

Indicator:	Current Health Care Coverage (C1)
Domain:	Health Care
Sub-domain:	Access to and Utilization of Health Care
Demographic group:	Women aged 18 to 44 years
Data resource:	California Health Interview Survey (CHIS) http://www.chis.ucla.edu/
Data availability:	2005, 2007, 2009
Numerator:	Female respondents aged 18-44 years in Los Angeles County who reported that they currently had some kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medical.
Denominator:	All female respondents aged 18-44 years in Los Angeles County who reported that they did or did not currently have some kind of health care coverage (excluding unknowns and refusals).
Measures of frequency:	Weighted estimates of annual prevalence and 95% confidence interval.
Period of case definition:	Current.
Significance:	In order to achieve optimal preconception health, women of childbearing age need access to preventive health care services at all times, not just during or shortly before pregnancy. Consistent access to care is especially critical for women of reproductive age with chronic medical conditions such as diabetes or hypertension. Lack of health care coverage has been widely associated with decreased use of preventive health services, delay in seeking medical care, and poor health status. ¹⁻² In describing the clinical content of preconception care, the Clinical Work Group of the Select Panel on Preconception Care workgroup recommends that providers ask all women of childbearing age about their health insurance coverage status and their usual source of care, and refer women without adequate coverage to social services or other agencies as appropriate. ³

Limitations of indicator: Studies indicate a high degree of validity for self-reported health insurance data from BRFSS although reliability studies are lacking.⁴ Some respondents might have interpreted “health care coverage” to include health care available to them despite lacking insurance (e.g. through free clinics or emergency room care that they cannot and do not pay for). CHIS is a random-dial telephone survey. The sample used - 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 maximal reduction of the non coverage bias⁵.

Related Healthy People

2010 Objective(s): 1-1. Increase the proportion of persons with health insurance. Target: 100%.

2020 Objective(s): AHS-1.1. Increase the proportion of persons with health insurance. Target: 100%.

References:

1. Weissman JS, Stern R, Fielding SL, Epstein AM. Delayed access to health care: risk factors, reasons, and consequences. *Ann Intern Med* 1991;114:325-31.
2. Centers for Disease Control and Prevention. Health insurance coverage and receipt of preventive health services -- United States, 1993. *MMWR* 1995; 44:219-25.
3. Jack B, Atrash H, Coonrod D, Moos M-K, O'Donnell J, Johnson K. The clinical content of preconception care: an overview and preparation of this supplement. *Am J Obstet Gynecol* 2008; 199 (6 Suppl B):S266-S279.
4. Nelson DE, Holtzman D, Bolen J, Stanwyck CA, Mack KA. Reliability and validity of measures from the Behavioral Risk Factor Surveillance System (BRFSS). *Soc Prev Med* 2001; 46 Suppl 1:S3-S42.
5. CHIS data quality. Assessing and addressing potential noncoverage bias. <http://www.chis.ucla.edu/dataquality2.html>

Indicator:	Current Health Care Coverage (C1a)
Domain:	Health Care
Sub-domain:	Access to and Utilization of Health Care
Demographic group:	Women aged 18 to 49 years
Data resource:	Los Angeles County Health Survey (LACHS) http://publichealth.lacounty.gov/ha/hasurveyintro.htm
Data availability:	2005, 2007
Numerator:	Female respondents aged 18-49 years in Los Angeles County who reported that they currently did not have some kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medical.
Denominator:	Female respondents aged 18-49 years in Los Angeles County who reported that they currently had or did not have some kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medical (excluding unknowns and refusals).
Measures of frequency:	Weighted estimates of annual prevalence and 95% confidence interval.
Period of case definition:	Current.
Significance:	In order to achieve optimal preconception health, women of childbearing age need access to preventive health care services at all times, not just during or shortly before pregnancy. Consistent access to care is especially critical for women of reproductive age with chronic medical conditions such as diabetes or hypertension. Lack of health care coverage has been widely associated with decreased use of preventive health services, delay in seeking medical care, and poor health status. ¹⁻² In describing the clinical content of preconception care, the Clinical Work Group of the Select Panel on Preconception Care workgroup recommends that providers ask all women of childbearing age about their health insurance coverage status and their usual source of care, and refer women without adequate

coverage to social services or other agencies as appropriate.³

Limitations of indicator: Studies indicate a high degree of validity for self-reported health insurance data from BRFSS, although reliability studies are lacking.⁴ Some respondents might interpret “health care coverage” to include health care available to them (e.g. through free clinics or emergency room care that they cannot and do not pay for) despite lacking insurance. 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 phones⁵.

Related Healthy People
2010 Objective(s):

1-1. Increase the proportion of persons with health insurance. Target: 100%.

2020 Objective(s):

AHS-1.1. Increase the proportion of persons with health insurance. Target: 100%.

References:

1. Weissman JS, Stern R, Fielding SL, Epstein AM. Delayed access to health care: risk factors, reasons, and consequences. *Ann Intern Med* 1991;114:325-31.
2. Centers for Disease Control and Prevention. Health insurance coverage and receipt of preventive health services -- United States, 1993. *MMWR* 1995; 44:219-25.
3. Jack B, Atrash H, Coonrod D, Moos M-K, O'Donnell J, Johnson K. The clinical content of preconception care: an overview and preparation of this supplement. *Am J Obstet Gynecol* 2008; 199 (6 Suppl B):S266-S279.
4. Nelson DE, Holtzman D, Bolen J, Stanwyck CA, Mack KA. Reliability and validity of measures from the Behavioral Risk Factor Surveillance System (BRFSS). *Soc Prev Med* 2001; 46 Suppl 1:S3-S42.
5. 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:	Health Insurance Coverage Before Pregnancy (C2a)
Domain	Health Care
Sub-domain	Access to and Utilization of Health Care
Demographic group:	Women having a live birth.
Data resource:	LAMB http://www.lalamb.org/
Data availability:	2005, 2007, 2009
Numerator:	Women who delivered a live birth in a given year in Los Angeles County reporting that they did not have health insurance coverage during the month before they became pregnant.
Denominator:	Women who delivered a live birth in a given year in Los Angeles County reporting that they did or did not have health insurance coverage during the month before they became pregnant (excluding non-responders).
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:	One month before the pregnancy resulting in the most recent live birth.
Significance:	In order to achieve optimal preconception health, women of childbearing age need access to preventive health care services at all times, especially if they are planning pregnancy. Consistent access to care is especially critical for women of reproductive age with chronic medical conditions such as diabetes or hypertension. Lack of health care coverage has been widely associated with decreased use of preventive health services, delay in seeking medical care, and poor health status. ¹⁻² In describing the clinical content of preconception care, the Clinical Work Group of the Select Panel on Preconception Care recommends that providers ask all women of childbearing age about their health insurance coverage and their usual source of care,

and refer women without adequate coverage to social services or other agencies as appropriate.⁴

Limitations of indicator: 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): 1-1. Increase the proportion of persons with health insurance.
Target: 100%.

2020 Objective(s): AHS-1.1. Increase the proportion of persons with health insurance.
Target: 100%.

References:

1. Weissman JS, Stern R, Fielding SL, Epstein AM. Delayed access to health care: risk factors, reasons, and consequences. *Ann Intern Med* 1991;114:325-31.
2. CDC. Health insurance coverage and receipt of preventive health services -- United States, 1993. *MMWR* 1995; 44:219-25.
3. Kaiser Family Foundation. Women's health insurance coverage. Washington, DC: Kaiser Family Foundation; 2004.
4. Jack B, Atrash H, Coonrod D, Moos M-K, O'Donnell J, Johnson K. The clinical content of preconception care: an overview and preparation of this supplement. *Am J Obstet Gynecol* 2008; 199 (6 Suppl B): S266-S279.

Indicator:	Health Insurance Coverage Before Pregnancy (C2b)
Domain	Health Care
Sub-domain	Access to and Utilization of Health Care
Demographic group:	Women having a fetal/infant loss.
Data resource:	LA HOPE project http://publichealth.lacounty.gov/mch/LAHOPE/LAHOPE.html
Data availability:	2007- 2009
Numerator:	Women having a fetal/infant death in Los Angeles County within 2007-2009 who reported that they did not have health insurance coverage during the month before they became pregnant.
Denominator:	Women having a fetal/infant death in Los Angeles County within 2007-2009 who reported that they did or did not have health insurance coverage during the month before they became pregnant (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:	One month before the pregnancy resulting in the most recent live birth.
Significance:	In order to achieve optimal preconception health, women of childbearing age need access to preventive health care services at all times, especially if they are planning pregnancy. Consistent access to care is especially critical for women of reproductive age with chronic medical conditions such as diabetes or hypertension. Lack of health care coverage has been widely associated with decreased use of preventive health services, delay in seeking medical care, and poor health status. ¹⁻² In describing the clinical content of preconception care, the Clinical Work Group of the Select Panel on Preconception Care recommends that providers ask all women of childbearing age about their health insurance coverage and their usual source of care,

and refer women without adequate coverage to social services or other agencies as appropriate.⁴

Limitations of indicator: LA HOPE 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):

1-1. Increase the proportion of persons with health insurance.
Target: 100%.

2020 Objective(s):

AHS-1.1. Increase the proportion of persons with health insurance.
Target: 100%.

References:

1. Weissman JS, Stern R, Fielding SL, Epstein AM. Delayed access to health care: risk factors, reasons, and consequences. *Ann Intern Med* 1991;114:325-31.
2. CDC. Health insurance coverage and receipt of preventive health services -- United States, 1993. *MMWR* 1995; 44:219-25.
3. Kaiser Family Foundation. Women's health insurance coverage. Washington, DC: Kaiser Family Foundation; 2004.
4. Jack B, Atrash H, Coonrod D, Moos M-K, O'Donnell J, Johnson K. The clinical content of preconception care: an overview and preparation of this supplement. *Am J Obstet Gynecol* 2008; 199 (6 Suppl B): S266-S279.

Indicator:	Postpartum Checkup (C4a)
Domain	Health Care
Sub-domain	Access to and Utilization of Health Care
Demographic group:	Women having a live birth.
Data resource:	LAMB http://Lalamb.org
Data availability:	2005, 2007, 2009
Numerator:	Women who delivered a live birth in a given year in Los Angeles County who reported that they had a postpartum checkup.
Denominator:	Women who delivered a live birth in a given year in Los Angeles County who reported that they had or did not have a postpartum checkup (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:	Approximately six weeks after the most recent live birth.
Significance:	The postpartum checkup provides a health care provider with an opportunity to assess a woman's physical recovery and emotional well-being following delivery. The postpartum visit in an optimal time assesses interconception health and provides counseling related to risk factors such as preterm labor, diabetes, hypertension, substance abuse, and mental health issues, which may affect subsequent pregnancies. ¹ However, postpartum visit is generally poor, especially among some groups that may be at a higher risk for poor pregnancy outcomes. ² A large multi-state study using PRAMS data showed the prevalence of postpartum checkups were lowest among women who were non-White, aged less than 35 years, and reported an intended pregnancy. ^{2,3}
Limitations of indicator:	Some women may consider a health care visit for some other reason (e.g., to monitor a chronic health condition or to treat a specific illness or injury) as a postpartum

checkup. 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):

16-5. Reduce maternal illness and complications due to pregnancy;
16-5c. Reduce postpartum complications including postpartum depression.

2020 Objective(s):

MICH-6. Reduce maternal illness and complications due to pregnancy (complications during hospitalized labor and delivery); Target: 28%
MICH-19. Increase the proportion of women giving birth who attend a postpartum care visit with a health worker.

References:

1. American College of Obstetricians and Gynecologists. ACOG technical bulletin. Preconception Care. Number 313 - Sept. 2005. Compendium of Selected Publications, Volume 1: committee opinions and policy statements, pp.214-215.
2. Kogan MD, Leary M, Schaetzel T. Factors associated with postpartum care among Massachusetts users of the maternal and infant care program. Family Plan Perspect 1990; 22: 128-30.
3. D'Angelo D, Williams L, Morrow B, et al. Preconception and interconception health status of women who recently gave birth to a live-born infant—Pregnancy Risk Assessment Monitoring System (PRAMS), United States, 26 reporting areas. MMWR 2007; 56(SS10): 1-35.

Indicator:	Postpartum Checkup (C4b)
Domain	Health Care
Sub-domain	Access to and Utilization of Health Care
Demographic group:	Women having a fetal/infant death
Data resource:	LAHOPE http://publichealth.lacounty.gov/mch/LAHOPE/LAHOPE.html
Data availability:	2007-2009
Numerator:	Women having a fetal/infant death in LA County in 2007-2009 who reported that they had a postpartum checkup.
Denominator:	Women having a fetal/infant death in LA County in 2007-2009 who reported that they had or did not have a postpartum checkup (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:	Approximately six weeks after the most recent delivery.
Significance:	The postpartum checkup provides a health care provider with an opportunity to assess a woman's physical recovery and emotional well-being following delivery. The postpartum visit in an optimal time assesses interconception health and provides counseling related to risk factors such as preterm labor, diabetes, hypertension, substance abuse, and mental health issues, which may affect subsequent pregnancies. ¹ However, attendance at the postpartum visit is generally poor, especially among some groups that may be at a higher risk for poor pregnancy outcomes. ² A large multi-state study using PRAMS data showed the prevalence of postpartum checkups were lowest among women who were non-White, aged less than 35 years, and reported an intended pregnancy. ^{2,3}

Limitations of indicator: Some women may consider a health care visit for some other reason (e.g., to monitor a chronic health condition or to treat a specific illness or injury) as a postpartum checkup. LA HOPE 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):

16-5. Reduce maternal illness and complications due to pregnancy;
16-5c. Reduce postpartum complications including postpartum depression.

2020 Objective(s):

MICH-6. Reduce maternal illness and complications due to pregnancy (complications during hospitalized labor and delivery); Target: 28%
MICH-19. Increase the proportion of women giving birth who attend a postpartum care visit with a health worker.

References:

1. American College of Obstetricians and Gynecologists. ACOG technical bulletin. Preconception Care. Number 313 - Sept. 2005. Compendium of Selected Publications, Volume 1: committee opinions and policy statements, pp.214-215.
2. Kogan MD, Leary M, Schaetzel T. Factors associated with postpartum care among Massachusetts users of the maternal and infant care program. Family Plan Perspect 1990; 22: 128-30.
3. D'Angelo D, Williams L, Morrow B, et al. Preconception and interconception health status of women who recently gave birth to a live-born infant—Pregnancy Risk Assessment Monitoring System (PRAMS), United States, 26 reporting areas. MMWR 2007; 56(SS10): 1-35.

Indicator:	Preventive Dental Care (C5a)
Domain	Health Care
Sub-domain	Access to Dental Care
Demographic group:	Women having a live birth.
Data resource:	LAMB Http://lalamb.org
Data availability:	2010
Numerator:	Women who delivered a live birth in a given year in Los Angeles County who reported that they had their teeth cleaned by a dentist or dental hygienist in the last 12 months.
Denominator:	Women who delivered a live birth in a given year in Los Angeles County who reported that they did or did not have their teeth cleaned by a dentist or dental hygienist in the last 12 months (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:	In the last 12 months.
Significance:	The American Academy of Periodontology recommends that women have a periodontal evaluation before pregnancy and that they maintain good oral hygiene during pregnancy. ¹ High C-reactive protein levels, found in women with periodontitis, have been associated with adverse pregnancy outcomes, such as preterm labor. ^{2,3} However, studies from PRAMS states reveal that a quarter or more of pregnant women may need dental care during their pregnancy but nearly half do not seek the care that they need. ⁴⁻⁶
Limitations of indicator:	It is unknown if the dental cleaning was done before, during or after pregnancy. 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): 21-10. Increase the proportion of children and adults who use the oral health care system each year. Target: 56%.
- 2020 Objective(s): OH-7. Increase the proportion of children, adolescents and adults who used the oral health care system (had a dental visit) in the past 12 months. Target: 49%.

References:

1. American Academy of Periodontology. AAP statement on the periodontal management of the pregnant patient. Vol. 2005, 2005.
2. Pitiphat W, Joshipura KJ, Rich-Edwards JW, Williams PL, Douglass CW, Gillman MW. Periodontitis and plasma C-reactive protein during pregnancy. *J Periodontol* 2006; 77:821-5.
3. Pitiphat W, Gillman MW, Joshipura KJ, Williams PL, Douglass CW, Rich-Edwards JW. Plasma C-reactive protein in early pregnancy and preterm delivery. *Am J Epidemiol* 2005; 162:1108-13.
4. Brooks K, El Reda D, Grigorescu V, Kirk G. Michigan Department of Community Health. "Oral Health During Pregnancy." MI PRAMS Delivery. Volume 6, Number 2. Family and Community Health, Michigan Department of Community Health, May 2007.
5. Lydon-Rochelle M, Krakowiak P, Hujoel PP, Peters RM. Dental care use and self-reported dental problems in relation to pregnancy. *Am J Public Health* 2004; 94: 765-771.
6. Gaffield ML, Gilbert BJ, Malvitz DM, Romaguera R. Oral health during pregnancy: an analysis of information collected by the Pregnancy Risk Assessment Monitoring System. *J Am Dent Assoc* 2001; 132:1009-1016.

Indicator:	Recent Pap Smear (C6)
Domain:	Health Care
Sub-domain:	Reproductive Health Care
Demographic group:	Women 18-44 years
Data resource:	California Health Interview Survey http://www.chis.ucla.edu/
Data availability:	2005, 2007
Numerator:	Female respondents aged 18-44 years from Los Angeles County who reported that they had a Pap smear within the previous 3 years.
Denominator:	Female respondents aged 18-44 years from Los Angeles County who reported that they did or did not have a Pap smear within the previous 3 years (excluding unknowns and refusals).
Measures of frequency:	Weighted estimates of annual prevalence and 95% confidence interval.
Period of case definition:	Within the past 3 years.
Significance:	Approximately 40%-60% of cervical cancer deaths can be prevented by increased use of the Pap smear and effective, timely treatment. Almost all cases of cervical cancer are caused by infection with high-risk types of the human papillomavirus (HPV). ¹ The CDC's Select Panel on Preconception Care recommends that women be screened routinely for HPV-associated abnormalities of the cervix and that recommended subgroups receive the HPV vaccine. Use of the vaccine, in conjunction with regular pap screening to detect HPV abnormalities early on, can reduce or eliminate the need for procedures that could decrease cervical competency during pregnancy. ² The office visit during which a Pap test is most often performed, sometimes referred to as the annual exam, is a prime opportunity for the clinician to screen for preconception risk factors and provide treatment or other interventions as necessary.

Limitations of indicator: Starting Pap smears is recommended at age 21 years or 3 years after the initiation of intercourse. The prevalence of Pap testing may be limited by age distribution, since younger women will have less opportunity to be in the age-group recommended for the test. Regarding the validity of recall periods for this item, recollection is better with shorter periods of time.³
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, taking 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 maximal reduction of the non coverage bias⁴.

Related Healthy People
2010 Objective(s):
test.

3-11. Increase the proportion of women who receive a Pap

3-11a. Women aged ≥ 18 years who have ever received a Pap test. Target: 97%.

3-11b. Women aged ≥ 18 year who have received a Pap test within the preceding 3 years. Target: 90%.

2020 Objective(s):

C-18.2 Increase the proportion of women who were counseled by their providers about Pap tests. Target: 65.8%.

References:

1. Utah's Indicator-Based Information System for Public Health; Indicator Profile for Cervical Cancer Screening. Retrieved 10/30/08 at: http://ibis.health.utah.gov/indicator/view/CervCAScr.UT_US.html
2. Jack B, Atrash H, Coonrod D, Moos M-K, O'Donnell J, Johnson K. The clinical content of preconception care: an overview and preparation of this supplement. *Am J Obstet Gynecol* 2008; 199(6 Suppl B): S266-S279.
3. Nelson DE, Holtzman D, Bolen J, Stanwyck CA, Mack KA. Reliability and validity of measures from the Behavioral Risk Factor Surveillance System (BRFSS). *Soc Prev Med* 2001; 46 Suppl 1:S3-42.
4. CHIS data quality. Assessing and addressing potential noncoverage bias. <http://www.chis.ucla.edu/dataquality2.html>

Indicator:	Preconception Counseling (C7a)
Domain:	Health Care
Sub-domain:	Content and Quality of Care
Demographic group:	Women having a live birth
Data resource:	LAMB http://lalamb.org .
Data availability:	2007, 2010
Numerator:	Women who delivered a live birth in a given year in Los Angeles County who reported that they did not talk to a doctor, nurse, or other health care worker about how to prepare for a healthy pregnancy and baby before their last pregnancy that resulted in a live birth.
Denominator:	Women who delivered a live birth in a given year in Los Angeles County who reported that they did or did not talk to doctor, nurse, or other health care worker about how to prepare for a healthy pregnancy and baby before their last pregnancy that resulted in a 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:	Within six months before the pregnancy that resulted in the most recent live birth.
Significance:	Studies have shown improvements in lifestyle behaviors after counseling among women planning a pregnancy. In a study on preconception counseling, a significant percentage of women who received counseling by a provider began using folic acid before pregnancy and reduced alcohol consumption in the first three months of pregnancy. ¹ Another study among women planning pregnancy showed that red cell folate levels among women who were folic acid supplement non-users before counseling increased significantly after 4 months while women who were supplement users before counseling remained stable up to 1

year after counseling.² Tracking knowledge of preconception risks and protective factors is imperative to assure that messages about being at optimal health prior to pregnancy are reaching intended audiences. Furthermore, surveillance of preconception counseling also serves as a means for monitoring the impact of the CDC's recommended preconception health action step to "increase health provider awareness regarding the importance of addressing preconception health among all women of childbearing age".³

Limitations of Indicator: The indicator is limited to women who saw a provider. Also, it does not describe the content of the counseling e.i. the health topics discussed during the counseling session. LAMB data are self-reported and are subject to misinterpretations of the response options. Data are also subject to non-response bias.

**Related Healthy
2010 Objective(s):**

1-3. Increase the proportion of persons appropriately counseled about health behaviors.
16-16. Increase the proportion of pregnancies begun with the optimum folic acid level.
16-17. Increase abstinence from alcohol, cigarettes and illicit drug use among pregnant women.

People 2020 Objective(s):

MICH-16.2. Increase the proportion of pregnancies begun with the optimum folic acid level (took multivitamins/folic acid every day in the month prior to pregnancy).
Target: 33.1%
MICH-14: Increase the proportion of women of childbearing potential with intake of at least 400 µg of folic acid from fortified foods or dietary supplements.
Target: 26.2%.
MCH-11. Increase abstinence from alcohol, cigarettes and illicit drug use among pregnant women. Target (alcohol): 98.3%, Target (tobacco): 98.6%, Target (illicit drugs): 100%.

References:

1. Elsinga J, de Jong-Potjer L, van der Pal-de Bruin K, et al. The effect of preconception counseling on lifestyle and other behavior before and during pregnancy. *Women's Health Issues* 2008; 18S: S117-S125.
2. De Weerd S, Thomas C, Cikot, R, et al. Preconception counseling improves folate status of women planning pregnancy. *Obstet Gynecol* 2002; 99: 45-50.

3. Johnson K, Posner SF, Biermann J, et al. Recommendations to improve preconception health and health care – United States. A report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. *MMWR Recomm Rep* 2006; Apr 26; 55(R-6):1-23.

Indicator:	Preconception Counseling (C7b)
Domain:	Health Care
Sub-domain:	Content and Quality of Care
Demographic group:	Women having a fetal/ infant death
Data resource:	LAHOPE http://publichealth.lacounty.gov/mch/LAHOPE/LAHOPE.html
Data availability:	2007-2009
Numerator:	Women having a fetal/infant death in Los Angeles County in 2007-2009 who reported that they did not talk to a doctor, nurse, or other health care worker about how to prepare for a healthy pregnancy and baby before their last pregnancy.
Denominator:	Women having a fetal/infant death in Los Angeles County in 2007-2009 who reported that they did or did not talk to doctor, nurse, or other health care worker about how to prepare for a healthy pregnancy and baby before their last pregnancy (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:	Within six months before the last pregnancy.
Significance:	Studies have shown improvements in lifestyle behaviors after counseling among women planning a pregnancy. In a study on preconception counseling, the increase in folic acid use before pregnancy and reduction of alcohol consumption in the first three months of pregnancy was observed in women who received counseling by a provider. ¹ Another study among women planning pregnancy showed that red cell folate levels among women who were folic acid supplement non-users before counseling increased significantly after 4 months while women who were supplement users before counseling remained stable up to 1 year after counseling. ² Tracking knowledge of

preconception risks and protective factors is imperative to assure that messages about being at optimal health prior to pregnancy are reaching intended audiences. Furthermore, surveillance of preconception counseling also serves as a means for monitoring the impact of the CDC's recommended preconception health action step to "increase health provider awareness regarding the importance of addressing preconception health among all women of childbearing age".³

Limitations of Indicator: The indicator is limited to women who saw a provider. Also, it does not describe the content of the counseling e.i. the health topics discussed during the counseling session. LA HOPE data are self-reported and are subject to misinterpretations of the response options. Data are also subject to non-response bias.

Related Healthy 2010 Objective(s): 1-3. Increase the proportion of persons appropriately counseled about health behaviors.
16-16. Increase the proportion of pregnancies begun with the optimum folic acid level.
16-17. Increase abstinence from alcohol, cigarettes and illicit drug use among pregnant women.

People 2020 Objective(s): MICH-16.2. Increase the proportion of pregnancies begun with the optimum folic acid level (took multivitamins/folic acid every day in the month prior to pregnancy).
Target: 33.1%
MICH-14: Increase the proportion of women of childbearing potential with intake of at least 400 µg of folic acid from fortified foods or dietary supplements.
Target: 26.2%.
MCH-11. Increase abstinence from alcohol, cigarettes and illicit drug use among pregnant women. Target (alcohol): 98.3%, Target (tobacco): 98.6%, Target (illicit drugs): 100%.

References:

4. Elsinga J, de Jong-Potjer L, van der Pal-de Bruin K, et al. The effect of preconception counseling on lifestyle and other behavior before and during pregnancy. *Women's Health Issues* 2008; 18S: S117-S125.
5. De Weerd S, Thomas C, Cikot, R, et al. Preconception counseling improves folate status of women planning pregnancy. *Obstet Gynecol* 2002; 99: 45-50.

6. Johnson K, Posner SF, Biermann J, et al. Recommendations to improve preconception health and health care – United States. A report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. *MMWR Recomm Rep* 2006; Apr 26; 55(R-6):1-23.