

Indicator:	Self-rated Mental Health Status (G1a)
Domain:	Mental Health
Sub-domain:	General Mental Distress
Demographic group:	Women aged 18-44 years.
Data resource:	California Health Interview Survey (CHIS) http://www.chis.ucla.edu/
Data availability:	2005, 2007
Numerator:	Women in Los Angeles County who reported having psychological distress (measured using Kessler 6 scale) in the past month.
Denominator:	Women in Los Angeles County who reported having or not having psychological distress (measured using Kessler 6 scale) in the past month (excluding unknowns and refusals).
Measures of frequency:	Weighted estimates of annual prevalence and 95% confidence interval.
Period of case definition:	Previous 30 days.
Significance:	Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. Mental health is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community or society ¹ . Research has shown that poor mental health is a major source of distress, disability, and social burden. ² Furthermore, poor mental health can interfere with social functioning and negatively impact physical well-being as well as the practice of health-promoting behaviors. ³
Limitations of indicator:	One of the recent studies showed that Kessler 6 is the brief valid tool for psychological distress screening. It has high sensitivity but comparatively low specificity ⁴ . CHIS is a random-dial telephone survey. The sample was taken from the database of landline phone numbers. Hence, non

response and non coverage can be a potential source of bias, especially, taken into account increasing number of cellular phone users in California. However, recently CHIS started to include cell phones in the sample as well as studied differences between cell phone only and land line users for the proper weighting of the estimates and maximum reduction of the non coverage bias⁵.

Related Healthy People

2010 Objective(s):

Overall goal: Improve mental health and ensure access to appropriate, quality mental health services.

2020 Objective(s):

Overall goal: Improve mental health and ensure access to appropriate, quality mental health services.

References:

1. Healthy People 2020 Overview of Mental Health and Mental Disorders. <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicId=28>
2. Murray CJL, Lopez AD. The global burden of disease: a comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020. 1996. Boston: Harvard University Press.
3. Surgeon General of the United States. Mental health: a report of the Surgeon General. 1999. Retrieved from <http://www.surgeongeneral.gov/library/mentalhealth/home.html>
4. Arnaud B, Malet L, Teissedre F, Izaute M, Moustafa F et al. Validity study of Kessler's psychological distress scales conducted among patients admitted to French emergency department for alcohol consumption-related disorders. Alcohol Clin Exp Res. 2010 Jul;34(7):1235-45.
5. CHIS data quality. Assessing and addressing potential noncoverage bias. <http://www.chis.ucla.edu/dataquality2.html>

Indicator:	Self-rated Mental Health Status (G1b)
Domain:	Mental Health
Sub-domain:	General Mental Distress
Demographic group:	Women who delivered a live birth in a given year in Los Angeles County
Data resource:	Los Angeles Mommy and Baby Project (LAMB) http://www.lalamb.org/
Data availability:	2005, 2007, 2010
Numerator:	Women who delivered a live birth in a given year in Los Angeles County reporting feeling sad, empty or depressed for most of the day for two weeks or longer during the pregnancy that resulted in the most recent live birth.
Denominator:	Women who delivered a live birth in a given year in Los Angeles County reporting that they did or did not feel sad, empty or depressed for most of the day for two weeks or longer during the pregnancy that resulted in the most recent live birth (excluding unknowns and refusals).
Measures of frequency:	Crude annual prevalence and by selected maternal demographic characteristics, weighted to account for unequal probabilities of selection, and adjusted for non-response and mail/telephone non-coverage.
Period of case definition:	During the pregnancy that resulted in the most recent live birth
Significance:	Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. Mental health is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community or society ¹ . Research has shown that poor mental health is a major source of distress, disability, and social burden. ² Furthermore, poor mental health can interfere with social functioning and negatively impact physical well-being as well as the practice of health-promoting behaviors. ³

Limitations of indicator: Reliability of data on the number of poor mental health days is currently unknown. However, the measure has been shown to be moderately valid.⁴ Also, LAMB data are self-reported and are subject to misinterpretations of the response options. Data are also subject to non-response bias.

Related Healthy People 2010 Objective(s): Overall goal: Improve mental health and ensure access to appropriate, quality mental health services.

2020 Objective(s): Overall goal: Improve mental health and ensure access to appropriate, quality mental health services.

References:

1. Healthy People 2020 Overview of Mental Health and Mental Disorders. <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicId=28>
2. Murray CJL, Lopez AD. The global burden of disease: a comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020. 1996. Boston: Harvard University Press.
3. Surgeon General of the United States. Mental health: a report of the Surgeon General. 1999. Retrieved from <http://www.surgeongeneral.gov/library/mentalhealth/home.html>
4. Nelson DE, Holtzman D, Bolen J, et al. Reliability and validity of measures from the Behavioral Risk Factor Surveillance System (BRFSS). Soc Prev Med 2001; 46 Suppl 1: S3-S42.

Indicator:	Preconception Anxiety and Depression (G2a)
Domain:	Mental Health
Sub-domain:	Anxiety and Depression
Demographic group:	Women aged 18-49 years.
Data resource:	Los Angeles County Health Survey (LACHS) http://publichealth.lacounty.gov/ha/hasurveyintro.htm
Data availability:	2005, 2007.
Numerator:	Women aged 18-49 years from Los Angeles County who reported that they were ever diagnosed with depression.
Denominator:	Women aged 18-49 years from Los Angeles County who reported that they were or were not ever diagnosed with depression (excluding unknowns and refusals).
Measures of frequency:	Weighted estimates of annual prevalence and 95% confidence interval.
Period of case definition:	Lifetime.
Significance:	Mental health plays a major role in people's ability to maintain good physical health. Mental illnesses, such as depression and anxiety, affect people's ability to participate in health-promoting behaviors ¹ . The Clinical Work Group of the Select Panel on Preconception Care recommends that providers should be vigilant and screen for psychiatric disorders among women of reproductive age, as the detection and appropriate management of these conditions can reduce the occurrence of adverse pregnancy and family outcomes. ²
Limitations of indicator:	The question in LACHS questionnaire that serves as a data source asks about possible diagnosis with depression but also other depressive syndromes. LACHS is a telephone survey that includes only households that have access to landline phones. Hence, non coverage and non response can be a potential source of bias. However, weighting procedures were used to reduce bias associated with exclusion of households without landline phones ³ .

Related Healthy People

2010 Objective(s):

18-9. Increase the proportion of adults with mental disorders who receive treatment.
18-9b. Increase treatment for adults aged 18 years and older with recognized depression.
Target: 50%.

2020 Objective(s):

MNMD-4.2. Reduce the proportion of adults aged 18 and older who experience major depressive episode.
Target: 6.1%
MNMD-9.2. Increase the proportion of adults aged 18 and older with major depressive episode who receive treatment.
Target: 75.1%
MNMD-11.1. Increase the proportion of primary physician offices that screen adults aged 19 or older for depression.
Target: 2.4%

References:

1. Healthy People 2020 Overview of Mental Health and Mental Disorders.
<http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicId=28>
2. Frieder A, Dunlop AL, Culpepper L, Bernstein PS. The clinical content of preconception care: women with psychiatric conditions. Am J Obstet Gynecol 2008; 199(6 Suppl B): S328-S332.
3. LACHS 2007. Summary of Survey Methodology. 2008, p.3.
[http://publichealth.lacounty.gov/ha/docs/2007%20LACHS/2007%20LA%20Health%20Survey%20Methods%20\(amended\).pdf](http://publichealth.lacounty.gov/ha/docs/2007%20LACHS/2007%20LA%20Health%20Survey%20Methods%20(amended).pdf)

Indicator:	Postpartum Depressive Symptoms (G3a)
Domain:	Mental Health
Sub-domain:	Postpartum Depression
Demographic group:	Women who delivered a live birth in a given year in Los Angeles County
Data resource:	Los Angeles Mommy and Baby Project (LAMB) http://www.lalamb.org/
Data availability:	2005, 2007, 2010
Numerator:	Women who delivered a live birth in a given year in Los Angeles County reporting that they were moderately or very depressed in the months after their babies were born.
Denominator:	Women who delivered a live birth in a given year in Los Angeles County responding to the question, “in the months after your new baby was born, would you say that you were not depressed at all, a little depressed, moderately depressed or very depressed?”
Measures of frequency:	Crude annual prevalence and by selected maternal demographic characteristics, weighted to account for unequal probabilities of selection, and adjusted for non-response and mail/telephone non-coverage.
Period of case definition:	After the most recent live birth.
Significance:	Depressive disorders after delivery range from “baby blues”, which occur within the first several weeks after delivery, to depression of postpartum onset (postpartum depression), which is more severe, requires treatment, and can manifest up to one year after delivery. ¹ Postpartum depression is estimated to affect 14-15% of mothers, and has been shown to have an adverse effect on marital relationships, mother-infant bonding, and may contribute to unfavorable parenting and infant health practices. ²⁻⁸ Depressive disorders generally have high recurrence rates, and previous depression and/or postpartum depression is predictive of depression during and after subsequent pregnancies. ⁹ Screening for depression has been shown to be simple and safe. Various treatments are available. ¹⁰

Identifying high risk women in the preconception period may prevent the emergence of depressive disorders during pregnancy and postpartum. Recommended screening for depression during well-baby visits in the postpartum period is also being considered by the American Academy of Pediatrics.¹¹

Limitations of indicator:

It is not possible to distinguish preexisting depressive symptoms from those that manifested after delivery. LAMB data are self-reported and are subject to misinterpretations of the response options. Hence, this indicator cannot be used to determine actual depression status. Various similar tools assessing self-reported depressive symptoms including feelings of being down depressed, sad, or hopeless, have been recommended for depression case-finding.⁹ Sensitivity measures for these tools are generally high with moderate to high specificity measures.¹²⁻¹⁴ The response option “a little depressed” was excluded from the case definition as this experience may be common among new mothers due to lack of appropriate rest. The LAMB data are also subject to non-response bias.

Related Healthy People
2010 Objective(s):

16-5.c. Reduction in postpartum complications, including postpartum depression.

2020 Objective(s)

Not Available

References:

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, 4th ed. (DSM-IV), Text Revision. Washington, DC: American Psychiatric Publishing, Inc; 2000.
2. Dietz PM, Williams SB, Callaghan WM, et al. Clinically identified maternal depression before, during, and after pregnancies ending in live births. *Am J Psychiatry* 2007; 164:1515-20.
3. Gaynes BN, Gavin N, Meltzer-Brody S, et al. Perinatal Depression: Prevalence, Screening Accuracy, and Screening Outcomes. Rockville, MD: Agency for Healthcare Research and Quality; 2005. Evidence report/technology assessment 119; AHRQ publication 05-E006-2.

4. Chung EK, McCollum KF, Elo IT, et al. Maternal depressive symptoms and infant health practices among low-income women. *Pediatrics* 2004; 113:e523-e529. Accessed from: <http://www.pediatrics.org/cgi/content/full/113/6/e523>.
5. Galler JR, Harrison RH, Ramsey F. Bed-sharing, breastfeeding and maternal moods in Barbados. *Infant Beh Dev* 2006; 29:526-34.
6. Leiferman J. The effect of maternal depressive symptomatology on maternal behaviors associated with child health. *Health Educ Behav* 2002; 29:596-607.
7. McLearn KT, Minkovitz CS, Strobino DM, et al. Maternal depressive symptoms at 2 to 4 months post partum and early parenting practices. *Arch Pediatr Adolesc Med* 2006; 160:279-84.
8. McLennan JD, Kotelchuck M. Parental prevention practices for young children in the context of maternal depression. *Pediatrics* 2000; 105:1090-95.
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10. U.S. Preventive Services Task Force. Screening for depression: recommendations and rationale. May 2002. Agency for Healthcare Research and Quality. <http://www.ahrq.gov/clinic/3rduspstf/depression/depressrr.htm#scientific>. Accessed October 11, 2008.
11. Chaudron LH, Szilagyi PG, Campbell AT, et al. Legal and ethical considerations: risks and benefits of postpartum depression screening at well-child visits. *Pediatrics* 2007; 119:123-28.
12. Whooley MA, Avins AL, Miranda J, et al. Case-finding instruments for depression. Two questions are as good as many. *J Gen Intern Med* 1997; 12:439-445.
13. Beck CT, Gable RK. Comparative analysis of the performance of the Postpartum Depression Screening Scale with two other depression instruments. *Nurs Res* 2001; 50:242-50.
14. Kroenke K, Spitzer RL, Williams JBW. The Patient Health Questionnaire-2: Validity of a two-item depression screener. *Medical Care* 2003; 41:1284-92.

Indicator:	Postpartum Depressive Symptoms (G3b)
Domain:	Mental Health
Sub-domain:	Postpartum Depression
Demographic group:	Women who experienced an infant or fetal loss in 2007-2009 in Los Angeles County
Data resource:	Los Angeles Health Overview of a Pregnancy Event (LA HOPE) http://www.publichealth.lacounty.gov/mch/LAHOPE/LAHOPE.html
Data availability:	2007-2009
Numerator:	Women who delivered a live birth in 2007-2009 in Los Angeles County reporting that they had postpartum depression: Question asked: “Did you experienced postpartum depression?”.
Denominator:	Women who delivered a live birth in 2007-2009 in Los Angeles County and reporting that they did or did not have postpartum depression.
Measures of frequency:	Crude annual prevalence and by selected maternal demographic characteristics, weighted to account for unequal probabilities of selection, and adjusted for non-response and mail/telephone non-coverage.
Period of case definition:	After the most recent pregnancy.
Significance:	Depressive disorders after delivery range from “baby blues”, which occur within the first several weeks after delivery, to depression of postpartum onset (postpartum depression), which is more severe, requires treatment, and can manifest up to one year after delivery. ¹ Postpartum depression is estimated to affect 14-15% of mothers, and has been shown to have an adverse effect on marital relationships, mother-infant bonding, and may contribute to unfavorable parenting and infant health practices. ²⁻⁸ Depressive disorders generally have high recurrence rates, and previous depression and/or postpartum depression is predictive of depression during and after subsequent pregnancies. ⁹ Screening for depression has been shown to

be simple and safe. Various treatments are available.¹⁰ Identifying high risk women in the preconception period may prevent the emergence of depressive disorders during pregnancy and postpartum. Recommended screening for depression during well-baby visits in the postpartum period is also being considered by the American Academy of Pediatrics.¹¹

Limitations of indicator: The indicator is based on only one question but not score calculated using validated tool. Also, it is not possible to distinguish preexisting depressive symptoms from those that manifested after delivery. LAHOPE data are self-reported and are subject to misinterpretations of the response options. Hence, this indicator cannot be used to determine actual depression status. Various similar tools assessing self-reported depressive symptoms including feelings of being down depressed, sad, or hopeless, have been recommended for depression case-finding.⁹ Sensitivity measures for these tools are generally high with moderate to high specificity measures.¹²⁻¹⁴ Also, The LAHOPE data are also subject to non-response bias. Since LAHOPE surveys women who experienced recent fetal or infant loss, reported depression may be attributed to the fetal or infant loss.

Related Healthy People
2010 Objective(s):

16-5.c. Reduction in postpartum complications, including postpartum depression.

2020 Objective(s) Not Available

References:

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, 4th ed. (DSM-IV), Text Revision. Washington, DC: American Psychiatric Publishing, Inc; 2000.
2. Dietz PM, Williams SB, Callaghan WM, et al. Clinically identified maternal depression before, during, and after pregnancies ending in live births. *Am J Psychiatry* 2007; 164:1515-20.
3. Gaynes BN, Gavin N, Meltzer-Brody S, et al. Perinatal Depression: Prevalence, Screening Accuracy, and Screening Outcomes. Rockville, MD: Agency for

- Healthcare Research and Quality; 2005. Evidence report/technology assessment 119; AHRQ publication 05-E006-2.
4. Chung EK, McCollum KF, Elo IT, et al. Maternal depressive symptoms and infant health practices among low-income women. *Pediatrics* 2004; 113:e523-e529. Accessed from: <http://www.pediatrics.org/cgi/content/full/113/6/e523>.
 5. Galler JR, Harrison RH, Ramsey F. Bed-sharing, breastfeeding and maternal moods in Barbados. *Infant Beh Dev* 2006; 29:526-34.
 6. Leiferman J. The effect of maternal depressive symptomatology on maternal behaviors associated with child health. *Health Educ Behav* 2002; 29:596-607.
 7. McLearn KT, Minkovitz CS, Strobino DM, et al. Maternal depressive symptoms at 2 to 4 months post partum and early parenting practices. *Arch Pediatr Adolesc Med* 2006; 160:279-84.
 8. McLennan JD, Kotelchuck M. Parental prevention practices for young children in the context of maternal depression. *Pediatrics* 2000; 105:1090-95.
 9. Frieder A, Dunlop AL, Culpepper L, et al. The clinical content of preconception care: women with psychiatric conditions. *Am J Obstet Gynecol* 2008; 199:(6 Suppl B):S328-32. Available from: http://www.ajog.org/issues/contents?issue_key=S0002-9378%2808%29X0011-0
 10. U.S. Preventive Services Task Force. Screening for depression: recommendations and rationale. May 2002. Agency for Healthcare Research and Quality. <http://www.ahrq.gov/clinic/3rduspstf/depression/depressrr.htm#scientific>. Accessed October 11, 2008.
 11. Chaudron LH, Szilagyi PG, Campbell AT, et al. Legal and ethical considerations: risks and benefits of postpartum depression screening at well-child visits. *Pediatrics* 2007; 119:123-28.
 12. Whooley MA, Avins AL, Miranda J, et al. Case-finding instruments for depression. Two questions are as good as many. *J Gen Intern Med* 1997; 12:439-445.
 13. Beck CT, Gable RK. Comparative analysis of the performance of the Postpartum Depression Screening Scale with two other depression instruments. *Nurs Res* 2001; 50:242-50.
 14. Kroenke K, Spitzer RL, Williams JBW. The Patient Health Questionnaire-2: Validity of a two-item depression screener. *Medical Care* 2003; 41:1284-92.