tended to be more mentally healthy, on average, than **younger** adults. This was particularly true for **females**.
- Respondents with incomes **at or below 200% of poverty** were among those most likely to have lower mental health scores than any other group.

## C. COMPARISON TO THE U.S. ADULT POPULATION (Figures 10.1, 10.2)

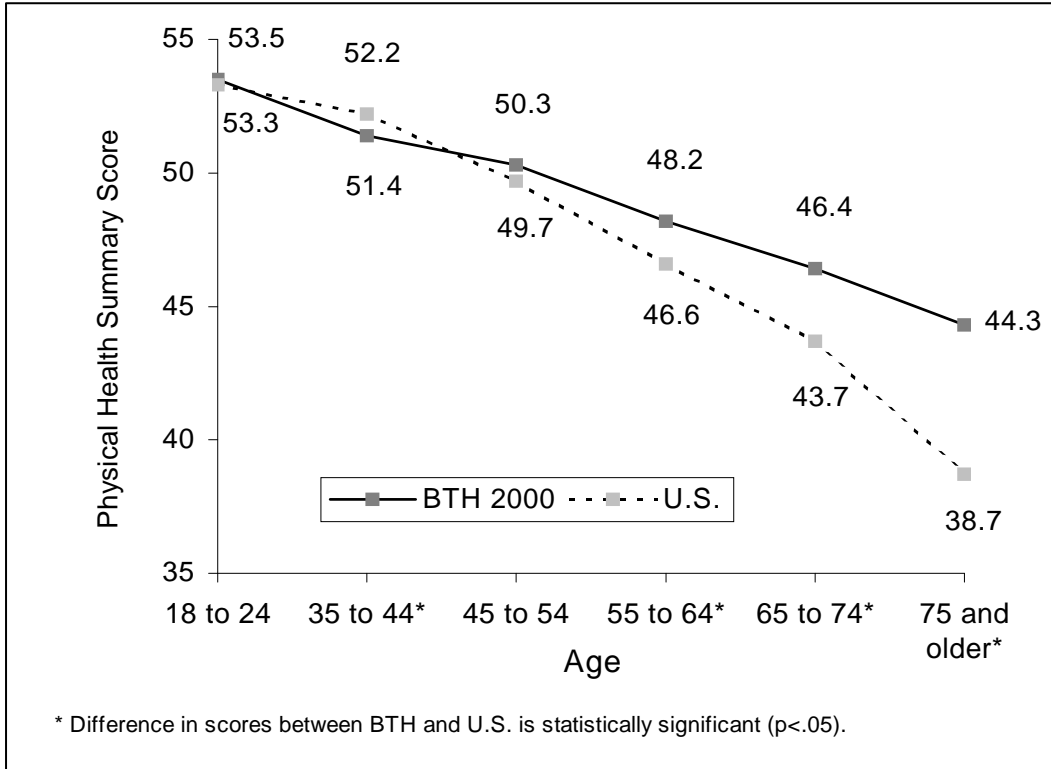
### Physical Health Status: Overall and By Age

- Overall, the average *physical health* summary score for adults living in the *Bridge to Health* region (50.1) was not different from the score for the U.S. adult population (50.1).
- Differences in the average *physical health* summary scores between the U.S. adult population and adults living in the Bridge to Health region were small and mostly not statistically significant for those ages 18 to 54. This means that adults of this age were about as physically healthy as adults nationally. However, the differences were statistically significant for ages 55 to 64, 65 to 74 and 75 and older. Thus, adults living in the region who are **age 45 and over**, on average, were **physically healthier** than their counterparts nationally (Figure 10.1).

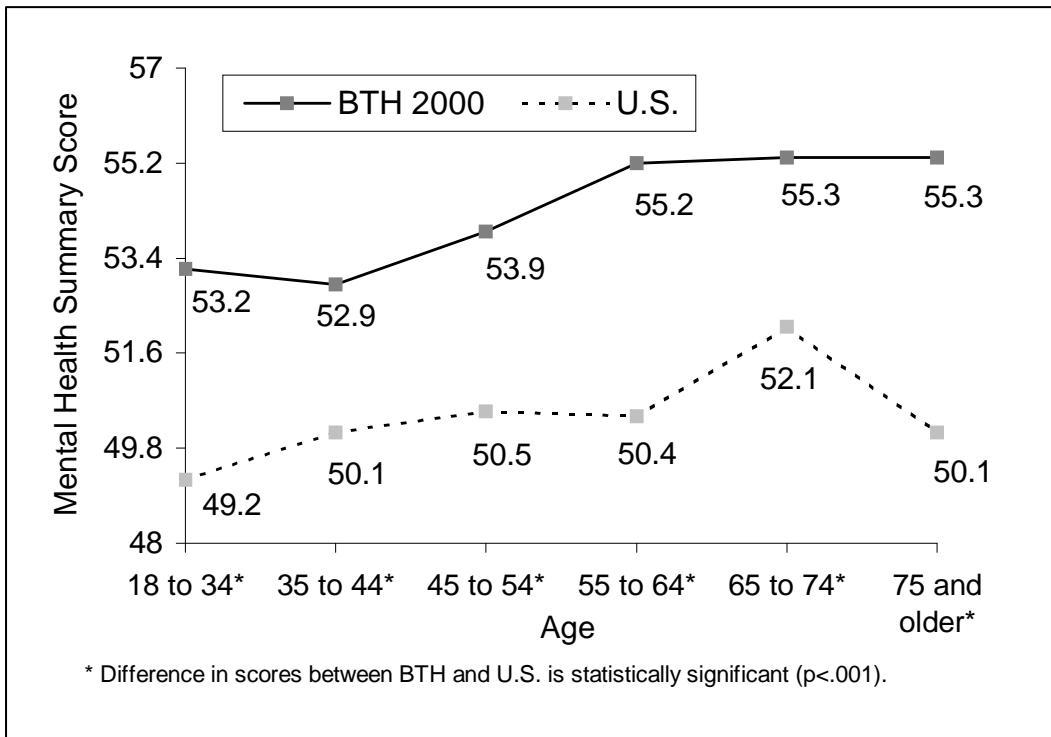
### Mental Health Status: Overall and By Age

- Overall, the average *mental health* summary score for adults living in the Bridge to Health region was statistically significantly higher than the score for the U.S. adult population (53.9 vs. 50.0,  $p < .001$ ). This was true for both males and females. This means that the region's adults were, on average, mentally healthier than adults were in the nation as a whole. The average score for the Bridge to Health region's adults was at the 66<sup>th</sup> percentile of the U.S. adult population, which means that 66% of adults nationally had a poorer mental health status than the average Bridge to Health resident.
- Differences in the average *mental health* summary scores between the U.S. adult population and the region's adults by age were all statistically significant. Thus, **at every age**, on average, Bridge to Health adults were **mentally healthier** than U.S. adults (Figure 10.1).

**Figure 10.1: Physical Health Summary Scores By Age for Bridge to Health Adult Residents and the U.S. Adult Population**



**Figure 10.2: Mental Health Summary Scores by Age for Bridge to Health Adult Residents and the U.S. Adult Population**



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## 2000 Bridge to Health Survey Questionnaire

### HOUSEHOLD SCREENING AND INTRODUCTION

Hello, is this the \_\_\_\_\_(household address)?

1. Correct address: continue
2. Address changed, out of the 18 geographic areas, brief the purpose of call, thanks, terminate
3. List of the reasons of refusals of SHAPE in CATI

**Hello, my name is \_\_\_\_\_. I am calling from the University of Minnesota on behalf of the Bridge to Health Collaborative. The Bridge to Health Collaborative is made up of over 100 health and medical organizations in Northeast Minnesota and Northwest Wisconsin. They have asked us to call households in the region to conduct a community health assessment survey.**

### SCREENING RESPONDENT FROM THE HOUSEHOLD

To make sure everyone is selected randomly, we would like to talk to the person who lives in this household, is at least 18 years old, and has had the last birthday. Would that be you or someone else?

1. Respondent is the person who answered the phone \_\_\_\_\_
2. Respondent is another person and is immediately available, ask to talk to this person \_\_\_\_\_
3. Respondent is another person who is not immediately available \_\_\_\_\_

Best time and date to call back

4. Respondent is non-English speaker (brief the purpose of call, thanks, terminate) \_\_\_\_\_

### INFORMED VERBAL CONSENT

(If the respondent is the person who answered the phone first, start with the fourth paragraph at \*.)

Hi \_\_\_\_\_ (first name).

**Hello, my name is \_\_\_\_\_. I am calling from the University of Minnesota on behalf of the Bridge to Health Collaborative. The Bridge to Health Collaborative is made up of over 100 health and medical organizations in Northeast Minnesota and Northwest Wisconsin. They have asked us to call households in the region to conduct a community health assessment survey.**

The survey asks questions about your health and health care. The information will be used for planning to improve the health and well being of people in your community. Your household has been randomly selected to participate in this survey.

\*Your participation in this survey will be highly appreciated. The interview will take about half an hour. All responses, including your name and address will be kept confidential. You can refuse to answer any question that you personally don't feel comfortable with. You also have the right to refuse to participate in the survey.

Would you be willing to participate in the survey?

Yes \_\_\_\_\_ continue

No \_\_\_\_\_ Would you mind telling me why?

List of reasons of refusals of SHAPE questionnaire in CATI.

For refusals, thank respondent, terminate

For the time is not convenient, explain and reschedule \_\_\_\_\_

## START INTERVIEW WITH QUESTIONNAIRE

1. Before we begin, I just want to verify that your zipcode is [SAY ZIPCODE]\_\_\_\_\_

2. Are you male or female?

\_\_\_ Male

\_\_\_ Female

3. [SF1]: In general, would you say your health is: [Read]

\_\_\_ Excellent

\_\_\_ Very good

\_\_\_ Good

\_\_\_ Fair

\_\_\_ Poor

\_\_\_ (Don't know/Not sure)

\_\_\_ (Refused)

4. Compared to others your age, would you say that your health is: [Read]

\_\_\_ Excellent

\_\_\_ Very good

\_\_\_ Good

\_\_\_ Fair

\_\_\_ Poor

\_\_\_ (Don't know/not sure)

\_\_\_ (Refused)

5. Have you been told by a physician that you currently have any of the following health conditions?

[Read and mark Yes or No for each item]

Allergies (not including allergies to medication)

Yes

No

Asthma

Back problems

Cancer

Chronic lung disease (including chronic bronchitis or emphysema)

Diabetes

Chronic digestive disease (such as ulcers, colitis, etc.)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



- Headaches (chronic) \_\_\_\_\_
- Heart trouble or angina \_\_\_\_\_
- Stroke related health problems \_\_\_\_\_
- High blood pressure or hypertension \_\_\_\_\_
- High cholesterol or triglycerides \_\_\_\_\_
- Joint problems (such as arthritis, rheumatism or gout) \_\_\_\_\_
- Kidney or bladder problems (including prostate problems) \_\_\_\_\_
- Depression \_\_\_\_\_
- Anxiety or panic attacks \_\_\_\_\_
- Other mental health problems \_\_\_\_\_
- Other (please specify) \_\_\_\_\_

6. How often do you use seatbelts when you drive or ride in a car? [Read]

- Always
- Nearly always
- Sometimes
- Seldom
- Never
- (Never ride or drive in a car)
- (Refused)

7. Yesterday, how many servings of fruits and vegetables did you eat? [Do not read responses.]  
*[A serving size is 1/2 cup cooked or 1 cup raw]* [Do not read]

- 0 servings
- Less than 1 serving
- If 1 or more servings, write number
- (Don't know/Not sure)
- (Refused)

8. In the past year, have you used a community food shelf program?

- Yes
- No
- (Don't know/not sure)
- (Refused)

Next, I will read a list of different types of health insurance. Please answer *yes* or *no* as to whether you personally have each type of insurance right now.

9. Health insurance or an HMO through your work or union  Yes  No  
 DK/NS  Ref
10. Health insurance or an HMO through someone else's work or union  Yes  No  
 DK/NS  Ref
11. Health insurance or an HMO bought directly by yourself or your family  Yes  No  
 DK/NS  Ref
12. Indian or Tribal Health Service  Yes  No  
 DK/NS  Ref
13. Health Insurance Risk Sharing Plan (HIRSP) (WI)  Yes  No  
 DK/NS  Ref
14. Healthy Start  Yes  No  
 DK/NS  Ref
15. Medicare  Yes  No  
 DK/NS  Ref
16. BadgerCare  Yes  No  
 DK/NS  Ref
17. Medicaid, Medical Assistance, PMAP  Yes  No  
 DK/NS  Ref
18. Minnesota Comprehensive Health Association (MCHA)  Yes  
No  DK/NS  Ref
19. General Assistance Medical Care (GAMC)  Yes  No  
 DK/NS  Ref
20. MinnesotaCare  Yes  No  
 DK/NS  Ref
21. Champus or Veterans' benefits  Yes  No  
 DK/NS  Ref
22. None  Yes  No  
 DK/NS  Ref
23. Other, (Please specify)
24. Concerning your health insurance status for the past year, would you say:  
 You were insured for the entire year  
 You were insured for part of the year, and uninsured for part of the year  
 You were uninsured for the entire year  
 (Refused)

25. In the past year, was there a time when you thought that you needed medical care but did not get it or delayed getting it?  
 Yes  
 No  
 (Refused)

*(For those who needed medical care but did not get it or delayed getting it)*

26. Why was that? (Mark all that apply—do not read response options) Were there any other reasons?  
 Could not get an appointment  
 Didn't know where to go

- Do not like doctors
- Inconvenient time
- Could not get off work
- Had no one to take care of the children
- Transportation problems
- Not treated with respect
- It was too far to go
- Didn't think it was serious enough to go for help
- Too nervous or afraid
- It cost too much
- My insurance didn't cover it
- Other, (Please specify)
- (Refused)

27. This next question is about prescriptions for medicines. Which of these statements best describes you. In the last 6 months:

- I had no prescriptions written for me.
- I had prescriptions written for me and filled them all
- I had prescriptions written for me and did not fill at least one of them.
- Don't know/not sure
- (Refused)

28. *(If did not fill a prescription) (If more than one prescription not filled, answer for the last prescription not filled)*

Why was that? [Do not read response options. Mark all that apply] Were there any other reasons?

- The medicine was too expensive
- I don't like taking medicines
- I didn't like the side effects
- Transportation problems
- My insurance didn't cover it
- Other: (Please specify)
- (Refused)

29. In the past year, have you postponed dental work?

- Yes
- No
- (Don't know/not sure)
- (Refused)

*(If delayed dental work)*

Why was that? *(Mark all that apply—do not read response options)* Were there any other reasons?

- It cost too much
- Could not get an appointment
- Transportation problems
- Too nervous or afraid
- Don't have insurance
- Other, (Please specify) \_\_\_\_\_
- (Refused)

30. Do you avoid eating or have trouble eating or drinking certain foods because your teeth or gums hurt?

- Yes
- No
- (Refused)

31. In an average week how many days do you get at least 30 minutes of moderate physical activity like walking, cycling and vacuuming.

- # of days per week
- (Don't know/Not sure)
- (Refused)

32. In an average week how many days do you participate in vigorous physical activity that lasts at least 20 minutes like stair-master, lap swimming, skiing machine and jogging.

- # number of days per week
- (Don't know/Not sure)
- (Refused)

33. (*For those who do NOT engage in moderate and/or vigorous exercise totaling 3 or more times per week*)

What prevents you from exercising 3 or more times per week? Is there anything else that prevents you from exercising 3 or more times per week? [*Do not read response options. Mark all that apply*] Any other reasons?

- Don't want to exercise
- No benefits to exercise
- Not enough time
- Disabled or too sick
- No facilities for exercising
- No one to exercise with
- Not enough money
- Other, Specify
- (Don't know/not sure)
- (Refused)

The next questions are about your current daily activities. Please try to answer the questions as accurately as you can.

[SF2] I'm going to read a list of activities that you might do during a typical day. As I read each item, please tell me if your health now limits you a lot, limits you a little, or does not limit you at all in these activities.

34. [SF2A] Moderate activities, such as moving a table, pushing a vacuum, bowling or playing golf:

- Yes, limited a lot
- Yes, limited a little
- No, not limited at all
- Don't do these activities
- (Don't know/Not sure)

(Refused)

35. **[SF2B]** (*For those limited in activities*)

Is that because of your health?

Yes

No

(Don't know/Not sure)

(Refused)

36. **[SF3A]** Climbing several flights of stairs. Does your health limit you a lot, limit you a little, or not limit you at all?

Yes, limited a lot

Yes, limited a little

No, not limited at all

Don't do these activities

(Don't know/Not sure)

(Refused)

37. **[SF3B]** (*For those with limited activities*)

Is that because of your health?

Yes

No

(Don't know/Not sure)

(Refused)

The following questions ask about your physical health and your daily activities.

38. **[SF4]** During the past 4 weeks, have you accomplished less than you would like as a result of your physical health?

Yes

No

(Don't know/not sure)

(Refused)

39. **[SF5]** During the past 4 weeks, were you limited in the kind of work or other regular daily activities you do as a result of your physical health?

Yes

No

(Don't know/not sure)

(Refused)

40. **[SF6]** During the past 4 weeks, have you accomplished less than you would like as a result of any emotional problems, such as feeling depressed or anxious?

Yes

No

(Don't know/not sure)

(Refused)

41. **[SF7]** During the past 4 weeks, did you not do work or other regular activities as carefully as usual as a result of any emotional problems, such as feeling depressed or anxious?

- Yes
- No
- (Don't know/not sure)
- (Refused)

42. **[SF8]** During the past 4 weeks, how much did pain interfere with your normal work, including both work outside the home and housework? Did it interfere:

- Not at all
- A little bit
- Moderately
- Quite a bit
- Extremely
- (Don't know/not sure)
- (Refused)

The next questions are about how you feel and how things have been with you during the past 4 weeks. As I read each statement, please give me the one answer that comes closest to the way you have been feeling; is it all of the time, most of the time, a good bit of the time, some of the time, a little of the time, or none of the time?

43. **[SF12]** During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities like visiting with friends or relatives? Has it interfered:

- All of the time
- Most of the time
- Some of the time
- A little of the time
- None of the time
- (Don't know/not sure)
- (Refused)

44. **[SF9]** How much of the time during the past 4 weeks have you felt calm and peaceful?

- All of the time
- Most of the time
- A good bit of the time
- Some of the time
- A little of the time
- None of the time
- (Don't know/not sure)
- (Refused)

45. **[SF10]** How much of the time during the past 4 weeks, did you have a lot of energy?

- All of the time
- Most of the time
- A good bit of the time
- Some of the time
- A little of the time

- None of the time
- (Don't know/not sure)
- (Refused)

46. [SF11] How much of the time during the past 4 weeks, have you felt downhearted and blue?

- All of the time
- Most of the time
- A good bit of the time
- Some of the time
- A little of the time
- None of the time
- (Don't know/not sure)
- (Refused)

47. In the last year, have you had a flu shot?

- Yes
- No
- (Don't know/not sure)
- (Refused)

My next questions are about different types of health examinations.

48. Have you had your blood pressure checked? [Read Responses]

- Within the past year
- Within the past 2 years
- Within the past 5 years
- 5 or more years ago
- Never
- (Don't know/not sure)
- (Refused)

49. . Have you had your blood cholesterol checked? [Read Responses] [*Blood cholesterol is a fatty substance found in the blood.*]

- Within the past year
- Within the past 2 years
- Within the past 5 years
- 5 or more years ago
- Never
- (Don't know/not sure)
- (Refused)

50. (*For women only*)

Have you had a mammogram? [Read responses] [*A mammogram is an x-ray of each breast to look for breast cancer.*]

- Within the past year
- Within the past 2 years
- Within the past 5 years
- 5 or more years ago

- Never
- (Not applicable, have had a double mastectomy)
- (Don't know/not sure)
- (Refused)

51. (For women only)

Have you performed a breast self-exam? *READ RESPONSES.*

- Within the past 3 months
- Within the past year
- Within the past 2 years
- 2 or more years ago
- Never
- (Not applicable, have had a double mastectomy)
- (Don't know/not sure)
- (Refused)

52. (For women only)

Have you had a Pap smear? [Read responses] [*A Pap smear is a test for cancer of the cervix.*]

- Within the past year
- Within the past 2 years
- Within the past 3 years
- Within the past 5 years
- 5 or more years ago
- Never
- (Not applicable, had a complete hysterectomy)
- (Don't know/not sure)
- (Refused)

53. (For men only)

Have you had a prostate exam? [Read responses] [*This is commonly called a digital rectal exam. IF FURTHER EXPLANATION NEEDED: A prostate exam is when a doctor or other health professional inserts a finger in the rectum to check the prostate for problems.*]

- Within the past year
- Within the past 2 years
- Within the past 5 years
- Five or more years ago
- Never
- (Don't know/not sure)
- (Refused)

54. (For both women and men)

Have you had any screening for colon cancer? {*Examples are proctoscopic exam and sigmoidoscopy. NOTE, THIS ALSO INCLUDES FECAL OCCULT BLOOD AND BARIUM ENEMA.*}

- Within the past year
- Within the past 2 years



- Within the past 5 years
- 5 or more years ago
- NEVER
- (Don't know/not sure)
- (Refused)

55. (For women only) [From the 1997 BRFSS]

Have you had a hysterectomy? (A hysterectomy is an operation to remove the uterus or womb.)

- Yes
- No
- (Don't Know/Not Sure)
- (Refused)

Do you have any of the following in your home?

- 56. Working smoke detector  Yes  No  (Don't know/Not sure)  
 Refused
- 57. Fire extinguisher  Yes  No  (Don't know/Not sure)  
 Refused
- 58. Carbon monoxide detector  Yes  No  (Don't know/Not sure)  
 Refused

In the past year, have you been:

- 59. Robbed or burglarized  
 Yes  No  (Don't know/Not sure)  (Refused)
- 60. A victim of property damage or vandalism by another person  
 Yes  No  (Don't know/Not sure)  (Refused)
- 61. Threatened or intimidated  
 Yes  No  (Don't know/Not sure)  (Refused)
- 62. Physically injured by another person  
 Yes  No  (Don't know/Not sure)  (Refused)
- 63. Sexually harassed  
 Yes  No  (Don't know/Not sure)  (Refused)
- 64. Sexually assaulted  
 Yes  No  (Don't know/Not sure)  (Refused)

65. Do you use smokeless tobacco, such as snuff or chewing tobacco?

- No I never have
- I used to but quit
- Yes
- (Refused)

*(For users of smokeless tobacco)*

How many times in the past month did you use smokeless tobacco?

- Everyday
- Several times per week
- Once a week
- Less than once per week
- Not at all
- (Refused)

66. Do you smoke cigars?

- No, I never have
- I used to but quit
- Yes
- (Refused)

*(For cigar smokers)*

How many times in the past month did you smoke cigars?

- Everyday
- Several times per week
- Once a week
- Less than once per week
- (Not at all)
- (Refused)

67. Have you smoked at least 100 cigarettes in your entire life?

- Yes
- No
- (Don't know/Not sure)
- (Refused)

68. *For smokers of at least 100 cigarettes in entire life*

How old were you when you first started smoking cigarettes on a regular basis?

- Years
- (Don't know/Not sure)
- (Never smoked regularly)
- (Refused]

69. *For smokers of at least 100 cigarettes in entire life, from Prochaska*

Are you currently a smoker?

- Yes
- No
- Refused

If no, How long ago did you stop smoking - would you say less than 6 months ago, 6-12 months ago, or more than 12 months ago?.

- Less than 6 months ago
- 6-12 months ago
- More than 12 months ago.
- Refused

70. *For cigarette smokers who quit more than 12 months ago*

How old were you when you quit smoking?

- Age
- (Refused)

71. *For current cigarette smokers*

On the average about how many cigarettes a day do you now smoke?

- # cigarettes (1 pack = 20 cigarettes)
- (Don't know/Not sure)
- (Refused)

72. *For current smokers*

In the last year, how many times have you quit smoking for at least one day or longer?"

- # times
- (Don't know/Not sure)
- (Refused)

73. *For current smokers*

Are you seriously thinking of quitting smoking? Would you say...

- Yes, within the next 30 days
- Yes, within the next 6 months
- Yes, more than 6 months from now
- No, not thinking of quitting
- (Refused)

*For current smokers who quit at least one day in last year (Q72 > than 0) and for former smokers who quit in last year (Q69a = 1 or 2)*

74. When you tried to quit in the last year, did you use...

Nicotine patch *If yes, Did it help?*

- Didn't use
- Used and helped
- Used and didn't help
- Used and don't know/not sure if helped
- Refused

75. Nicotine gum *If yes, Did it help?*

- Didn't use
- Used and helped
- Used and didn't help
- Used and don't know/not sure if helped
- Refused

76. Nicotine spray *If yes, Did it help?*

- Didn't use
- Used and helped

- Used and didn't help
- Used and don't know/not sure if helped
- Refused

77. Nicotine inhaler *If yes*, Did it help?

- Didn't use
- Used and helped
- Used and didn't help
- Used and don't know/not sure if helped
- Refused

78. Zyban *If yes*, Did it help?

- Didn't use
- Used and helped
- Used and didn't help
- Used and don't know/not sure if helped
- Refused

79. Other prescription medicine *If yes*, Did it help?

- Didn't use
- Used and helped
- Used and didn't help
- Used and don't know/not sure if helped
- Refused

80. Any other methods? What? [Do not read response categories. Check all that apply.]

- Acupuncture
- Herbs (i.e. ginseng)
- Hypnosis
- A quit smoking class or group
- Books or pamphlets
- Video or audio tapes
- A website or the Internet
- A telephone help-line people call for help to stop smoking
- Other

This next question asks for your opinion on a matter. I am going to read you a list of places. For each location, do you think that smoking should be allowed in all areas, in some areas, or not allowed at all?

81. . Restaurants

- Allowed in all areas
- Allowed in some areas,
- Not allowed at all
- (Don't know/not sure)
- (Refused)

82. Bars and cocktail lounges

- Allowed in all areas

- Allowed in some areas,
- Not allowed at all
- (Don't know/not sure)
- (Refused)

83. Indoor work areas

- Allowed in all areas
- Allowed in some areas,
- Not allowed at all
- (Don't know/not sure)
- (Refused)

84. Outdoor sporting events and concerts

- Allowed in all areas
- Allowed in some areas,
- Not allowed at all
- (Don't know/not sure)
- (Refused)

85. *For everyone*

Does anyone, including yourself, regularly smoke inside your home?

- Yes
- No
- (Refused)

86. *For everyone*

Which of the following statements best describes the rules about smoking inside your home? Do not include decks, garages, or porches.

- Smoking is allowed anywhere and at any time
- Smoking is allowed in some places or at some times
- Smoking is not allowed in any place or at any time

87. *For everyone*

Do you know of any services or programs available to help people in your community to stop smoking?

- Yes
- No
- (Don't know/not sure)
- (Refused)

*(For those who know of services or programs)*

Can you give me an example of one of those services or program?

- Yes (*Interviewer, check if any example given*)
- No
- (Don't know/not sure)
- (Refused)

88. During the past month, have you had at least one drink of any alcoholic beverage such as beer, wine, wine coolers, or liquor?

- Yes
- No
- (Refused)

*(For those who have had at least one drink)*

89. , How many days per week or per month did you drink any alcoholic beverages on the average?

- Days per week
- OR
- Days per month
- (Don't know/not sure)
- (Refused)

*(For those who have had at least one drink)*

90. A drink is one can of beer, 1 glass of wine, 1 bottle of wine cooler, 1 cocktail, or 1 shot of liquor. On the days that you drink, about how many drinks do you have on average?

- Number of drinks
- (Don't know/not sure)
- (Refused)

*(For those who have had at least one drink)*

91. Considering all types of alcoholic beverages, that is beer, wine, wine coolers, cocktails, and liquor as drinks, how many times in the past month did you have 5 or more drinks on one occasion? *(Note: if none enter zero for the number of times.)*

- Number of times
- (Don't know/not sure)
- (Refused)

92. How many times in the past year did you drive or ride in any of the following types of vehicles when you thought that the driver had too much to drink? *(Note: If did not do this, enter a zero for the number of times.)*

- Car or truck
- Boat
- Snowmobile
- Other

Finally, just a few questions that will help us compare your answers with others in your community.

93. In what year were you born?

- Year
- (Refused)

94. Are you currently [read choices]?

- Married
- Separated
- Divorced
- Widowed
- Never been married
- A member of an unmarried couple (living together but not married)
- (Don't know/not sure)
- (Refused)

95. What is the highest grade you completed in school?

- 8th grade or less
- Some high school
- High School Graduate/GED
- Some college or other schooling after high school such as vocational or technical school
- Graduate of a vocational or trade school
- Associate degree
- Bachelors degree
- Post graduate or professional degree
- (Refused)

96. Including yourself, how many adults and how many children live in your household?

- Number of adults
- Number of children under 5 years old
- Number of children 5 to 17 years old
- (Refused)

97. Are you of Hispanic, Latino, or Chicano origin?

- Yes
- No
- (Don't know/not sure)
- (Refused)

98. What is your race? Would you say you are (*pause after each one*)

- American Indian
- Asian or Pacific Islander
- Black or African American
- White
- Other, Please specify:
- (Don't know/not sure)]
- (Refused)]

99. How tall are you without shoes?

\_\_\_ feet \_\_\_ inches

100. Approximately how much do you weigh?

\_\_\_ Pounds

101. Approximately what was your household income from all sources last year before taxes? {Read categories if amount not provided. “How about if I give you some categories. If you are self employed or own your own business, please report your net income after business deductions.”}

[CATEGORIES FROM THE CHAMP (Child Health Assessment and Monitoring Project) SURVEY USED]

On behalf of the Bridge to Health Collaborative, thank you very much for your participation.