

# **Cesarean Births**

## Cesarean Live Births

**INDICATOR:** Cesarean births

**DEFINITION:** The proportion of live births delivered via Cesarean section (c-section)

**NUMERATOR:** The number of Cesarean live births, by place of residence, in a calendar year

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

**RISK FACTORS:** Older maternal age, previous c-section, pregnancy complications, sexually transmitted disease, obesity, diabetes, extreme neonatal birth weight

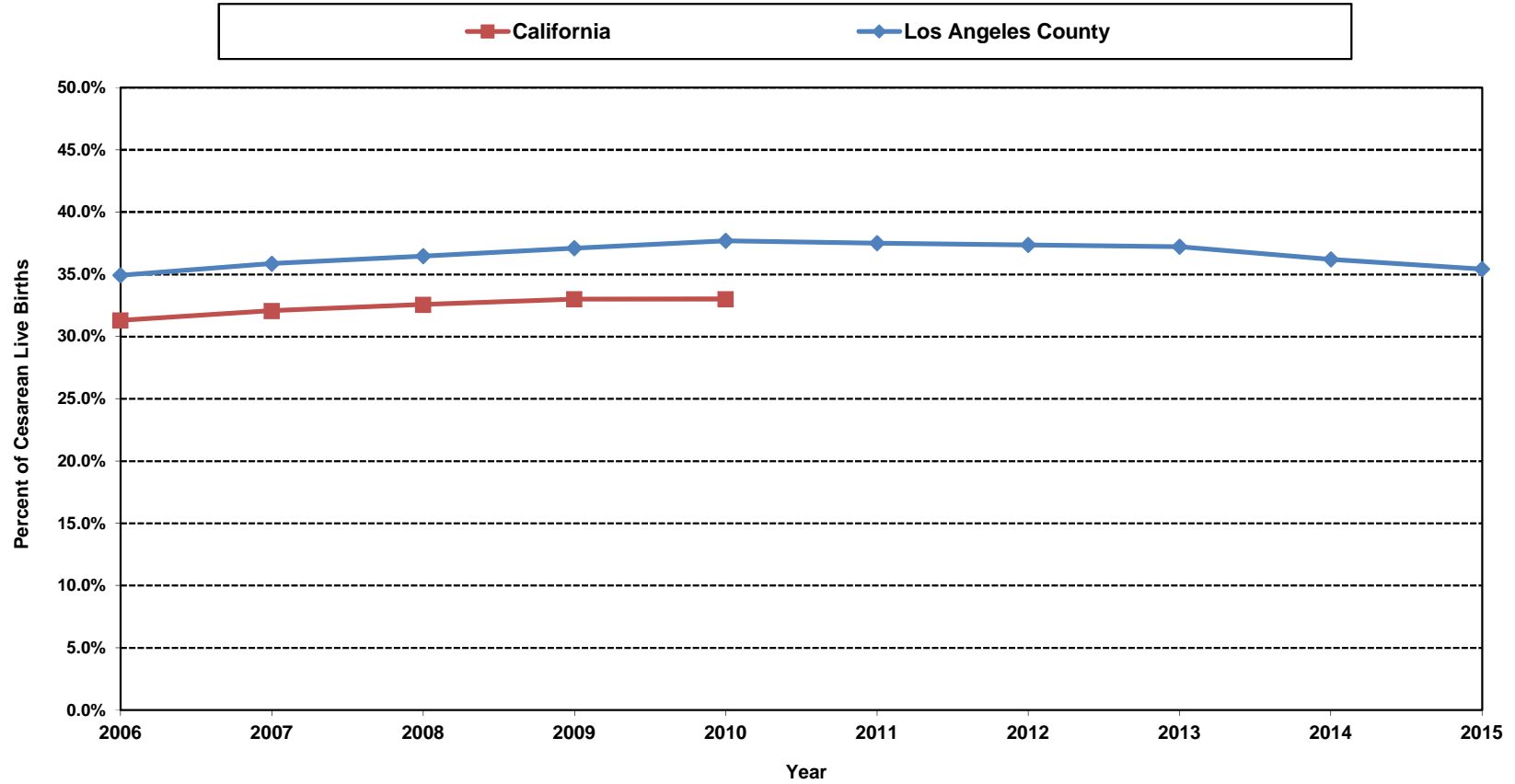
Year	California				Los Angeles County			
	Total C-Section Live Births		95% Confidence Interval		Total C-Section Live Births		95% Confidence Interval	
	Number	Percent	Lower	Upper	Number	Percent	Lower	Upper
2006	175,943	31.3%	26.7%	35.6%	53,034	34.9%	30.0%	38.8%
2007	181,574	32.1%	27.4%	36.4%	54,431	35.9%	30.9%	39.8%
2008	179,626	32.6%	27.8%	37.0%	53,838	36.5%	31.4%	40.5%
2009	173,878	33.0%	28.1%	37.5%	51,813	37.1%	31.9%	41.3%
2010	168,379	33.0%	28.0%	37.6%	50,186	37.7%	32.4%	42.0%
2011	#N/A	#N/A	#N/A	#N/A	48,864	37.5%	32.1%	41.9%
2012	#N/A	N/C	N/C	N/C	49,197	37.4%	32.0%	41.7%
2013	#N/A	N/C	N/C	N/C	47,834	37.2%	31.8%	41.6%
2014	#N/A	N/C	N/C	N/C	47,106	36.2%	30.9%	40.5%
2015	#N/A	N/C	N/C	N/C	44,109	35.4%	25.0%	33.8%

Denominator: Total Live Births		
Year	California	LA County
2005	562,157	151,837
2006	566,137	151,813
2007	551,567	147,684
2008	526,774	139,679
2009	509,979	133,160
2010	502,023	130,313
2011	503,788	131,697
2012	494,392	128,523
2013	502,973	130,150
2014	#N/A	124,507

Note: California 2011-2015 data was unavailable at the time of this report. Rates are not calculated (N/C).

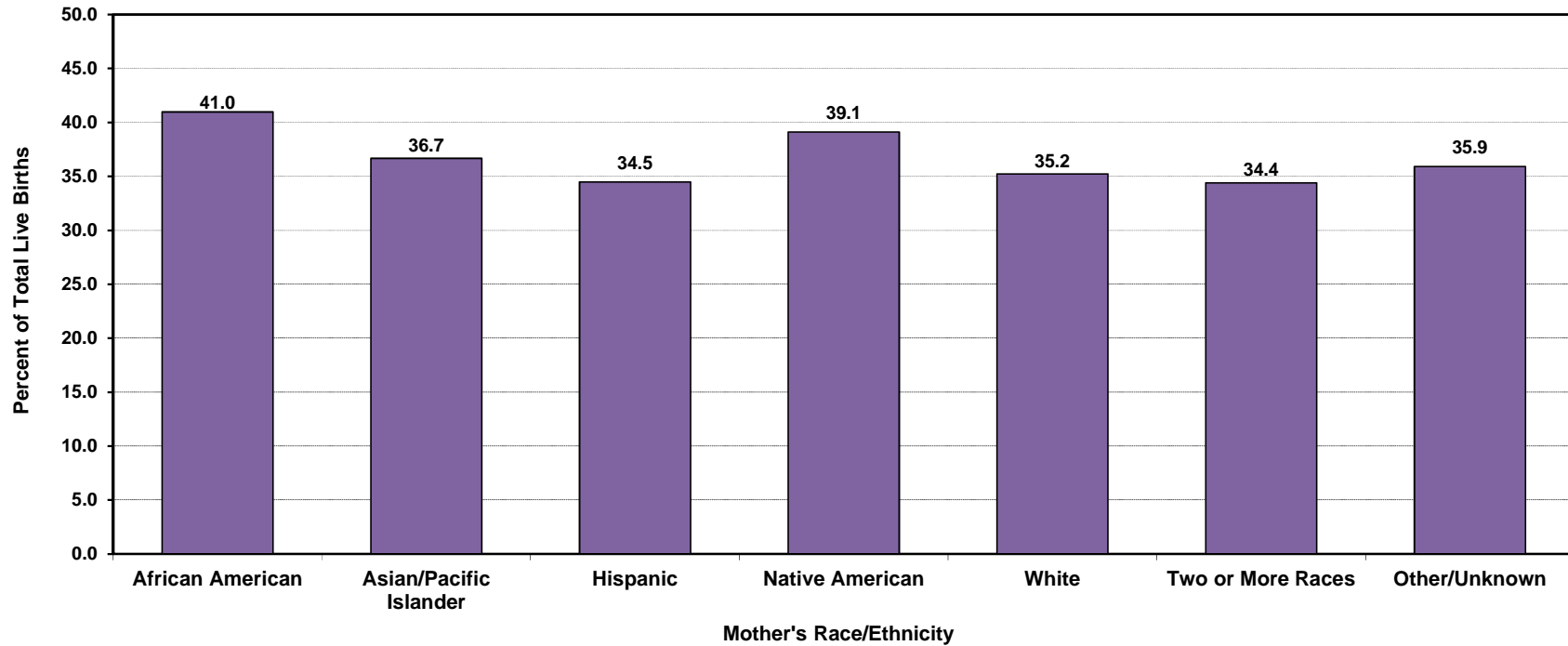
Sources: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2006-2015.

**Percent of Cesarean Live Births  
California vs. Los Angeles County, 2006-2015**



Note: California 2011-2015 data was unavailable at the time of this report. Rates are not calculated (N/C).  
Sources: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2006-2015.

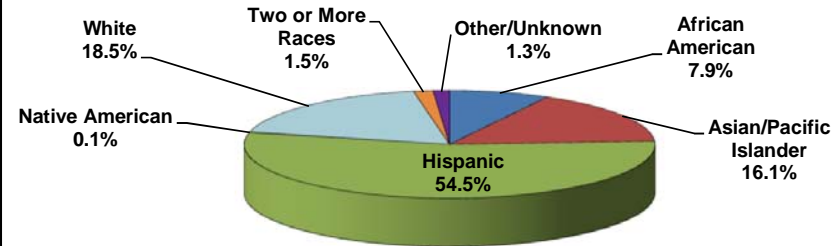
**Cesarean Live Births, as Percent of Total Live Births by Mother's Race/Ethnicity  
Los Angeles County, 2015**



Mother's Race/Ethnicity	Los Angeles County, 2015			
	Cesarean Births		95% Confidence Interval	
	Number	Percent	Lower	Upper
African American	3,481	41.0	39.9	42.0
Asian/Pacific Islander	7,120	36.7	36.0	37.3
Hispanic	24,043	34.5	34.1	34.8
Native American	61	39.1	31.4	46.8
White	8,161	35.2	34.6	35.8
Two or More Races	676	34.4	32.3	36.5
Other/Unknown	567	35.9	33.5	38.3
<b>Total</b>	<b>44,109</b>	<b>35.4</b>	<b>35.2</b>	<b>35.7</b>

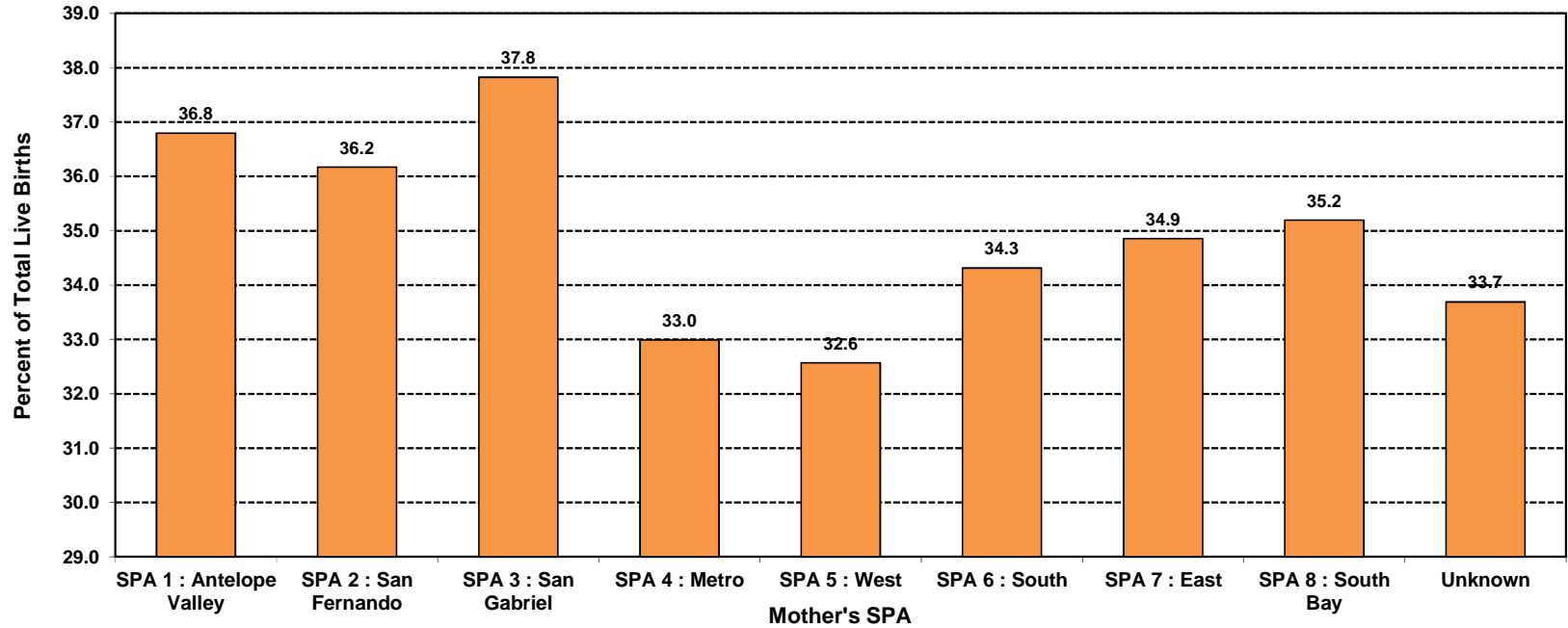
Total Live Births
8,497
19,417
69,724
156
23,169
1,965
1,579
<b>124,507</b>

**Percent Distribution of Cesarean Live Births  
by Race/Ethnicity  
Los Angeles County, 2015**



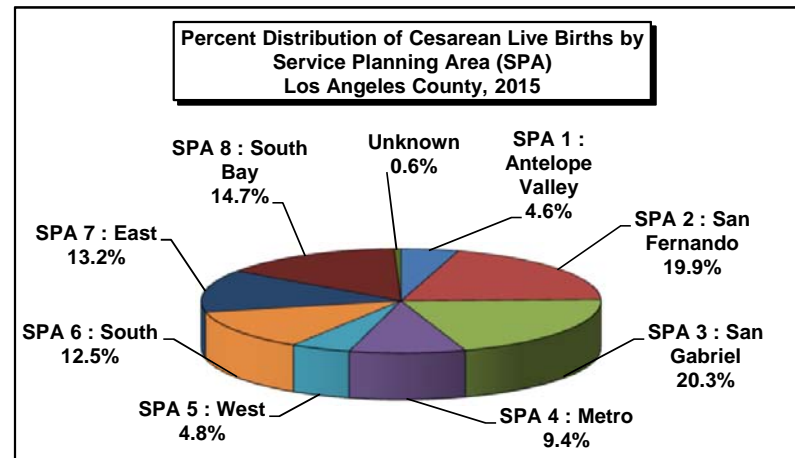
Note: African American, Asian/Pacific Islander, Native American, White and other races exclude Hispanic ethnicity. Hispanic includes any race category.  
Source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2015.

**Cesarean Live Births, as Percent of Total Live Births by Service Planning Area (SPA)  
Los Angeles County, 2015**



Los Angeles County, 2015				
Service Planning Area (SPA)	Cesarean Births		95% Confidence Interval	
	Number	Percent	Lower	Upper
SPA 1 : Antelope Valley	2,045	36.8	35.5	38.1
SPA 2 : San Fernando	8,776	36.2	35.6	36.8
SPA 3 : San Gabriel	8,938	37.8	37.2	38.4
SPA 4 : Metro	4,140	33.0	32.2	33.8
SPA 5 : West	2,135	32.6	31.4	33.7
SPA 6 : South	5,514	34.3	33.6	35.0
SPA 7 : East	5,804	34.9	34.1	35.6
SPA 8 : South Bay	6,505	35.2	34.5	35.9
Unknown	252	33.7	30.3	37.1
<b>Total</b>	<b>44,109</b>	<b>35.4</b>	<b>35.2</b>	<b>35.7</b>

Total Live Births
5,558
24,263
23,630
12,550
6,555
16,069
16,652
18,482
748
<b>124,507</b>

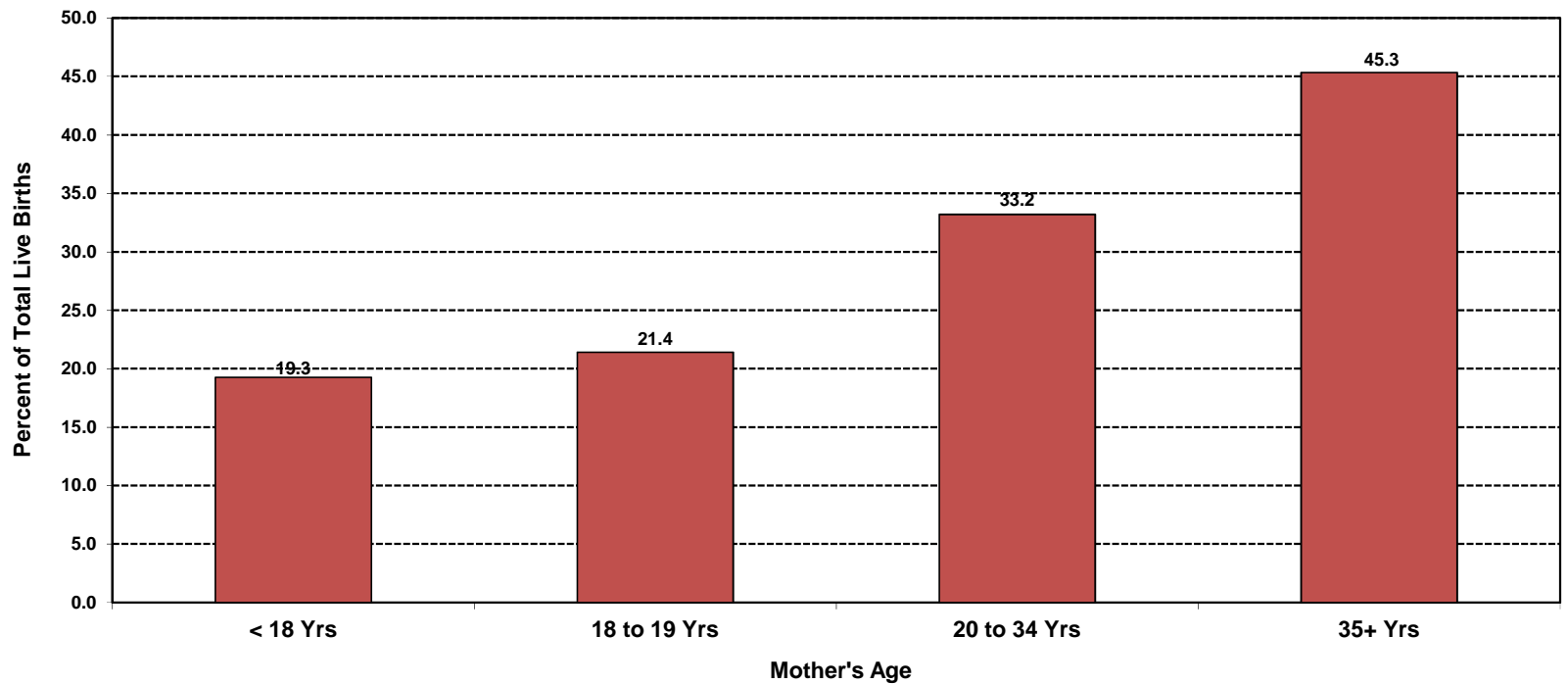


Note: SPA 8 includes Catalina Island.

Source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2014.

July 1, 2010 Population Estimates, prepared by Walter R. McDonald & Associates, Inc. (WRMA) for Urban Research, Los Angeles County ISD.

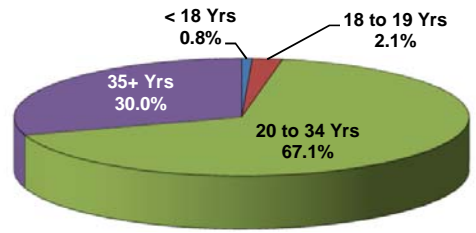
**Cesarean Live Births, as Percent of Total Live Births by Mother's Age  
Los Angeles County, 2015**



Los Angeles County, 2015				
Mother's Age	Cesarean Births		95% Confidence Interval	
	Number	Percent	Lower	Upper
< 18 Yrs	332	19.3	17.4	21.1
18 to 19 Yrs	943	21.4	20.2	22.6
20 to 34 Yrs	29,592	33.2	32.9	33.5
35+ Yrs	13,240	45.3	44.8	45.9
<b>Total</b>	<b>44,109</b>	<b>35.4</b>	<b>35.2</b>	<b>35.7</b>

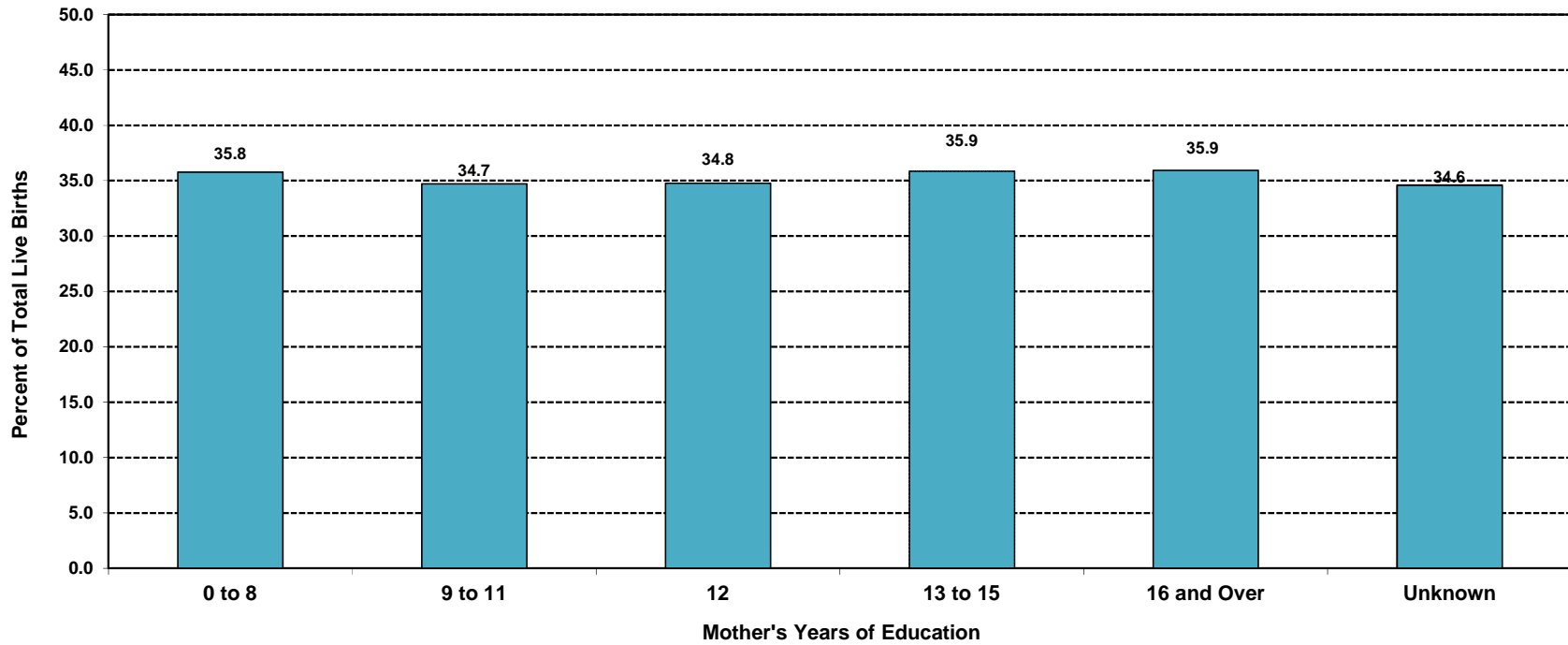
Total Live Births
1,724
4,404
89,151
29,209
<b>124,507</b>

**Percent Distribution of Cesarean Live Births by Mother's Age  
Los Angeles County, 2015**



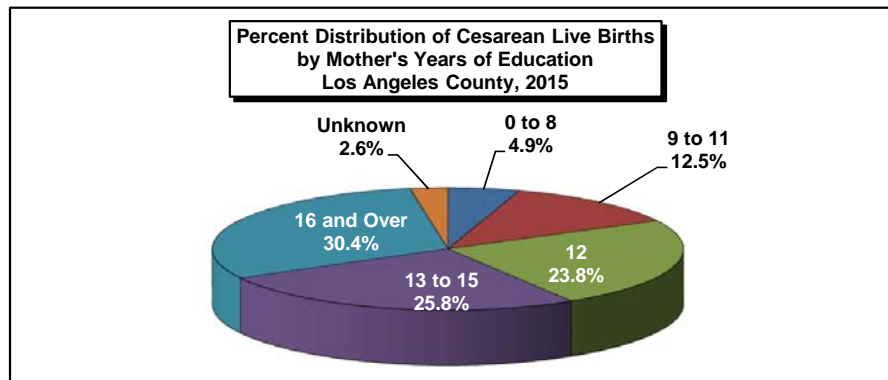
Source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2015.

**Cesarean Live Births, as Percent of Total Live Births by Mother's Years of Education  
Los Angeles County, 2015**



Los Angeles County, 2015				
Mother's Years of Education	Cesarean Births		95% Confidence Interval	
	Number	Percent	Lower	Upper
0 to 8	2,167	35.8	34.6	37.0
9 to 11	5,520	34.7	34.0	35.4
12	10,503	34.8	34.2	35.3
13 to 15	11,389	35.9	35.3	36.4
16 and Over	13,391	35.9	35.4	36.4
Unknown	1,139	34.6	33.0	36.2
<b>Total</b>	<b>44,109</b>	<b>35.4</b>	<b>35.2</b>	<b>35.7</b>

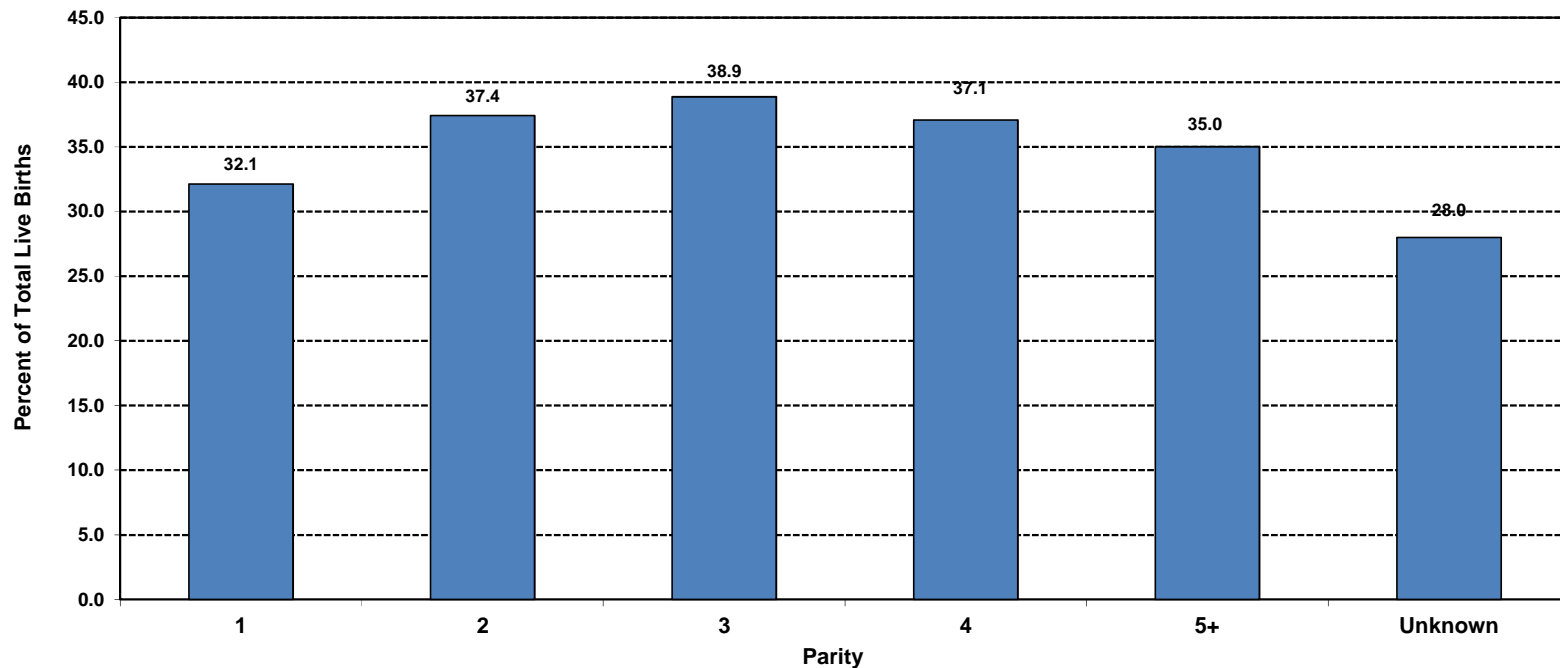
Total Live Births
6,058
15,906
30,217
31,760
37,273
3,293
<b>124,507</b>



Note: This analysis did not adjust for teen mothers who may not be old enough to have reached a higher educational level.

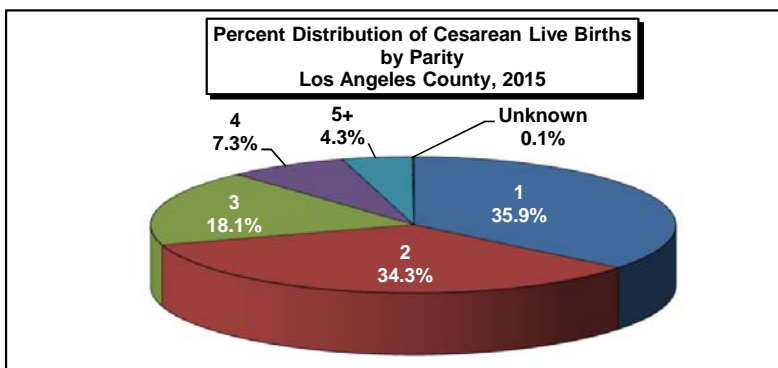
Source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2015.

**Cesarean Live Births, as Percent of Total Live Births by Parity  
Los Angeles County, 2015**



Los Angeles County, 2015				
Parity	Cesarean Births		95% Confidence Interval	
	Number	Percent	Lower	Upper
1	15,835	32.1	31.7	32.5
2	15,125	37.4	36.9	37.9
3	7,969	38.9	38.2	39.5
4	3,237	37.1	36.1	38.1
5+	1,901	35.0	33.7	36.3
Unknown	42	28.0	20.8	35.2
<b>Total</b>	<b>44,109</b>	<b>35.4</b>	<b>35.2</b>	<b>35.7</b>

Total Live Births
49,282
40,420
20,498
8,728
5,429
150
<b>124,507</b>

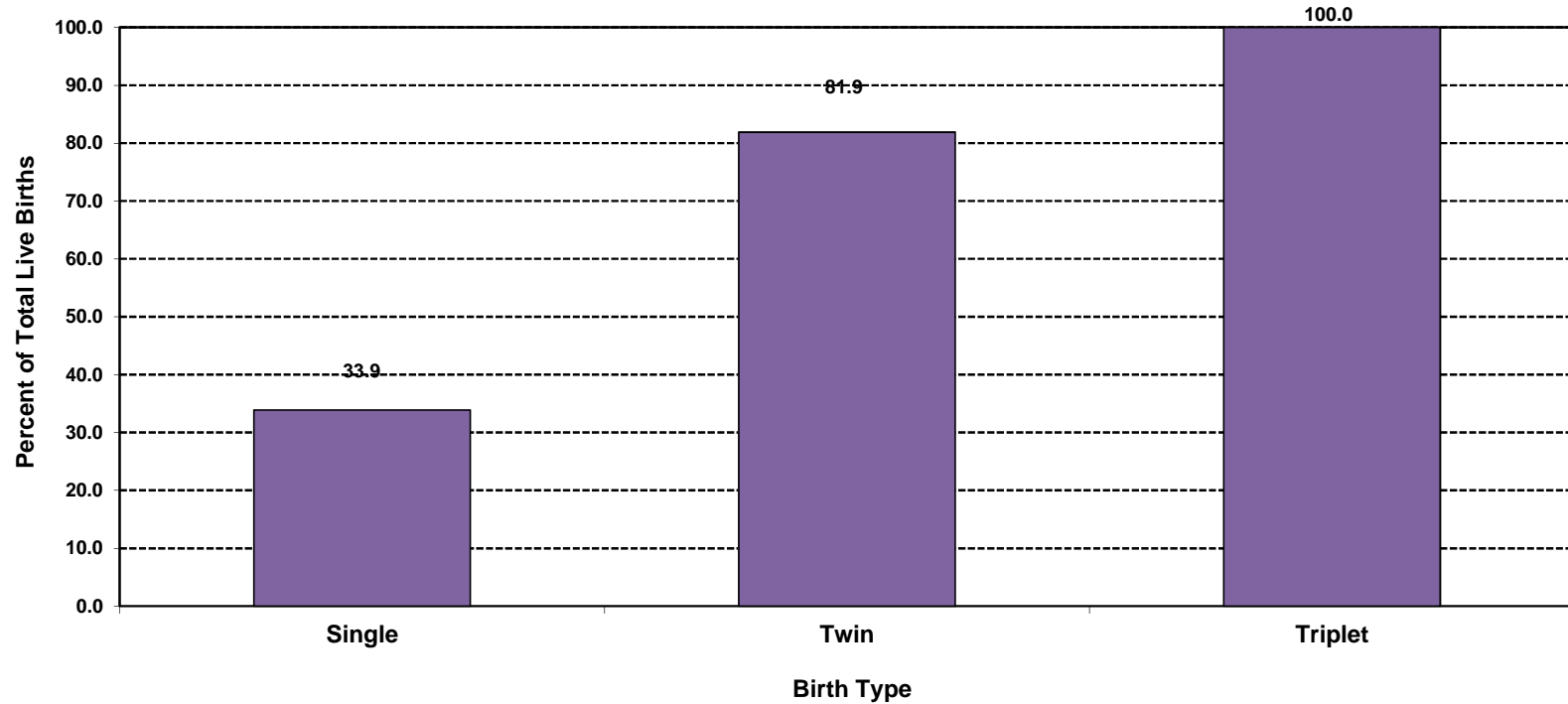


Note: Parity = number of pregnancies resulting in live births to a woman.

Source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2015.



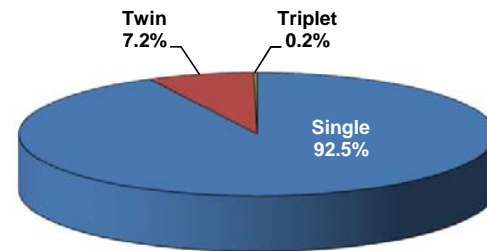
**Cesarean Live Births, as Percent of Total Live Births by Birth Type  
Los Angeles County, 2015**



Los Angeles County, 2015				
Birth Type	Cesarean Births		95% Confidence Interval	
	Number	Percent	Lower	Upper
Single	40,814	33.9	33.6	34.1
Twin	3,191	81.9	80.7	83.1
Triplet	104	100.0	100.0	100.0
Quadruplet	<5	N/C	N/C	N/C
Quintuplet	<5	N/C	N/C	N/C
<b>Total</b>	<b>44,109</b>	<b>35.4</b>	<b>35.2</b>	<b>35.7</b>

Total Live Births
120,506
3,897
104
<5
<5
<b>124,507</b>

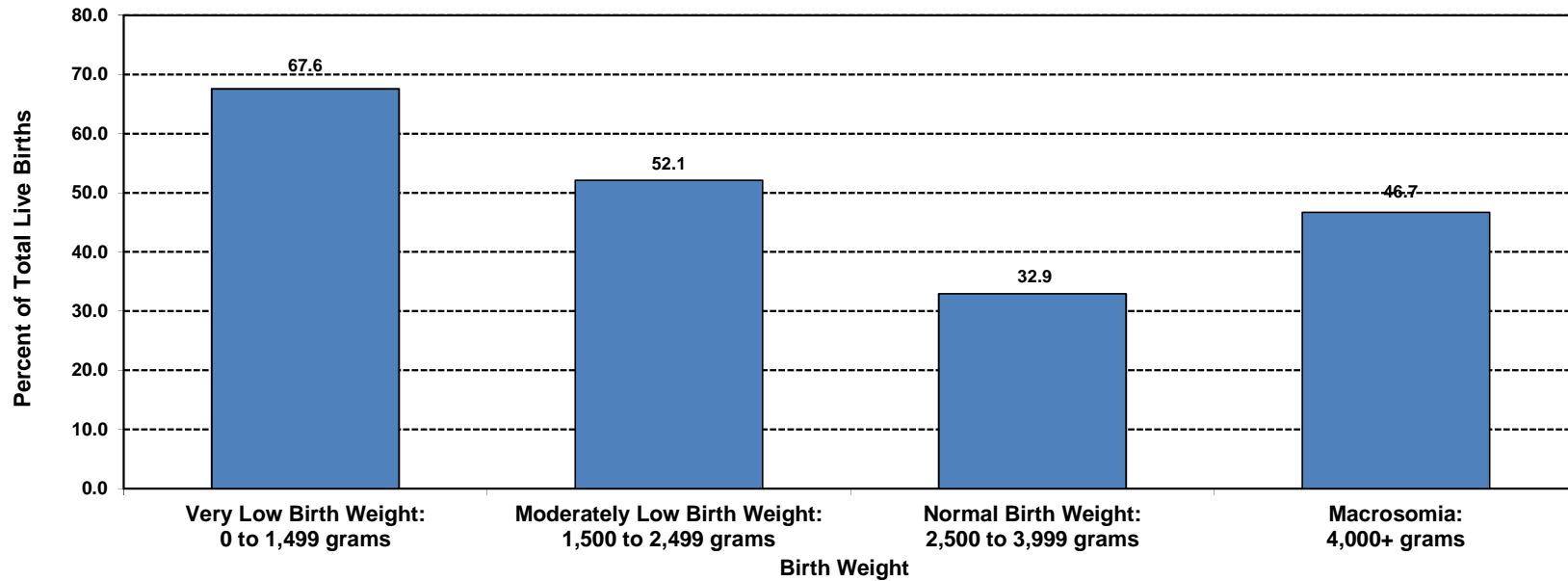
**Percent Distribution of Cesarean Live Births  
by Birth Type  
Los Angeles County, 2015**



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, 2015.

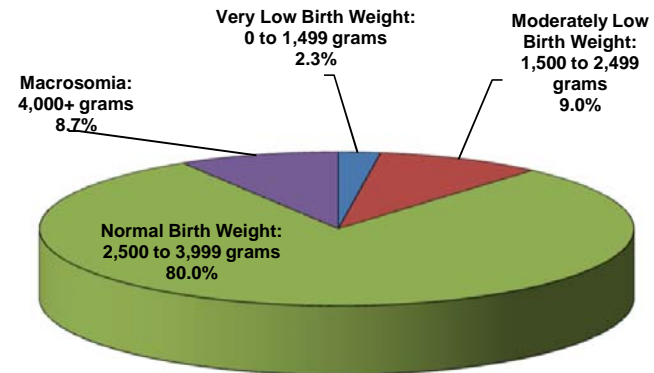
**Cesarean Live Births, as Percent of Total Live Births by Birth Weight  
Los Angeles County, 2015**



Los Angeles County, 2015				
Birth Weight	Cesarean Births		95% Confidence Interval	
	Number	Percent	Lower	Upper
Very Low Birth Weight: 0 to 1,499 grams	1,006	67.6	65.2	69.9
Moderately Low Birth Weight: 1,500 to 2,499 grams	3,967	52.1	51.0	53.2
Normal Birth Weight: 2,500 to 3,999 grams	35,291	32.9	32.6	33.2
Macrosomia: 4,000+ grams	3,845	46.7	45.6	47.8
Unknown	<5	N/C	N/C	N/C
<b>Total</b>	<b>44,109</b>	<b>35.4</b>	<b>35.2</b>	<b>35.7</b>

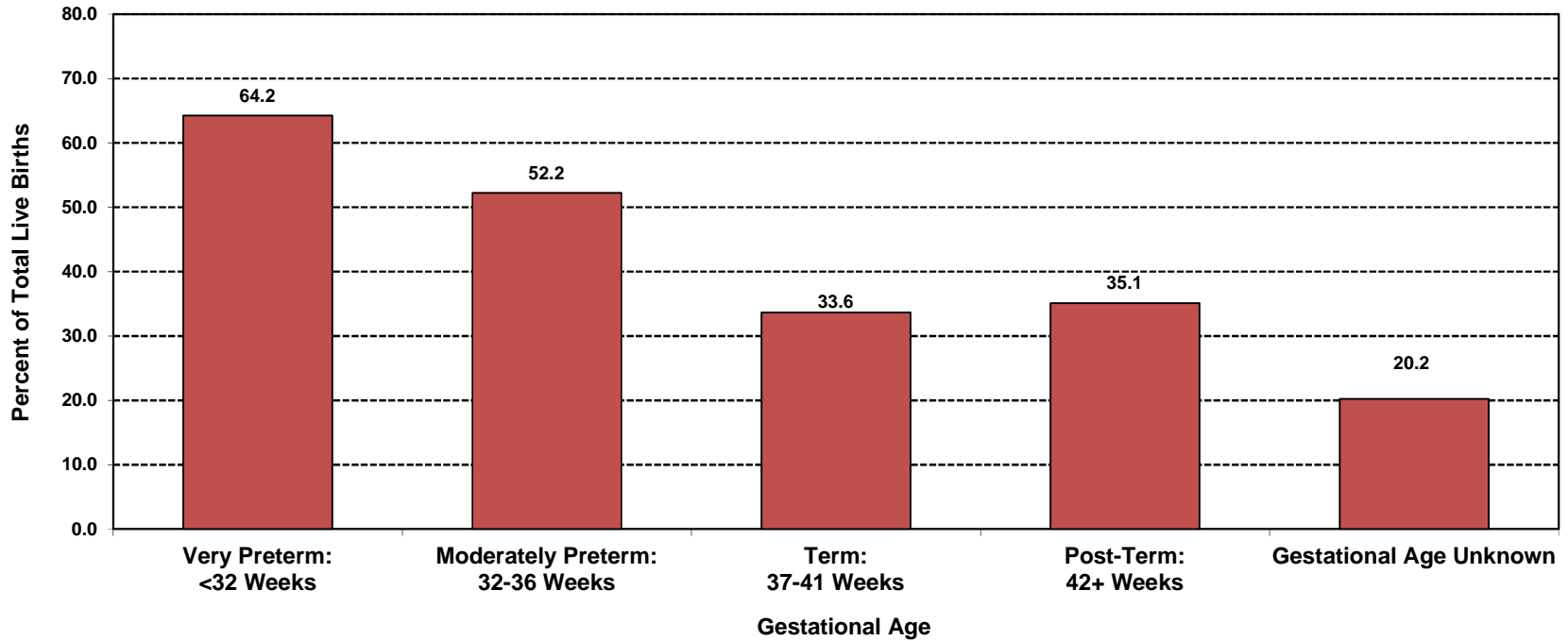
Total Live Births
1,489
7,611
107,171
8,233
<5
<b>124,507</b>

**Percent Distribution of Cesarean Live Births by Birth Weight  
Los Angeles County, 2015**



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, 2015.

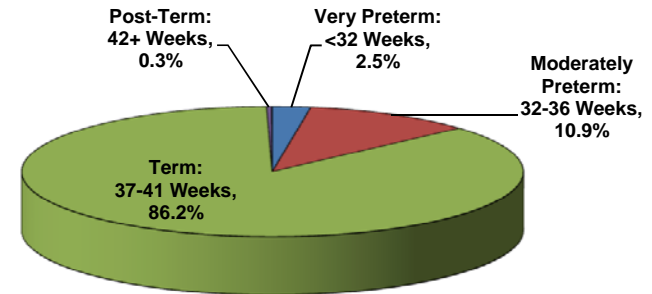
**Cesarean Live Births, as Percent of Total Live Births by Gestational Age  
Los Angeles County, 2015**



Los Angeles County, 2015				
Gestational Age	Cesarean Births		95% Confidence Interval	
	Number	Percent	Lower	Upper
Very Preterm: <32 Weeks	1,089	64.2	62.0	66.5
Moderately Preterm: 32-36 Weeks	4,828	52.2	51.2	53.2
Term: 37-41 Weeks	38,032	33.6	33.4	33.9
Post-Term: 42+ Weeks	140	35.1	30.4	39.8
Gestational Age Unknown	20	20.2	12.3	28.1
<b>Total</b>	<b>44,109</b>	<b>35.4</b>	<b>35.2</b>	<b>35.7</b>

Total Live Births
1,695
9,246
113,068
399
99
<b>124,507</b>

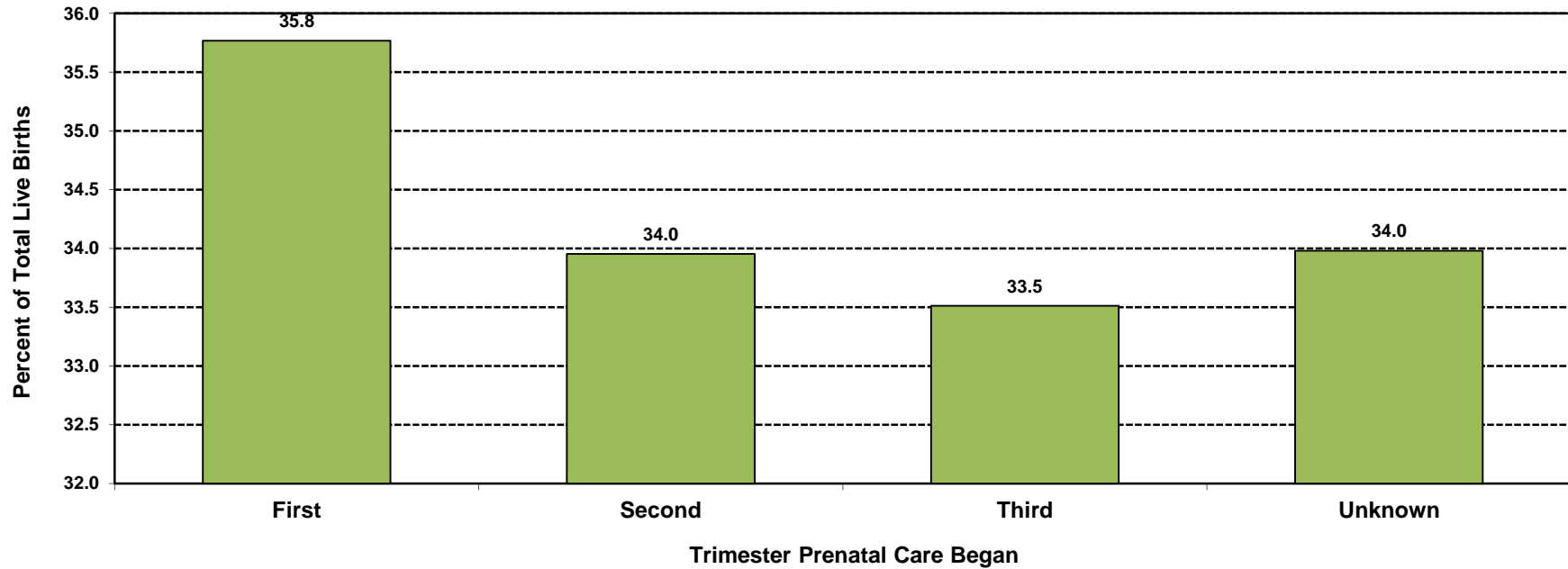
**Percent Distribution of Cesarean Live Births  
by Gestational Age  
Los Angeles County, 2015**



Note: Unknown includes those weeks of gestation not stated, less than 17 weeks of gestation, and 53 weeks or more gestation. These categories reflect inaccuracies rather than actual gestation periods. Gestation is calculated from obstetrical estimate of gestation.

Source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2015.

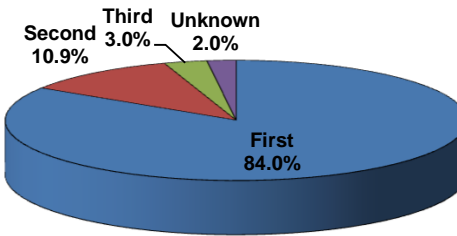
**Cesarean Live Births, as Percent of Total Live Births by  
Mother's Trimester Prenatal Care (PNC) Began  
Los Angeles County, 2015**



Los Angeles County, 2015				
Mother's Trimester Prenatal Care Began	Cesarean Births		95% Confidence Interval	
	Number	Percent	Lower	Upper
First	36,896	35.8	35.5	36.1
Second	4,803	34.0	33.2	34.7
Third	1,322	33.5	32.0	35.0
Unknown	894	34.0	32.2	35.8
<b>Total</b>	<b>43,915</b>	<b>35.5</b>	<b>35.2</b>	<b>35.7</b>

Total Live Births
103,155
14,146
3,945
2,631
<b>123,877</b>

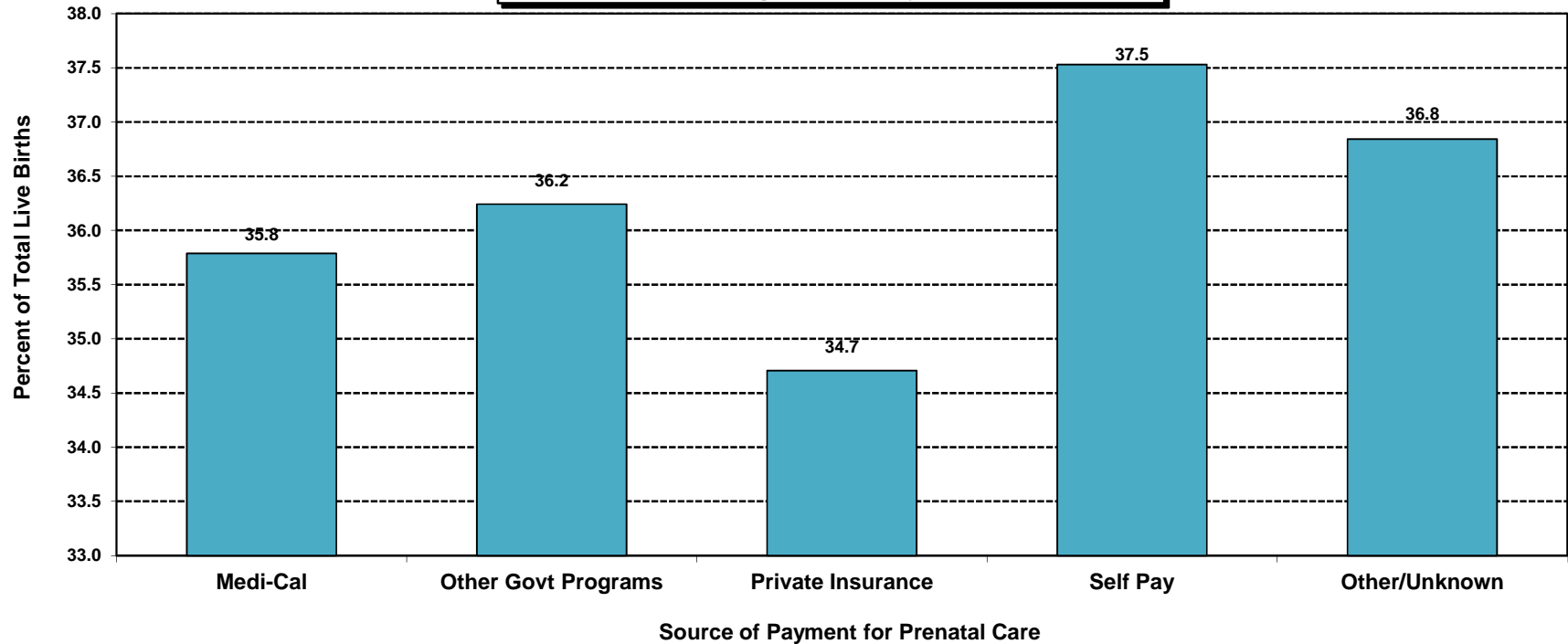
**Percent Distribution of Preterm Live Births by Mother's  
Trimester Prenatal Care Began  
Los Angeles County, 2015**



"Trimester Prenatal Care Began" excludes women who did not receive prenatal care (N=630) and 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, 2015.

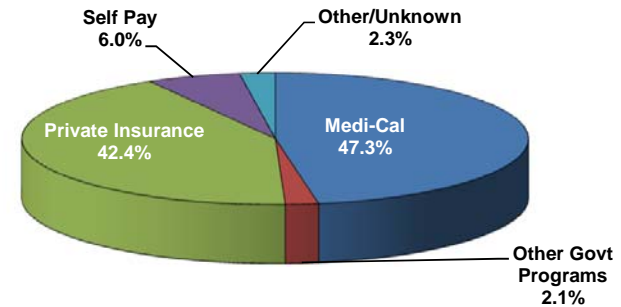
**Cesarean Live Births, as Percent of Total Live Births  
by Source of Payment for Prenatal Care (PNC)  
Los Angeles County, 2015**



Los Angeles County, 2015				
Prenatal Care Payment Source	Cesarean Births		95% Confidence Interval	
	Number	Percent	Lower	Upper
Medi-Cal	20,760	35.8	35.4	36.2
Other Govt Programs	922	36.2	34.4	38.1
Private Insurance	18,606	34.7	34.3	35.1
Self Pay	2,626	37.5	36.4	38.7
Other/Unknown	1,001	36.8	35.0	38.7
<b>Total</b>	<b>43,915</b>	<b>35.5</b>	<b>35.2</b>	<b>35.7</b>

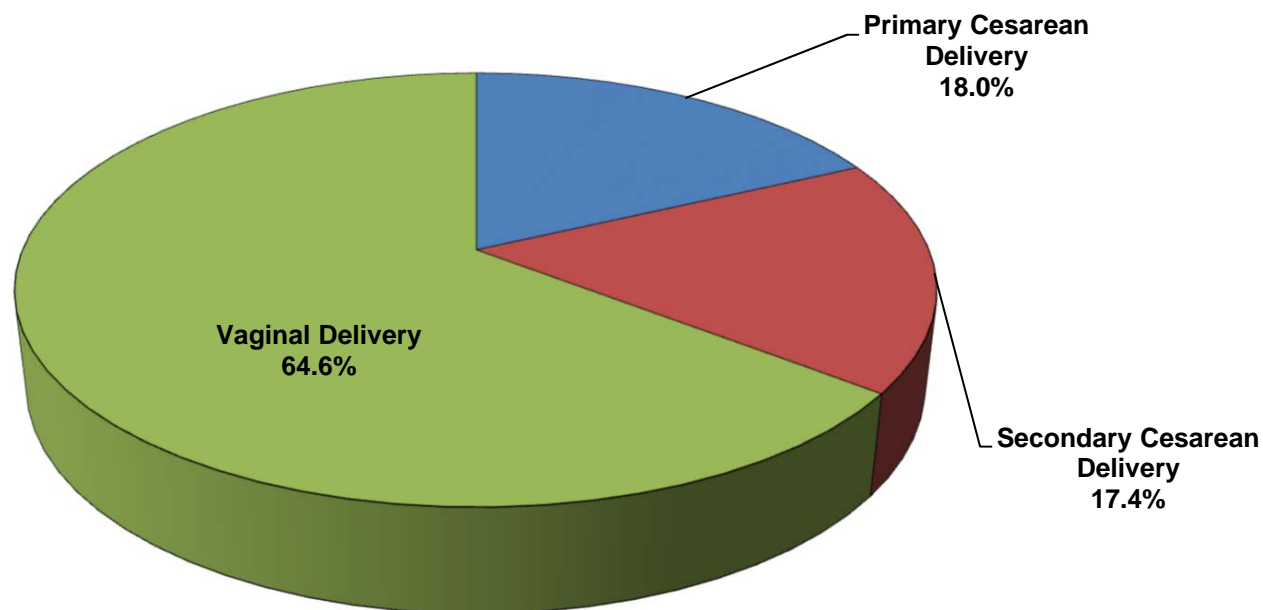
Total Live Births
58,009
2,544
53,609
6,997
2,717
<b>123,876</b>

**Cesarean Live Births by source of Payment for Prenatal Care  
Los Angeles County, 2015**



Note: "Source of Payment for PNC" excludes women who did not receive prenatal care (N=630) and live births that are missing source of payment (missing=1).  
Source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2015.

**Total Live Births by Method of Delivery  
Los Angeles County, 2015**



Los Angeles County, 2015				
Method of Delivery	Number of Live Births		95% Confidence Interval	
	Number	Percent	Lower	Upper
Primary Cesarean Delivery	22,470	18.0%	15.7%	20.4%
Secondary Cesarean Delivery	21,639	17.4%	15.1%	19.7%
Vaginal Delivery	80,398	64.6%	60.1%	69.0%
<b>Total</b>	<b>124,507</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2014.