

Utah Health Status Update:

Measuring Depression Among Utah Adults

April 2006

Utah Department of Health

Approximately 20% of the U.S. population is affected by mental illness during any given year. Of all mental illnesses, depression is the most common disorder.¹ Approximately 14 million adults in the U.S., or 6.7% of the adult population, suffer from major depression.² Major depression is the leading cause of disability, and is associated with more than two-thirds of suicides each year. From 2001–2002, only 52% of adults in the health care sector who were diagnosed with depression received adequate treatment.³

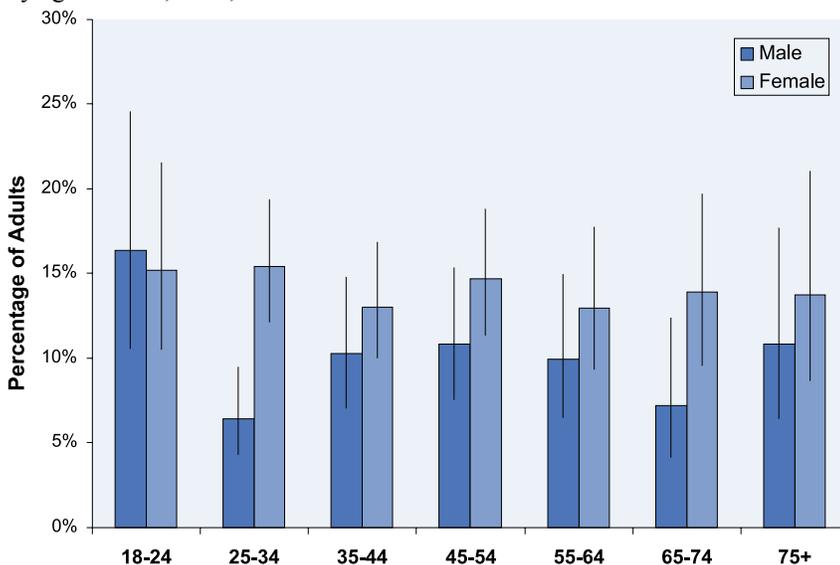
Depression was selected as a measure of mental health by the Healthy People 2010 committee in order to monitor progress in mental health treatment among adults. Healthy People 2010 objective 18-9b states “Increase the proportion of adults with recognized depression who receive treatment.” In order to estimate the prevalence of depression in Utah adults, a modified version of the Patient Health Questionnaire (PHQ-9) was included on the 2005 Utah Behavioral Risk Factor Surveillance System (BRFSS). The PHQ-9 is a validated screening tool to diagnose clinical depression. The BRFSS is a random-digit-dialed telephone survey of noninstitutionalized persons 18 years of age and older. Survey respondents were classified as depressed based on a validated algorithm. A total of 5,137 Utah adults were surveyed.

Results from the 2005 survey indicated that 12.3% of Utah adults, or 214,900 individuals, were classified as depressed. One-third of these (4.4% of adults) were classified as having a more severe form called major depressive disorder. More women (14.4%) were classified as depressed than men (10.3%). Depression was more prevalent in women across all age groups 25 and older (see Figure 1).

Income and education were also related to reported depression. Although these data do not address causation, those with higher household incomes were less likely to be classified as depressed (see Figure 2). Additionally, those without a high school diploma or GED were

Depression by Age and Sex

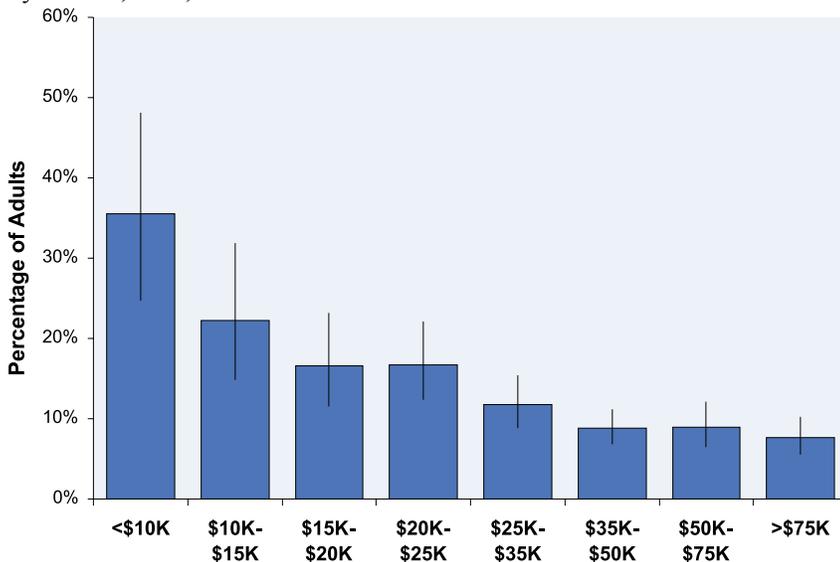
Figure 1. Percentage of Utah adults aged 18 and older classified as depressed by age and sex, Utah, 2005



Source: Utah Behavioral Risk Factor Surveillance System, 2005

Depression by Income

Figure 2. Percentage of Utah adults aged 18 and older classified as depressed by income, Utah, 2005



Source: Utah Behavioral Risk Factor Surveillance System, 2005

more likely to be classified as depressed (28.5%) than were those with education beyond high school (8.2%) (not shown).

The presence of some reported chronic diseases increased the likelihood of reported depression (see Figure 3). Survey respondents who reported

arthritis were nearly twice as likely to be classified as depressed (17.7% vs. 10.8%), and respondents who reported asthma were also more likely to be classified as depressed (17.2% vs. 11.9%). Similar trends were observed for respondents who reported diabetes, and having had a heart attack or stroke.

Certain chronic disease risk factors were associated with depression. Respondents who reported current cigarette smoking were over twice as likely to be classified as depressed compared to respondents who reported never having smoked (22.4% vs. 10.6%). Respondents who reported high blood pressure were more likely to be classified as depressed than those who did not report high blood pressure (17.5% vs. 11.1%). Respondents who reported getting the recommended level of physical activity reported less depression (8.7%) than those getting insufficient activity (15.1%) and those who reported no leisure time physical activity (24.5%). Respondents who were obese were more likely to be classified as depressed compared to those who were at an ideal weight (16.4% vs. 9.4%). Respondents who were underweight also reported a higher rate of depression (22.9%) (see Figure 4).

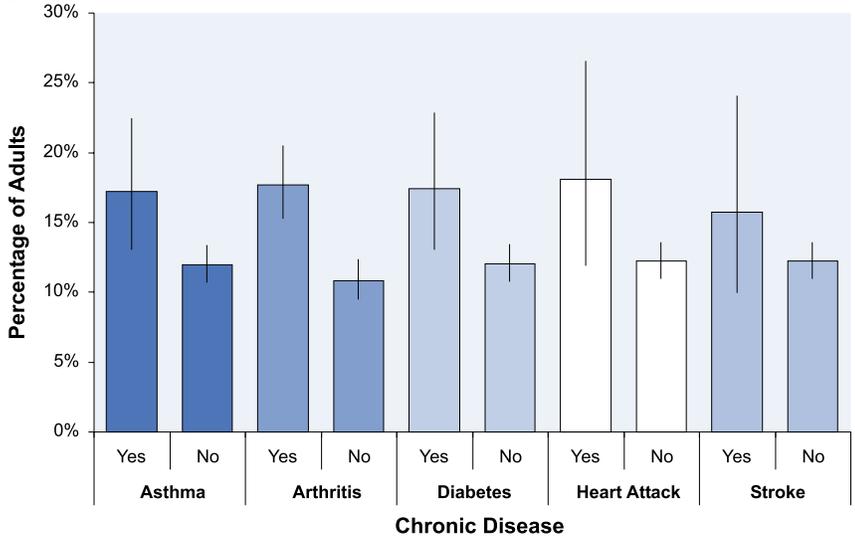
These data suggest that Utah may have a higher prevalence of depression compared to the national average. Additionally, depression appears to be associated with certain chronic conditions and chronic disease risk factors. Targeted screening should be considered for adults with these conditions and risk factors. It is important that these individuals be identified and offered treatment. Timely and appropriate interventions can help improve the quality of life of persons who suffer from this disease.

References:

1. U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. Washington, DC: U.S. Government Printing Office, November 2000.
2. National Institutes of Mental Health "The Numbers Count: Mental Disorders in America." Retrieved from <http://www.nimh.nih.gov/publicat/numbers.cfm#MajorDepressive> on February 27, 2006.
3. Kessler, R.C., Berglund, P., Demler, O., Jin, R., Koretz, D., Merikangas, K.R, Rush, A.J., Walters, E. E., and Wang, P.S. The Epidemiology of Major Depressive Disorder: Results from the National Comorbidity Survey Replication (NCS-R). *JAMA* 2003;289:3095-3105.

Depression and Chronic Disease

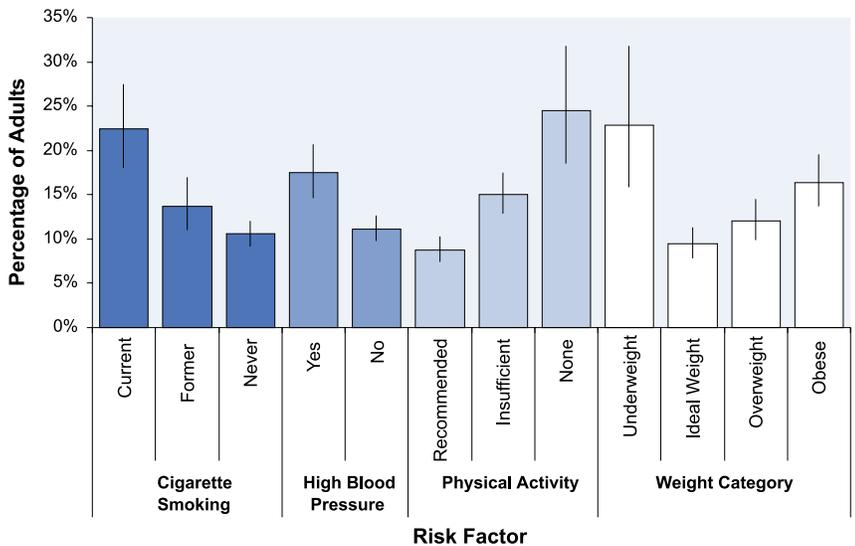
Figure 3. Percentage of Utah adults aged 18 and older classified as depressed by presence or absence of chronic disease, Utah, 2005



Source: Utah Behavioral Risk Factor Surveillance System, 2005

Depression Risk Factors

Figure 4. Percentage of Utah adults aged 18 and older classified as depressed by risk factor, Utah, 2005



Source: Utah Behavioral Risk Factor Surveillance System, 2005

April 2006 Utah Health Status Update

For additional information about this topic, contact **Holly Watson, State of Utah Division of Substance Abuse and Mental Health, 120 N. 200 W., Room 209, Salt Lake City, UT 84103, (801) 538-4233, email: hwatson@utah.gov; Michael Friedrichs, MS, Bureau of Health Promotion, Utah Department of Health, P.O. Box 142106, Salt Lake City, UT 84114-2106, (801) 538-6244, email: mfriedrichs@utah.gov; or the Office of Public Health Assessment, Utah Department of Health, P.O. Box 142101, Salt Lake City, UT 84114-2101, (801) 538-6108, FAX (801) 538-9346, email: phdata@utah.gov.**

Breaking News, March 2006

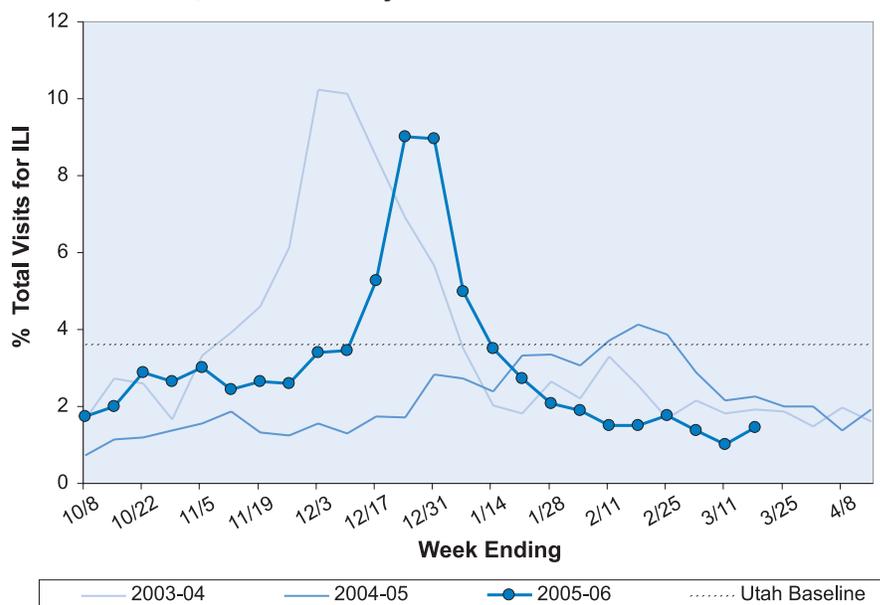
Influenza Surveillance for 2005-2006 Season

Active influenza surveillance began in October with low levels of activity detected through mid-November. Activity rapidly increased during December and peaked at the end of that month. The weekly percentage of patient visits to sentinel providers for influenza-like illness (ILI) first exceeded the state baseline of 3.6% during the week ending 17 Dec 2005. ILI peaked at 9.0% during the week ending 24 Dec 2005. Compared to other regions of the U.S., Utah and other mountain states displayed earlier active circulation of influenza viruses this season.

The Utah Department of Health monitored laboratory-confirmed, influenza-associated hospitalizations this season. As of March 28, 2006, 467 hospitalizations have been reported for the current season. The number of weekly reported hospitalizations peaked at 110 cases during the week ending 31 Dec 2005. Overall, the highest rates of hospitalizations have occurred in the very young (<2 years) and the elderly (≥65 years).

During a typical influenza season, it is expected that the majority of influenza-associated hospitalizations will occur in traditional high-risk groups such as the elderly, the very young, and also those with chronic diseases. In Utah this season, 83% of hospitalizations have been identified as high risk. Influenza A viruses predominated in the hospitalized population being identified in 96% of all cases with known influenza type.

Percentage of Visits for Influenza-like Illness (ILI) Reported by Sentinel Providers, Utah Summary 2005-06 and Previous Two Seasons



Source: UDOH Bureau of Epidemiology

Community Health Indicators Spotlight, March 2006

Influenza Vaccination Among Utah Adults Aged 65 and Over

Influenza immunization coverage in Utah for non-institutionalized adults aged 65 and older has increased in Utah from 55% in 1993 to 70% in 2005. Although adult vaccination rates have generally increased over time, there was a slight drop in 2005 from recent years (75.5% in 2004, 74.8% in 2003). Interpretation of vaccination rates from the BRFSS survey are somewhat challenging because the survey data are collected in calendar years, and each flu season always spans two calendar years.

Factors such as vaccine availability, access to vaccination, and media coverage influence vaccination rates. Patients who must defer vaccination until later in the season may never receive vaccination. For instance, those whose physicians do not have the vaccine at their clinic location, or those who seek vaccination before the vaccine is widely available, will be required to make additional attempts to get vaccinated. Some patients will not make the additional attempts.

If Utah is to achieve the Healthy People 2010 goal of 90% flu vaccination coverage for adults 65 years of age and older, vaccine availability, provider vaccination practices, and patient attitudes toward flu vaccination must be improved.

References: Centers for Disease Control and Prevention (CDC), Behavioral Risk Factors Surveillance System (BRFSS).

Monthly Health Indicators Report for February 2006

Monthly Report of Notifiable Diseases, February 2006	# Cases	# Expected Cases (5-year average)	# Cases YTD	# Expected YTD (5-year average)	YTD Standard Morbidity Ratio (obs/exp)
Campylobacteriosis (Campylobacter)	14	9	27	29	0.9
Escherichia coli (E. coli) 0157:H7	1	2	4	4	1.0
Hepatitis A (infectious hepatitis)	1	5	2	8	0.3
Hepatitis B (serum hepatitis)	1	2	2	6	0.3
Influenza**	For the most up-to-date information on influenza in Utah, visit http://health.utah.gov/epi/diseases/flu				
Measles (Rubeola, Hard Measles)	0	0	0	0	--
Meningococcal Diseases	1	1	2	1	2.0
Norovirus	0	0*	0	0*	--
Pertussis (Whooping Cough)	72	13	114	22	5.1
Salmonellosis (Salmonella)	20	13	34	27	1.3
Shigella	6	4	9	7	1.3
Varicella (Chickenpox)	83	68*	134	160*	0.8
Viral Meningitis	11	5	26	12	2.2

Note: Active surveillance has ended for West Nile Virus (WNV) until the 2006 season.

Notifiable Diseases Reported Quarterly, 4rd Qtr 2005	# Cases	# Expected Cases (5-year average)	# Cases YTD	# Expected YTD (5-year average)	YTD Standard Morbidity Ratio (obs/exp)
HIV	28	16	100	60	1.7
AIDS	8	16	41	59	0.7
Chlamydia	1,267	1,064	4,607	3,295	1.4
Gonorrhea	217	122	728	368	2.0
Tuberculosis	4	9	29	38	0.8

Program Enrollment for the Month of February 2006	Current Month	Previous Month	% Change From Previous Month	1 Year Ago	% Change From 1 Year Ago
Medicaid	177,170	177,408	-0.1%	175,286	+1.1%
PCN (Primary Care Network)	16,425	17,344	-5.3%	20,242	-18.9%
CHIP (Children's Health Ins. Plan)	34,064	35,286	-3.5%	28,697	+18.7%

Program Expenditures for the Month of February 2006	Monthly	Expected/ Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Ambulatory Surgical Care	\$ 643,673	\$ 610,430	\$ 4,499,059	\$ 4,566,300	(\$ 67,241)
Fee for Service Hospital Inpatient	\$ 15,171,636	\$ 14,765,670	\$ 108,011,728	\$ 110,940,220	(\$ 2,928,492)
Long Term Care	\$ 12,858,992	\$ 13,708,580	\$ 111,455,389	\$ 108,823,230	\$ 2,632,159
Pharmacy	\$ 10,564,740	\$ 13,976,000	\$ 130,951,905	\$ 139,616,180	(\$ 8,664,275)

Health Care System Measures	Current Data Year	Number of Events	Percentage of Utah Population	% Change From Previous Year	Total Charges in Millions	% Change From Previous Year
Overall Hospitalizations	2004	266,195	10.1%	-0.3%	\$ 3,225.0	+11.1%
Non-maternity Hospitalizations	2004	160,302	5.9%	0.0%	\$ 2,692.5	+12.0%
Emergency Department Encounters	2004	627,078	24.2%	-4.2%	\$ 456.6	+14.7%
Outpatient Surgery	2004	303,123	11.7%	+6.0%	\$ 845.3	+15.6%

Annual Community Health Measures	Current Data Year	Population at Risk	Number Affected	Percentage/Rate	Previous Year Rate	% Change From Previous Year
Overweight and Obesity (Adults 18+)	2005	1,740,474	942,949	54.2%	56.4%	-3.9%
Cigarette Smoking (Adults 18+)	2005	1,740,474	200,553	11.5%	10.5%	+9.7%
Influenza Immunization (Adults 65+)	2005	212,582	148,272	69.7%	75.5%	-7.6%
Health Insurance Coverage (Uninsured)	2005	2,528,926	292,845	11.6%	10.2%	+13.5%
Motor Vehicle Crash Injury Deaths	2004	2,469,230	298	12.1 / 100,000	11.6 / 100,000	+4.3%
Suicide Deaths	2004	2,469,230	377	15.3 / 100,000	13.9 / 100,000	+10.1%
Diabetes Prevalence	2005	2,528,926	104,154	4.1%	3.8%	+8.7%
Coronary Heart Disease Deaths	2004	2,469,230	1,603	64.9 / 100,000	70.6 / 100,000	-8.1%
All Cancer Deaths	2004	2,469,230	2,442	98.9 / 100,000	100.9 / 100,000	-2.0%
Births to Adolescents (Ages 15-17)	2004	57,505	854	14.9 / 1,000	16.0 / 1,000	-6.9%
Early Prenatal Care	2004	50,653	39,521	78.0%	78.0%	0.0%
Infant Mortality	2004	50,653	262	5.2 / 1,000	5.0 / 1,000	+4.0%
Childhood Immunization (4:3:1:3:3)	2004	48,619	34,665	71.3%	78.8%	-9.5%

* Due to limited historical data, the average is based upon 2 years of data for norovirus, and varicella.

** During this month, influenza activity continued to decline in Utah. The average weekly proportion of patient visits to sentinel providers in Utah for influenza-like illness (ILI) were below baseline values for this month. As of February 28, 2006, 452 influenza-associated hospitalizations have been reported to UDOH.

Note: % Change could be due to random variation