# Prevalence of ANXIETY & DEPRESSION Among Adults in Nebraska in 2006



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# INTRODUCTION

The Nebraska Behavioral Risk Factor Surveillance System (BRFSS) has been conducting surveys annually since 1986 for the purpose of collecting data on the prevalence of major health risk factors and conditions among adults residing in the state. Information gathered in these studies has been used to target health education and risk reduction activities throughout the state in order to lower rates of premature death and disability.

# **METHODOLOGY**

This series of surveys is based on a research design developed by the Centers for Disease Control and Prevention (CDC). It is used in all 50 states, the District of Columbia, and three U.S. territories. Questions are standardized to ensure comparability of data with other states and to allow determination of trends over time.

For the **2006** BRFSS, telephone surveys with **7,967** randomly selected Nebraska residents aged **18** and older were conducted by the Nebraska Health and Human Services System during **2006**. However, **3,990** interviews included the Anxiety/Depression Module.

Prevalence estimates are based on weighted data rather than raw numbers of responses to a question. The weights adjust for over- or under-sampling of age/gender groups. Age-adjustment was used for most prevalence estimates in this report as well.

In most cases, prevalence estimates are presented along with the 95 percent confidence intervals associated with them. Confidence intervals are a method of measuring sampling error and defining the range where the "true" percentage would be found 95 percent of the time. Larger sample size is related to smaller confidence intervals and greater reliability of data. Confidence intervals are also useful in statistical significance testing. Differences in prevalence estimates for two subgroups of the population can be determined to be statistically significant if their confidence intervals do not overlap. Confidence intervals were calculated using SUDAAN, a software package that estimates sample variances for complex sample designs.

Percentages were not calculated for subgroups of the population when their sample size was less than 50. Calculations based on such a small sample size are considered to be unreliable. Unless otherwise noted, responses of "Don't know/Not sure" and "Refused" were removed from the denominators when calculating prevalence rates in this report.

# SUMMARY OF RESULTS

#### **Prevalence of Selected Mental Illnesses**

Based on responses to the **2006** Nebraska BRFSS Anxiety and Depression Module and related questions:

Six percent of adults had current depression in the two weeks prior to the survey (based on CDC's Severity of Depression scale).

- Eight percent reported "frequent mental distress" (FMD). Respondents who had FMD stated that their "mental health was not good" due to "stress, depression, and problems with emotions" for at least 14 of the last 30 days. This measure may include a wider range of mental health problems than "current depression".
- Sixteen percent of adults had ever been told by a health professional that they had a depressive disorder (a lifetime diagnosis of depression).
- Ten percent reported a **lifetime diagnosis of anxiety**.

BRFSS respondents who reported current depression, FMD, or a lifetime diagnosis of depression shared some common characteristics. Prevalence rates for these conditions were generally higher for: females, persons with less than a college education, low-income respondents, previously-married respondents, and those who were unemployed or unable to work.

#### **Prevalence of Alcohol Abuse**

- A total of 18 percent of Nebraska adults aged 18 and older engaged in **binge drinking** in the past 30 days.
- Three percent of adults participated in **heavy (or chronic) drinking** in the last month.

#### **Co-Occurrence of Mental Illnesses**

Results of this study show some co-occurrence of mental illnesses.

- Three percent of all respondents were categorized as having current depression <u>and</u> FMD.
- Three percent also had current depression and a lifetime diagnosis of depression.
- Seven percent of respondents indicated they had ever received a diagnosis of depression and a diagnosis of anxiety, although not necessarily at the same time.

#### **Co-Occurrence of Depression and Alcohol Abuse**

Only about one percent of all respondents reported current depression <u>and</u> alcohol abuse. However, **6** percent of adults who were classified as having current depression also reported alcohol abuse.

Among persons with a lifetime diagnosis of depression, 13 percent reported alcohol abuse in the past month. For respondents with a lifetime diagnosis of anxiety, 17 percent also indicated abuse of alcohol in the last 30 days.

#### **Association of Mental Illness with Chronic Diseases**

Prevalence rates for some chronic diseases were significantly higher among adults with the mental illnesses addressed in this study than among those who did not have mental illness. Rates of coronary heart disease were significantly higher among persons with current depression, FMD, or lifetime diagnoses of anxiety and/or depression than among those without these conditions.

Prevalence of stroke was significantly higher among persons with current depression, FMD, or a lifetime diagnosis of anxiety.

Compared to respondents without these mental illnesses, significantly higher rates of asthma were found among respondents with a lifetime diagnosis of depression or with current depression/FMD. Diabetes was also significantly more prevalent among persons with current depression/FMD and among persons ever diagnosed with anxiety and depression.

#### **Association of Mental Illness with Unhealthy Behaviors**

Cigarette smoking and physical inactivity were both significantly more prevalent among persons with all of the mental illnesses included in this survey.

Obesity was also significantly more prevalent among persons with current depression, current depression/FMD, or lifetime diagnoses of both depression and anxiety.

However, no significant association was found between prevalence of current depression or lifetime diagnoses of anxiety and/or depression and alcohol abuse. That is, rates of alcohol abuse for persons with these mental illnesses were not significantly higher than corresponding rates for persons without these mental illnesses.

#### Association of Alcohol Abuse with Chronic Diseases and Unhealthy Behaviors

Of the four chronic diseases studied by alcohol abuse, a significant difference in prevalence was noted only for diabetes. Prevalence of diabetes was significantly <u>lower</u> among persons who reported current binge drinking than among those who reported no alcohol abuse. (This result may be due in part to the fact that diabetes is more prevalent in middle-aged or older adults, while binge drinking rates are highest among young adults).

Prevalence of cigarette smoking was significantly higher among respondents who engaged in binge drinking or in both binge and heavy drinking than it was among those who reported no alcohol abuse in the past 30 days.

# HIGHLIGHTS

#### **Current Depression**

#### **Prevalence**

Based on the Severity of Depression Scale developed by CDC, 6 percent of respondents to the 2006 Nebraska BRFSS had scores of ten or higher in the two weeks preceding the survey. These adults were categorized as having "current depression".

Applying this prevalence rate to the **2006** population of adults aged **18** and older in Nebraska, an estimated **79,398** adults had depression in the past two weeks.

Prevalence of current depression was significantly higher among respondents who:

- Had less education than a college degree
- Had household incomes of less than \$25,000 per year
- Were previously married (i.e., divorced, widowed, separated) as compared to currently married respondents
- Were unemployed or unable to work.

# Association of Current Depression with Prevalence of Chronic Diseases and/or Unhealthy Behaviors

Rates of coronary heart disease and stroke were significantly higher among persons with current depression than among those who didn't have depression.

Prevalence rates for three of the five unhealthy behaviors studied (cigarette smoking, physical inactivity, and obesity) were also significantly higher for respondents with current depression.

On average, persons with current depression also reported having a significantly higher number of chronic medical conditions (0.37 each), compared to adults who did not have current depression (0.19). The same pattern was evident with number of unhealthy behaviors. Persons with current depression averaged 1.48 unhealthy behaviors each, while those without depression had a significantly lower number (0.85).

#### Lifetime Diagnosis of Anxiety and/or Depression

#### **Prevalence**

Eighteen percent of **2006** BRFSS respondents indicated that they had ever been diagnosed with anxiety, depression or both. Based on this prevalence rate, it is estimated that **238,194** adult Nebraskans have ever been told by a physician or other healthcare provider that they had either or both of these disorders.

Altogether, **16** percent of adults reported a lifetime diagnosis of depression, while **10** percent indicated they had ever received a diagnosis of an anxiety disorder.

Significantly higher rates of lifetime diagnosis of depression only were noted for several population groups:

- Women
- Persons in the middle age groups (30- to 44-year-olds and 45- to 64-year-olds)
- Persons with annual household incomes below \$15,000
- Previously married respondents
- Respondents who were unable to work

No significant differences were found in the proportion of respondents with a lifetime diagnosis of anxiety only in any of the groups studied.

Sociodemographic characteristics of adults receiving diagnoses of both depression and anxiety were similar to those who had been diagnosed with depression only.

# Association of a Lifetime Diagnosis of Depression and/or Anxiety with Prevalence of Chronic Diseases

Prevalence rates for coronary heart disease and for diabetes were both significantly higher for persons who had ever been diagnosed with both depression and anxiety than they were for adults who had never been diagnosed with either of these conditions.

Asthma was more than twice as prevalent among persons with a lifetime diagnosis of depression only than it was among those who had not been diagnosed with either anxiety or depression. This difference was statistically significant.

The proportion of respondents reporting they had a stroke was significantly greater among adults who had ever been diagnosed with anxiety only than among those who were never told they had either anxiety or depression.

# Association of a Lifetime Diagnosis of Depression and/or Anxiety with Prevalence of Unhealthy Behaviors

Statistically significant differences were noted in prevalence of three of the five unhealthy behaviors studied. Respondents with a lifetime diagnosis of depression only or both depression/anxiety were significantly more likely to report current smoking or physical inactivity than those who never were diagnosed with either condition. Prevalence of obesity was significantly greater among adults with lifetime diagnoses of both anxiety and depression than among those who had not been diagnosed with either.

Differences in prevalence of binge drinking and chronic (heavy) drinking by lifetime diagnosis of depression, anxiety, or both were not significant.

The mean number of multiple chronic conditions was significantly higher for respondents with diagnosed depression only, diagnosed anxiety only, or both, compared to those who had never been diagnosed with either illness.

Respondents who were ever diagnosed with depression only or with both depression and anxiety reported significantly greater mean numbers of unhealthy behaviors than did respondents who had never been diagnosed with either anxiety or depression.

#### **Frequent Mental Distress (FMD)**

#### **Prevalence**

Eight percent of adults surveyed reported FMD; that is, they stated that their mental health was "not good" due to "stress, depression, and problems with emotions" for 14 or more of the past 30 days. Based on this rate, an estimated 105,864 adult Nebraskans had FMD in the past month (*Table* 1). This group could include persons who have other mental health problems in addition to anxiety and depression.

#### TABLE 1

# Estimated Percent and Number of Nebraska Adults Aged 18 and Older with Selected Behavioral Health Disorders

#### Nebraska 2006 BRFSS

	Weighted Prevalence Estimate (%)	Estimated # of NE Adults with Condition*
Current DepressionSeverity of Depression score = 10+ (based on application of Algorithm	6	70.208
2 to PHQ-8 responses)	O	79,398
Mild or No Current DepressionSeverity of Depression score <10	94	1,243,900
Lifetime Diagnosis of Depression Only	9	119,097
Lifetime Diagnosis of Anxiety Only	3	39,699
Lifetime Diagnosis of Both Depression and Anxiety (not necessarily co-occurring)	7	92,631
SUBTOTAL Lifetime Diagnosis of Depression and/or Anxiety	18	238,194
No Lifetime Diagnosis of Either Depression or Anxiety	82	1,085,104
Both Current Depression and Lifetime Diagnosis of Depression	3	39,699
Current Depression Only	2	26,466
Lifetime Diagnosis of Depression Only	12	158,796
SUBTOTAL Current Depression and/or Lifetime Diagnosis of Depression	17	224,961
Neither Current Depression nor Lifetime Diagnosis of Depression	82	1,085,104
Frequent Mental Distress (FMD)	8	105,864
Infrequent or No Mental Distress	92	1,217,434
Both FMD and Current Depression	3	39,699
FMD Only	4	52,932
Current Depression Only	3	39,699
SUBTOTAL Current Depression and/or FMD	10	132,330
Neither FMD nor Current Depression	90	1,190,968
Binge Drinking (In Past 30 Days)	18	238,194
No Binge Drinking	82	1,085,104
Heavy Drinking (In Past 30 Days)	3	39,699
No Heavy Drinking		1,283,599
Alcohol Abuse (Binge Drinking and/or Heavy Drinking) in Past 30 Days	97 18	238,194
Neither Binge Drinking and Or Heavy Drinking  Neither Binge Drinking nor Heavy Drinking	82	
Combined Current Depression (Severity of Depression score=10+) and Binge Drinking		1,085,104
Current Depression Only	1	13,233
	4	52,932
Binge Drinking Only	18	238,194
SUBTOTAL Current Depression and/or Binge Drinking	23	304,359
Neither Current Depression nor Binge Drinking	77	1,018,939
Combined Current Depression (Severity of Depression score = 10+) and Heavy Drinking	1	13,233
Current Depression Only	5	66,165
Heavy Drinking Only	3	39,699
SUBTOTAL Current Depression and/or Heavy Drinking	9	119,097
Neither Current Depression nor Heavy Drinking	91	1,204,201
Combined Current Depression (Severity of Depression score = 10+) and Alcohol Abuse (Binge and/or Heavy Drinking)	1	13,233
Current Depression Only	4	52,932
Alcohol Abuse Only	18	238,194
SUBTOTAL Current Depression and/or Alcohol Abuse	23	304,359
Neither Current Depression nor Alcohol Abuse	77	1,018,939

Respondents with the following sociodemographic characteristics reported significantly higher rates of FMD than other adults responding to the **2006** BRFSS:

- Women
- Persons with less than a college education
- Adults with annual household incomes under \$15,000
- · Respondents who had never married or were previously married
- Unemployed and unable-to-work respondents.

If respondents with current depression are combined with those reporting FMD, there is some overlap. Altogether, 10 percent of adults reported current depression and/or frequent mental distress--an estimated 132,330 adults in 2006. (In comparison, 6 percent were categorized as having current depression and 8 percent as having FMD).

#### Association of Current Depression/FMD with Prevalence of Chronic Diseases

Prevalence of coronary heart disease and prevalence of stroke were both significantly greater among persons with FMD only than they were among adults who had neither FMD nor current depression.

Persons who had both FMD and current depression were significantly more likely to report having diabetes than persons with neither FMD nor current depression. This significant association was also found for asthma.

The mean number of chronic conditions was also significantly higher among respondents with current depression only or both current depression and FMD than among those who had neither.

#### Association of Current Depression/FMD with Prevalence of Unhealthy Behaviors

Adults indicating they had FMD only, current depression only, or both FMD and current depression were significantly more likely than adults who had neither condition to report that they currently smoke cigarettes and to say they were physically inactive.

Obesity rates were significantly higher among persons with current depression only or both current depression and FMD than among persons who currently had neither condition.

Differences in prevalence of heavy drinking among these respondent categories were not significant. However, in contrast to other unhealthy behaviors, significantly fewer persons with both FMD and current depression reported current binge drinking, compared to persons with FMD only or neither FMD nor current depression.

The mean number of unhealthy behaviors was significantly lower among adults who had neither FMD nor current depression than among the other three respondent groups. Adults with current depression only also engaged in significantly fewer unhealthy behaviors, on average, than those with both FMD and current depression.

#### **Alcohol Abuse**

#### **Prevalence**

In this study, alcohol abuse is defined as binge drinking and/or heavy drinking in the month prior to the survey. (Precise definitions appear later in the report).

In 2006, 15 percent of adults in Nebraska engaged in binge drinking but not heavy (chronic) drinking. In contrast, less than one percent participated in heavy drinking but not in binge drinking, while an additional 3 percent qualified as binge drinkers and heavy drinkers. Thus, 18 percent of adults (an estimated 238,194 Nebraskans aged 18 and older) reported alcohol abuse in the month prior to the survey. The remaining 82 percent did not meet the criteria for either binge or heavy drinking.

Prevalence of binge drinking was significantly greater among respondents who were:

- Male
- Young adults aged 18 to 29 or aged 30 to 44
- Non-Hispanic white (as compared to Hispanic) adults.

Due to the relatively small proportion of BRFSS respondents who indicated heavy drinking, analysis by sociodemographic categories is not possible.

## Association of Alcohol Abuse with Prevalence of Chronic Diseases and/or Unhealthy Behaviors

Of the four chronic diseases studied, a significant difference in prevalence was noted only for diabetes. Prevalence of diabetes was significantly lower among persons who reported only binge drinking in the past 30 days than among persons who had not participated in either binge drinking or heavy drinking in the past month. This result may be due in part to the fact that diabetes is more prevalent in middle-aged or older adults, while binge drinking rates are highest among young adults.

Prevalence of cigarette smoking was significantly higher among respondents who engaged in binge drinking or in both binge and heavy drinking than it was among those who reported no alcohol abuse in the past 30 days.

No significant differences were found among the mean numbers of chronic diseases reported or among the mean numbers of unhealthy behaviors for the four alcohol use categories.

# RESULTS AND DISCUSSION

#### Estimated Prevalence of Selected Behavioral Health Disorders in Nebraska

Table 1 presents the estimated prevalence of selected behavioral health disorders among adults aged 18 and older in Nebraska and the estimated number of adults with each condition or combination of conditions. Please note that all estimates are based on the findings from the 2006 Nebraska BRFSS, with percentages applied to 2006 U.S. Census estimates.

*Table* **2** presents this information for each of the six Behavioral Health Regions in Nebraska.

Please note that each of the boxes in these tables is self-contained. The sum of the estimated percentages in each box represents 100 percent of the adult population.

TABLE 2
Estimated Percent and Number of Nebraska Adults Aged 18 and Older with Selected Behavioral Health Disorders--Behavioral Health Regions 1, 2 and 3
Nebraska 2006 BRFSS

		Region 1 (V	Vestern)	Region 2 (	Southwest)	Region 3 (C	entral)
	Range in Prevalence Estimates Over Six BH Regions	Weighted Prevalence Estimate (%)	Estimated # of Adults with Condition	Weighted Prevalence Estimate (%)	Estimated # of Adults with Condition	Weighted Prevalence Estimate (%)	Estimated # of Adults with Condition
Current DepressionSeverity of Depression score = 10+ (based on application of Algorithm 2 to PHQ-8 responses)	4-6%	6	3,967	6	4,560	6	10,214
Mild or No Current DepressionSeverity of Depression score <10	94-96%	94	62,152	94	71,433	94	160,012
Lifetime Diagnosis of Depression Only	8 - 12%	12	7,934	9	6,839	9	15,320
Lifetime Diagnosis of Anxiety Only	2 - 4%	3	1,984	2	1,520	2	3,405
Lifetime Diagnosis of Both Depression and Anxiety (not necessarily co-occurring)	4-9%	8	5,290	4	3,040	6	10,214
SUBTOTAL Lifetime Diagnosis of Depression and/or Anxiety	14 - 23%	23	15,207	15	11,399	17	28,938
No Lifetime Diagnosis of Either Depression or Anxiety	77 - 86%	77	50,912	85	64,594	83	141,287
Both Current Depression and Lifetime Diagnosis of Depression	2 - 4%	4	2,645	3	2,280	4	6,809
Current Depression Only	2 - 4%	2	1,322	4	3,040	3	5,107
Lifetime Diagnosis of Depression Only	10 - 17%	17	11,240	10	7,599	11	18,725
SUBTOTAL Current Depression and/or Lifetime Diagnosis of Depression	14 - 23%	23	15,207	17	12,919	18	30,641
Neither Current Depression nor Lifetime Diagnosis of Depression	77 - 86%	77	50,912	83	63,074	82	139,585
Both Frequent Mental Distress (FMD) and Current Depression	3 - 4%	3	1,984	3	2,280	3	5,107
FMD Only	3 - 8%	8	5,290	4	3,040	3	5,107
Current Depression Only	2 - 4%	3	1,984	3	2,280	4	6,809
SUBTOTAL Current Depression and/or FMD	8-14%	14	9,257	10	7,599	10	17,023
Neither FMD nor Current Depression	86 - 92%	86	56,862	90	68,394	91	154,905
Binge Drinking in Past 30 Days	15 - 22%	15	9,918	19	14,439	16	27,236
No Binge Drinking in Past 30 Days	78 - 85%	85	56,201	81	61,554	84	142,989
Heavy Drinking in Past 30 Days	3 - 5%	3	1,984	4	3,040	3	5,107

TABLE 2
Estimated Percent and Number of Nebraska Adults Aged 18 and Older with Selected Behavioral Health Disorders--Behavioral Health Regions 1, 2 and 3
Nebraska 2006 BRFSS

		Region 1 (V	Vestern)	Region 2 (	Southwest)	Region 3 (0	Central)
	Range in Prevalence Estimates Over Six BH Regions	Weighted Prevalence Estimate (%)	Estimated # of Adults with Condition	Weighted Prevalence Estimate (%)	Estimated # of Adults with Condition	Weighted Prevalence Estimate (%)	Estimated # of Adults with Condition
No Heavy Drinking in Past 30 Days	95 - 97%	97	64,135	96	72,953	97	165,118
Alcohol Abuse (Binge Drinking and/or Heavy Drinking) in Past 30 Days	16 - 22%	16	10,579	19	14,439	16	27,236
Neither Binge Drinking nor Heavy Drinking	78 - 84%	84	55,540	81	61,554	84	142,989
Combined Current Depression (Severity of Depression score=10+) and Binge Drinking	<1 - 2%	1	661	2	1,520	0	О
Current Depression Only	3 - 6%	5	3,306	4	3,040	6	10,214
Binge Drinking Only	13 - 20%	14	9,257	17	12,919	13	22,129
SUBTOTAL Current Depression and/or Binge Drinking	19 - 25%	20	13,224	23	17,478	19	32,343
Neither Current Depression nor Binge Drinking	75 - 81%	80	52,895	77	58,515	81	137,882
Combined Current Depression (Severity of Depression score=10+) and Heavy Drinking	<1 - 2%	О	О	1	760	0	О
Current Depression Only	4-7%	6	3,967	6	4,560	7	11,916
Heavy Drinking Only	2 - 4%	4	2,645	4	3,040	3	5,107
SUBTOTAL Current Depression and/or Heavy Drinking	6 - 11%	10	6,612	11	8,359	10	17,023
Neither Current Depression nor Heavy Drinking	89 - 94%	91	60,168	89	67,634	91	154,905
Combined Current Depression (Severity of Depression score = 10+) and Alcohol Abuse (Binge and/or Heavy Drinking)	<1 - 2%	1	661	2	1,520	0	О
Current Depression Only	3-7%	5	3,306	4	3,040	7	11,916
Alcohol Abuse Only	11 - 17%	12	7,934	14	10,639	11	18,725
SUBTOTAL Current Depression and/or Alcohol Abuse	18 - 22%	18	11,901	20	15,199	18	30,641
Neither Current Depression nor Alcohol Abuse	78 - 82%	82	54,218	80	60,794	82	139,585

\*Nebraska population from 2006 U.S. Census estimates. NOTE: Percentages may not total 100% due to rounding.

# TABLE 2 (continued) Estimated Percent and Number of Nebraska Adults Aged 18 and Older with Selected Behavioral Health Disorders--Behavioral Health Regions 4, 5, and 6 Nebraska 2006 BRFSS

		(Northern)		(Southeast)	Region 6	(Eastern)
	Weighted Prevalence Estimate (%)	Estimated # of Adults with Condition	Weighted Prevalence Estimate (%)	Estimated # of Adults with Condition	Weighted Prevalence Estimate (%)	Estimated # of Adults wit Condition
Current DepressionSeverity of Depression score = 10+ (based on application of Algorithm 2 to PHQ-8 responses)	4	6,243	6	19,766	5	26,273
Mild or No Current DepressionSeverity of Depression score <10	96	149,820	94	309,673	95	499,186
Lifetime Diagnosis of Depression Only	8	12,485	9	29,650	8	42,037
Lifetime Diagnosis of Anxiety Only	2	3,121	3	9,883	4	21,018
Lifetime Diagnosis of Both Depression and Anxiety (not necessarily co-occurring)	4	6,243	6	19,766	9	47,291
SUBTOTAL Lifetime Diagnosis of Depression and/or Anxiety	14	21,849	18	59,299	21	110,346
No Lifetime Diagnosis of Either Depression or Anxiety	86	134,214	82	270,140	79	415,113
Both Current Depression and Lifetime Diagnosis of Depression	2	3,121	3	9,883	3	15,764
Current Depression Only	2	3,121	3	9,883	2	10,509
Lifetime Diagnosis of Depression Only	10	15,606	11	36,238	13	68,310
SUBTOTAL Current Depression and/or Lifetime Diagnosis of	14	21,849	17	56,005	18	94,583
Depression Life in the control of th	•		-			
Neither Current Depression nor Lifetime Diagnosis of Depression	86	134,214	82	270,140	81	425,622
Both Frequent Mental Distress (FMD) and Current Depression	3	4,682	4	13,178	3	15,764
FMD Only	3	4,682	6	19,766	4	21,018
Current Depression Only	2	3,121	2	6,589	2	10,509
SUBTOTAL Current Depression and/or FMD	8	12,485	12	39,533	9	47,291
Neither FMD nor Current Depression	92	143,578	88	289,906	91	478,168
Binge Drinking in Past 30 Days	19	29,652	22	72,477	17	89,328
No Binge Drinking in Past 30 Days	81	126,411	78	256,962	83	436,131
Heavy Drinking in Past 30 Days	5	7,803	3	9,883	3	15,764
No Heavy Drinking in Past 30 Days	95	148,260	97	319,556	97	509,695
Alcohol Abuse (Binge Drinking and/or Heavy Drinking) in Past 30 Days	19	29,652	22	72,477	17	89,328
Neither Binge Drinking nor Heavy Drinking	81	126,411	78	256,962	83	436,131
Combined Current Depression (Severity of Depression score=10+) and Binge Drinking	1	1,561	2	6,589	1	5,255
Current Depression Only	3	4,682	3	9,883	4	21,018
Binge Drinking Only	18	28,091	20	65,888	19	99,837
SUBTOTAL Current Depression and/or Binge Drinking	22	34,334	25	82,360	24	126,110
Neither Current Depression nor Binge Drinking	77	120,169	75	247,079	76	399,349
Combined Current Depression (Severity of Depression score=10+) and Heavy Drinking	О	O	2	6,589	0	О
Current Depression Only	4	6,243	5	16,472	5	26,273
Heavy Drinking Only	2	3,121	4	13,178	3	15,764
SUBTOTAL Current Depression and/or Heavy Drinking	6	9,364	11	36,238	8	42,037
Neither Current Depression nor Heavy Drinking	94	146,699	90	296,495	92	483,422
Combined Current Depression (Severity of Depression score = 10+) and Alcohol Abuse (Binge and/or Heavy Drinking)	1	1,561	2	6,589	1	5,255
Current Depression Only	4	6,243	3	9,883	4	21,018
Alcohol Abuse Only	16	24,970	17	56,005	17	89,328
SUBTOTAL Current Depression and/or Alcohol Abuse	21	32,773	22	72,477	22	115,601
Neither Current Depression nor Alcohol Abuse	80	124,850	78	256,962	78	409,858

#### **Current Prevalence of Depression**

#### **Definition**

The Severity of Depression Scale was constructed using responses to questions taken from the Patient Health Questionnaire (PHQ-8) developed at Columbia University. The PHQ-8 is an easily administered tool for primary care physicians to use in diagnosing anxiety disorders and depression. Each question asks the respondent to state the number of days within the past two weeks that they have been affected by a particular mood.

Respondents to the **2006** BRFSS were told, "Now, I am going to ask you some questions about your mood. When answering these questions, please think about how many days each of the following has occurred in the past two weeks." Survey respondents were then asked, "Over the last two weeks, how many days have you:

- Had little interest or pleasure in doing things?
- Felt down, depressed or hopeless?
- Had trouble falling asleep or staying asleep or sleeping too much?
- Felt tired or had little energy?
- Had a poor appetite or eaten too much?
- Felt bad about yourself or that you were a failure or had let yourself or your family down?
- Had trouble concentrating on things, such as reading the newspaper or watching the TV?
- Moved or spoken so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you were moving around a lot more than usual?"

An algorithm developed at the Centers for Disease Control and Prevention was then used to reconfigure these scores to fit into the four-category scheme developed as part of the original PHQ-8. Using this Scale, reconfigured scores of ten or greater indicate that the respondent has "current depression", while scores of less than ten denote "mild or no current depression."

#### **Prevalence of Current Depression**

Based on the Severity of Depression scale described above, 6 percent of adults responding to the **2006** Nebraska BRFSS had scores of **10** or higher in the past two weeks and were categorized as having "current depression" (*Table 3*).

Applying this rate to the **2006** population of adults aged **18** and older in Nebraska, an estimated **79,398** adults had depression in the two weeks prior to the survey.

# TABLE 3 Prevalence of Current Depression Based on PHQ-8 Questions (Severity of Depression Score = 10 +) Among Nebraska Adults by Selected Sociodemographic Characteristics 2006 Nebraska BRFSS with 95% Confidence Intervals (SUDAAN)

		Curren of Dep	t Depression (Severity pression Score = 10 +)	Mild or N of Dep	o Depression (Severity pression Score < 10)
	Total # of Respondents	%	Confidence Interval	%	Confidence Interval
Total	3,503	6	4.6-6.8	94	93.2-95.4
Gender:					
Male	1,393	4	2.7-5.9	96	94.1-97.3
Female	2,110	7	5.9-8.8	93	91.2-94.1
Age:					
18-29	308	6	3.5-9.9	94	90.1-96.5
30-44	848	6	4.5-8.4	94	91.6-95.5
45-64	1,423	6	4.6-7.5	94	92.5-95.4
65+	924	4	2.6-5.6	96	94.4-97.4
Women aged 18-44	692	7	5.3-10.0	93	90.0-94.7
Women aged 45+	1,418	7	5.5-8.9	93	91.1-94.5
Household Type:					
Adults w/1+ children <18 yrs of age in household	1,179	6	4.0-8.2	94	91.8-96.0
Adults with NO children <18 yrs of age in		_			
household	2,324	5	3.6-6.2	95	93.8-96.4
Education:					
<high school<="" td=""><td>250</td><td>8</td><td>4.5-12.7</td><td>92</td><td>87.3-95.5</td></high>	250	8	4.5-12.7	92	87.3-95.5
High School	1,202	9	6.6-12.2	91	87.8-93.4
Some College	1,018	6	4.4-8.0	94	92.0-95.6
College Degree	1,031	2	1.6-3.6	98	96.4-98.4
Income:					
<\$15,000	289	23	15.4-31.9	77	68.1-84.6
\$15,000 - \$24,999	555	10	6.9-13.9	90	86.1-93.1
\$25,000 - \$49,999	1,127	5	3.6-7.4	95	92.6-96.4
\$50,000 - \$74,999	574	7	2.8-15.7	93	84.3-97.2
\$75,000 +	595	2	1.0-3.8	98	96.2-99.0
Race (Age-Adjusted):					
White NH*	3,226	5	4.3-6.4	95	93.6-95.7
African American NH*	45	#	#	#	#
Asian American NH*	16	#	#	#	#
Native American NH*	17	#	#	#	#
Hispanic American	155	5	2.9-9.6	95	90.4-97.1
Marital Status:					
Currently Married	2,245	4	3.1-5.0	96	95.0-96.9
Previously Married	869	9	6.3-12.6	91	87.4-93.7
Never Married	385	7	4.7-11.0	93	89.0-95.3
Employment:			.,		
Employed	1,859	4	3.0-5.4	96	94.6-97.0
Self-employed	422	4	2.1-8.8	96	91.2-97.9
Unemployed	62	24	13.6-38.8	76	61.2-86.4
Homemaker	235	4	2.3-8.3	96	91.7-97.7
Student	57	<1	0.1-2.5	>99	97.5-99.9
Retired	729	3	1.5-7.1	97	92.9-98.5
Unable to Work	134	39	24.5-55.6	61	44.4-75.5
Veteran Status	-54	39	~ <del>4</del> ., ,,,,	01	オオ・オ / ブウ
Yes	531	4	2.2-7.1	96	92.9-97.8
No	2,971	6	4.8-7.1	94	92.9-95.2

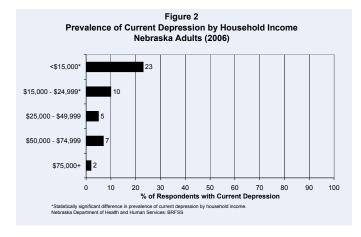
NOTE: "Number" and "Percent" exclude missing, don't know, and refused responses.
\*NH = Non-Hispanic

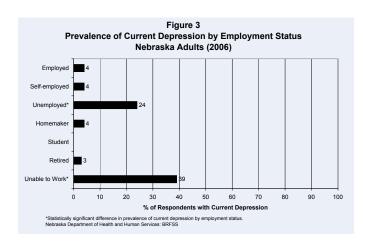
<sup># -</sup> Data not reported due to N < 50.

#### **Who Has Current Depression?**

Figure 1
Prevalence of Current Depression by Educational Level
Nebraska Adults (2006)

High School
Some College
College Degree\*
2
10
20
30
40
50
60
70
80
90
100
\*Statistically significant difference in prevalence of current depression by educational level.
Nebraska Department of Health and Human Services: BRFSS





Seven percent of women were classified as currently having depression. Men (4 percent) were less likely to give responses indicating they were currently depressed, although differences by gender were not significant.

Respondents aged **65** and older (4 percent) were somewhat less likely than persons in the younger age groups (**6** percent) to report depressive symptoms scoring **10** or more on the Severity of Depression Scale. However, differences were not statistically significant.

College graduates (2 percent) were significantly less likely than persons with less education to currently be depressed (*Figure 1*). Six percent of respondents with some college or technical training were currently depressed, as were 9 percent of high school graduates and 8 percent of respondents who had not completed high school.

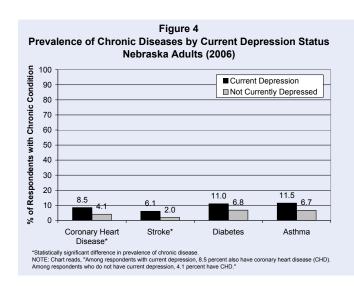
A significantly greater proportion of persons with household incomes under \$15,000 per year (23 percent) had current depression, compared to persons with higher incomes (except for those earning \$50,000 to \$74,999 per year) (*Figure* 2). A significantly greater proportion of respondents with incomes of \$15,000 to \$24,999 (10 percent) also were categorized as having depression, compared to those in the highest income bracket (2 percent).

Respondents who were "previously married" (i.e., divorced, widowed, or separated) were significantly more likely to be depressed (9 percent) than those who stated they were currently married (4 percent). Seven percent of adults who "never married" gave responses indicating they were depressed in the past two weeks.

The highest rates of current depression (based on this Scale) were found among respondents who were unemployed (24 percent) or who were unable to work (39 percent). Prevalence of current depression was significantly higher for these groups than for all the other employment classes, where rates were 4 percent or less (*Figure* 3).

Differences in prevalence of current depression were not significant by presence of children in the household, race/ethnicity of respondents or by their veteran status.

#### Prevalence of Selected Chronic Diseases and Unhealthy Behaviors Among Adults with Current Depression

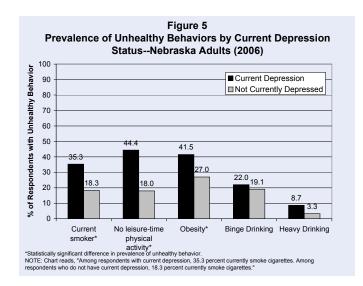


For this analysis, prevalence rates for four chronic diseases (coronary heart disease, stroke, diabetes, and asthma) were calculated for persons with and for persons without selected behavioral health conditions. In addition, prevalence rates for five unhealthy behaviors (current smoking, no leisure-time physical activity, obesity, binge drinking, and heavy drinking) were calculated for persons with the behavioral health conditions mentioned above.

#### **Prevalence of Chronic Diseases**

Prevalence of coronary heart disease was significantly higher among persons with current depression (8.5 percent) than among those who had only mild or no depression (4.1 percent) (*Table* 4). In fact, prevalence was more than double among respondents with current depression (*Figure* 4).

by Sta	tus of Current Severity	Depression (Ba of Depression	onditions and Unhosed on PHQ-8 Quo	estions)	iors							
Current Depression Mild or No Depression (Severity of Depression Score = 10+) (Severity of Depression Score < 10												
	N % Confidence N Interval											
Coronary Heart Disease	220	8.5	5.2-13.6	3,255	4.1	3.4-4.8						
Stroke	221	2.0	1.5-2.5									
Diabetes	224	11.0	6.8	5.9-7.8								
Asthma	224	, , ,										
Mean Number of Multiple Chronic Conditions	216	0.37	0.29-0.46	3,238	0.19	0.17-0.22						
Current smoker	225	35.3	27.3-44.2	3,273	18.3	16.4-20.4						
No leisure-time physical activity	225	44.4	36.4-52.7	3,277	18.0	16.3-19.8						
Obesity (Body Mass Index = 30+)	216	41.5	33.8-49.7	3,151	27.0	25.0-29.1						
Binge Drinking	220	22.0	14.8-31.2	3,238	19.1	17.0-21.3						
Heavy Drinking	222	8.7	3.8-18.6	3,231	3.3	2.6-4.1						
Mean Number of Multiple Unhealthy Behaviors	210	1.48	1.31-1.65	3,092	0.85	0.81-0.90						
NOTE: Shading indicates statistically significant differences.												



Prevalence of stroke was three times as high among Nebraska adults with current depression (6.1 percent) as among those without depression (2.0 percent). This difference was also statistically significant.

The proportions of respondents who had diabetes (11.0 percent) or asthma (11.5 percent) were also higher among those who reported current depression than among those who didn't (6.8 percent and 6.7 percent, respectively). However, differences were not significant.

When the mean (average) numbers of multiple chronic conditions were compared, persons with current depression were found to have a significantly greater average number of chronic conditions (0.37) than persons who did not currently have depression (0.19).

#### **Prevalence of Unhealthy Behaviors**

Prevalence rates for three of the five unhealthy behaviors were significantly higher among persons with current depression than among those who were not currently depressed. More than one-third of respondents with current depression reported that they smoke cigarettes (35.3 percent), compared to only 18.3 percent of those who were not depressed (*Figure* 5).

More than four in ten respondents with current depression (44.4 percent) did not participate in any leisure-time physical activity, while only 18.0 percent of those without depression were physically inactive.

A similar proportion of currently depressed persons (41.5 percent) reported heights and weights that placed them in the "obese" category, with a Body Mass Index (BMI) reading of 30 or greater. Among those who were not depressed, a significantly smaller proportion (27.0 percent) were classified as obese.

Although rates of binge drinking and heavy (chronic) drinking were somewhat higher among respondents with current depression, differences were not statistically significant.

The average number of unhealthy behaviors reported by persons with current depression (1.48 behaviors per person) was significantly larger than the average for persons who were not currently depressed (0.85). (*Table 4*).

# Lifetime Prevalence of Diagnosed Anxiety and/or Depressive Disorders

#### **Definitions**

Ever Told You Have a Depressive Disorder (Lifetime Diagnosis of Depression): "Yes" to the question, "Has a doctor or other healthcare provider EVER told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?"

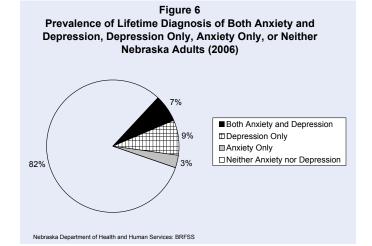
Ever Told You Have an Anxiety Disorder (Lifetime Diagnosis of Anxiety): "Yes" to the question, "Has a doctor or other healthcare provider EVER told you that you had an anxiety disorder (including acute stress disorder, panic disorder, phobia, posttraumatic stress disorder, or social anxiety disorder)?"

#### **Prevalence**

Altogether, 18 percent (rounded) of respondents to the 2006 Nebraska BRFSS reported a lifetime diagnosis of depression, anxiety, or both, while 82 percent stated they had never been told by a doctor or other healthcare provider that they had either of these disorders (*Table* 1). Based on this prevalence rate, it is estimated that 238,194 adult Nebraskans had ever been diagnosed with anxiety and/or depression (as of 2006).

A greater proportion of adults in this study indicated they had been diagnosed with a depressive disorder only (9 percent), compared to those diagnosed with an anxiety disorder only (3 percent) (*Figure 6*). Seven percent reported having been diagnosed with both anxiety and depression, although not necessarily at the same time.

Combining respondents who only reported a lifetime diagnosis of depression and those who reported having been diagnosed with both anxiety and depression, 16 percent of adults had a lifetime diagnosis of a depressive disorder. Similarly, 10 percent overall had a lifetime diagnosis of an anxiety disorder.



#### Who Has Ever Been Diagnosed with Depression Only?

Women (12 percent) were significantly more likely than men (5 percent) to say they were ever diagnosed with a depressive disorder (*Table* 5).

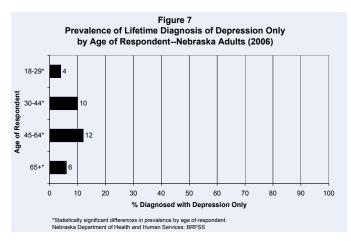
TABLE 5
Lifetime Diagnosis of Depression Only, Lifetime Diagnosis of Anxiety Only, Lifetime Diagnosis of Both,
and Lifetime Diagnosis of Neither Anxiety or Depression Among Nebraska Adults by Selected Sociodemographic Characteristics
2006 Nebraska BRFSS with 95% Confidence Intervals (SUDAAN)

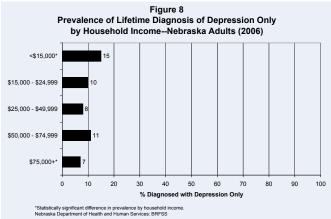
	Total		time Diagnosis of epression Only		ne Diagnosis of nxiety Only		time Diagnosis of Both kiety and Depression*	No Lifetime Diagnosis of Either Anxiety or Depression		
	Number	%	Confidence Interval	%	Confidence Interval	%	Confidence Interval	%	Confidence Interva	
Total	3,822	9	7.5-9.9	3	2.4-4.0	7	5.5-8.2	82	79.6-83.3	
Gender:										
Male	1,512	5	3.9-6.8	3	2.0-4.3	4	3.0-6.1	88	85.1-89.8	
Female	2,310	12	10.4-14.1	3	2.4-4.3	9	7.2-11.7	75	72.6-78.1	
Age:	,,,,								,,	
18-29	316	4	2.5-7.0	2	0.8-6.4	11	5.5-19.3	83	74.8-88.8	
30-44	896	10	7.6-12.4	4	2.7-6.3	6	4.3-7.8	80	76.9-83.4	
45-64	1,514	12	10.1-14.5	3	1.9-4.0	7	5.7-9.0	78	75.1-80.5	
65 +	1,096	6	4.3-7.8	4	2.8-6.2	3	2.0-4.4	87	84.3-89.4	
Women aged 18-44	726	12	9.3-15.3	2	1.4-4.2	11	7.5-15.4	75	70.0-79.1	
Women aged 45+	1,584	12	10.3-14.5	4	3.0-5.6	7	5.9-9.4	76	73.4-78.8	
Household Type:	1,504		10.5 14.5		3.0 3.0		3.9 9.4	- /-	73.4 70.0	
Adults w/1+ children <18										
yrs of age in household Adults w/NO children	1,242	8	6.4-9.9	3	2.1-4.3	6	4.2-8.1	83	80.4-85.7	
<18 yrs of age in household	2,580	7	5.9-9.2	3	1.8-4.4	8	5.2-11.7	82	78.1-85.1	
Education:										
<high school<="" td=""><td>202</td><td>•</td><td>4.0-15.0</td><td>_</td><td>12-64</td><td>6</td><td>2 1-11 1</td><td>82</td><td>74.8-87.8</td></high>	202	•	4.0-15.0	_	12-64	6	2 1-11 1	82	74.8-87.8	
High School	292	9	4.9-15.9	3	1.2-6.4		3.1-11.1 5.2-10.0	82		
	1,333	7	5.6-9.7	3	2.0-5.5	7	_	1	78.4-85.1	
Some College	1,110	9	6.9-10.7	4	2.4-5.2	6	4.4-8.4	82	78.6-84.5	
College Degree Income:	1,082	9	7.3-11.5	2	1.5-3.8	6	3.9-8.2	83	79.7-85.5	
<\$15,000	348	15	10.0-22.5	4	1.7-8.3	17	11.9-24.0	64	55.2-71.7	
\$15,000 - \$24,999	616	10	7.2-13.7	3	1.6-5.4	14	8.8-21.7	73	65.7-79.2	
\$25,000 - \$49,999	1,200	8	6.3-10.2	4	2.2-5.5	6	4.8-8.6	82	79.0-84.7	
\$50,000 - \$74,999	608	11	7.2-15.6	4	2.2-6.1	2	1.2-3.6	84	78.5-87.6	
\$75,000 +	612	7	4.7-9.9	2	0.8-2.9	4	2.7-6.5	87	83.9-90.3	
Race (Age-Adjusted):										
White NH**	3,524	9	7.8-10.4	3	2.4-4.0	6	5.0-7.8	82	79.6-83.4	
African American NH**	46	#	#	#	#	#	#	#	#	
Asian American NH**	19	#	#	#	#	#	#	#	#	
Native American NH**	19	#	#	#	#	#	#	#	#	
Hispanic American	167	5	2.8-9.7	2	0.8-6.4	7	3.6-13.5	85	78.2-90.5	
Marital Status:										
<b>Currently Married</b>	2,411	8	6.6-9.2	3	2.2-4.0	5	3.3-8.5	84	80.8-86.5	
Previously Married	994	13	9.9-16.7	2	1.6-3.7	9	6.5-11.6	76	71.5-79.8	
Never Married	413	6	4.1-9.5	4	1.6-7.7	12	7.5-18.3	78	71.6-83.7	
Employment:	7.5		4 7.5		,,,		7.5 .0.5	,,,	7.10 05.7	
Employed	1,959	9	7.2-10.8	3	2.5-4.8	5	3.7-6.8	83	80.0-85.0	
Self-employed	456	5	2.8-7.4	2	0.6-5.0	5	2.7-7.5	89	85.0-92.1	
Unemployed	72	8	3.5-16.7		1.5-11.2	19	10.6-33.0	68	54.5-79.7	
Homemaker	261	13	8.5-18.9	4 2	0.8-3.4		3.9-12.2	79	72.0-84.0	
Student	i i		1			7	0.8-18.4	1		
Retired	57 850	34	17.9-54.0	7	0.9-39.5	4	-	55	42.0-67.5 78.0-88.6	
	859	7	4.3-12.2	3	1.4-5.1	6	3.2-10.8	84		
Unable to Work	153	27	16.4-41.3	2	0.6-4.1	38	28.0-48.1	34	23.4-46.0	
Veteran Status						_			-0.1.00.0	
Yes	593	6	3.8-10.6	3	1.5-7.6	6	3.2-10.1	84	78.6-88.8	
No	3,227	9	7.9-10.4 ing. don't know, a	3	2.5-4.2	7	5.5-8.4	81	78.9-82.8	

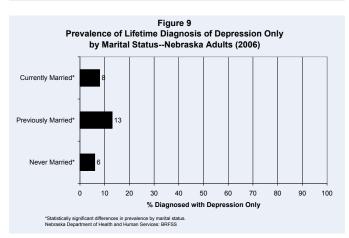
NOTE: "Number" and "Percent" exclude missing, don't know, and refused responses.

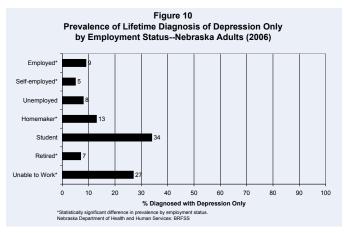
<sup>\*</sup>"Both" means that respondent was at some time diagnosed with a depressive disorder and with an anxiety disorder, not necessarily at the same time. \*\*NH = Non-Hispanic

<sup># -</sup> Data not reported due to N<50.









Respondents aged 45 to 64 (12 percent) were significantly more likely than adults aged 65 and older (6 percent) and those aged 18 to 29 (4 percent) to report ever being told by a doctor or other health professional that they had some form of depression (*Figure 7*). The proportion of adults aged 30 to 44 (10 percent) with a lifetime diagnosis of depression only was also significantly greater than the proportion of 18- to 29-year-olds.

A significantly greater proportion of respondents in the lowest income bracket (under \$15,000 per year) reported ever being told they had a depressive disorder (15 percent), compared to those earning \$75,000 or more (7 percent) (*Figure* 8).

A significantly greater proportion of "previously married" respondents (i.e., those who were divorced, separated, or widowed) said they had ever been diagnosed with depression only (13 percent), compared to "currently married" (8 percent) or "never married" (6 percent) adults (*Figure* 9).

More than one-fourth of respondents who were unable to work (27 percent) stated they had ever been diagnosed with depression only—a significantly greater proportion than that reported for respondents who were employed (9 percent), self-employed (5 percent), or retired (7 percent) (*Figure* 10). Homemakers (13 percent) were also significantly more likely than self-employed respondents to have a lifetime diagnosis of depression.

No difference in prevalence was found between women of childbearing age (18 to 44 years) and women aged 45 and older. Differences in lifetime diagnosis of depression rates were not significant by: presence of children under age 18 in the household, educational level, or veteran status of respondent.

Prevalence rates for non-Hispanic white (9 percent) and Hispanic respondents (5 percent) were not significantly different. Numbers of African American, Asian American, and Native American respondents to this question were insufficient to allow reporting of prevalence rates for these groups.

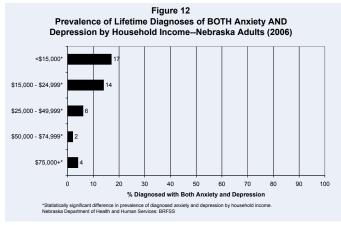
#### Who Has Ever Been Diagnosed with Anxiety Only?

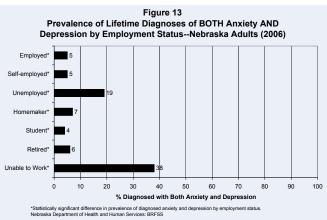
No significant differences were found in prevalence of a lifetime diagnosis of an anxiety disorder in any of the sociodemographic categories studied (*Table 5*).

# Who Has Ever Received Diagnoses of <u>Both</u> Depression and Anxiety?

Figure 11
Prevalence of Lifetime Diagnoses of BOTH Anxiety AND Depression by Age of Respondent--Nebraska Adults (2006)

18-29\*
30-44
45-64\*
7
0 10 20 30 40 50 60 70 80 90 100
% Ever Diagnosed with Both Anxiety and Depression





Sociodemographic characteristics of adults receiving diagnoses of both depression and anxiety were similar to those who had ever been diagnosed with depression only. Significant differences in prevalence were noted by respondent gender, age, income, and employment status.

A significantly greater proportion of women (9 percent) than men (4 percent) reported ever being diagnosed with both depression and anxiety (although not necessarily at the same time).

Respondents aged 65 and older (3 percent) were significantly less likely than persons aged 45 to 64 (7 percent) and those aged 18 to 29 (11 percent) to have ever been diagnosed with anxiety and depression (*Figure* 11).

Adults with annual incomes below \$25,000 (14 to 17 percent) were significantly more likely than those with higher incomes (2 to 6 percent) to have lifetime diagnoses of anxiety and depression (*Figure* 12).

Among those unable to work, the proportion of respondents who were ever diagnosed with anxiety and depression (38 percent) was significantly higher than corresponding rates for all other employment categories (4 to 7 percent), except unemployed adults (19 percent) (*Figure* 13). The unemployed were significantly more likely than employed or self-employed workers (5 percent) to report lifetime diagnoses of these conditions.

# Who Has <u>Never</u> Been Diagnosed with Anxiety or Depression?

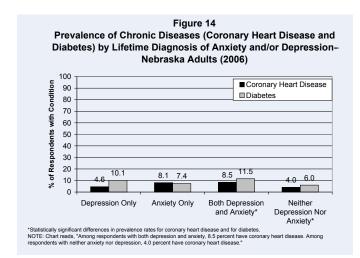
Men (88 percent) were significantly more likely than women (75 percent) to say they had <u>never</u> been diagnosed with either an anxiety or a depressive disorder.

Compared to adults aged 30 to 44 (80 percent) and aged 45 to 64 (78 percent), a significantly greater proportion of respondents aged 65 and older (87 percent) had not received a diagnosis of either of these conditions in their lifetime.

In general, respondents with higher incomes were more likely than lower-income adults to report that they never had anxiety or depression. Persons with household incomes of \$75,000 or more (87 percent) were significantly more likely than those with incomes under \$25,000 per year to say they were never diagnosed with these disorders. In addition, compared to adults with incomes under \$15,000 (64 percent), a significantly greater proportion of respondents earning \$25,000 or more annually (82 to 87 percent) stated they had not been told by a health professional that they had either anxiety or depression.

Respondents who were currently married (84 percent) were significantly more likely than those who had been previously married (76 percent) to report never being diagnosed with an anxiety or depressive disorder.

Employed (83 percent) and self-employed (89 percent) individuals were significantly more likely than unemployed respondents (68 percent), those who were unable to work (34 percent), or students (55 percent) to report never receiving a diagnosis of either of these conditions. In fact, persons who were unable to work were significantly more likely than those in all other employment classes to say they ever had anxiety or depression.



#### Prevalence of Chronic Diseases and Unhealthy Behaviors by Lifetime Diagnosis of Anxiety, Depression or Both

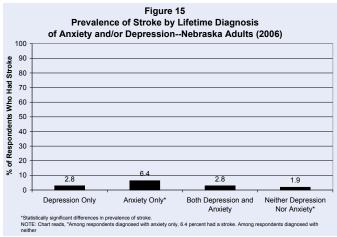
#### **Prevalence of Chronic Diseases**

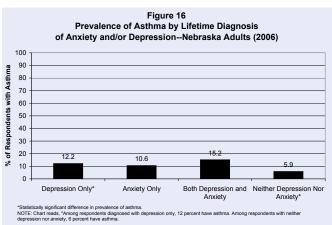
Prevalence of coronary heart disease was significantly higher for persons who had ever been diagnosed with both depression and anxiety at some time in their lives (8.5 percent) than it was for persons who were never diagnosed with either of those conditions (4.1 percent) (*Table* 6) (Figure 14).

TABLE 6
Prevalence and Mean of Selected Chronic Conditions and Unhealthy Behaviors
by Status of Lifetime Diagnosis of Depression Only, Anxiety Only, Both\* or Neither
2006 Nebraska BRFSS with 95% Confidence Intervals (SUDAAN)

		Depression ONLY			iagnosed ON	l with Anxiety LY		Depr	ed with BOTH* ession nxiety	NOT Diagnosed with EITHER Depression OR Anxiety			
	N	%	Confidence Interval	N	%	Confidence Interval	N	%	Confidence Interval	N	%	Confidence Interval	
Coronary Heart Disease	368	4.6	2.6-8.0	116	8.1	4.0-15.7	234	8.5	5.2-13.6	3,073	4.1	3.4-4.9	
Stroke	370	2.8	1.3-5.7	117	6.4	3.2-12.4	236	2.8	1.4-5.7	3,084	1.9	1.5-2.4	
Diabetes	373	10.1	6.9-14.5	117	7.4	3.5-14.9	238	11.5	7.6-17.0	3,092	6.4	5.5-7.4	
Asthma	373	12.2	7.81-18.40	117	10.6	5.4-20.0	233	15.2	10.9-20.9	3,082	5.9	4.49-7.78	
Mean Number of Multiple Chronic Conditions	362	0.30	0.21-0.38	116	0.33	0.22-0.44	229	0.38	0.30-0.46	3,054	0.18	0.19-0.20	
Current smoker	373	30.2	24.2-37.0	117	29.1	19.0-41.7	238	28.5	21.3-36.9	3,087	17.4	15.4-19.5	
No leisure-time physical activity Obesity (Body Mass Index =	374	30.3	24.4-36.9	117	19.1	11.6-29.6	238	30.2	24.3-37.0	3,092	18.3	16.6-20.2	
30+)	360	33.5	27.9-39.7	114	31.2	21.3-43.2	234	38.4	30.4-47.1	2,955	26.1	24.0-28.3	
Binge Drinking	370	12.9	8.9-18.3	115	23.8	15.0-35.8	231	13.7	8.6-21.0	3,046	20.0	17.8-22.4	
Heavy Drinking	367	3.5	1.7-7.0	115	8.5	3.6-18.9	232	5.6	2.2-13.4	3,042	3.0	2.4-3.9	
Mean Number of Multiple Unhealthy Behaviors	354	1.11	0.97-1.25	112	1.12	0.89-1.35	226	1.14	0.96-1.32	2,891	0.84	0.79-0.89	

NOTE: Shading indicates statistically significant differences.





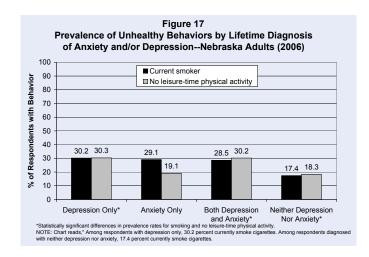
The proportion of respondents reporting they had a stroke (*Figure* 15) was significantly greater among adults who had ever been diagnosed with anxiety (6.4 percent) than among those who were never told they had either anxiety or depression (1.9 percent).

Diabetes prevalence was significantly higher among respondents with lifetime diagnoses of both anxiety and depression (11.5 percent) than it was among adults who had never received a diagnosis of anxiety or depression (6.4 percent) (*Figure* 14).

Asthma was more than twice as prevalent (12.2 percent) among persons with a lifetime diagnosis of depression only than it was among persons who had not been diagnosed with either depression or anxiety (5.9 percent) (*Figure* 16). This difference was statistically significant.

In addition, the mean number of multiple chronic conditions was significantly higher among persons who had received a diagnosis of depression only (0.30), a diagnosis of anxiety only (0.33), or diagnoses of both a depressive and an anxiety disorder (0.38), compared to those who had not been diagnosed with either (0.18) (*Table 6*).

<sup>\*&</sup>quot;Both" means that respondent was at some time diagnosed with a depressive disorder and with an anxiety disorder, not necessarily at the same time.



#### **Prevalence of Unhealthy Behaviors**

Statistically significant differences were noted in prevalence of three of the five unhealthy behaviors listed in *Table 6*, according to lifetime diagnosis of depression or depression/anxiety.

Persons who had ever been told they had depression only (30.2 percent) and persons who ever had been diagnosed with both depression and anxiety (28.5 percent) were significantly more likely to be current smokers than respondents who never had either of these conditions (17.4 percent) (*Figure* 17).

The same pattern was evident for physical inactivity. Adults with a lifetime diagnosis of depression only (30.3 percent) and those with lifetime diagnoses of both depression and anxiety (30.2 percent) were significantly more likely than respondents without a lifetime diagnosis of either (18.3 percent) to say they did not participate in any physical activity outside of work.

Prevalence of obesity was significantly greater among respondents who had lifetime diagnoses of both anxiety and depression (38.4 percent) than among those who had not been diagnosed with either condition (26.1 percent).

Differences in prevalence of binge drinking and chronic (heavy) drinking by lifetime diagnosis of depression, anxiety or both were not significant.

#### **Prevalence of Frequent Mental Distress (FMD)**

#### **Definition**

Responses to the following question, "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"

Frequent Mental Distress (FMD): 14 or more days during the past 30 days.

Infrequent or No Mental Distress: less than 14 days during the past 30 days.

#### **Current Prevalence**

In 2006, 8 percent of respondents to the Nebraska BRFSS reported 14 or more days in the past 30 days when their mental health was "not good". These respondents would be categorized as having "frequent mental distress". The remaining 92 percent are considered to have infrequent or no mental distress (*Table* 1).

Based on these prevalence rates, an estimated 105,864 adults in Nebraska had FMD in the past month.

#### Who Has Frequent Mental Distress (FMD)?

In 2006, 10 percent of female respondents stated that their mental health was "not good" for 14 or more of the last 30 days, indicating that they had FMD as defined in this study (*Table 7*). Prevalence of FMD was significantly higher among females than among males (6 percent).

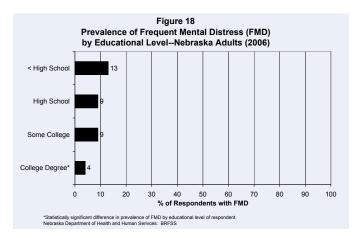
TABLE 7
Prevalence of Frequent Mental Distress (FMD) and Prevalence of Infrequent or No Mental Distress Among Nebraska Adults
by Selected Sociodemographic Characteristics
2006 Nebraska BRFSS with 95% Confidence Intervals (SUDAAN)

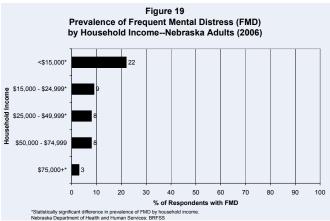
			ent Mental Distress Days in Past 30 Days)	Infrequent or No Mental Dist (<14 Days in Past 30 Days)		
	Total Number	%	Confidence Interval	%	Confidence Interva	
Total	3,895	8	6.5-9.3	92	90.7-93.5	
Gender:						
Male	1,555	6	4.1-7.8	94	92.2-95.9	
Female	2,340	10	8.1-12.0	90	88.0-91.9	
Age:						
18-29	322	6	3.8-9.6	94	90.4-96.2	
30-44	924	7	5.7-9.7	93	90.3-94.3	
45-64	1,529	8	6.8-10.2	92	89.8-93.2	
65 +	1,120	6	4.2-7.9	94	92.1-85.8	
Women aged 18-44	744	10	7.3-13.9	90	86.1-92.7	
Women aged 45+	1,596	10	7.8-11.8	90	88.2-92.2	
Household Type:						
Adults w/1+ children <18 yrs of age in household	1,280	7	5.3-9.2	93	90.8-94.7	
Adults w/ NO children <18 yrs of age in household	2,615	7	5.5-9.5	93	90.5-94.5	
Education:						
<high school<="" td=""><td>298</td><td>13</td><td>8.0-18.9</td><td>88</td><td>81.1-92.0</td></high>	298	13	8.0-18.9	88	81.1-92.0	
High School	1,377	9	6.7-11.7	91	88.3-93.3	
Some College	1,121	9	7.0-12.6	91	87.4-93.0	
College Degree	1,092	4	2.7-5.0	96	95.0-97.3	
Income:		•				
<\$15,000	352	22	15.2-29.8	78	70.2-84.8	
\$15,000 - \$24,999	636	9	5.9-14.1	91	85.9-94.1	
\$25,000 - \$49,999	1,221	8	5.8-11.3	92	88.7-94.2	
\$50,000 - \$74,999	619	8	4.0-16.8	92	83.2-96.0	
\$75,000 +	621	3	2.1-5.8	97	94.2-97.9	
Race (Age-Adjusted):					74.2 77.3	
White NH*	3,586	7	5.6-7.8	93	92.2-94.4	
African American NH*	45	#	#	#	#	
Asian American NH*	19	#	#	#	#	
Native American NH*	20	#	#	#	#	
Hispanic American	178	6	3.3-9.9	94	90.1-96.7	
Marital Status:	.,,		3.5 9.9	<del></del>	90.1 90.7	
Currently Married	2,450	5	4.3-6.3	95	93.7-95.7	
Previously Married	1,018	11	8.1-14.6	89	85.4-91.9	
Never Married	422	10	7.0-13.7	90	86.3-83.0	
Employment:	422		7.0 13.7	90	00.5 05.0	
Employed	1,993	6	4 5-7 4	94	82.6-95.5	
Self-employed	468		4.5-7.4 2.1-6.6	9 <del>4</del> 96	i i	
Unemployed		4	i i		93.4-97.9 61.0-85.2	
Homemaker	77	25 8	14.8-39.0 4.9-13.9	75 03	86.1-95.1	
Student	259			92	i	
Retired	56	3	1.3-7.6	97	92.4-98.7	
Unable to Work	889	7	4.0-10.9	93	89.1-96.0	
	148	38	24.5-54.5	62	45.5-75.5	
Veteran Status	6	_	20.55		00.000	
Yes	605	6	3.8-10.2	94	89.8-96.2	
No	3,273	8	6.7-9.6	92	90.4-93.3	

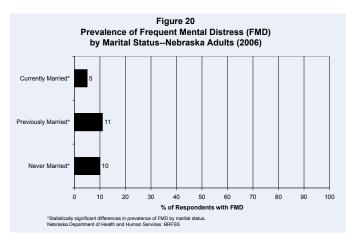
NOTE: "Number" and "Percent" exclude missing, don't know, and refused responses.

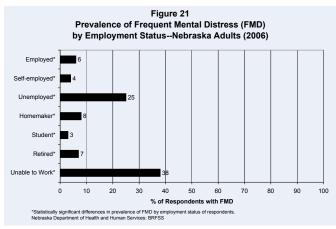
\*NH = Non-Hispanic

<sup># -</sup> Data not reported due to N < 50.









Persons with college degrees (4 percent) were significantly less likely than respondents with less education to report 14 or more days in the last month when their mental health was "not good" (*Figure* 18). For adults with less than a high school education, 13 percent gave responses indicating they had FMD, as did 9 percent each of high school graduates and adults with technical training or some college.

More than one-fifth of adults with household incomes under \$15,000 (22 percent) had FMD in the past month, according to this survey (*Figure* 19). Significantly smaller proportions of people with incomes of \$15,000 to \$24,999 (9 percent), \$25,000 - \$49,999 (8 percent), and \$75,000 and up (3 percent) reported frequent mental distress in the past month.

Respondents who were never married (10 percent) or previously married (11 percent) were significantly more likely than currently married persons (5 percent) to say their mental health was not good for at least 14 of the last 30 days (*Figure* 20).

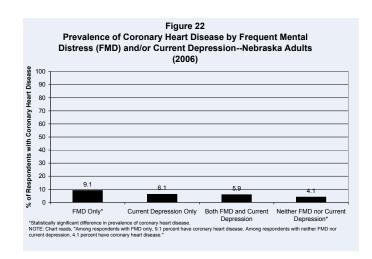
Unemployed (25 percent) and unable-to-work (38 percent) respondents were significantly more likely than adults in other employment categories to have FMD (*Figure* 21).

Prevalence of Frequent Mental Distress (FMD) and Current Depression (Combined)

If we combine respondents with current depression only (3 percent), those who reported frequent mental distress only (4 percent), and those who had both (3 percent), the result is a broader view of the adult population with mental health problems including depression <u>and</u> other disorders. Using these criteria, 10 percent of the population had current depression, FMD or both.

Based on these prevalence rates, an estimated **132,330** adults in Nebraska had current depression and/or FMD in **2006** (*Table* **1**).

Prevalence of Chronic Diseases and Unhealthy Behaviors by Current Depression and Frequent Mental Distress (FMD)

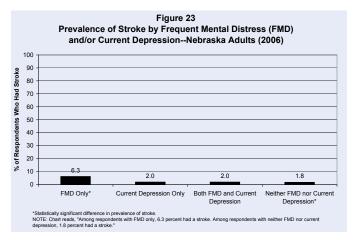


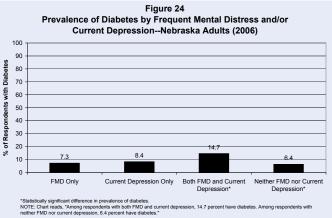
#### **Prevalence of Chronic Diseases**

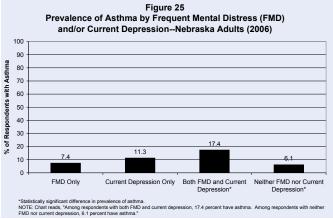
Prevalence of coronary heart disease among persons with FMD only (9.1 percent) was more than double the rate among persons who have neither FMD nor current depression (4.1 percent) (*Table 8*) (*Figure 22*). This difference was statistically significant.

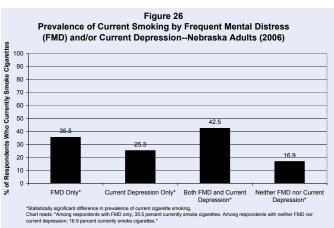
TABLE 8
Prevalence and Mean of Selected Chronic Conditions and Unhealthy Behaviors by Frequent Mental Distress
(FMD) Only, Current Depression (Severity of Depression Score = 10+) Only, Both FMD and Current Depression, or Neither
2006 Nebraska BRFSS with 95% Confidence Intervals (SUDAAN)

	Frequ		al Distress	_			В0		AND Current	NEITHER FMD NOR Current		
		(FMD) 0	nly Confidence	Curr	ent Depre	Confidence		Depression Confidence		Depr		ession Confidence
	N	%	Interval	N	%	Interval	N	%	Interval	N	%	Interval
Coronary Heart Disease	144	9.1	5.5-14.7	429	6.1	3.9-9.5	160	5.9	3.0-11.4	3,001	4.1	3.4-4.9
Stroke	146	6.3	3.3-11.7	433	2.0	1.0-4.0	160	2.0	0.8-5.0	3,010	1.8	1.4-2.3
Diabetes	146	7.3	3.8-13.5	436	8.4	5.8-12.1	162	14.7	9.2-22.5	3,018	6.4	5.5-7.5
Asthma	146	7.4	4.2-12.8	434	11.3	7.8-16.1	159	17.4	11.6-25.2	3,008	6.1	4.6-8.1
Mean Number of Multiple												
Chronic Conditions	144	0.30	0.20-0.40	423	0.28	0.22-0.34	155	0.39	0.28-0.50	2,982	0.18	0.16-0.21
Current smoker	146	35.5	25.4-47.1	437	25.3	20.2-31.3	162	42.5	34.5-50.8	3,013	16.9	15.0-18.9
No leisure-time physical activity	146	30.8	22.4-40.6	436	25.5	20.4-31.3	162	43.7	34.6-53.2	3,018	17.6	15.9-19.5
Obesity (Body Mass Index = 30+)	142	30.8	22.4-40.8	426	34.8	28.7-41.4	158	43.1	34.0-52.7	2,886	26.2	24.0-28.4
Binge Drinking	144	28.9	20.0-39.8	432	14.9	10.7-20.4	158	9.3	5.5-15.2	2,973	19.5	17.4-21.9
Heavy Drinking	145	4.8	2.2-10.3	432	4.1	2.3-7.3	157	6.0	1.7-19.0	2,969	3.2	2.5-4.1
Mean Number of Multiple												
Unhealthy Behaviors	140	1.28	1.08-1.48	418	1.04	0.90-1.19	152	1.42	1.28-1.56	2,824	0.83	0.78-0.88
NOTE: Shading indicates statistica	lly sigr	nificant o	differences									









The proportion of respondents with FMD only who reported having a stroke (6.3 percent) was also significantly higher than the proportion among respondents who have neither FMD nor current depression (1.8 percent) (*Figure* 23).

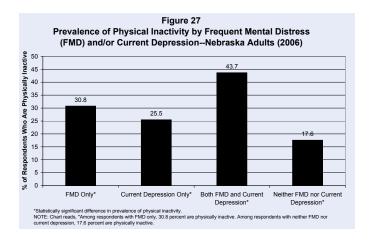
Persons who indicated they had FMD as well as current depression were significantly more likely to report having diabetes (14.7 percent) than persons who did not have either current depression or frequent mental distress (6.4 percent) (*Figure* 24).

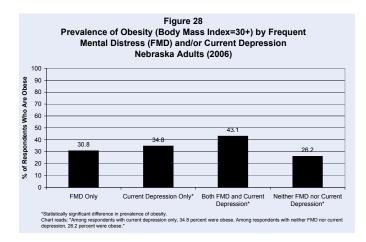
Asthma was also much more common among respondents with FMD/current depression (17.4 percent) than among respondents who reported neither of these conditions (6.1 percent) (*Figure* 25).

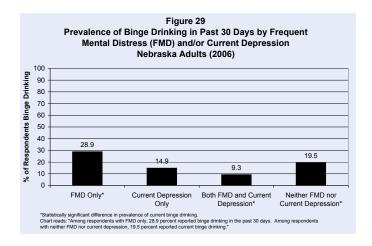
The mean number of chronic conditions (*Table 8*) was also significantly higher among respondents with current depression only (**0.28**) or both FMD and current depression (**0.39**) than among those who had neither (**0.18**).

#### **Prevalence of Unhealthy Behaviors**

Adults indicating they had FMD only (35.5 percent), current depression only (25.3 percent), or both FMD and current depression (42.5 percent) were significantly more likely than adults who had neither of these conditions (16.9 percent) to report they currently smoke cigarettes. In addition, respondents with both FMD and current depression were significantly more likely than those with current depression only to be current smokers (*Figure* 26).







The same pattern is evident when looking at prevalence of physical inactivity in the past month (*Figure* 27). Respondents with FMD only (30.8 percent), current depression only (25.5 percent), or both FMD and current depression (43.7 percent) were all significantly more likely than respondents with neither condition (17.6 percent) to say they engaged in no leisure-time physical activity in the past month. Prevalence of physical inactivity was also significantly higher for respondents with both FMD and current depression than for those with current depression only.

Obesity rates (*Figure* **28**) were significantly higher among persons with current depression only (**34.8** percent) or both current depression and FMD (**43.1** percent) than among persons who currently had neither condition (**26.2** percent).

Compared to persons with both FMD and current depression (9.3 percent), significantly greater proportions of persons with FMD (28.9 percent) or neither FMD nor depression (19.5 percent) reported binge drinking in the past month (*Figure* 29).

Differences in prevalence of heavy drinking among these respondent categories were not significant.

The mean number of unhealthy behaviors was significantly lower among adults who had neither FMD nor current depression (0.83) than among the three other respondent groupings. Adults with current depression only (1.04) also engaged in significantly fewer unhealthy behaviors, on average, than those with both FMD and current depression (1.42).

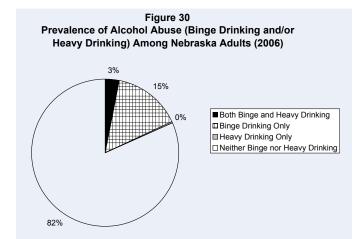
#### **Alcohol Abuse**

#### **Definitions:**

#### Binge Drinking

For Men--Five or more drinks of alcohol (beer, wine, wine coolers, cocktails, or liquor) on an occasion, one or more times during the past 30 days.

For Women—Four or more drinks of alcohol (beer, wine, wine coolers, cocktails, or liquor) on an occasion, one or more times during the past 30 days.



Nebraska Department of Health and Human Services: BRFSS

#### Heavy (Chronic) Drinking

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

For Men—two or more drinks. For Women—one or more drink.

#### **Current Prevalence of Alcohol Abuse**

In **2006**, based on responses to the above questions, **15** percent of adults in Nebraska engaged in binge drinking but not in heavy drinking (*Table* 1) (*Figure* **30**).

In contrast, less than one percent participated in heavy drinking but not in binge drinking, while an additional 3 percent qualified as binge drinkers and heavy drinkers. Thus, 18 percent of adults reported alcohol abuse in the month prior to the survey. The remaining 82 percent did not meet the criteria for either binge or heavy drinking.

Altogether, an estimated 238,194 Nebraskans aged 18 and older reported alcohol abuse in the month prior to the survey.

# Who Participated in Both Binge Drinking and Heavy Drinking in Nebraska?

Although the range in prevalence rates for binge and heavy drinking combined was narrow within sociodemographic categories, some significant differences were found.

Among Nebraska adults aged 18 and older, men were significantly more likely than women to report both binge drinking and heavy drinking in the past 30 days (*Table 9*). In fact, prevalence was twice as high for men (4 percent) as for women (2 percent) in 2006.

#### TABLE 9

# Prevalence of Alcohol Abuse (Both Binge Drinking and Heavy Drinking, Binge Drinking Only, or Heavy Drinking Only) or No Alcohol Abuse in Past 30 Days Among Nebraska Adults by Selected Sociodemographic Characteristics 2006 Nebraska BRFSS with 95% Confidence Intervals (SUDAAN)

				ALCOHO	)L ABUSE			NO ALCOHOL ABUSE			
			<u>h</u> Binge Drinking <u>d</u> Heavy Drinking	Bir	nge Drinking Only	Hea	ovy Drinking Only		<u>er</u> Binge Drinking Heavy Drinking		
	Total Number	%	Confidence Interval	%	Confidence Interval	%	Confidence Interval	%	Confidence Interval		
Total	7,691	3	2.5-3.5	15	13.8-16.4	0.3	0.2-0.5	82	80.3-83.0		
Gender:							_				
Male	3,003	4	3.1-4.9	19	17.4-21.6	0.1	0.1-0.3	77	74.3-78.7		
Female	4,688	2	1.6-2.7	11	9.2-12.3	0.5	0.3-0.8	87	85.1-88.3		
Age:											
18-29	642	2	1.5-4.1	24	20.2-29.2	0.1	0.02-0.4	73	68.1-77.4		
30-44	1,777	4	3.4-5.7	20	17.3-22.0	0.2	0.04-0.6	76	73.3-78.4		
45-64	3,022	3	2.5-4.2	11	9.7-12.6	0.3	0.2-0.6	85	83.6-86.9		
65 +	2,250	1	0.3-1.1	2	1.1-2.4	1.0	0.6-1.6	97	95.9-97.6		
Women aged 18-44	1,462	3	2.0-3.8	16	13.1-18.6	0.3	0.1-0.8	81	78.3-84.0		
Women aged 45+	3,226	1	0.9-1.9	5	4.1-6.1	0.8	0.5-1.3	93	91.7-94.0		
Household Type:	5,0		2.5 1.5	,	7 0.1		2.5 1.5	75	J, JT.0		
Adults w/1+ children <18 yrs of age in household	2,517	2	1.8-3.1	14	12.8-16.3	0.1	0.0-0.3	83	81.3-84.9		
Adults with NO children <18 yrs of age in household	5,174	4	3.1-5.2	17	14.5-19.6	0.5	0.2-0.9	79	75.9-81.2		
Education:											
<high school<="" td=""><td>614</td><td>4</td><td>1.9-6.6</td><td>11</td><td>7.3-16.0</td><td>0.2</td><td>0.0-0.7</td><td>85</td><td>80.0-89.4</td></high>	614	4	1.9-6.6	11	7.3-16.0	0.2	0.0-0.7	85	80.0-89.4		
High School	2,714	4	2.8-4.9	15	13.0-17.3	0.3	0.1-0.5	81	78.6-83.2		
Some College	2,159	3	2.1-4.2	17	14.3-19.4	0.3	0.2-0.5	80	77.3-82.5		
College Degree	2,196	3	1.7-3.7	17	14.3-20.2	0.6	0.3-1.1	80	76.7-82.7		
Income:											
<\$15,000	746	4	1.9-6.7	7	4.4-10.9	0.4	0.1-1.5	89	84.5-92.4		
\$15,000 - \$24,999	1,274	3	1.9-4.5	11	8.6-14.3	0.2	0.0-0.5	86	82.4-88.6		
\$25,000 - \$49,999	2,311	4	3.0-5.6	15	12.7-17.5	0.2	0.1-0.5	81	78.1-83.2		
\$50,000 - \$74,999	1,209	3	2.0-4.2	18	14.6-22.1	0.2	0.1-0.7	79	74.8-82.4		
\$ <b>75,000</b> +	1,277	3	1.9-3.9	20	16.5-23.9	1.0	0.4-2.3	76	72.2-79.9		
Race (Age-Adjusted):											
White NH*	7,082	3	2.5-3.6	16	14.6-17.5	0.4	0.2-0.5	81	79.1-82.1		
African American NH*	106	1	0.2-8.5	10	4.8-19.8	0.0		89	78.7-94.3		
Asian American NH*	31	#	#	#	#	#	#	#	#		
Native American NH*	46	#	#	#	#	#	#	#	#		
Hispanic American	334	1	0.2-2.2	9	6.0-14.0	0.3	0.0-2.2	90	84.9-93.1		
Marital Status:											
Currently Married	4,790	3	2.1-3.8	14	12.0-16.0	0.3	0.2-0.5	83	80.8-85.0		
Previously Married	2,058	7	3.1-16.2	11	8.8-14.3	0.6	_	81	73.4-86.7		
Never Married	836	4	2.5-5.6	16	12.8-19.0	0.0	0.0-0.2	81	77.0-83.8		
Employment:											
Employed	3,859	3	2.4-3.7	16	14.3-17.7	0.5	0.2-1.2	81	78.6-82.3		
Self-employed	908	5	3.0-7.0	18	14.0-23.5	0.3	0.1-1.0	77	71.5-81.5		
Unemployed	157	3	1.2-7.8	11	6.4-18.7	0.0		86	77.8-61.1		
Homemaker	526	1	0.2-2.7	4	2.7-7.2	0.1	0.0-0.6	95	91.8-96.6		
Student	115	0	0.1-1.2	14	6.6-27.7	0.0		86	72.1-93.2		
Retired	1,779	2	0.9-4.4	10	6.7-14.9	0.3	0.2-0.6	88	82.7-91.3		
Unable to Work	337	0	0.1-1.1	3	2.2-13.1	0.0		94	86.8-97.6		
Veteran Status	331		÷					74	22.0 97.0		
Yes	1,141	3	1.4-5.4	20	13.5-29.8	0.1	0.0-0.3	77	67.5-83.8		
No	6,544	3	2.5-3.6	15	13.2-15.9	0.4	0.3-0.6	82	80.7-83.5		

 $NOTE: "Number" \ and "Percent" \ exclude \ missing, don't \ know, and \ refused \ responses.$ 

<sup>\*</sup>NH = Non-Hispanic

<sup>#</sup> - Data not reported due to N<50.

Significant differences were also seen in binge/heavy drinking rates by age of respondent, with older adults aged 65 and older (1 percent) significantly less likely than younger adults (2 to 4 percent) to report this pattern of alcohol consumption.

Women of childbearing age (aged 18 through 44 years) were significantly more likely (3 percent) than women aged 45 and older (1 percent) in Nebraska to say they participated in both binge and heavy drinking.

Non-Hispanic white Nebraskans (3 percent) were significantly more likely than Hispanic adults in the state (1 percent) to report binge <u>and</u> heavy drinking in the last month.

Five percent of self-employed respondents engaged in both binge and heavy drinking in the past month—a significantly greater proportion than that reported by homemakers, students and those unable to work. Employed respondents were also significantly more likely than students and persons unable to work to report these behaviors.

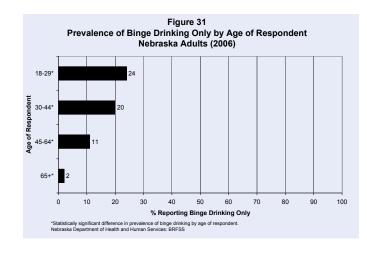
No significant differences in prevalence of binge drinking were found by presence of children in the household, educational level, marital status, or veteran status of respondents.

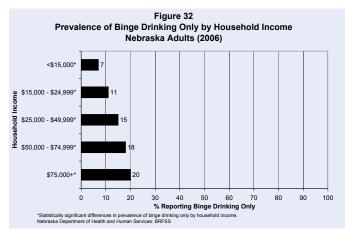
# Who Participated in Binge Drinking (But Not Heavy Drinking) in Nebraska?

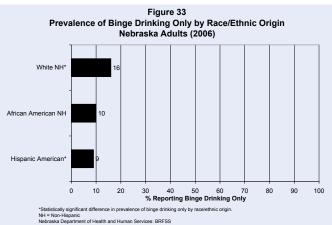
Overall, 15 percent of adults in the 2006 Nebraska BRFSS reported binge drinking, but not heavy drinking. The pattern of binge drinking by socioeconomic characteristics was similar to that found for binge/heavy drinking combined.

A significantly greater proportion of males (19 percent) than females (11 percent) participated in binge drinking in the past 30 days.

Young adults aged 18 to 29 were significantly more likely to binge drink (24 percent) than persons aged 45 to 64 (11 percent) or persons aged 65 and older (2 percent). Prevalence of binge drinking also decreased significantly with each older age group, beginning with respondents aged 30 to 44 (20 percent) (*Figure* 31).







A significantly greater proportion (16 percent) of women of childbearing age (18 to 44 years) engaged in binge drinking but not heavy drinking, compared to women aged 45 and older (5 percent).

The proportion of respondents with annual household incomes of \$50,000 and over who reported binge drinking only (18 to 20 percent) was significantly greater than the proportion reported for those with incomes under \$25,000 (7 to 11 percent). Respondents in the middle income bracket (\$25,000 to \$49,999) were also significantly more likely (15 percent) than those earning under \$15,000 per year (7 percent) to binge drink (*Figure* 32).

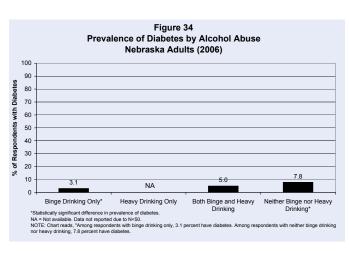
Non-Hispanic white adults (16 percent) were significantly more likely than Hispanic adults in Nebraska (9 percent) to report alcohol consumption patterns consistent with binge drinking (*Figure* 33).

Significantly greater proportions of individuals who were employed (16 percent) or self-employed (18 percent) participated in binge drinking in the past month, compared to homemakers (4 percent) and respondents unable to work (3 percent).

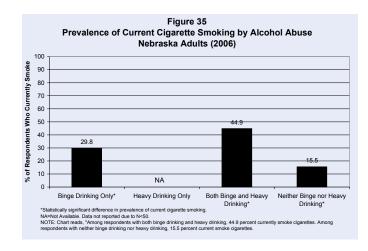
# Who Participated in Heavy Drinking (But Not Binge Drinking) in Nebraska?

Due to the extremely small proportion of BRFSS respondents who indicated heavy drinking but not binge drinking (0.3 percent), no analysis by sociodemographic characteristics is possible.

# Prevalence of Chronic Diseases and Unhealthy Behaviors Among Persons with Alcohol Abuse



Of the four chronic diseases studied by alcohol abuse status, a significant difference in prevalence by alcohol use was noted only for diabetes (*Table* 10). Prevalence of diabetes was significantly <u>lower</u> among persons who reported binge drinking in the past 30 days (3.1 percent) than among persons who had not participated in either binge drinking or heavy drinking in the past month (7.6 percent). (*Figure* 34). This may be due in part to diabetes being less prevalent among younger adults who are much more likely than older adults to report binge drinking.



Prevalence of cigarette smoking was significantly higher among respondents who engaged in binge drinking (29.8 percent) or in both binge drinking and heavy drinking (44.9 percent) than it was among those who reported no alcohol abuse in the past month (15.5 percent). (*Figure* 35).

Prevalence rates for chronic diseases and unhealthy behaviors among respondents who indicated heavy drinking were not reported, due to the small number of respondents with this pattern of alcohol use.

Respondents who engaged in both binge and heavy drinking in the past month reported an average of **0.95** other unhealthy behaviors. This mean is significantly higher than that computed for respondents who indicated no binge or heavy drinking (**0.64**). No significant differences were found among the mean numbers of chronic diseases reported.

by Status of Binge I	Prinking	, Heavy	Mean of Select Drinking, or Al ebraska BRFSS v	ed Chr cohol <i>l</i>	\buse	onditions and (Binge Drinki	ng and/	or Heav		nst Month	l	
	ALCOHOL ABUSE  BOTH Binge AND Heavy Binge Drinking ONLY Heavy Drinking ONLY Drinking											
	N	%	Confidence Interval	N	%	Confidence Interval	N	%	Confidence Interval	N	%	king Confidence Interval
Coronary Heart Disease	814	5.3	3.0-9.4	36	#	#	210	3.2	1.5-6.7	6,572	4.5	4.0-5.1
Stroke	816	3.0	1.2-7.3	36	#	#	208	4.6	1.6-12.9	6,611	2.6	2.2-3.1
Diabetes	816	3.1	1.9-5.0	36	#	#	210	5.0	2.2-11.3	6,623	7.6	6.9-8.4
Asthma	815	6.3	4.0-9.7	36	#	#	209	6.6	3.1-13.6	6,594	8.0	6.9-9.2
Mean Number of Multiple Chronic Conditions	813	0.18	0.10-0.25	36	#	#	207	0.20	0.11-0.29	6,520	0.22	0.21-0.24
Current smoker	814	29.8	25.4-34.6	36	#	#	208	44.9	36.0-54.1	6,615	15.5	14.2-17.0
No leisure-time physical activity	816	18.9	15.0-23.5	36	#	#	210	24.4	17.4-33.0	6,625	20.6	19.3-22.0
Obesity (Body Mass Index = 30+)	796	23.9	19.7-28.6	35	#	#	207	25.1	17.8-34.2	6,314	27.9	26.2-29.6
Mean Number of Multiple Unhealthy Behaviors	794		0.63-0.83	35	#	#	205	0.95	0.82-1.09	6,300	0.64	0.61-0.66
NOTE: Shading indicates statistically significant differences. # - Data not reported due to N<50.												



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