

# **Infant Mortality**

**TITLE V INDICATOR TEMPLATE**

**INDICATOR:** Infant Mortality Rate

**DEFINITION:** The number of infant deaths occurring at less than 365 days of age per 1,000 live births

**NUMERATOR:** The number of infant deaths occurring at less than 365 days of age, 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 2010 OBJECTIVE:**

Reduce the infant mortality rate to no more than 4.5 per 1,000 live births.  
(Baseline: 7.2 per 1,000 live births in 1998) (Objective 16-1c)

**RISK FACTORS:**

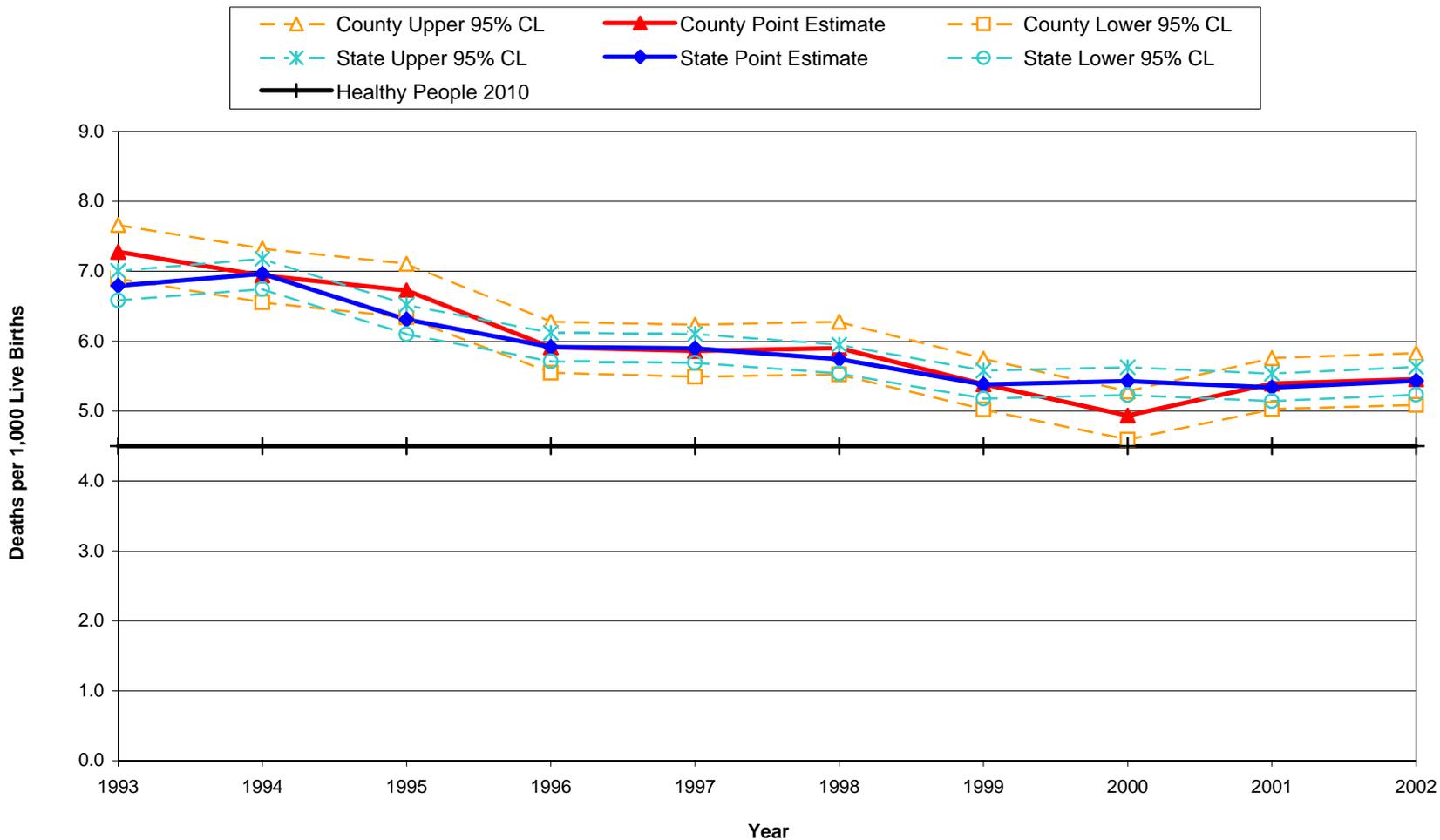
Race/ethnicity; prematurity/disorders related to short gestation; low birth weight; congenital anomalies; young maternal age; low maternal education level; maternal tobacco use; maternal alcohol or substance use/abuse; poor maternal nutrition; inadequate prenatal care; unintended pregnancy; maternal psychosocial problems; maternal medical complications/chronic illness during pregnancy (including diabetes); pregnancy complications; short interpregnancy interval; injury (including domestic violence); infection; respiratory distress syndrome; family history of SIDS

Year	California				LA County			
	Infant Mortality		95% Confidence Interval		Infant Mortality		95% Confidence Interval	
	Deaths	Rate	Lower	Upper	Deaths	Rate	Lower	Upper
1993	3,970	6.8	6.6	7.0	1,381	7.3	6.9	7.7
1994	3,948	7.0	6.7	7.2	1,252	6.9	6.6	7.3
1995	3,478	6.3	6.1	6.5	1,176	6.7	6.3	7.1
1996	3,186	5.9	5.7	6.1	999	5.9	5.5	6.3
1997	3,091	5.9	5.7	6.1	950	5.9	5.5	6.2
1998	2,994	5.7	5.5	5.9	936	5.9	5.5	6.3
1999	2,787	5.4	5.2	5.6	841	5.4	5.0	5.7
2000	2,884	5.4	5.2	5.6	777	4.9	4.6	5.3
2001	2,815	5.3	5.1	5.5	828	5.4	5.0	5.8
2002	2,875	5.4	5.2	5.6	825	5.5	5.1	5.8

Year	Denominator: Live Births	
	California	LA County
1993	584,483	189,706
1994	567,034	180,394
1995	551,226	174,862
1996	538,628	168,973
1997	524,174	162,036
1998	521,265	158,604
1999	518,073	156,153
2000	531,285	157,391
2001	527,371	153,523
2002	529,245	151,167

Source: California Department of Health Services, Center for Health Statistics, Vital Statistics, 1993-2002.

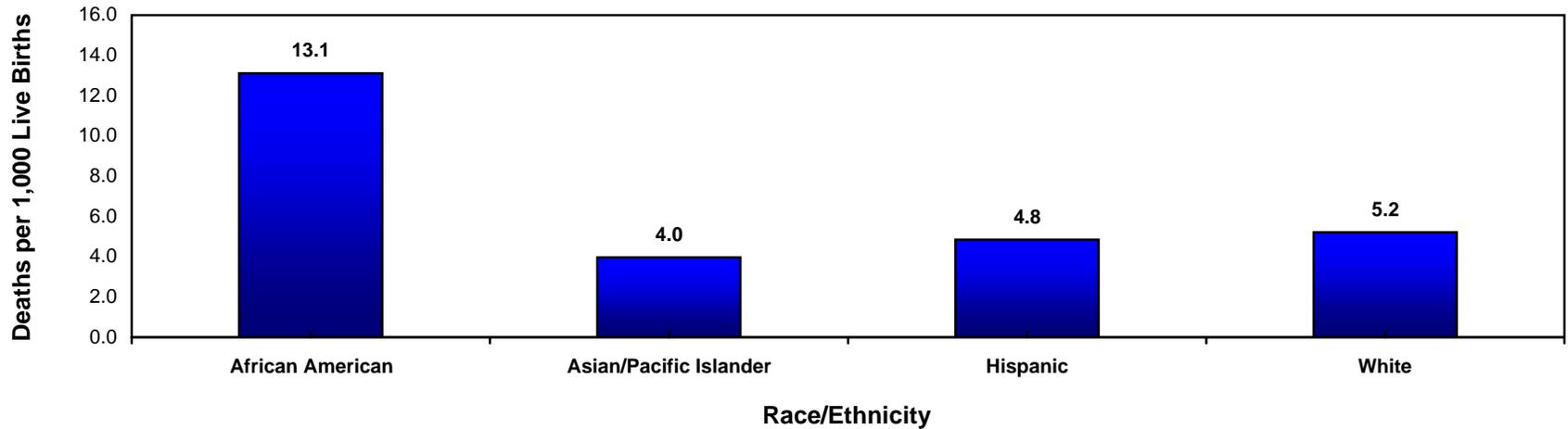
### Infant Deaths per 1,000 Live Births California vs. Los Angeles County, 1993-2002



Year 2010 Objective: Reduce the infant mortality rate to no more than 4.5 per 1,000 live births.

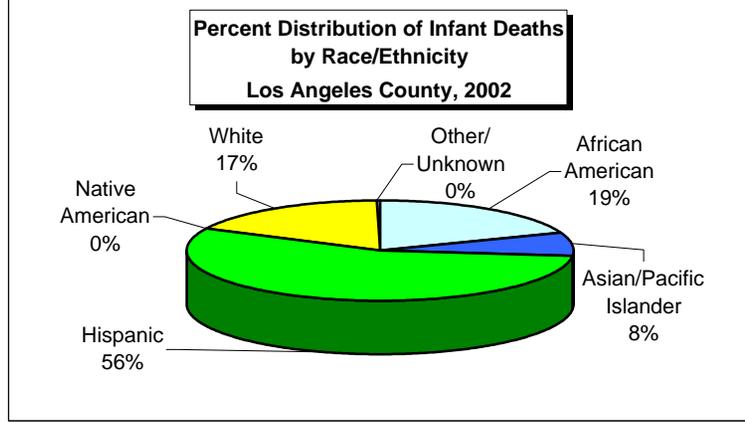
Source: California Department of Health Services, Center for Health Statistics, Vital Statistics, 1993-2002.

**Infant Mortality Rate by Race/Ethnicity  
Los Angeles County, 2002**



Los Angeles County, 2002				
Race/Ethnicity	Infant Mortality		95% Confidence Interval	
	Deaths	Rate	Lower	Upper
African American	157	13.1	11.1	15.2
Asian/Pacific Islander	63	4.0	3.0	4.9
Hispanic	459	4.8	4.4	5.3
Native American	0	N/C	N/C	N/C
White	144	5.2	4.4	6.1
Other/Unknown	2	N/C	N/C	N/C
<b>Total</b>	<b>825</b>	<b>5.5</b>	<b>5.1</b>	<b>5.8</b>

Total Live Births
11,973
15,924
94,742
253
27,674
601
<b>151,167</b>



Year 2010 Objective: Reduce the infant mortality rate to no more than 4.5 per 1,000 live births.

Note: Infant mortality rate is defined as infant deaths occurring less than 365 days per 1,000 live births.

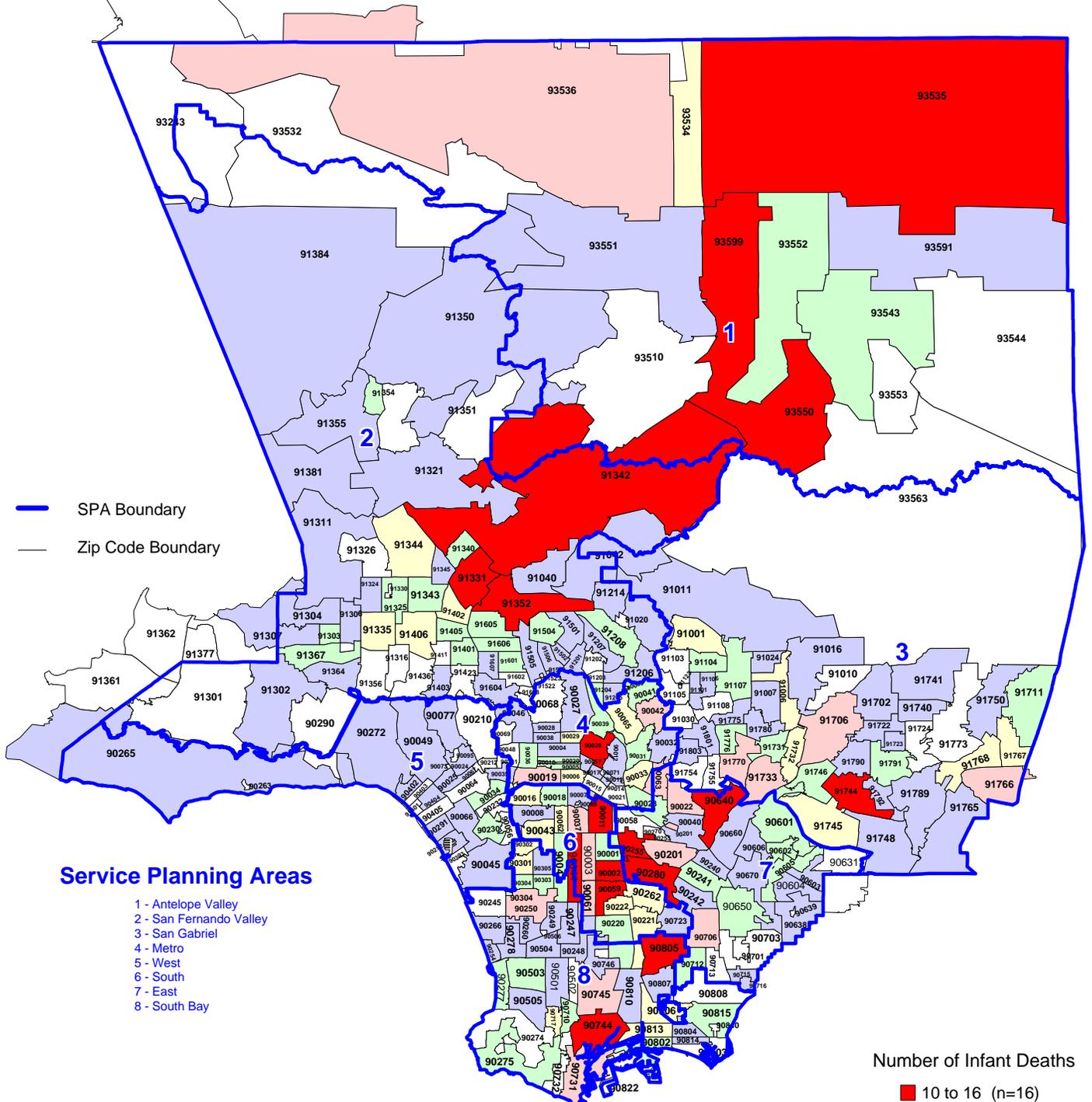
African American, Asian/Pacific Islander, Native American, White and other races exclude Hispanic ethnicity. Hispanic includes any race category.

Rates are not calculated (N/C) if fewer than five deaths.

Source: California Department of Health Services, Center for Health Statistics, Vital Statistics, 2002.

# Number of Infant Deaths by Zip Code\* and Service Planning Area (SPA)

Los Angeles County, 2002



\* Los Angeles County zip code boundaries as of April 2002

Total number of live births in Los Angeles County, 2002 = 151,167  
 Total number of infant deaths in Los Angeles County, 2002 = 825

Note: Infant death is defined as death occurring at less than 365 days of age

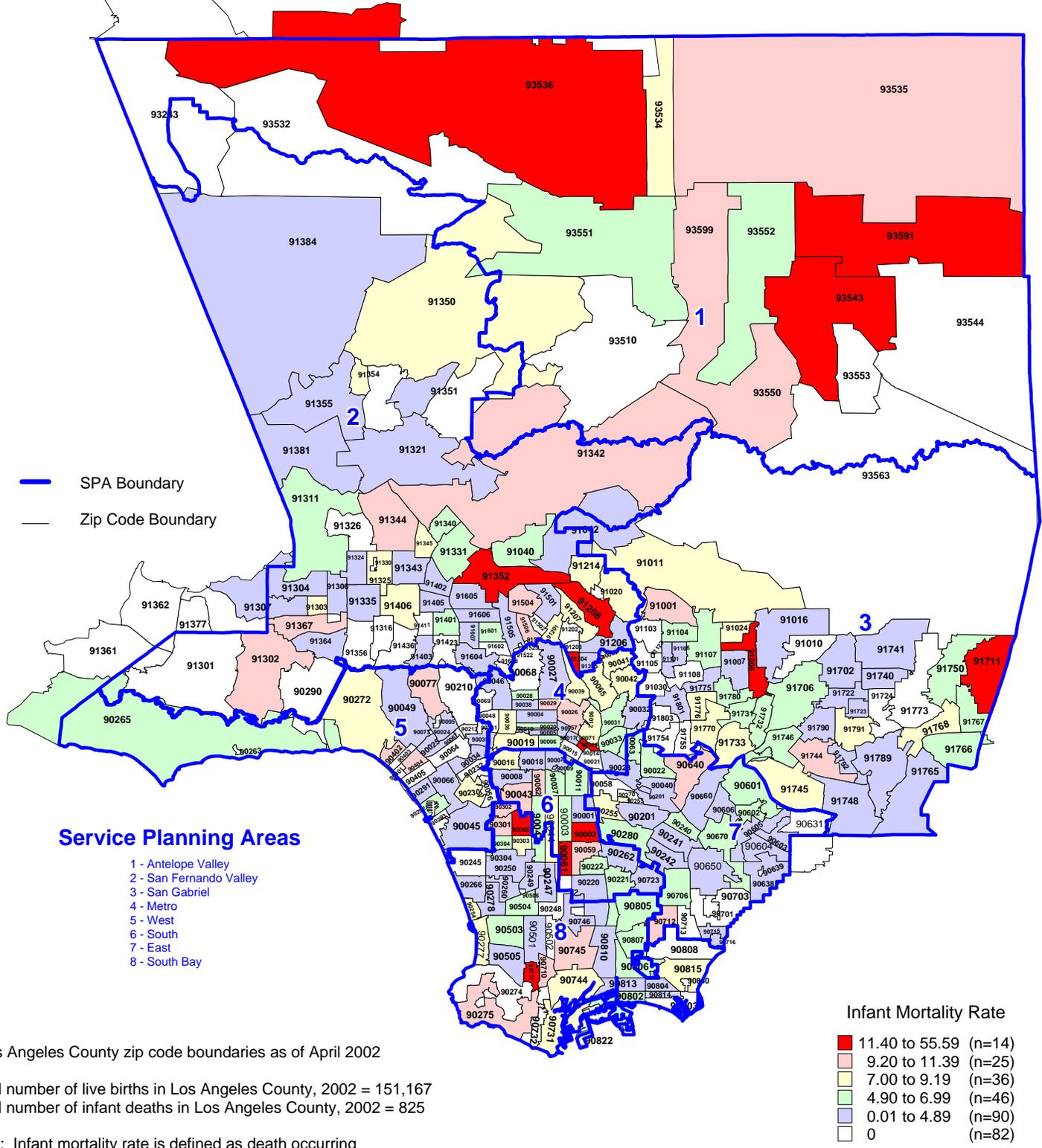
n = total number of zip codes in range

Source: California Department of Health Services,  
 Center for Health Statistics, Vital Statistics, 2002



# Infant Mortality Rate by Zip Code\* and Service Planning Area (SPA)

Los Angeles County, 2002



\* Los Angeles County zip code boundaries as of April 2002

Total number of live births in Los Angeles County, 2002 = 151,167  
Total number of infant deaths in Los Angeles County, 2002 = 825

Note: Infant mortality rate is defined as death occurring at less than 365 days of age per 1,000 live births

Source: California Department of Health Services, Center for Health Statistics, Vital Statistics, 2002

n = total number of zip codes in range

**TITLE V INDICATOR TEMPLATE**

**INDICATOR:** Neonatal Mortality Rate

**DEFINITION:** The number of infant deaths occurring at less than 28 days of age per 1,000 live births

**NUMERATOR:** The number of infant deaths occurring at less than 28 days of age, 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 2010 OBJECTIVE:**

Reduce the neonatal mortality rate to no more than 2.9 per 1,000 live births.  
(Baseline: 4.8 per 1,000 live births in 1998) (Objective 16-1d)

**RISK FACTORS:**

Congenital anomalies; respiratory distress syndrome; short gestation; low birth weight; maternal complications; race/ethnicity (African American, Puerto Rican)

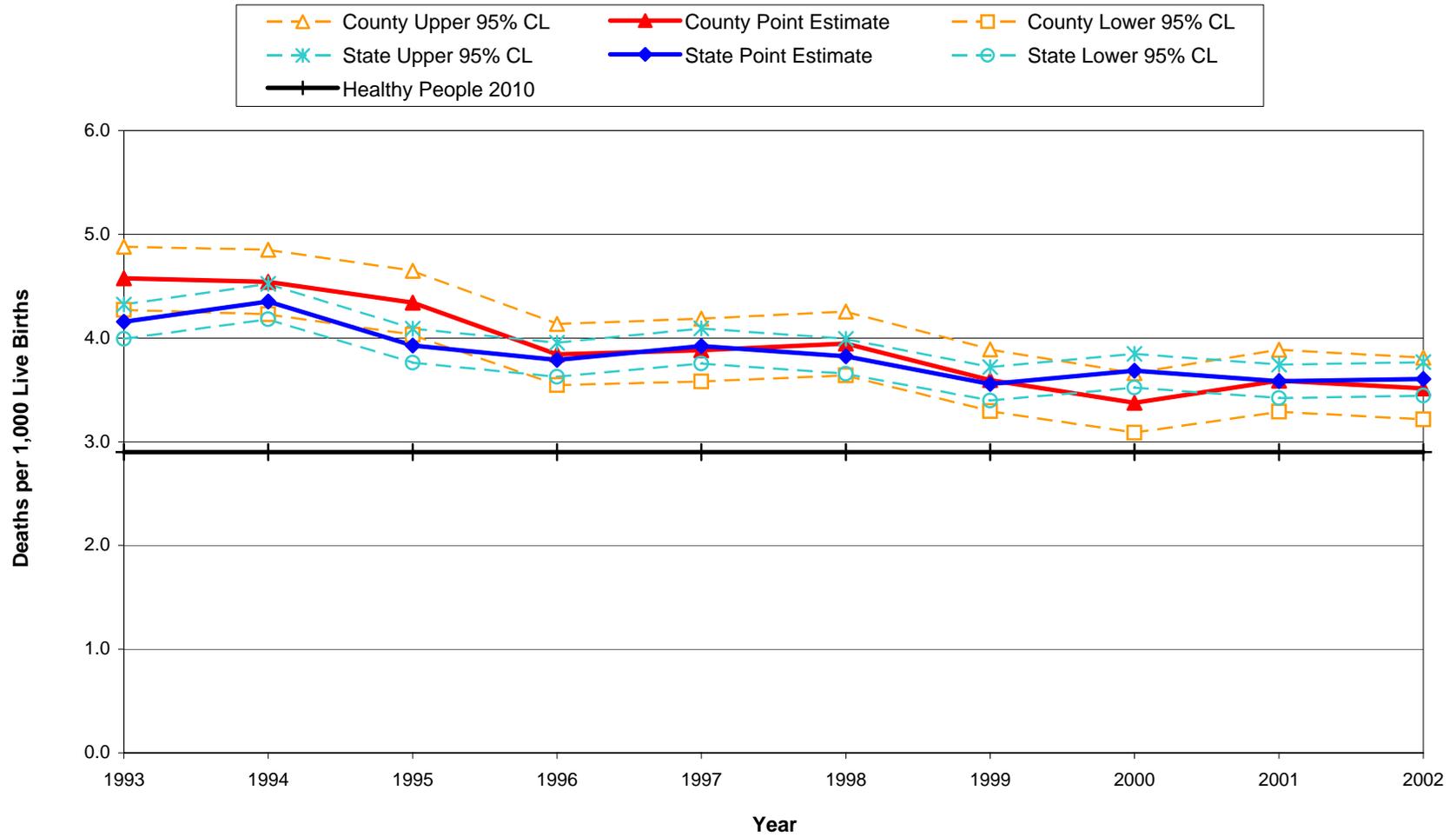
See also risk factors for infant mortality.

Year	California				LA County			
	Neonatal Mortality		95% Confidence Interval		Neonatal Mortality		95% Confidence Interval	
	Deaths	Rate	Lower	Upper	Deaths	Rate	Lower	Upper
1993	2,429	4.2	4.0	4.3	868	4.6	4.3	4.9
1994	2,467	4.4	4.2	4.5	819	4.5	4.2	4.9
1995	2,164	3.9	3.8	4.1	759	4.3	4.0	4.6
1996	2,041	3.8	3.6	4.0	649	3.8	3.5	4.1
1997	2,056	3.9	3.8	4.1	629	3.9	3.6	4.2
1998	1,993	3.8	3.7	4.0	626	3.9	3.6	4.3
1999	1,843	3.6	3.4	3.7	561	3.6	3.3	3.9
2000	1,957	3.7	3.5	3.8	531	3.4	3.1	3.7
2001	1,889	3.6	3.4	3.7	551	3.6	3.3	3.9
2002	1,908	3.6	3.4	3.8	531	3.5	3.2	3.8

Denominator: Live Births		
Year	California	LA County
1993	584,483	189,706
1994	567,034	180,394
1995	551,226	174,862
1996	538,628	168,973
1997	524,174	162,036
1998	521,265	158,604
1999	518,073	156,153
2000	531,285	157,391
2001	527,371	153,523
2002	529,245	151,167

Source: California Department of Health Services, Center for Health Statistics, Vital Statistics, 1993-2002.

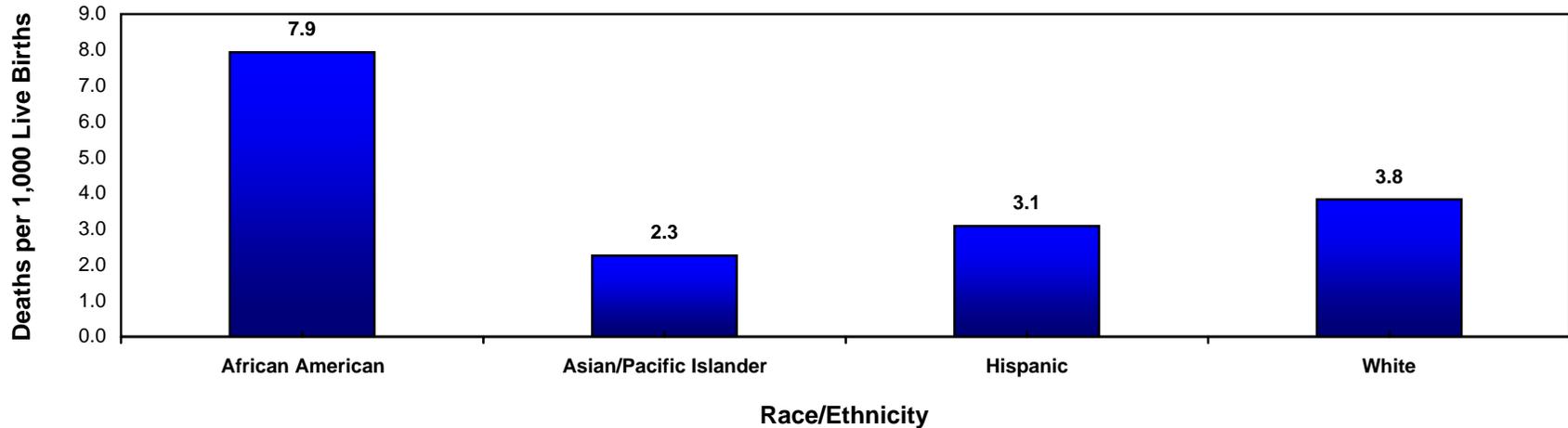
### Neonatal Deaths per 1,000 Live Births California vs. Los Angeles County, 1993-2002



Year 2010 Objective: Reduce the neonatal mortality rate to no more than 2.9 per 1,000 live births.

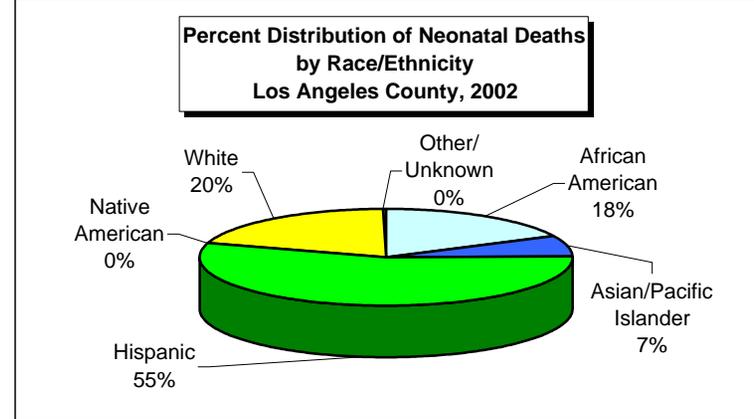
Source: California Department of Health Services, Center for Health Statistics, Vital Statistics, 1993-2002.

### Neonatal Mortality Rate by Race/Ethnicity Los Angeles County, 2002



Los Angeles County, 2002				
Race/Ethnicity	Neonatal Mortality		95% Confidence Interval	
	Deaths	Rate	Lower	Upper
African American	95	7.9	6.3	9.5
Asian/Pacific Islander	36	2.3	1.5	3.0
Hispanic	292	3.1	2.7	3.4
Native American	0	N/C	N/C	N/C
White	106	3.8	3.1	4.6
Other/Unknown	2	N/C	N/C	N/C
<b>Total</b>	<b>531</b>	<b>3.5</b>	<b>3.2</b>	<b>3.8</b>

Total Live Births
11,973
15,924
94,742
253
27,674
601
<b>151,167</b>



Year 2010 Objective: Reduce the neonatal mortality rate to no more than 2.9 per 1,000 live births.

Note: Neonatal mortality rate is defined as infant deaths occurring less than 28 days per 1,000 live births.

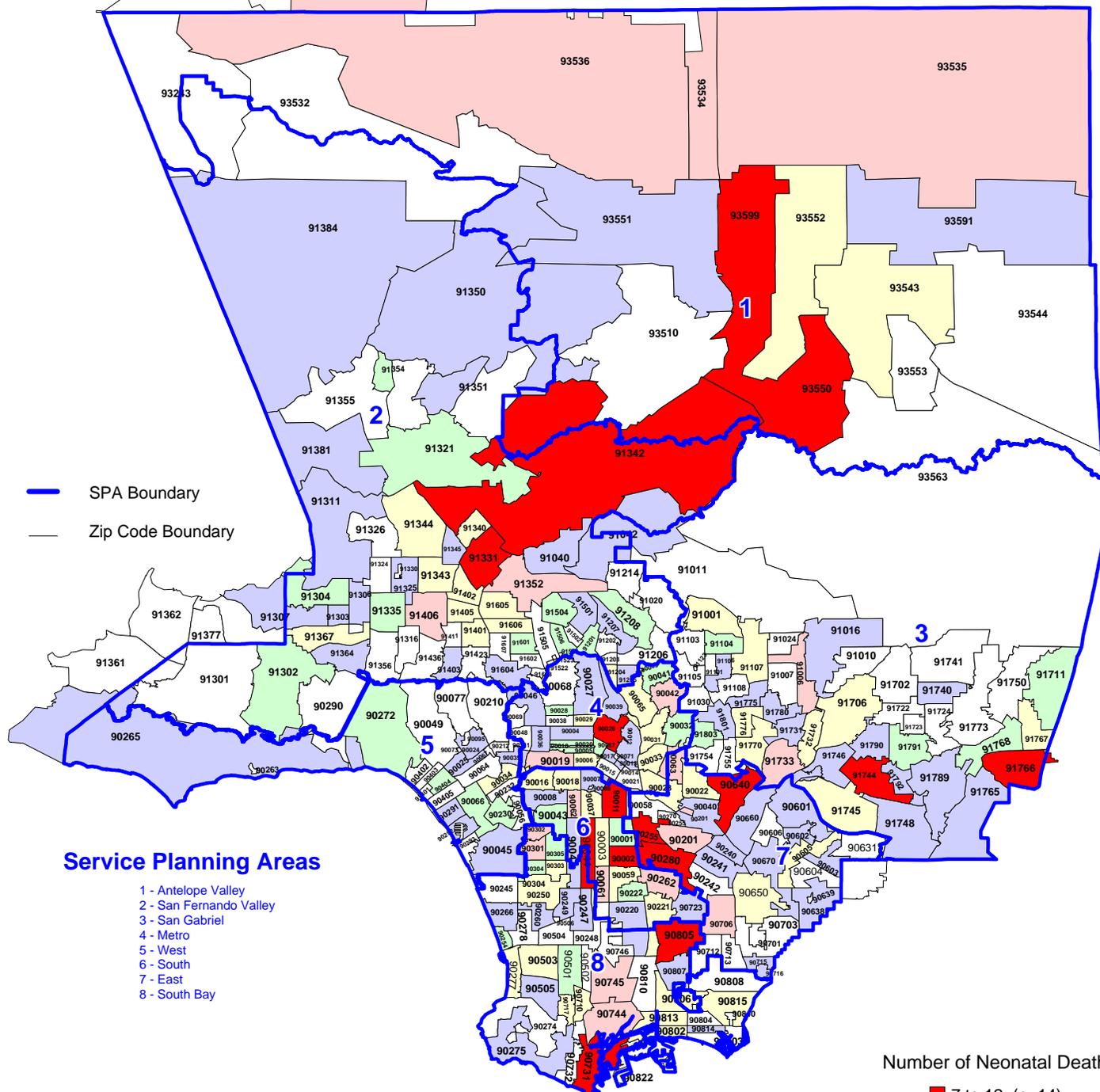
African American, Asian/Pacific Islander, Native American, White and other races exclude Hispanic ethnicity. Hispanic includes any race category.

Rates are not calculated (N/C) if fewer than five deaths.

Source: California Department of Health Services, Center for Health Statistics, Vital Statistics, 2002.

# Number of Neonatal Deaths by Zip Code\* and Service Planning Area (SPA)

Los Angeles County, 2002



\* Los Angeles County zip code boundaries as of April 2002

Total number of live births in Los Angeles County, 2002 = 151,167  
 Total number of neonatal deaths in Los Angeles County, 2002 = 531

Note: Neonatal death is defined as death occurring at less than 28 days of age

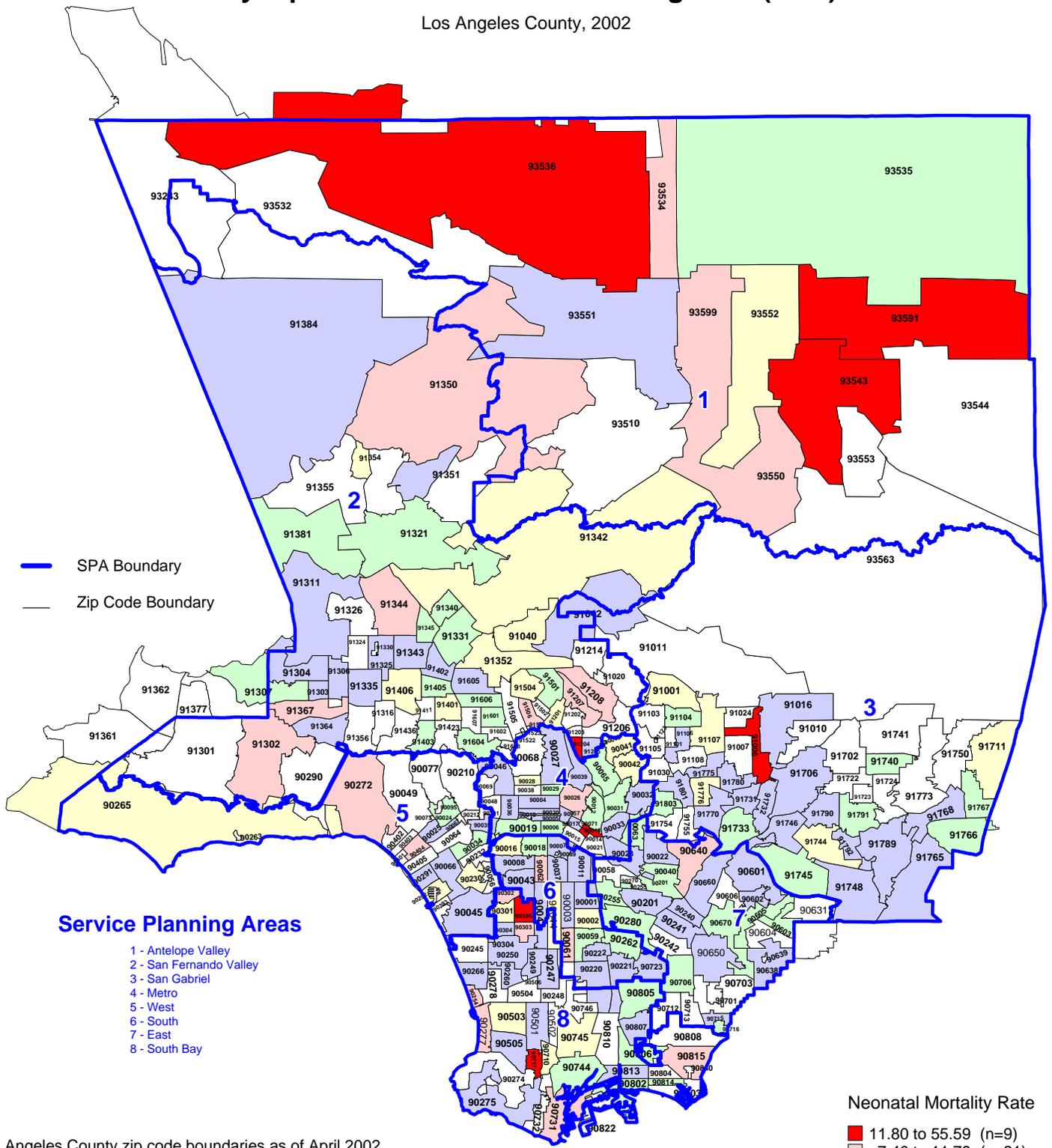
Source: California Department of Health Services,  
 Center for Health Statistics, Vital Statistics, 2002



n = total number of zip codes in range

# Neonatal Mortality Rate by Zip Code\* and Service Planning Area (SPA)

Los Angeles County, 2002



\* Los Angeles County zip code boundaries as of April 2002.

Total number of live births in Los Angeles County, 2002 = 151,167  
Total number of neonatal deaths in Los Angeles County, 2002 = 531

Note: Neonatal mortality rate is defined as death occurring at less than 28 days of age per 1,000 live births

n = total number of zip codes in range

Source: California Department of Health Services, Center for Health Statistics, Vital Statistics, 2002

**TITLE V INDICATOR TEMPLATE**

**INDICATOR:** Post-Neonatal Mortality Rate

**DEFINITION:** The number of infant deaths occurring from 28 through 364 days of age per 1,000 live births

**NUMERATOR:** The number of infant deaths occurring from 28 through 364 days of age, 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 2010 OBJECTIVE:**

Reduce the post-neonatal mortality rate to no more than 1.2 per 1,000 live births.  
(Baseline: 2.4 per 1,000 live births in 1998) (Objective 16-1e)

**RISK FACTORS:** Congenital anomalies; injuries; infection in late pregnancy; family history of SIDS; maternal smoking or drug use; young maternal age (teen births); race/ethnicity (African American, Puerto Rican)

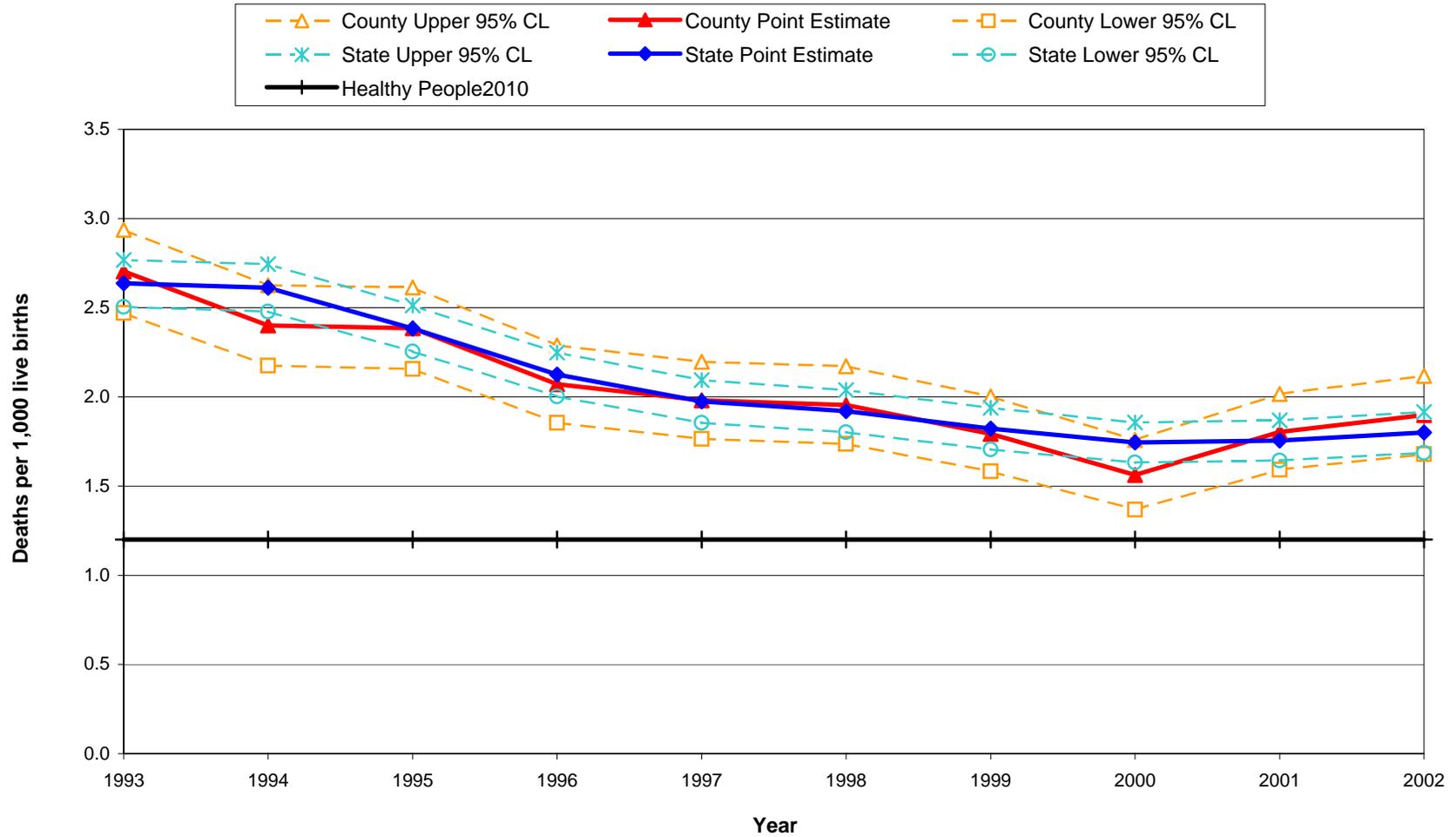
See also risk factors for infant mortality.

Year	California				LA County			
	Post-Neonatal Mortality		95% Confidence Interval		Post-Neonatal Mortality		95% Confidence Interval	
	Deaths	Rate	Lower	Upper	Deaths	Rate	Lower	Upper
1993	1,541	2.6	2.5	2.8	513	2.7	2.5	2.9
1994	1,481	2.6	2.5	2.7	433	2.4	2.2	2.6
1995	1,314	2.4	2.3	2.5	417	2.4	2.2	2.6
1996	1,145	2.1	2.0	2.2	350	2.1	1.9	2.3
1997	1,035	2.0	1.9	2.1	321	2.0	1.8	2.2
1998	1,001	1.9	1.8	2.0	310	2.0	1.7	2.2
1999	944	1.8	1.7	1.9	280	1.8	1.6	2.0
2000	927	1.7	1.6	1.9	246	1.6	1.4	1.8
2001	926	1.8	1.6	1.9	277	1.8	1.6	2.0
2002	953	1.8	1.7	1.9	287	1.9	1.7	2.1

Year	Denominator: Live Births	
	California	LA County
1993	584,483	189,706
1994	567,034	180,394
1995	551,226	174,862
1996	538,628	168,973
1997	524,174	162,036
1998	521,265	158,604
1999	518,073	156,153
2000	531,285	157,391
2001	527,371	153,523
2002	529,245	151,167

Source: California Department of Health Services, Center for Health Statistics, Vital Statistics, 1993-2002.

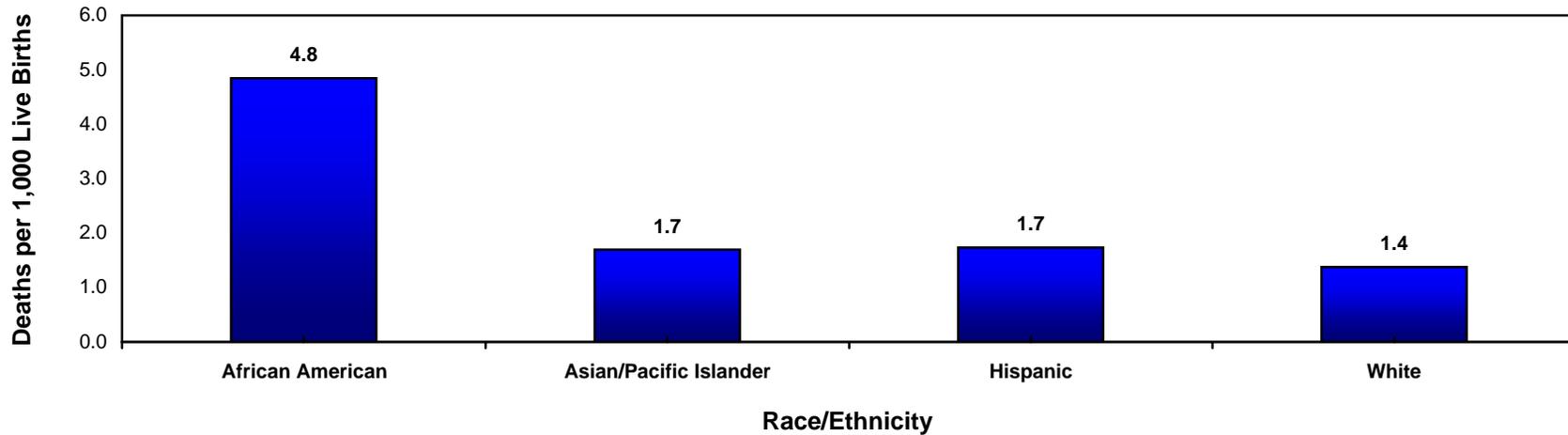
### Post-Neonatal Deaths per 1,000 Live Births California vs. Los Angeles County, 1993-2002



Year 2010 Objective: Reduce the neonatal mortality rate to no more than 1.2 per 1,000 live births.

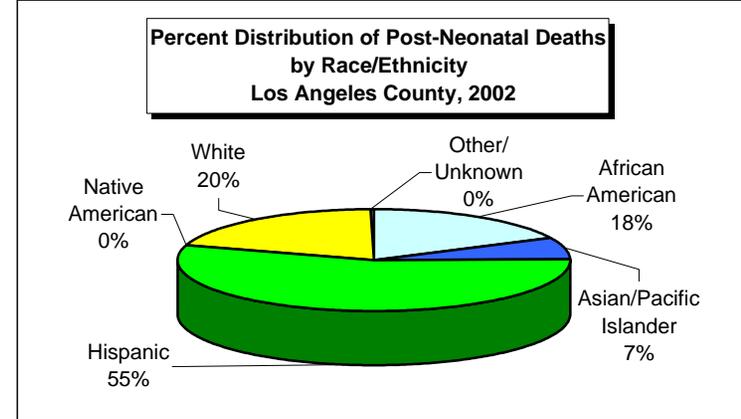
Source: California Department of Health Services, Center for Health Statistics, Vital Statistics, 1993-2002.

**Post-Neonatal Mortality Rate by Race/Ethnicity  
Los Angeles County, 2002**



Los Angeles County, 2002				
Race/Ethnicity	Post-Neonatal Mortality		95% Confidence Interval	
	Deaths	Rate	Lower	Upper
African American	58	4.8	3.6	6.1
Asian/Pacific Islander	27	1.7	1.1	2.3
Hispanic	164	1.7	1.5	2.0
Native American	0	N/C	N/C	N/C
White	38	1.4	0.9	1.8
Other/Unknown	0	N/C	N/C	N/C
<b>Total</b>	<b>287</b>	<b>1.9</b>	<b>1.7</b>	<b>2.1</b>

Total Live Births
11,973
15,924
94,742
253
27,674
601
<b>151,167</b>



Year 2010 Objective: Reduce the post-neonatal mortality rate to no more than 1.2 per 1,000 live births.

Note: Post-neonatal mortality rate is defined as infant deaths occurring from 28 through 364 days of age per 1,000 live births.

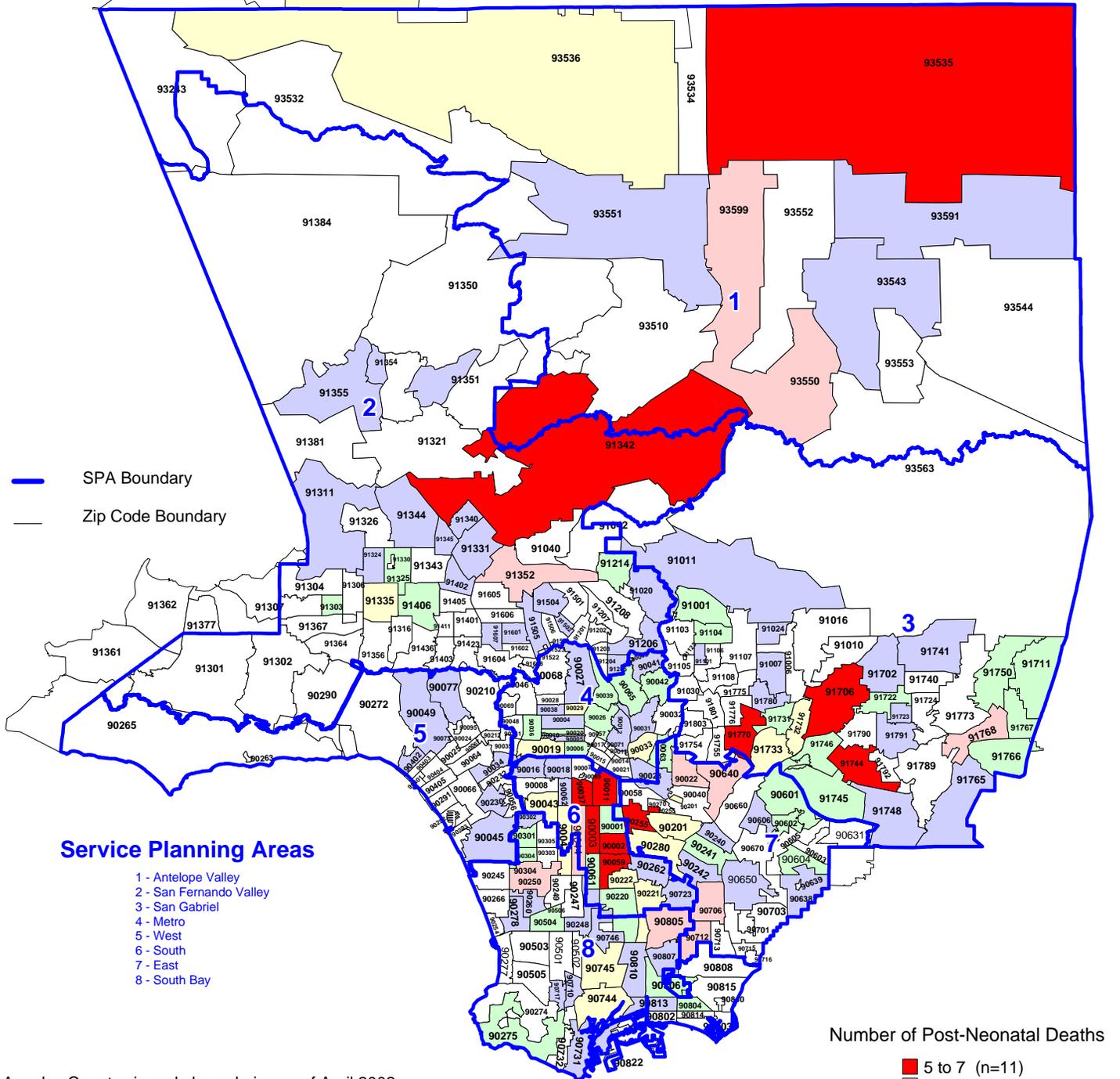
African American, Asian/Pacific Islander, Native American, White and other races exclude Hispanic ethnicity. Hispanic includes any race category.

Rates are not calculated (N/C) if fewer than five deaths.

Source: California Department of Health Services, Center for Health Statistics, Vital Statistics, 2002.

# Number of Post-Neonatal Deaths by Zip Code\* and Service Planning Area (SPA)

Los Angeles County, 2002



\* Los Angeles County zip code boundaries as of April 2002

Total number of live births in Los Angeles County, 2002 = 151,167  
 Total number of post-neonatal deaths in Los Angeles County, 2002 = 287

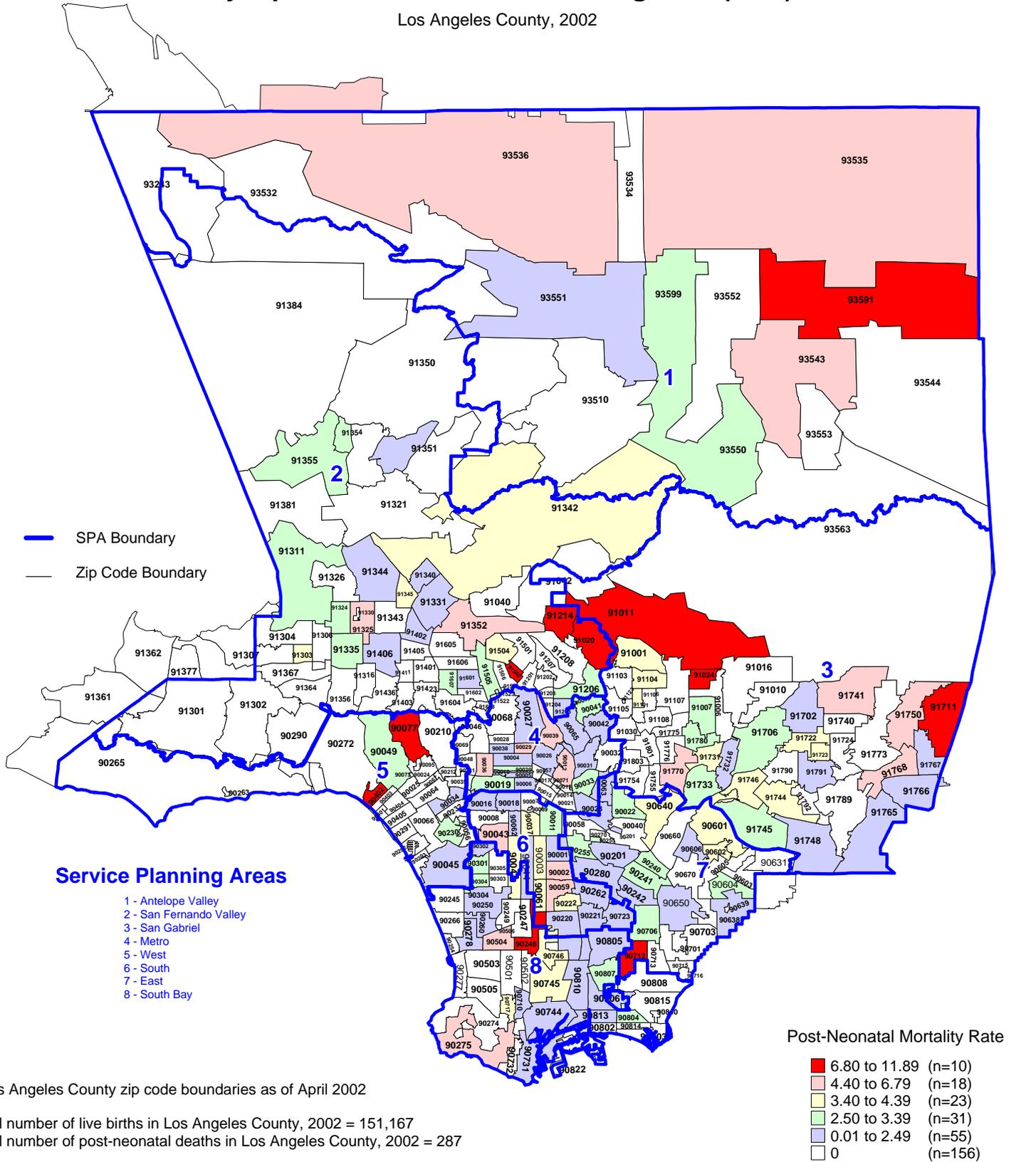
Note: Post-neonatal death is defined as death occurring between 28 and 365 days of age

n = total number of zip codes in range

Source: California Department of Health Services,  
 Center for Health Statistics, Vital Statistics, 2002

# Post-Neonatal Mortality Rate by Zip Code\* and Service Planning Area (SPA)

Los Angeles County, 2002



\* Los Angeles County zip code boundaries as of April 2002

Total number of live births in Los Angeles County, 2002 = 151,167  
 Total number of post-neonatal deaths in Los Angeles County, 2002 = 287

Note: Post-neonatal mortality rate is defined as death occurring at between 28 and 365 days of age per 1,000 live births

n = total number of zip codes in range

Source: California Department of Health Services,  
 Center for Health Statistics, Vital Statistics, 2002