Current Major Depression in Utah
Utah vs. U.S.

A total of 34 states included the PHQ-8 in their 2006 state BRFSS questionnaire (see Appendix B: Methods and Procedures). The age-adjusted prevalence of major depression among adults varied from a high of 7.0% in West Virginia to a low of 2.2% in North Dakota. The prevalence of major depression in Utah was 4.2% (95% CI: 3.5%–5.1%). This prevalence rate was no different from the U.S. rate of 4.2%, calculated using data from all 34 states.

The states with prevalence rates lower than the U.S. rate tended to be in the Midwest or the West, and states with prevalence rates higher than the U.S. rate tended to be in the South.
From 2005–2007, Utah added the PHQ-9 to the BRFSS. The following analyses for Utah adults are based on the PHQ-9 for those years. See Appendix B: Methods and Procedures, Appendix C: Depression Modules, and Appendix D: PHQ-9 Instrument.

**Local Health Districts and Small Areas**

The age-adjusted rate of major depression among adults in Utah from 2005–2007 was estimated at 4.1%. The percentage of adults with major depression varied by local health district (LHD). Central Utah LHD had the highest rate of major depression (5.6%) while Summit County LHD had the lowest rate (2.2%). However, neither of these rates were statistically different from the overall state rate of major depression. Looking at small areas within LHDs, data from 2005–2007 show that adults in South Salt Lake had the highest rate of major depression (10.4%) followed by West Orem (8.8%) and West Valley East (8.2%). The lowest rates of major depression were found in the combined West Jordan/Copperton and South Jordan small areas (1.2%), Grand/San Juan Counties (1.5%) and Sandy Center (1.9%). The West Orem and Sandy Center rates were not statistically different from the state rate. (For more information about small area analysis, please see Appendix B: Methods and Procedures.)
Major Depression by Local Health District and Small Area, Utah, 2005–2007

Age-adjusted to the 2000 U.S. standard population.

Utah Depression Surveillance Report
Current Major Depression in Utah
Demographics and Socioeconomic Characteristics

There appears to be an association between mental disorders, such as major depression, and socioeconomic characteristics. Studies have shown that persons with a low socioeconomic status, such as low education and low income, have a higher chance of being depressed.

Sex and Age

Overall, more Utah adult females had major depression compared to Utah males (5.1% and 3.1%, respectively). Females aged 25 to 34 years and 35 to 44 years had a statistically higher rate of major depression compared to males. The apparent differences between sexes for the other age groups were not statistically significant.

Race

Black and Pacific Islander Utahns (0.8% and 2.1%, respectively) had a statistically lower percentage of major depression compared to all Utahns (4.1%).

Major Depression by Race, Utah, 2005–2007

Age-adjusted to the 2000 U.S. standard population.
Ethnicity

There were no statistically significant differences in rates of major depression across ethnicity.

Marital Status

Married persons (2.6%) had a lower rate of major depression compared to all other marital categories (4.9%–23.8%). Separated persons (23.8%) had the highest rate of major depression followed by divorced persons (12.4%); these rates were statistically higher than the rates for married persons.

Employment Status

The highest rate of major depression was for unemployed persons (21.1%) while the lowest rate was among retired persons (1.3%). Employed persons (2.8%) had a statistically lower rate of major depression compared to the overall state rate of 4.1%.
Education Level*

Persons with less than a high school diploma (10.1%) and persons with a high school diploma or a GED certificate (6.3%) had statistically higher rates of major depression compared to the overall state rate of 4.1%. Persons with at least a college degree (1.8%) had a statistically lower rate of major depression compared to the overall state rate.

* Highest level of educational attainment.

Income

Persons with annual household incomes less than $10,000 (19.9%), between $10,000–$19,999 (9.2%), and between $20,000–$34,999 (6.1%) all had significantly higher major depression rates compared to the overall state rate of 4.1%. Though there were no statistically significant differences between the major depression rates for the groups with annual household incomes between $10,000–$19,999 and $20,000–$34,999, both these groups had significantly lower rates compared to the group with household incomes less than $10,000 annually. Persons with annual household incomes of $50,000 or more (2.4%) had a statistically lower rate of major depression compared to all groups except for those with household incomes between $35,000–$49,999.

Age-adjusted to the 2000 U.S. standard population.
Chronic Diseases

There appears to be an association between major depression and chronic diseases. Depression might lead to chronic disease and chronic disease can worsen the symptoms of depression. People with depression are less likely to seek or follow through with treatment for their chronic diseases. Thus, timely diagnosis and treatment of major depression could positively impact the course and treatment of chronic disease(s).²

Heart Attack

Of those persons who had been told by a doctor that they had a heart attack, 10.1% had major depression, and of those persons that had not been told that they had a heart attack, 4.0% had major depression. These rates were statistically significantly different.

Stroke

Of those persons who had been told by a doctor that they had a stroke, 12.0% had major depression, and of those persons who had not been told that they had a stroke, 3.9% had major depression. These rates were statistically significantly different.
Hypertension

Of those persons who had been told by a doctor that they had high blood pressure (hypertension), 7.7% had major depression, and of those persons who had not been told that they had high blood pressure, 3.6% had major depression. These rates were statistically significantly different.

Asthma

Of those persons who reported current asthma, 8.2% had major depression. Of those persons who did not report current asthma, 3.7% had major depression. These rates were statistically significantly different.

Diabetes

Of those persons who had been told by a doctor that they had diabetes, 6.2% had major depression. Of those persons who had not been told that they had diabetes, 3.9% had major depression. These rates were statistically significantly different.
Arthritis

Of those persons who had been told by a doctor that they had arthritis, 7.5% had major depression. Of those persons who had not been told that they had arthritis, 2.9% had major depression. These rates were statistically significantly different.
General Health and Health Behaviors

Previous analysis of BRFSS data has shown an association between major depression and smoking, body size (as measured by BMI), physical inactivity, and binge and heavy drinking. In a recent study to determine what factors among depressed patients led to worse outcomes, it was shown that the worse outcomes were associated with poor health-related behaviors like physical inactivity.

Health Status

Of those persons who stated that their health status was fair or poor, 17.7% had major depression. Of those persons who stated that their status was excellent, very good, or good, 2.4% had major depression. These rates were statistically significantly different.

Smoking

Of those persons who were current smokers, 11.1% had major depression. Of those persons who reported never smoking or formerly smoking, 3.3% had major depression. These rates were statistically significantly different.
Binge Drinking

Of those persons who reported binge drinking* in the past 30 days, 5.9% had major depression. Of those persons who did not report binge drinking, 3.8% had major depression. These rates were statistically significantly different.

* Binge drinking is defined as consuming five or more drinks of alcohol on an occasion one or more times during the past 30 days. A drink of alcohol is 1 can or bottle of beer, 1 glass of wine, 1 can or bottle of wine cooler, 1 cocktail, or 1 shot of liquor.

Screenings

Sigmoidoscopy/colonoscopy

There was no difference in the rate of major depression by colonoscopy test status (within the last five years or more than five years/never).

Mammography

There was no difference in the rate of major depression among women aged 40 and over who had a mammogram within the last two years.
Major Depression by Cholesterol Test in the Past Five Years, Utah, 2005 and 2007

Of those persons who had a cholesterol test within the past five years, 3.1% had major depression. Of those persons whose last cholesterol test was more than five years ago or never, 6.2% had major depression. These rates were statistically significantly different.

Physical Activity

There was an inverse relationship between the amount of physical activity and major depression. Individuals who engaged in physical activity that meet the recommendations* had the lowest rate of major depression (2.9%). Those who engaged in some physical activity but not enough to meet the recommendations had a higher major depression rate (4.1%), but this rate was not statistically different from the rate for those who met the recommendations for physical activity. Persons who engaged in no physical activity had a statistically higher rate of major depression (10.0%).

* Recommended activity includes 30 minutes of moderate physical activity 5 or more days per week or 20 minutes of vigorous physical activity 3 or more days per week.

Major Depression by Recommended Physical Activity, Utah, 2005 and 2007

Cholesterol Test

Of those persons who had a cholesterol test within the past five years, 3.1% had major depression. Of those persons whose last cholesterol test was more than five years ago or never, 6.2% had major depression. These rates were statistically significantly different.
Nutrition

Of the four categories for fruit or vegetable consumption, those persons who consumed no fruits or vegetables daily had the highest rate of major depression (10.2%) among all groups. Among persons who consumed 1–2 daily servings of fruit and vegetables, 4.7% had major depression. Those who consumed 3–4 daily servings (2.6%) or 5 or more daily servings (3.6%) had the lowest rates of major depression. The rate for the 5 or more daily servings was not statistically different from the 3–4 daily servings or 1–2 daily servings categories.

Obesity

Obese persons (5.8%) had statistically higher rates of major depression than those of normal weight (3.8%).*

* Normal weight is defined as a Body Mass Index (BMI) of less than 25; overweight is defined as a BMI of 25 to <30; obese is defined as a BMI of 30 or more. BMI is calculated by dividing weight in kilograms by the square of height in meters.
Access to Health Care

According to the 1999 Report, *Mental Health: A Report of the Surgeon General*, adequate mental health treatment resources for large population groups require a wide range of services in a variety of settings, with sufficient flexibility to permit movement to the appropriate level of care. Private and public insurance policies have been pieced together to meet the public's need for mental health services.\(^{16}\)

### Major Depression by Insurance Coverage, Utah, 2005–2007

![Graph](image)

**Insurance Coverage**

Of those persons who reported not having health insurance, 6.3% had major depression. Of those persons who reported having health insurance, 3.6% had major depression. These rates were statistically significantly different.

### Primary Care Provider

There was no difference in the percentage of individuals with major depression based on personal doctor categories (3.7% for having no personal doctor, 4.2% for having one personal doctor, and 4.9% for having more than one personal doctor).

### Major Depression by Having a Personal Doctor, Utah, 2005–2007

![Graph](image)

Age-adjusted to the 2000 U.S. standard population.
Major Depression by Routine Checkup in the Past Five Years, Utah, 2005–2007

Recent Routine Medical Checkup

Of those persons who reported not having a routine checkup in the past five years or never having a routine checkup, 6.4% had major depression. Of those persons who reported having a routine checkup in the past five years, 3.9% had major depression. These rates were statistically significantly different.