

## TRENDS IN DEPRESSION: SHEDDING LIGHT ON THE DARKNESS

### Introduction

Major depression and other depressive disorders affect one in ten U.S. adults each year and are the leading cause of disability in the United States.<sup>1,2</sup> Their connection with other chronic health conditions, riskier health behaviors, and suicide result not only in lowered quality of life but also premature death.

Depressive disorders also pose a high economic burden. In 2000, the cost to the U.S. economy totaled \$83.1 billion: \$26.1 billion in direct treatment costs, \$5.4 billion in suicide-related costs, and \$51.5 billion in workplace costs, resulting from decreased productivity and absenteeism. Recurrent major depression also increases the risk for suicide, which in 2007 was the sixth leading cause of premature death in LA County.<sup>3,4</sup> For these reasons, major depression and other depressive disorders are a major public health issue.

The most common type of depressive disorder is major (or unipolar) depression, followed by bipolar (or manic) depression, and dysthymia – a chronic, less severe form of the disorder. The cause of these disorders can be both genetic and environmental. People who experience prolonged stress or major loss (bereavement, divorce, job loss) are at an increased risk for depression, as are individuals with a family history of the disorder. Moreover, an initial episode of major depression increases the risk of its recurrence, with risk of relapse as high as 85%.<sup>5</sup>

1. Kessler RC, Chiu WT, Demler O, Walters EE. Prevalence, severity, and comorbidity of twelve-month DSM-IV disorders in the National Comorbidity Survey Replication (NCS-R). *Archives of General Psychiatry* 2005; 62(6): 617-627.
2. The World Health Organization. *The global burden of disease: 2004 update, Table A2: Burden of disease in DALYs by cause, sex and income group in WHO regions, estimates for 2004.* Geneva, Switzerland: WHO, 2008. [http://www.who.int/healthinfo/global\\_burden\\_disease/GBD\\_report\\_2004update\\_AnnexA.pdf](http://www.who.int/healthinfo/global_burden_disease/GBD_report_2004update_AnnexA.pdf).
3. Witte TK, Timmons KA, Fink E, Smith AR, Joiner TE. Do major depressive disorder and dysthymic disorder confer differential risk for suicide? *Journal of Affective Disorder* 2009; 115: 69-78.
4. Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology. *Mortality in Los Angeles County 2007: Leading causes of death and premature death with trends for 1998-2007.* June 2010.
5. Mueller TI, Leon AC, Keller MB, Solomon DA, Endicott J, Coryell W, Warshaw M, Maser JD. Recurrence after recovery from major depressive disorder during 15 years of observational follow-up. *American Journal of Psychiatry* 1999; 156: 1000-1006.

**1** Percent of LA County Adults (18+ years old) Ever Diagnosed with Depressive Disorder, 1999-2007

	1999 (%)	2002± (%)	2005 (%)	2007 (%)
<b>Los Angeles County</b>	8.8	9.7	12.9	13.6
<b>Gender</b>				
Male	6.5	7.5	9.5	10.3
Female	11.0	11.8	16.2	16.6
<b>Age Group</b>				
18-24	6.7	7.2	9.7	10.7
25-29	6.6	7.5	9.3	12.6
30-39	7.0	8.2	11.2	11.8
40-49	11.0	11.3	14.1	14.0
50-59	13.1	13.8	20.1	19.0
60-64	9.1	13.4	16.5	18.2
65 and over	8.1	8.9	10.5	10.9
<b>Race/Ethnicity</b>				
Latino	7.1	7.4	11.5	12.4
White	11.9	14.2	16.4	17.0
African-American	9.0	10.1	14.8	16.6
Asian/Pacific Islander	4.3	5.2	7.3	6.0
<b>Federal Poverty Level §</b>				
0-99% FPL	9.4	12.3	16.0	16.3
100-199% FPL	10.5	9.5	13.0	14.7
200-299% FPL	8.6	9.7	11.8	11.7
300% or above FPL	7.6	8.5	11.7	11.9
<b>Service Planning Area</b>				
Antelope Valley	9.7	9.2	15.7	17.1
San Fernando	9.7	10.4	12.8	13.5
San Gabriel	7.2	9.0	11.2	12.4
Metro	9.6	11.0	11.9	14.6
West	8.8	11.7	16.6	13.2
South	6.9	7.0	12.2	13.6
East	8.7	9.7	13.2	13.4
South Bay	9.8	9.4	13.7	13.8

§ Federal Poverty Level (FPL) thresholds are based on the US Census and at the time of interview. For example, the 2007 data were based on the 2006 FPL, which for a family of four (2 adults, 2 dependents) corresponded to annual incomes of \$20,444 (100% FPL), \$40,888 (200% FPL), and \$61,332 (300% FPL).  
± Estimates may differ from prior estimates as weights were updated March 20, 2006.



Major depression affects women more frequently than men.<sup>6</sup> Women are especially vulnerable to depression after giving birth (postpartum), when hormonal changes and the responsibility of caring for a newborn can be overwhelming.

Depression is associated with increased risk for engaging in unhealthy behaviors, such as excessive alcohol use or smoking.<sup>7,8</sup> Depression can also lead to certain chronic conditions, including heart disease and diabetes, or can arise as a result of chronic illness. In either case, depressive disorder can increase the risk for complications or death related to chronic disease.<sup>9</sup>

Although depressive disorders are relatively common and have a negative impact on health and mortality, they remain underreported and undertreated.<sup>10</sup> Barriers to treatment include stigma or shame associated with mental illness, as well as the inability to afford or access mental health care when needed. Therefore, increasing the percentage of Americans who receive treatment for depression remains an important national public health goal.<sup>11</sup>

## Who Has Depression?

The Los Angeles County Health Survey (LACHS) measured depressive disorders by asking respondents if they had ever been diagnosed with depression, or some other depressive disorder, by a doctor or other health professional. Because the survey question asked respondents if they had *ever* been diagnosed with the disorder, it was not necessarily a measure of current depression.

- According to the 2007 LACHS, an estimated 1,009,000 adults ages 18 and over reported ever being diagnosed with a depressive disorder.
- The reported rate of diagnosed depressive disorders among adults in the County has steadily increased from about 9% in 1999 to about 14% in 2007 (Table 1).

- The frequency of diagnosed depressive disorders has increased for both men (from 7% in 1999 to 10% in 2007) and women (11% in 1999 to 17% in 2007), with women consistently reporting higher rates of depression than men.
- Although the rate of diagnosed depressive disorders increased across all racial/ethnic groups from 1999 to 2007, Asians/Pacific Islanders in 2007 were less likely than other racial/ethnic groups to report having ever been diagnosed with depression.
- Diagnosed depressive disorders increased in all Service Planning Areas (SPAs) from 1999 to 2007, particularly in the Antelope Valley SPA (10% in 1999 to 17% in 2007) and the South SPA (7% in 1999 to 14% in 2007).

## How Do Depressive Disorders Impact Health-Related Quality of Life?

The LACHS measured health-related quality of life by asking respondents the number of days in the past month in which their mental health and physical health were not good. Poor mental health days were those comprised of problems with stress, depression, or emotions whereas poor physical health days were those due to illness or injury.

- Adults ever diagnosed with a depressive disorder reported an average of more poor mental health days and more poor physical health days in the previous month (10 and 8 days, respectively) than those who were never diagnosed with a depressive disorder (2 and 3 days, respectively) (Figure 1).
- The average number of poor mental health days during the previous month varied by history of diagnosed depressive disorder and by race/ethnicity (Figure 2).

6. Kessler RC, Berglund P, Demler O, Jin R, Koretz D, Merikangas KR, Rush AJ, Walters EE, Wang PS. The epidemiology of major depressive disorder: results from the National Comorbidity Survey Replication (NCS-R). *Journal of the American Medical Association*, 2003; 289(23): 3095-3105.

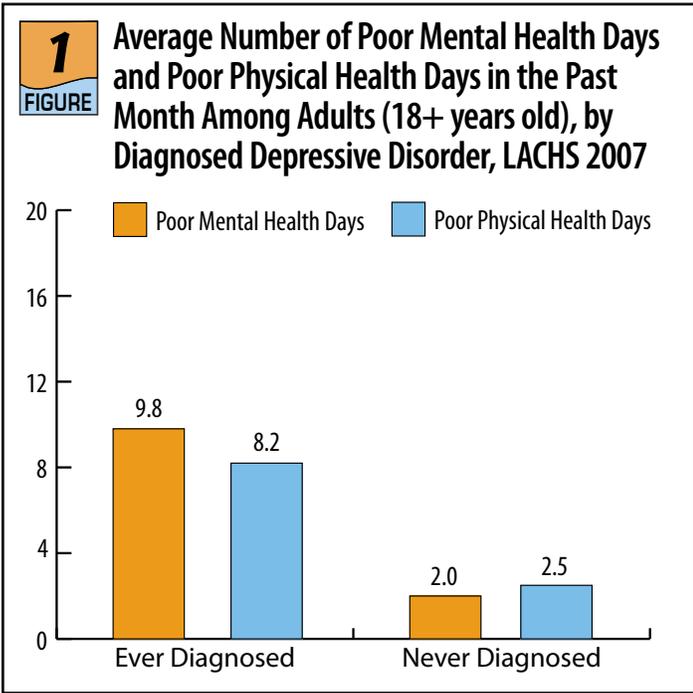
7. Holahan CJ, Moos RH, Holahan CK, Cronkite RC, Randall PK. Unipolar depression, life context vulnerabilities, and drinking to cope. *Journal of Consulting and Clinical Psychology* 2004; 72: 269-275.

8. Pratt LA, Brody DJ. Depression and Smoking in the U.S. Household Population Aged 20 and Over, 2005-2008. U.S. Department of Health and Human Services. National Center for Health Statistics. NCHS Data Brief 2010; No. 34. Available at: <http://www.cdc.gov/nchs/data/databriefs/db34.pdf>.

9. Katon WJ. Clinical and health services relationships between major depression, depressive symptoms, and general medical illness. *Biological Psychiatry* 2003; 54: 216-226.

10. Pratt LA, Brody DJ. Depression in the United States Household Population, 2005-2006. U.S. Department of Health and Human Services. National Center for Health Statistics. NCHS Data Brief 2008; No. 7. Available from: <http://www.cdc.gov/nchs/data/databriefs/db07.pdf>.

11. Healthy People 2010 and proposed 2020 Objectives. Available at: <http://www.healthypeople.gov/document/html/objectives/18-09.htm> and <http://www.healthypeople.gov/hp2020/Objectives/TopicArea.aspx>



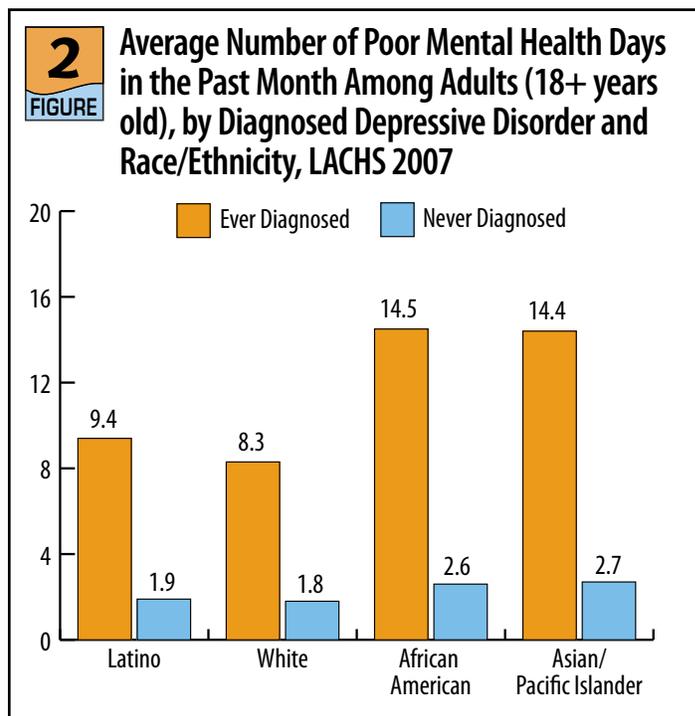
- African Americans and Asians/Pacific Islanders with a history of depressive disorder reported a higher number of poor mental health days than Latinos or whites. No significant racial/ethnic disparities were observed among those never diagnosed with a depressive disorder (Figure 2).
- Among adults ever diagnosed with a depressive disorder, 33% reported experiencing frequent mental distress (defined as feeling stress, depression, or emotional problems for 14 or more days in the previous month), compared to only 6% of those never diagnosed with a disorder.

### Depressive Disorder and Health Behaviors

- The rate of heavy drinking<sup>‡</sup> was higher among adults ever diagnosed with depression (7%) than among those never diagnosed with the disorder (3%).
- Similarly, more adults ever diagnosed with depression reported they were current cigarette smokers than did those never diagnosed with depression (21% vs. 13%).

<sup>‡</sup> Heavy drinking among males is defined as consuming more than 60 drinks during the previous month and, among females, more than 30 drinks during the previous month. [REFERENCE: BRFSS]

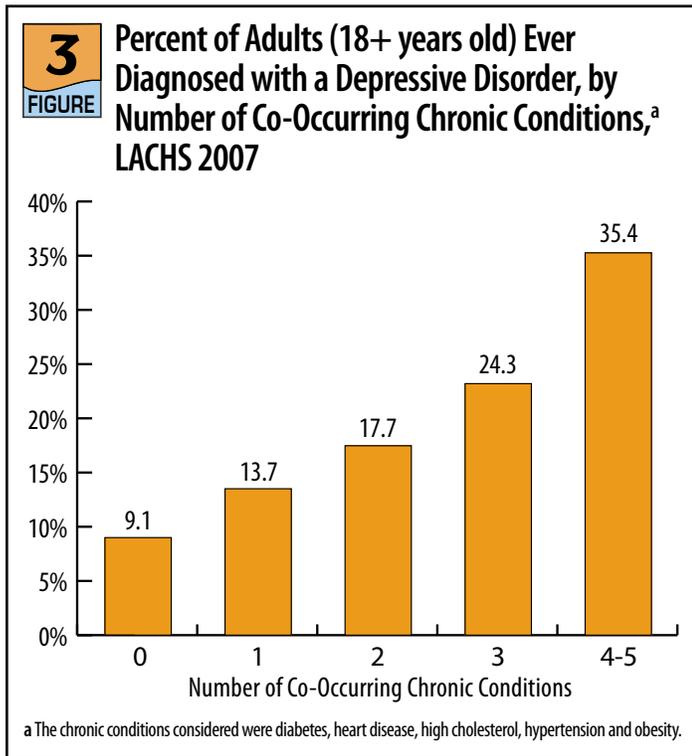
- In addition, among adults with a history of diagnosed depressive disorder, a higher percentage (43%) reported minimal to no weekly physical activity than adults who were never diagnosed with the disorder (35%).



### Depressive Disorder and Chronic Conditions

- Adults ever diagnosed with a depressive disorder reported a higher rate of having ever been diagnosed with other chronic conditions, including diabetes, hypertension, high cholesterol, heart disease, and obesity, than adults never diagnosed with a depressive disorder.<sup>†</sup>
- As the number of these reported chronic conditions increased, so did the rate of ever being diagnosed with depressive disorder. Specifically, 35% of people diagnosed with 4 or 5 chronic conditions reported a diagnosis of depressive disorder, compared to only 9% of people who did not have any of the chronic conditions considered (Figure 3).

<sup>†</sup> These chronic conditions were measured by the LA County Health Survey (LACHS). Other chronic conditions, such as arthritis, emphysema and cancer, may also be associated with depressive disorders.



## Cost as a Barrier to Mental Health Care

Among adults in LA County ever diagnosed with a depressive disorder:

- An estimated 190,000 adults (about one-fifth) reported being unable to afford mental health care or counseling when they needed it in the previous year.
- Almost twice as many Latinos than whites with a history of depressive disorder reported an inability to afford mental health care when they needed it in the previous year (22% and 12%, respectively).
- Among adults 18-64 years old, the ability to afford mental health care varied by insurance status: 36% of uninsured, 21% with Medi-Cal, and 13% of those with private insurance were unable to afford mental health care when they needed it in the past year.

## Recommendations

### What Can Individuals Do?

#### If You Know Somebody Who is Depressed:

- Make sure the depressed person receives appropriate diagnosis and timely treatment<sup>12</sup>
- Provide emotional support, encouragement, and patience<sup>12</sup>
- Suggest culturally-appropriate resources (community, family, social, or spiritual) that can provide additional support
- Do not ignore remarks about suicide; help the person obtain immediate medical care<sup>12</sup>

#### If You are Depressed:

- Seek help from a mental health professional; do not let hopelessness or shame stop you from getting medical help
- Physical activity can help reduce symptoms of depression;<sup>13,14</sup> engage in regular exercise, like daily walks or other physical activity
- Expect your mood to improve gradually, not immediately<sup>12</sup>
- Seek advice and encouragement, from particular family members, mentors, spiritual leaders, counselors, or others you respect<sup>12</sup>

### Los Angeles County Department of Mental Health

The Los Angeles County Department of Mental Health (DMH) is the largest county mental health department in the U.S., directly operating more than 80 programs and contracting with more than 700 providers to deliver mental health services to people of all ages. For free, confidential mental health information, referrals to service providers, and crisis counseling, at any day or time, call the 24/7 ACCESS hotline at **1-800-854-7771**. For additional information, please visit the DMH website:

[dmh.lacounty.gov](http://dmh.lacounty.gov)

12. Depression. National Institute of Mental Health, NIH Publication No. 08 3561, Revised 2008. <http://www.nimh.nih.gov/health/publications/depression/nimhdepression.pdf>

13. Fox KR. The influence of physical activity on mental well-being. *Public Health Nutrition* 1999; 2(3a): 411-418.

14. Harris AH, Cronkite R, Moos R. Physical activity, exercise coping, and depression in a 10-year cohort study of depressed patients. *Journal of Affective Disorders* 2006; 93(1-3): 79-85.



## What Can Healthcare Providers, Communities and Local Agencies Do?

- Raise awareness that depression can occur to any one at any time in their life, and that it is not a sign of weakness or a character flaw
- Screen for depressive disorders when systems are in place to assure accurate diagnosis, effective treatment, and follow-up<sup>15</sup>
- Be alert for depression among new mothers at their postpartum and well-child visits.<sup>16,17</sup>
- Educate at-risk populations such as adolescents, elderly and their families about suicide and its indicators<sup>18</sup>
- Ensure the availability of culturally and linguistically sensitive providers and materials<sup>18</sup>
- Develop systems of collaborative care for management of depressive disorders, in which case managers link primary care providers, patients, and mental health specialists<sup>18,19</sup>

## What Can Employers, Businesses and Policymakers Do?

- Encourage employers to promote mental wellness programs for employees, provide education about depression, and create a stigma-free work environment<sup>18</sup>
- Promote social inclusion for all individuals with mental illnesses
- Allocate adequate funding for mental health services provided by integrated healthcare systems, especially those serving low-income individuals
- Advocate for treatment and insurance reimbursement consistent with existing laws guaranteeing equal coverage of physical and mental health conditions



## on the web



The mission of the **National Institutes of Mental Health** is to understand and treat mental illness through research, leading the way for prevention, recovery, and cure.

[www.nimh.nih.gov](http://www.nimh.nih.gov)

### **National Alliance on Mental Illness (NAMI)**

is focused on educating America about mental illness, offering resources to those in need, and insisting that mental illness become a high national priority. (800) 950-6264; [www.nami.org](http://www.nami.org)

The **Jed Foundation** works nationally to reduce suicide and emotional distress among college and university students. (212) 647-7544;

[www.jedfoundation.org](http://www.jedfoundation.org)

Serving the Latino population of San Fernando Valley, **El Centro de Amistad, Inc.** provides mental health services, including individual, family and group therapy, and medication support. (818) 347-8565; (818) 898-0223; [www.elcentrodeamistad.com](http://www.elcentrodeamistad.com)

With nine centers throughout LA County, the **Didi Hirsch Mental Health Services** agency provides a 24-hour suicide crisis line, help for those suffering with psychiatric conditions, substance abuse counseling, and community outreach programs for those affected by a traumatic event. (310) 390-8896;

[www.didihirsch.org](http://www.didihirsch.org)

**Pacific Asian Counseling Services** offers counseling services to the diverse Asian Pacific Community of LA County at the individual, couple, and family and group levels, assisting clients with depression, anxiety and situational stress or grief. (310) 337-1550; [www.pacsla.org](http://www.pacsla.org)

15. *Guide to Clinical Preventive Services, 2010-2011.* AHRQ Publication No. 10-05145, September 2010. Agency for Healthcare Research and Quality, Rockville, MD. At time of publication, available from: <http://www.ahrq.gov/clinic/pocketgd.htm>

16. Sheeder J, Kabir K, Stafford B. Screening for postpartum depression at well-child visits: Is one enough during the first 6 months of life? *Pediatrics* 2009; 123: e982-e988.

17. *The American College of Obstetricians and Gynecologists, Committee on Obstetric Practice. Committee Opinion. Obstetrics & Gynecology* 2010; 115(2): 394-395.

18. *The State of Depression in America, Executive Summary.* Depression and Bipolar Support Alliance, Chicago, IL. February, 2006. <http://www.dbsalliance.org/pdfs/uplowres.pdf>

19. *Guide to Community Preventive Services, 2010-2011.* Epidemiology and Analysis Program Office (EAPO), Office of Surveillance, Epidemiology, and Laboratory Services (OSELS), Centers for Disease Control and Prevention, Atlanta, GA. At time of publication, available from: <http://www.thecommunityguide.org/index.htm>



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The Los Angeles County Health Survey is a periodic, population-based telephone survey that collects information on sociodemographic characteristics, health status, health behaviors, and access to health services among adults and children in the county. The 2007 survey collected information on a random sample of 7,200 adults and 5,728 children. The survey was conducted for the Los Angeles County Department of Public Health by Field Research Corporation and was supported by grants from First 5 LA, the Tobacco Control and Prevention Program, the Emergency Preparedness and Response Program and other Department of Public Health programs.