Issue Brief #1:
What Do the Data Tell Us?

In recognition of the essential role mental health plays in overall health, the Healthy Aging Program at the Centers for Disease Control and Prevention (CDC) and the National Association of Chronic Disease Directors (NACDD) are releasing two issue briefs focused on the mental health of older adults in the United States.

This first issue brief reviews existing data and lays the foundation for understanding key issues related to mental health in adults over 50. The second brief will focus on depression, an important and emerging public health issue. Recent public health efforts to develop, test, and disseminate programs that address depression in older adults have led to practical information on this topic; the second issue brief will examine interventions to address depression that communities can use to improve the mental health and quality of life of older Americans.

CDC

NATIONAL ASSOCIATION OF CHRONIC DISEASE DIRECTORS
Promoting Health. Preventing Disease.

The State of Mental Health and Aging in America

Why is Mental Health a Public Health Issue?

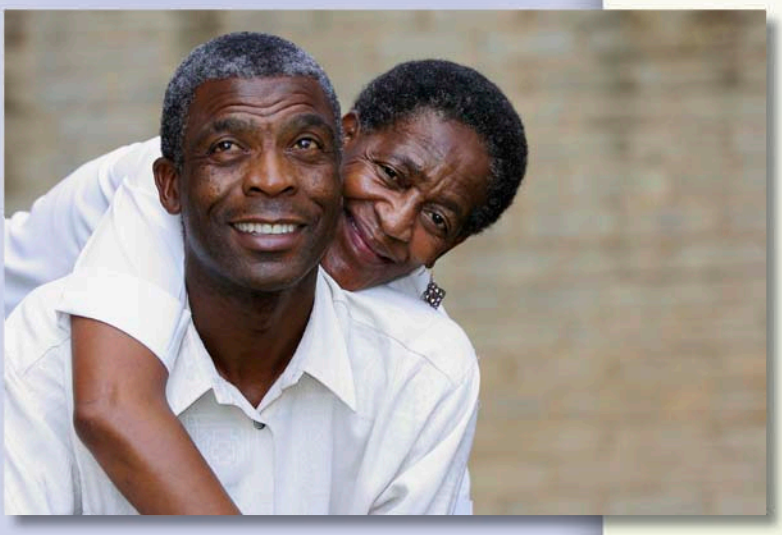
The World Health Organization defines health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (1). Because mental health is essential to overall health and well-being, it must be recognized and treated in all Americans, including older adults, with the same urgency as physical health. For this reason, mental health is becoming an increasingly important part of the public health mission. In fact, the mental health of older Americans has been identified as a priority by the Healthy People 2010 objectives (2), the 2005 White House Conference on Aging (3), and the 1999 Surgeon General's report on mental health (4).

The goals and traditions of public health and health promotion can be applied just as usefully in the field of mental health as they have been in the prevention of both infectious and chronic diseases. Public health agencies can incorporate mental health promotion into chronic disease prevention efforts, conduct surveillance and research to improve the mental health evidence base, and collaborate with partners to develop comprehensive mental health plans and to enhance coordination of care. The challenges for public health are to identify risk factors, increase awareness about mental disorders and the effectiveness of treatment, remove the stigma associated with mental disorders and receiving treatment for them, eliminate health disparities, and improve access to mental health services, particularly among populations that are disproportionately affected (5).

Mental Health Problems in Older Adults

It is estimated that 20% of people age 55 years or older experience some type of mental health concern (6). The most common conditions include anxiety, severe cognitive impairment, and mood disorders (such as depression or bipolar disorder) (6). Mental health issues are often implicated as a factor in cases of suicide. Older men have the highest suicide rate of any age group (7). Men aged 85 years or older have a suicide rate of 45.23 per 100,000, compared to an overall rate of 11.01 per 100,000 for all ages (7).

The presence of depressive disorders often adversely affects the course and complicates the treatment of other chronic diseases.



The Significance of Depression

Depression, a type of mood disorder, is the most prevalent mental health problem among older adults. It is associated with distress and suffering (4). It also can lead to impairments in physical, mental, and social functioning (4). The presence of depressive disorders often adversely affects the course and complicates the treatment of other chronic diseases (8). Older adults with depression visit the doctor and emergency room more often, use more medication, incur higher outpatient charges, and stay longer in the hospital (4).

Although the rate of older adults with depressive symptoms tends to increase with age (4), depression is not a normal part of growing older. Rather, in 80% of cases it is a treatable condition (8). Unfortunately, depressive disorders are a widely under-recognized condition and often are untreated or undertreated among older adults (4).

The Behavioral Risk Factor Surveillance System and Indicators

As described earlier, a core public health function related to mental health is the collection of surveillance data that can be used for priority setting and as the foundation for developing public health programs.

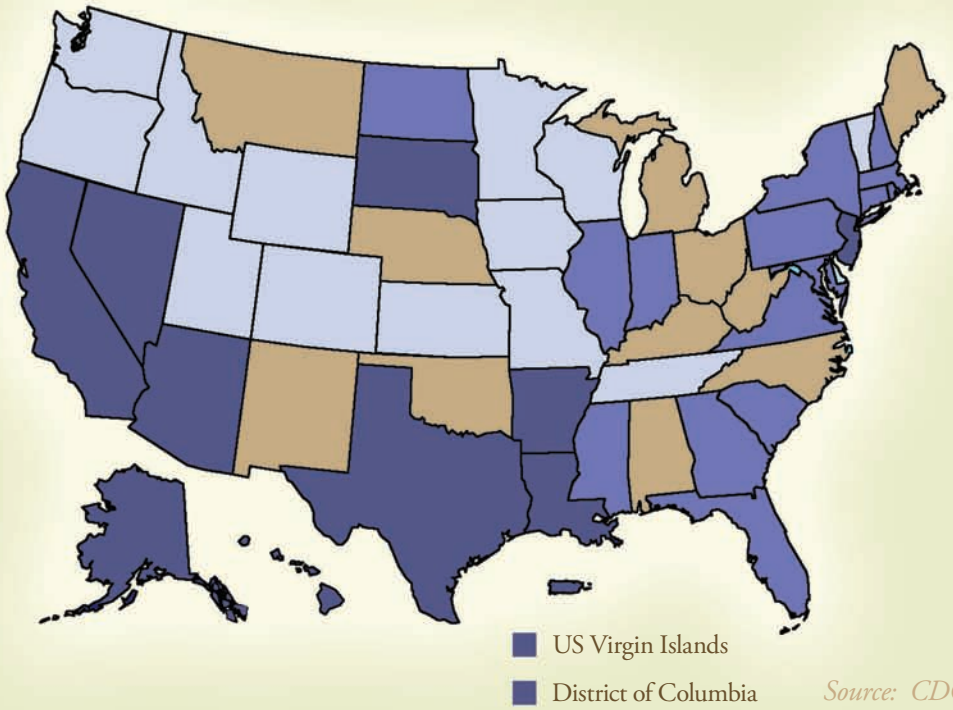
Through CDC's Behavioral Risk Factor Surveillance System (BRFSS—see Technical Information), states collect data on the mental health of older adults. The BRFSS questionnaire consists of three parts: 1) core questions asked to all 50 states, the District of Columbia and three territories, 2) supplemental modules which are a series of questions on specific topics (e.g. mental health, adult asthma history, intimate partner violence), and 3) state-added questions that are selected by individual states.

Unfortunately, depressive disorders are a widely under-recognized condition and often are untreated or under-treated among older adults.

There are BRFSS core questions related to mental health that collect information on the prevalence of social and emotional support, life satisfaction, and the number of mentally unhealthy days.

An Anxiety and Depression module was developed for the BRFSS to collect additional information on mental health conditions. In 2006, 38 states and three territories used this module to determine the prevalence of current depression, lifetime diagnosis of depression, and lifetime diagnosis of anxiety.

This issue brief reports on six indicators related to mental health that were part of the 2006 BRFSS survey, both from core questions and the Anxiety and Depression module. Data are provided for the U.S. population age 50 years or older, with a focus on age, racial/ethnic differences, and sex.



Social and Emotional Support

Percentage of adults aged 50 or older who reported that they 'rarely' or 'never' received the social support that they needed

- 0 - 7.87%
- 7.88 - 9.41%
- 9.42 - 11.18%
- 11.19 - 17.74%

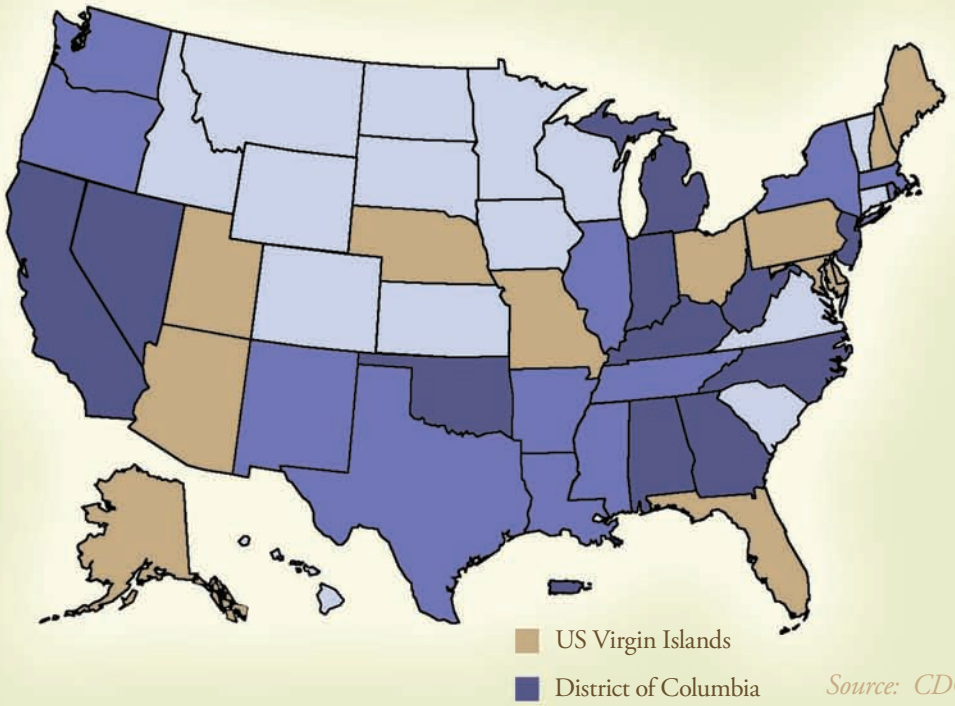
Source: CDC, Behavioral Risk Factor Surveillance System, 2006

BRFSS Question

"How often do you get the social and emotional support you need?"

The response options included: "always", "usually", "sometimes", "rarely", or "never."

- Social support serves major support functions, including emotional support (e.g., sharing problems or venting emotions), informational support (e.g., advice and guidance), and instrumental support (e.g., providing rides or assisting with housekeeping) (9).
- Adequate social and emotional support is associated with reduced risk of mental illness, physical illness, and mortality (9).
- The majority (nearly 90%) of adults age 50 or older indicated that they are receiving adequate amounts of support.
- Adults age 65 or older were more likely than adults age 50–64 to report that they "rarely" or "never" received the social and emotional support they needed (12.2% compared to 8.1%, respectively).
- Approximately one-fifth of Hispanic and other, non-Hispanic adults age 65 years or older reported that they were not receiving the support they need, compared to about one-tenth of older white adults.
- Among adults age 50 or older, men were more likely than women to report they "rarely" or "never" received the support they needed (11.39% compared to 8.49%).



Life Satisfaction

Percentage of adults aged 50 or older who responded that they were "dissatisfied" or "very dissatisfied" with their lives.

- 0 - 4.06%
- 4.07 - 4.57%
- 4.58 - 5.04%
- 5.05 - 7.16%

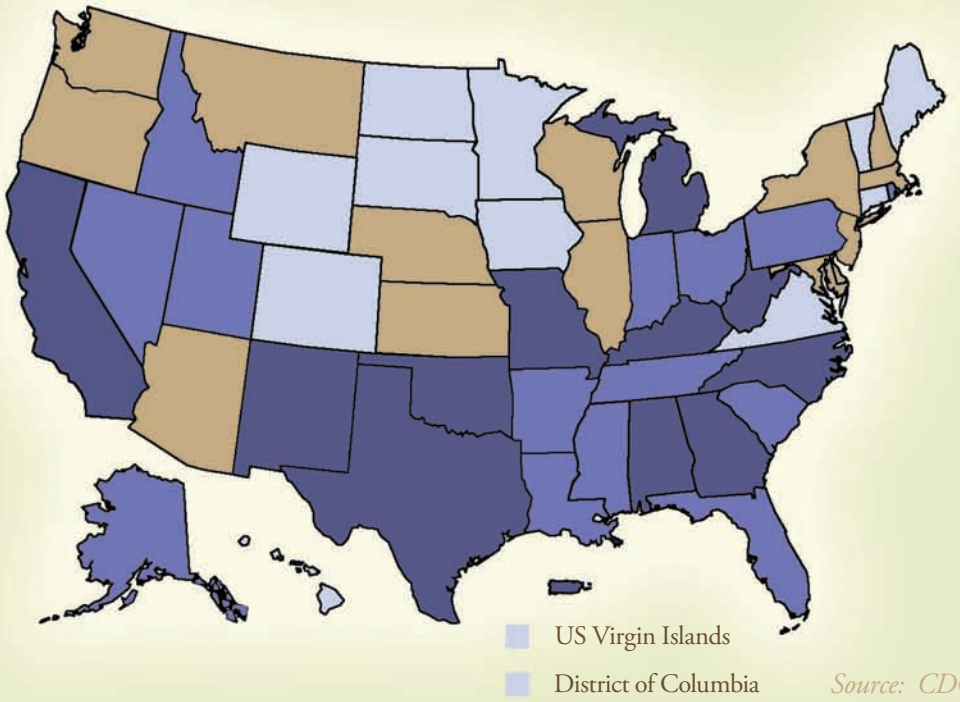
Source: CDC, Behavioral Risk Factor Surveillance System, 2006

BRFSS Question

"In general, how satisfied are you with your life?"

The response options included: "very satisfied", "satisfied", "dissatisfied", or " very dissatisfied."

- Life satisfaction is the self-evaluation of one's life as a whole, and is influenced by socioeconomic, health, and environmental factors (10).
- Life dissatisfaction is associated with obesity and risky health behaviors such as smoking, physical inactivity, and heavy drinking (10).
- Nearly 95% of adults age 50 or older reported being "satisfied" or "very satisfied" with their lives, with approximately 5% indicating that they were "dissatisfied" or "very dissatisfied" with their lives.
- Adults age 50–64 were more likely than adults age 65 or older to report that they were "dissatisfied" or "very dissatisfied" with their lives (5.8% compared to 3.5%, respectively).
- Other, non-Hispanic adults age 50–64 were the group most likely to report that they were "dissatisfied" or "very dissatisfied" with their lives (9.7% compared to 7.0% of Hispanics, 7.2% of black, non-Hispanic adults, and 5.25% of white, non-Hispanic adults in the same age group).
- Men and women age 50 or older reported similar rates of life satisfaction (4.7% to 5.0%, respectively).



Frequent Mental Distress

Percentage of adults aged 50 years or older who in the past 30 days experienced frequent mental distress

- 0 - 7.23%
- 7.24 - 8.52%
- 8.53 - 9.82%
- 9.83 - 14.45%

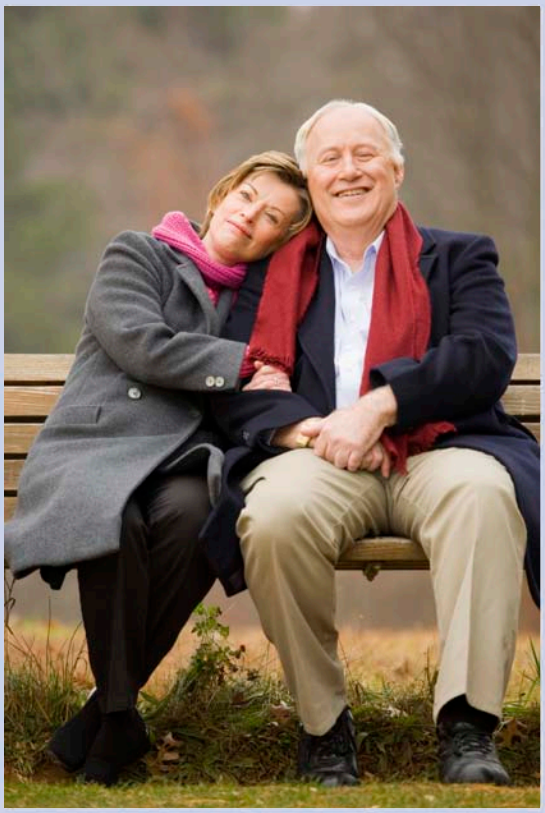
Source: CDC, Behavioral Risk Factor Surveillance System, 2006

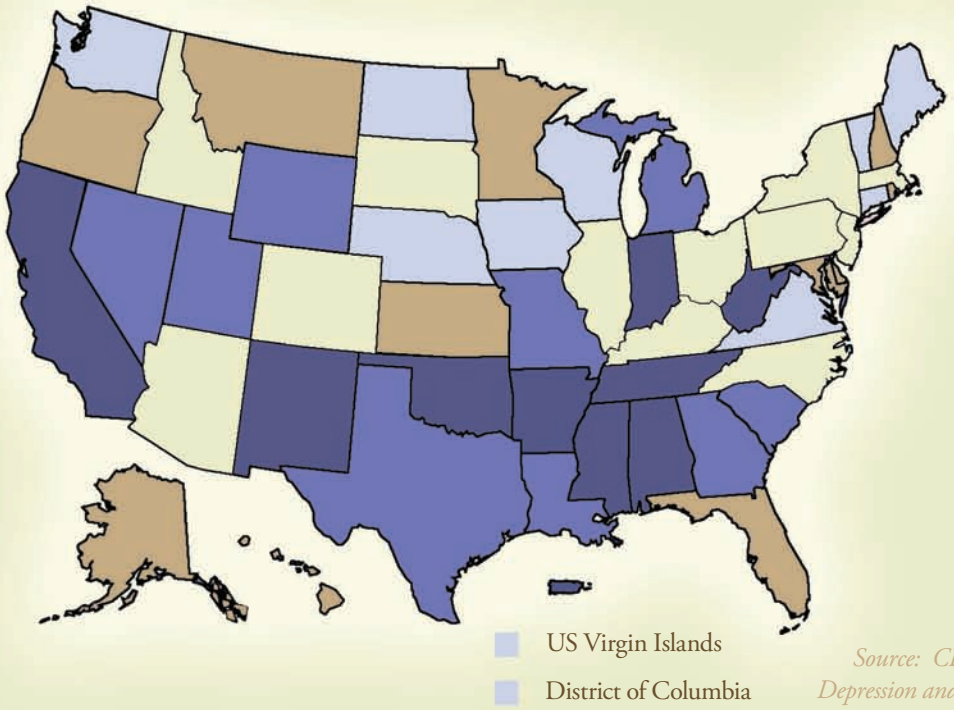
- Frequent mental distress (FMD) may interfere with major life activities, such as eating well, maintaining a household, working, or sustaining personal relationships.
- FMD can also affect physical health. Older adults with FMD were more likely to engage in behaviors that can contribute to poor health, such as smoking, not getting recommend amounts of exercise, or eating a diet with few fruits and vegetables (11).
- The overwhelming majority of older adults did not experience FMD—in fact, in 2006, the prevalence of FMD was only 9.2% among U.S. adults age 50 or older and 6.5% among those age 65 or older.
- Hispanics had a higher prevalence of FMD (13.2%) compared to white, non-Hispanics (8.3%) or black, non-Hispanics (11.1%).
- Women aged 50-64 and 65 or older reported more FMD than men in the same age groups (13.2% and 7.7% compared to 9.1% and 5.0%, respectively).

BRFSS 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?"

People who reported 14 or more days of poor mental health were defined as having frequent mental distress (FMD).





Current Depression

Percentage of adults aged 50 or older who had current depression.

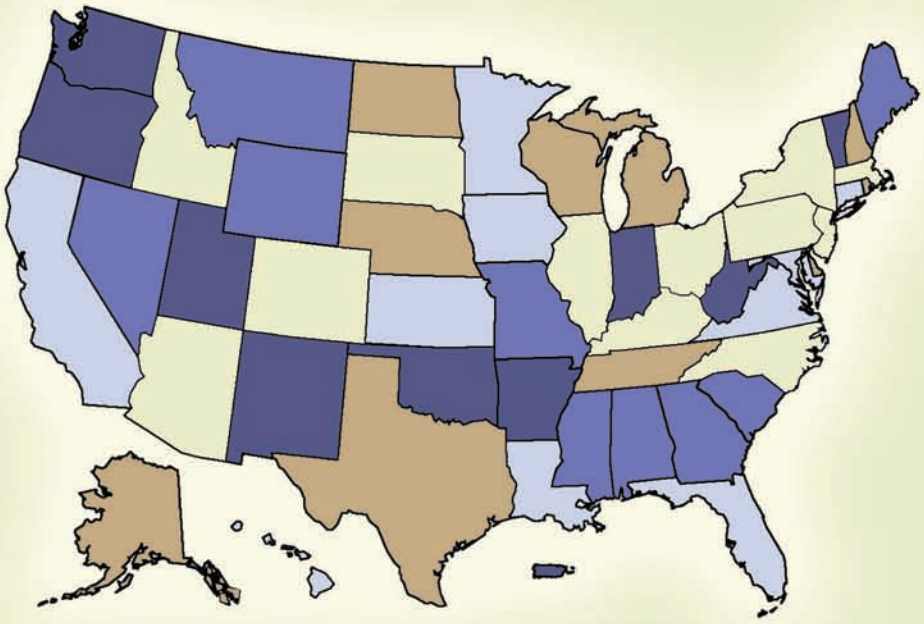
- 0 - 5.41%
- 5.42 - 6.66%
- 6.67 - 8.57%
- 8.58 - 12.43%
- No data

Source: CDC, Behavioral Risk Factor Surveillance System, 2006: Depression and Anxiety Module administered in 38 states and 3 territories.

BRFSS Question

Current Depression
A PHQ-8 score of 10 or greater (see technical information).

- Depression is more than just a passing mood. Rather, it is a condition in which one may experience persistent sadness, withdrawal from previously enjoyed activities, difficulty sleeping, physical discomforts, and feeling "slowed down" (12).
- Risk factors for late-onset depression included widowhood, physical illness, low educational attainment (less than high school), impaired functional status, and heavy alcohol consumption (4).
- Depression is one of the most successfully treated illnesses. There are highly effective treatments for depression in late life, and most depressed older adults can improve dramatically from treatment (12).
- Contrary to popular belief, most adults age 50 or older were not currently depressed — only 7.7% in this age group reported current depression, and 15.7% reported a lifetime diagnosis of depression.



US Virgin Islands

District of Columbia

Lifetime Diagnosis of Depression

Percentage of adults aged 50 or older with a lifetime diagnosis of depression.

- 0 - 14.22%
- 14.23 - 15.86%
- 15.87 - 18.06%
- 18.07 - 23.19%
- No data

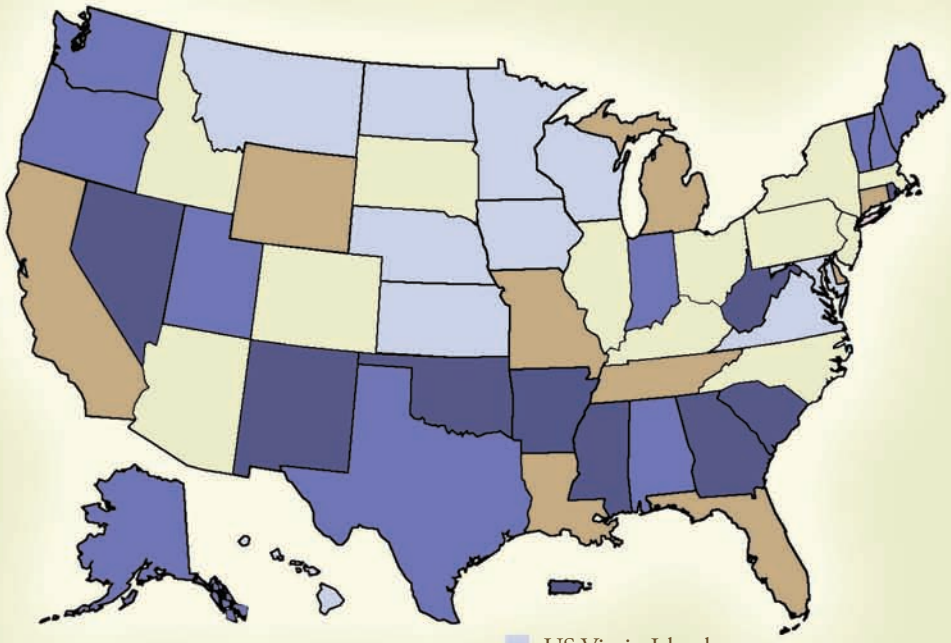
Source: CDC, Behavioral Risk Factor Surveillance System, 2006: Depression and Anxiety Module administered in 38 states and 3 territories.

- In 2006, adults age 50–64 reported more current depression and lifetime diagnosis of depression than adults age 65 or older (9.4% compared with 5.0% for current depressive symptoms and 19.3% compared with 10.5% for lifetime diagnosis of depression, respectively).
- Hispanic adults age 50 or older reported more current depression than white, non-Hispanic, black, non-Hispanic adults, or other, non-Hispanic adults (11.4% compared to 6.8%, 9.0%, and 11%, respectively).
- Women age 50 or older reported more current and lifetime diagnosis of depression than men (8.9% compared to 6.2% for current depressive symptoms; 19.1% compared to 11.7% for lifetime diagnosis).

BRFSS Question

Lifetime Diagnosis of Depression
"Has a doctor or other healthcare provider EVER told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?"

Depression is one of the most successfully treated illnesses



US Virgin Islands

District of Columbia

Lifetime Diagnosis of Anxiety Disorder

Percentage of adults aged 50 or older with a lifetime diagnosis of anxiety disorder.

- 0 - 9.38%
- 9.39 - 10.59%
- 10.60 - 12.06%
- 12.07 - 17.62%
- No data

Source: CDC, Behavioral Risk Factor Surveillance System, 2006: Depression and Anxiety Module administered in 38 states and 3 territories.

BRFSS Question

"Has a doctor or other healthcare provider EVER told you that you have an anxiety disorder (including acute stress disorder, anxiety, generalized anxiety disorder, obsessive-compulsive disorder, panic attacks, panic disorder, phobia, posttraumatic stress disorder, or social anxiety disorder)?"

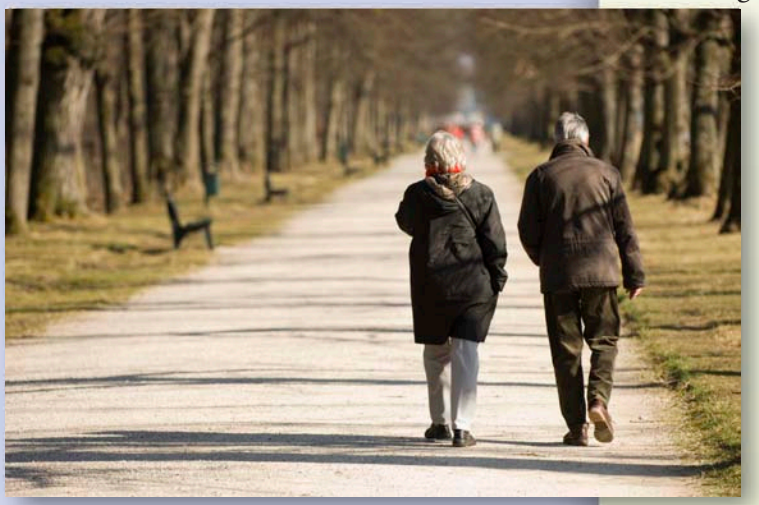
Older adults are less likely to report psychiatric symptoms and more likely to emphasize physical complaints

- Anxiety, like depression, is among the most prevalent mental health problems among older adults (6). The two conditions often go hand in hand, with almost half of older adults who are diagnosed with a major depression also meeting the criteria for anxiety (13).
- Late-life anxiety is not well understood, but is believed to be as common in older adults as in younger age groups (although how and when it appears is distinctly different in older adults). Anxiety in this age group may be underestimated because older adults are less likely to report psychiatric symptoms and more likely to emphasize physical complaints (13).
- More than 90% of adults age 50 or older did not report a lifetime diagnosis of anxiety.
- Adults age 50–64 reported a lifetime diagnosis of an existing anxiety disorder more than adults age 65 or older (12.7% compared to 7.6%).
- Hispanic adults age 50 or older were slightly more likely to report a lifetime diagnosis of an anxiety disorder compared to white, non-Hispanic, black, non-Hispanic, or other, non-Hispanic adults (14.5% compared to 12.6%, 11% and 14.2%, respectively).
- Women age 50–64 years report a lifetime diagnosis of an anxiety disorder more often than men in this age group (16.1% compared to 9.2%, respectively.)

Next Steps

Most older adults are experiencing the life satisfaction, social and emotional support, and good mental health that are essential to healthy aging. For those who do need assistance, programs and services should be accessible and tailored to meet the unique needs of older adults. Public health professionals, while relative newcomers to the field, have an essential role to fulfill in assuring that the mental health status of the older adult population is monitored through surveillance systems such as the BRFSS. This information then can be used to support evidence-based programs and interventions.

This issue brief lays the foundation for examining a select group of mental health indicators among older adults. Future work will focus on connecting this information to programmatic efforts and other resources that public health, aging services, and mental health professionals can use to improve the health and quality of life of older Americans.



Technical Information

For the past two decades, CDC's Behavioral Risk Factor Surveillance System (BRFSS) has helped states survey U.S. adults regarding a wide range of health issues and behaviors that affect their health. The crucial information gathered through this state-based telephone surveillance system is used by national, state, and local public health agencies to identify populations that might be most at risk and to monitor the need for and the effectiveness of various public health interventions.

A subset of BRFSS survey questions assess how many people are experiencing mental health issues, including frequent mental distress, current depression, lifetime diagnoses of both depression or an anxiety disorder, as well as the availability of social and emotional support, which may reduce risk of emotional distress. BRFSS's Anxiety and Depression Module used the PHQ-8, a well-validated, brief, self-reported measure for detecting current depression. The PHQ-8 asked 8 questions about depressive symptoms. This questionnaire is based on criteria from the Diagnostic and Statistical Manual of Mental Disorders (fourth edition) diagnosis of depressive disorders (14). The PHQ-8 has been shown to be effective for detecting current depression in various race/ethnicities (15) as well as in older adults (16). For the BRFSS, PHQ-8 questions were modified to be comparable to other BRFSS questions by assessing the number of days in the past 2 weeks the respondent experienced a particular depressive symptom (12, 17). Each question asked about number of days the symptom occurred in the past two weeks and a score was assigned based on the number of days (0 to 1 days=0 points, 2 to 6 days=1 point, 7 to 11 days= 3 points, and 12 to 14 days=4 points). The scores for each item were summed to produce a total score between 0 and 24 points. A respondent with a total score of ≥10 was defined as having current depression.

While the BRFSS is a useful tool for assessing the mental health of the older adult population, it has some limitations: It excludes people who do not have telephones or are in institutions, such as nursing homes; it may under-represent people who are severely impaired because of the functional capacity required to participate in the survey; and responses to BRFSS are self-reported and therefore have not been confirmed by a healthcare provider. Despite these limitations, the BRFSS is a uniquely powerful tool to provide the prevalence of mental health issues among older community-dwelling U.S. adults, due to its large sample size and proven reliability and validity (18).

The BRFSS is administered and supported by the Division of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, CDC. For more information, please visit http://www.cdc.gov/brfss.

References

(1) World Health Organization (1948). Constitution of the World Health Organization. Available at: http://www.who.int/governance/eb/who_constitution_en.pdf (accessed June 23, 2008).

(2) U.S. Department of Health and Human Services (2000). Healthy People 2010. Available at: http://www.health.gov/healthypeople (accessed June 10, 2008).

(3) U.S. Department of Health and Human Services (2006). 2005 White House Conference on Aging. Available at: http://www.whcoa.gov/index.asp (accessed June 10, 2008).

(4) U.S. Department of Health and Human Services (1999). Older Adults and Mental Health. In: Mental Health: A Report of the Surgeon General. Available at: http://www.surgeongeneral.gov/library/mentalhealth/chapter5/sec1.html (accessed June 10, 2008).

(5) Marshall Williams S, Chapman D, Lando J (2005). The role of public health in mental health promotion. MMWR 54(34):841-842.

(6) American Association of Geriatric Psychiatry (2008). Geriatrics and mental health—the facts. Available at: http://www.aagponline.org/prof/facts_mh.asp (accessed June 23, 2008).

(7) Web-based Injury Statistics and Query Reporting System (WISQARS) (Online). National Center for Injury Prevention and Control, Centers for Disease Control and Prevention (producer). Available at: http://www.cdc.gov/ncipc/wisqars/ (accessed June 10, 2008).

(8) Chapman DP, Perry GS, Strine TW (2005). The vital link between chronic disease and depressive disorders. Prev Chronic Dis; 2(1):A14.

(9) Strine TW, Chapman DP, Balluz L, Mokdad AH (2008). Health-related quality of life and health behaviors by social and emotional support: Their relevance to psychiatry and medicine. Soc Psychiatry Psychiatr Epidemiol 43:151-159.

(10) Strine TW, Chapman DP, Balluz L, Moriarty DG, Mokdad AH (2008). The associations between life satisfaction and health-related quality of life, chronic illness, and health behaviors among U.S. community-dwelling adults. J Community Health; 33:40–50.

(11) McGuire, LC, Strine, TW, Okoro, CA, Ahluwalia, IB, & Ford, ES (2007). Modifiable Characteristics of a Healthy Lifestyle in U.S. Older Adults with or without Frequent Mental Distress, 2003 Behavioral Risk Factor Surveillance System. Am J Geriatr Psychiatry, 15(9):754-761.

(12) Geriatric Mental Health Foundation (2008). Depression in late life: not a natural part of aging. Available at: http://www.gmhfonline.org/gmhf/consumer/factsheets/depression_latelife.html (accessed June 23, 2008).

(13) Anxiety Disorders Association of America (2008). New thinking on anxiety and aging: Anxiety disorders common in the elderly. Available at: www.adaa.org/ADAA%20web%20fin/articles/aging.pdf (accessed June 23, 2008).

(14) American Psychiatric Association (2000). Diagnostic and Statistical Manual of Mental Disorders, Text Revision. 4th ed. Washington, DC: American Psychiatric Association.

(15) Huang FY, Chung H, Kroenke K, Delucchi KL, Spitzer RL (2006). Using the Patient Health Questionnaire-9 to measure depression among racially and ethnically diverse primary care patients. J Gen Intern Med; 21(6):547-552.

(16) Ell K, Unutzer J, Aranda M, Sanchez K, Lee PJ (2005). Routine PHQ-9 depression screening in home health care: depression, prevalence, clinical and treatment characteristics and screening implementation. Home Health Care Serv Q; 24(4):1-19.

(17) Strine TW, Balluz L, Chapman DP, Moriarty DG, Owens M, Mokdad AH (2004). Risk behaviors and healthcare coverage among adults by frequent mental distress status, 2001. Am J Prev Med; 26(3):213-216.

(18) Nelson D, Holtzman D, Bolen J, Stanwyck CA, Mack KA (2001). Reliability and validity of measures for the Behavioral Risk Factor Surveillance System (BRFSS). International Journal of Public Health; 46:S1.

Acknowledgments

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For more information, please visit
www.cdc.gov/aging and www.chronicdisease.org

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