Prenatal Care
**INDICATOR:** First Trimester Onset of Prenatal Care (PNC)

**DEFINITION:**
The percent of live born infants whose mothers received prenatal care in the first trimester of pregnancy

**NUMERATOR:**
The number of live births to women who received prenatal care during the first trimester, by place of residence, in a calendar year

**DENOMINATOR:**
The total number of live births, by place of residence, in a calendar year

**HEALTHY PEOPLE 2020 OBJECTIVE:**
Increase the proportion of pregnant women who receive prenatal care in the first trimester of pregnancy to 77.9 percent of live births. (Baseline: 70.8 percent of pregnant women in 2007) (Objective MICH–10.1)

**RISK FACTORS:**
For not obtaining early prenatal care: Low income; young maternal age/teen pregnancy; low maternal education level; race/ethnicity (African American, Hispanic, American Indian/Alaska Native); high parity; maternal substance abuse; lack of health insurance; lack of obstetric providers

<table>
<thead>
<tr>
<th>Year</th>
<th>California</th>
<th>First Trimester Prenatal Care</th>
<th>95% Confidence Interval</th>
<th>Los Angeles County</th>
<th>First Trimester Prenatal Care</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Lower</td>
<td>Upper</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>2004</td>
<td>466,463</td>
<td>85.6</td>
<td>85.5</td>
<td>85.7</td>
<td>136,144</td>
<td>89.9</td>
</tr>
<tr>
<td>2005</td>
<td>470,955</td>
<td>85.8</td>
<td>85.7</td>
<td>85.9</td>
<td>136,020</td>
<td>90.5</td>
</tr>
<tr>
<td>2006</td>
<td>478,973</td>
<td>85.2</td>
<td>85.1</td>
<td>85.3</td>
<td>137,077</td>
<td>90.3</td>
</tr>
<tr>
<td>2007</td>
<td>459,188</td>
<td>80.9</td>
<td>80.8</td>
<td>81.0</td>
<td>129,741</td>
<td>85.5</td>
</tr>
<tr>
<td>2008</td>
<td>445,108</td>
<td>80.7</td>
<td>80.6</td>
<td>80.8</td>
<td>123,251</td>
<td>83.5</td>
</tr>
<tr>
<td>2009</td>
<td>428,449</td>
<td>81.3</td>
<td>81.2</td>
<td>81.4</td>
<td>116,717</td>
<td>83.6</td>
</tr>
<tr>
<td>2010</td>
<td>416,759</td>
<td>81.7</td>
<td>81.6</td>
<td>81.8</td>
<td>110,516</td>
<td>83.0</td>
</tr>
<tr>
<td>2011</td>
<td>410,213</td>
<td>81.7</td>
<td>81.6</td>
<td>81.8</td>
<td>106,307</td>
<td>81.6</td>
</tr>
<tr>
<td>2012</td>
<td>412,679</td>
<td>81.9</td>
<td>81.8</td>
<td>82.0</td>
<td>106,996</td>
<td>81.2</td>
</tr>
<tr>
<td>2013</td>
<td>406,305</td>
<td>82.2</td>
<td>82.1</td>
<td>82.3</td>
<td>105,259</td>
<td>81.9</td>
</tr>
</tbody>
</table>

**Note:** The decrease in first-trimester entry in 2007 is due at least in part to a recategorization of this data in birth certificates. This measure excludes the prenatal care experiences of all women whose pregnancies did not result in live births.

**Source:** California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2004-2013.
Year 2020 Objective: Increase the proportion of pregnant women who receive prenatal care in the first trimester of pregnancy to 77.9 percent of live births.

Note: The decrease in first-trimester entry in 2007 is due at least in part to a recategorization of this data in birth certificates.
This measure excludes the prenatal care experiences of all women whose pregnancies did not result in live births.
Percent of Total Live Births by Birthweight and by Mother’s Trimester Prenatal Care (PNC) Began
Los Angeles County, 2013

<table>
<thead>
<tr>
<th>Mother's Trimester Prenatal Care Began</th>
<th>Very Low Birthweight</th>
<th>Moderately Low Birthweight</th>
<th>Normal Birthweight</th>
<th>Macrosomia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 to 1,499 grams</td>
<td>1,500 to 2,499 grams</td>
<td>2,500 to 3,999 grams</td>
<td>4,000+ grams</td>
</tr>
<tr>
<td>No Prenatal Care</td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>First</td>
<td>1,238</td>
<td>1.2%</td>
<td>6,083</td>
<td>5.8%</td>
</tr>
<tr>
<td>Second</td>
<td>143</td>
<td>1.0%</td>
<td>872</td>
<td>6.0%</td>
</tr>
<tr>
<td>Third</td>
<td>7</td>
<td>0.2%</td>
<td>167</td>
<td>4.4%</td>
</tr>
<tr>
<td>Unknown</td>
<td>103</td>
<td>2.3%</td>
<td>343</td>
<td>7.6%</td>
</tr>
<tr>
<td>Total</td>
<td>1,528</td>
<td>1.2%</td>
<td>7,530</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

Note: “Trimester Prenatal Care Began” excludes the prenatal care experiences of all women whose pregnancies did not result in a live birth.
Source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2013
Percent of Total Live Births by Mother’s Trimester Prenatal Care (PNC) Began and by Source of Payment for Prenatal Care (PNC)
Los Angeles County, 2013

Source of Payment for Prenatal Care

Note: "Trimester Prenatal Care Began" excludes the prenatal care experiences of all women whose pregnancies did not result in a live birth.
Numbers fewer than 5 are shown as "<5". Rates are not calculated (N/C) if number is fewer than five.
Source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2013
Percent of Total Live Births by Birthweight and by Source of Payment for Prenatal Care (PNC)
Los Angeles County, 2013

Source of Payment for Prenatal Care

<table>
<thead>
<tr>
<th>Source of Payment for Prenatal Care</th>
<th>Very Low Birthweight</th>
<th>Moderately Low Birthweight</th>
<th>Normal Birthweight</th>
<th>Macrosomia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 to 1,499 grams</td>
<td>1,500 to 2,499 grams</td>
<td>2,500 to 3,999 grams</td>
<td>4,000+ grams</td>
</tr>
<tr>
<td>No Prenatal Care</td>
<td>37</td>
<td>65</td>
<td>373</td>
<td>17</td>
</tr>
<tr>
<td>Private Insurance</td>
<td>627</td>
<td>3,161</td>
<td>44,972</td>
<td>3,977</td>
</tr>
<tr>
<td>Other Govt Programs</td>
<td>19</td>
<td>156</td>
<td>2,324</td>
<td>176</td>
</tr>
<tr>
<td>Medi-Cal</td>
<td>763</td>
<td>3,699</td>
<td>54,378</td>
<td>4,209</td>
</tr>
<tr>
<td>Self Pay</td>
<td>48</td>
<td>321</td>
<td>6,764</td>
<td>372</td>
</tr>
<tr>
<td>Other/Unknown</td>
<td>34</td>
<td>128</td>
<td>1,741</td>
<td>161</td>
</tr>
<tr>
<td>Total</td>
<td>1,528</td>
<td>7,530</td>
<td>110,552</td>
<td>8,912</td>
</tr>
</tbody>
</table>

Note: "Trimester Prenatal Care Began" excludes the prenatal care experiences of all women whose pregnancies did not result in a live birth.
Source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2013
Percent of Total Live Births by Adequacy of Prenatal Care Utilization Index and by Mother's Trimester Prenatal Care (PNC) Began
Los Angeles County, 2013

<table>
<thead>
<tr>
<th>Mother's Trimester Prenatal Care Began</th>
<th>Adequate</th>
<th>Intermediate</th>
<th>Inadequate</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Prenatal Care</td>
<td>&lt;5 N/C</td>
<td>&lt;5 N/C</td>
<td>493 100.0</td>
<td>&lt;5 N/C</td>
</tr>
<tr>
<td>First</td>
<td>99,067  94.1</td>
<td>3,749 3.6</td>
<td>663 0.6</td>
<td>1,780 1.7</td>
</tr>
<tr>
<td>Second</td>
<td>7,105   49.2</td>
<td>729 5.0</td>
<td>6,432 44.5</td>
<td>172 1.2</td>
</tr>
<tr>
<td>Third</td>
<td>&lt;5 N/C</td>
<td>&lt;5 N/C</td>
<td>3,769 98.6</td>
<td>53 1.4</td>
</tr>
<tr>
<td>Unknown</td>
<td>&lt;5 N/C</td>
<td>&lt;5 N/C</td>
<td>4,514 100.0</td>
<td>4,514 100.0</td>
</tr>
<tr>
<td>Total</td>
<td>106,172 82.6</td>
<td>4,478 3.5</td>
<td>11,357 8.8</td>
<td>6,519 5.1</td>
</tr>
</tbody>
</table>

Note: "Trimester Prenatal Care Began" excludes the prenatal care experiences of all women whose pregnancies did not result in a live birth. Numbers fewer than 5 are shown as "<5". Rates are not calculated (N/C) if number is fewer than five.

Source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2013
Percent of Total Live Births by Adequacy of Prenatal Care Utilization Index and by Source of Payment for Prenatal Care (PNC)
Los Angeles County, 2013

<table>
<thead>
<tr>
<th>Source of Payment for Prenatal Care</th>
<th>Adequate</th>
<th>Intermediate</th>
<th>Inadequate</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Prenatal Care</td>
<td>&lt;5 N/C</td>
<td>&lt;5 N/C</td>
<td>493 100.0%</td>
<td>&lt;5 N/C</td>
</tr>
<tr>
<td>Private Insurance</td>
<td>46,357  87.9%</td>
<td>1,148 2.2%</td>
<td>2,217 4.2%</td>
<td>3,015 5.7%</td>
</tr>
<tr>
<td>Other Govt Programs</td>
<td>2,431  90.9%</td>
<td>69 2.6%</td>
<td>146 5.5%</td>
<td>29 1.1%</td>
</tr>
<tr>
<td>Medi-Cal</td>
<td>50,845  80.6%</td>
<td>2,650 4.2%</td>
<td>7,109 11.3%</td>
<td>2,448 3.9%</td>
</tr>
<tr>
<td>Self Pay</td>
<td>4,764  63.5%</td>
<td>571 7.6%</td>
<td>1,264 16.8%</td>
<td>906 12.1%</td>
</tr>
<tr>
<td>Other/Unknown</td>
<td>1,775  86.0%</td>
<td>40 1.9%</td>
<td>128 6.2%</td>
<td>121 5.9%</td>
</tr>
<tr>
<td>Total</td>
<td>106,172 82.6%</td>
<td>4,478 3.5%</td>
<td>11,357 8.8%</td>
<td>6,519 5.1%</td>
</tr>
</tbody>
</table>

Note: Numbers fewer than 5 are shown as "<5". Rates are not calculated (N/C) if number is fewer than five.
Source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2013
**INDICATOR:** Percent of Total Live Births by Adequacy of Prenatal Care Utilization (APNCU) Index

**DEFINITION:**
The percent of live born infants whose mothers received adequate prenatal care as defined by the Adequacy of Prenatal Care Utilization Index (APNCU) developed by Milton Kotelchuck. This index does not assess the quality of the prenatal care that is delivered.

**NUMERATOR:**
The number of live births to women who received adequate care, as defined by the APNCU criteria, by place of residence, in a calendar year

**DENOMINATOR:**
The total number of live births, by place of residence, in a calendar year

**HEALTHY PEOPLE 2020 OBJECTIVE:**
Increase the proportion of pregnant women who receive early and adequate prenatal care to 77.6 percent of live births.
(Baseline: 70.5 percent of pregnant women in 2007) (Objective MICH–10.2)

**RISK FACTORS:**
Inadequate Prenatal Care
Low income; young maternal age/teen pregnancy; low maternal education level; race/ethnicity (African American, Hispanic, American Indian/Alaskan Native); high parity; maternal substance abuse; lack of health insurance; lack of obstetric providers

<table>
<thead>
<tr>
<th>Year</th>
<th>California</th>
<th>Los Angeles County</th>
<th>Denominator: Live Births</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adequate Prenatal Care</td>
<td>95% Confidence Interval</td>
<td>Adequate Prenatal Care</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Lower</td>
</tr>
<tr>
<td>2004</td>
<td>459,050</td>
<td>84.3</td>
<td>84.2</td>
</tr>
<tr>
<td>2005</td>
<td>469,208</td>
<td>85.5</td>
<td>85.4</td>
</tr>
<tr>
<td>2006</td>
<td>480,255</td>
<td>85.4</td>
<td>85.3</td>
</tr>
<tr>
<td>2007</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2008</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2009</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2010</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2011</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2012</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2013</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Note:**
The APNCU Index measures prenatal care utilization, which includes consideration of the month prenatal care began and the number of prenatal care visits during the time mothers actually received prenatal care. This utilization index is based on the recommendations established by the American College of Obstetrics and Gynecologists (ACOG). Appendix A contains the specific criteria for timing and number of prenatal care visits that are used to assign adequacy categories. Due to the change in methodology for calculating the Kotelchuck Index, data presented may not be comparable to those published in previous FHOP reports. N/A: 2007 - 2013 data for California not available for retrieval

**Source:** California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2004-2013.
Year 2020 Objective: Increase the proportion of pregnant women who receive early and adequate prenatal care to 77.6 percent of live births.

Note: The APNCU Index measures prenatal care utilization, which includes consideration of the month prenatal care began and the number of prenatal care visits during the time mothers actually received prenatal care. This utilization index is based on the recommendations established by the American College of Obstetrics and Gynecologists (ACOG). Appendix A contains the specific criteria for timing and number of prenatal care visits that are used to assign adequacy categories. Due to the change in methodology for calculating the Kotelchuck Index, data presented may not be comparable to those published in previous FHOP reports.

Number of Live Births by Mothers who had Late Prenatal Care by Zip Code* and Service Planning Area (SPA)

Los Angeles County, 2013

Service Planning Areas (SPAs):

1 - Antelope Valley
2 - San Fernando Valley
3 - San Gabriel
4 - Metro
5 - West
6 - South
7 - East
8 - South Bay

Number of Mothers who had Late Prenatal Care

LATEPNC
0 - 33 n=(133)
34 - 83 n=(82)
84 - 161 n=(48)
162 - 311 n=(18)
311 - 476 n=(3)

n = total number of zip codes within range

*Los Angeles County zip code boundaries as of 2010
Total number of live births in Los Angeles County, 2012= 128,526
Total number of mothers who had late prenatal care in Los Angeles County, 2013 = 18,260
Note: Prenatal care that begins in the second or third trimester is considered late.
Zip code 90704 (Catalina Island) is not included. Total number of mothers who had late prenatal care in 90704, 2013 = 9
Los Angeles County - Department of Public Health

Percent of Live Births by Mothers who had Late Prenatal Care by Zip Code* and Service Planning Area (SPA)

Los Angeles County, 2013

SPA Boundary
Zip Code Boundary

Service Planning Areas (SPAs):
1 - Antelope Valley
2 - San Fernando Valley
3 - San Gabriel
4 - Metro
5 - West
6 - South
7 - East
8 - South Bay

Percent of Mothers who had Late Prenatal Care

- 0 - 4.5 n=(45)
- 4.6 - 9.4 n=(73)
- 9.5 - 14.5 n=(102)
- 14.6 - 24.6 n=(56)
- 24.7 - 66.7 n=(8)

n = total number of zip codes within range

*Los Angeles County zip code boundaries as of 2010
Total number of live births in Los Angeles County, 2013 = 128,526
Total number of mothers who had late prenatal care in Los Angeles County, 2013 = 18,260
Percent of mothers who had late prenatal care in Los Angeles County, 2013 = 14.2
Note: Prenatal care that begins in the second or third trimester is considered late.
Zip code 90704 (Catalina Island) is not included. Percent of mothers who had late prenatal care in 90704, 2013 = 19.57
Los Angeles County - Department of Public Health
Number of Live Births by Mothers who had No Prenatal Care by Zip Code* and Service Planning Area (SPA)
Los Angeles County, 2013

Service Planning Areas (SPAs):
1 - Antelope Valley
2 - San Fernando Valley
3 - San Gabriel
4 - Metro
5 - West
6 - South
7 - East
8 - South Bay

Number of Mothers who had No Prenatal Care

- 0 - 1 n=(189)
- 2 - 3 n=(55)
- 4 - 6 n=(27)
- 7 - 9 n=(14)
- 10 - 12 n=(3)

*Los Angeles County zip code boundaries as of 2010
Total number of live births in Los Angeles County, 2013 = 128,526
Total number of mothers who had no prenatal care in Los Angeles County, 2013 = 493
Zip code 90704 (Catalina Island) is not included. Total number of mothers who had no prenatal care in 90704, 2013 = 0
Percent of Live Births by Mothers who had No Prenatal Care by Zip Code* and Service Planning Area (SPA) Los Angeles County, 2013

Service Planning Areas (SPAs):
1 - Antelope Valley
2 - San Fernando Valley
3 - San Gabriel
4 - Metro
5 - West
6 - South
7 - East
8 - South Bay

Percent of Mothers who had No Prenatal Care
- 0.0 - 0.1 n=(140)
- 0.2 - 0.5 n=(90)
- 0.6 - 1.0 n=(49)
- 1.1 - 2.1 n=(8)
- 2.2 - 100.0 n=(1)

n = total number of zip codes within range

*Los Angeles County zip code boundaries as of 2010
Total number of live births in Los Angeles County, 2013 = 128,526
Total number of mothers who had no prenatal care in Los Angeles County, 2013 = 493
Percent of mothers who had no prenatal care in Los Angeles County, 2013 = 0.40
Zip code 90704 (Catalina Island) is not included. Percent of mothers who had no prenatal care in 90704, 2013 = 0.00