

MATERNAL MORTALITY

TITLE V PERINATAL INDICATORS - 2018

INDICATOR: Maternal Mortality Rate

DEFINITION: Death from obstetric causes <=42 days postpartum, per 100,000 live births

NUMERATOR: The number of maternal deaths with the underlying causes of the death as identified by ICD-9 codes 630-676, or by ICD-10 codes A34, O00-O99, 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:

Reduce maternal deaths to no more than 11.4 per 100,000 live births.
(Baseline: 12.7 per 100,000 live births in 2007) (Objective MICH-5)

RISK FACTORS:

Race/ethnicity; maternal age over thirty; high parity; late entry into prenatal care; lack of comprehensive prenatal care; tobacco use during pregnancy; alcohol/substance abuse during pregnancy

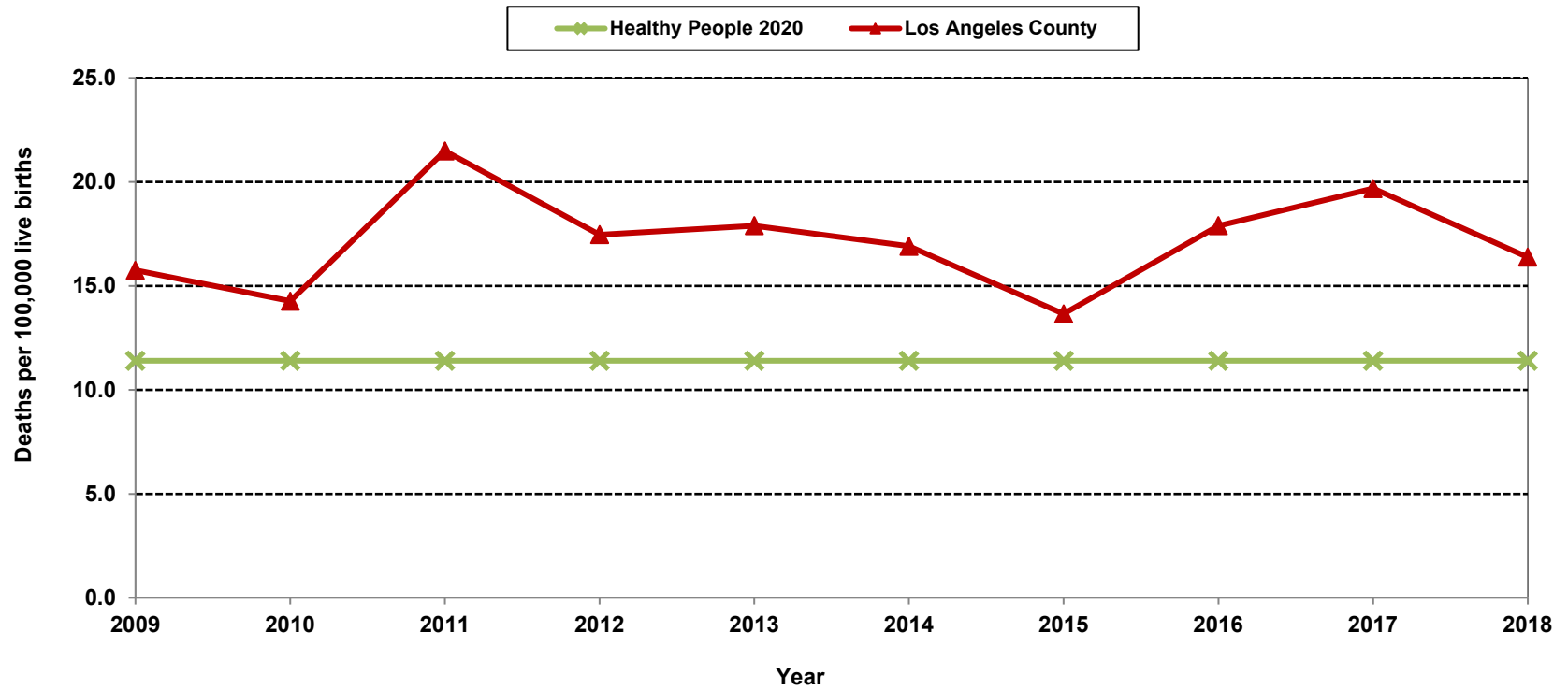
Year	Los Angeles County			
	Maternal Mortality		95% Confidence Interval	
	Deaths	Rate	Lower	Upper
2009	22	15.8	9.2	22.3
2010	19	14.3	7.9	20.7
2011	28	21.5	13.5	29.4
2012	23	17.5	10.3	24.6
2013	23	17.9	10.6	25.2
2014	22	16.9	9.8	24.0
2015	17	13.7	7.2	20.1
2016	22	17.9	10.4	25.4
2017	23	19.7	11.6	27.7
2018	18	16.4	8.8	23.9

Denominator: Live Births	
Year	LA County
2009	139,679
2010	133,160
2011	130,313
2012	131,697
2013	128,523
2014	130,150
2015	124,507
2016	122,941
2017	116,850
2018	109,893

Note: "Maternal Mortality Rate" is defined as the number of maternal deaths due to pregnancy, childbirth and the puerperium per 100,000 live births as identified by ICD-10 codes A34, O00-O99 .

Source: 2018 California Comprehensive Birth File, downloaded from the Vital Records Business Intelligence System (VRBIS) on February 4, 2020

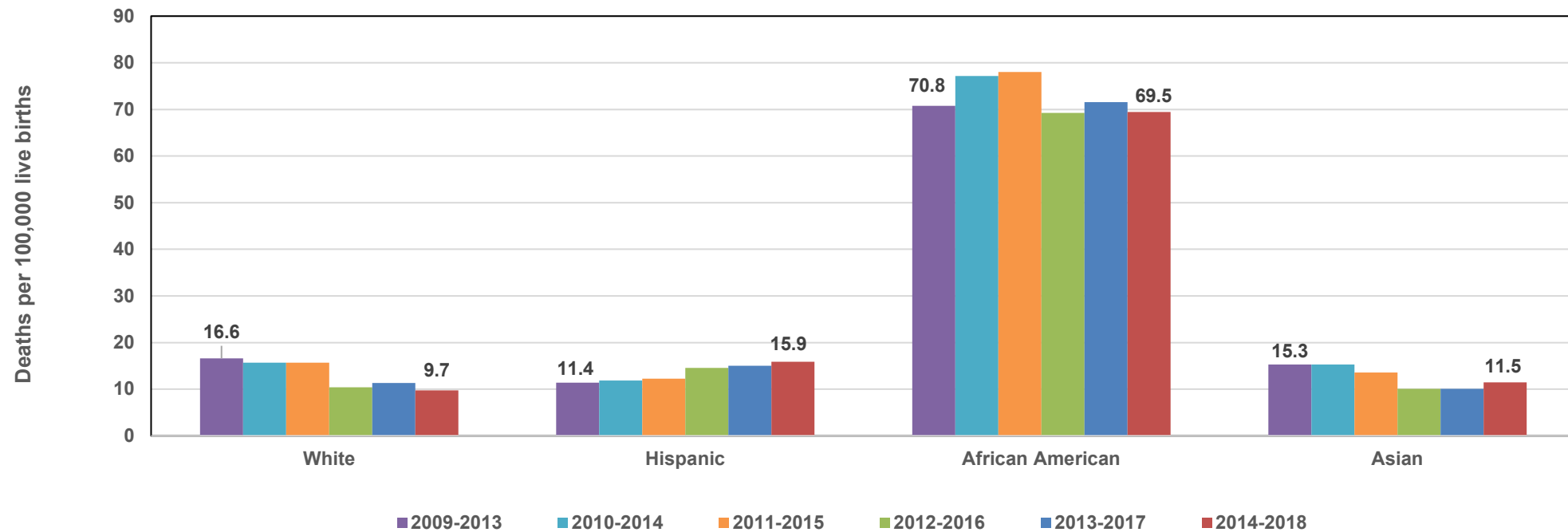
Maternal Mortality Rates (per 100,000 live births) Los Angeles County, 2009-2018



Notes: "Maternal Mortality Rate" is defined as the number of maternal deaths due to pregnancy, childbirth and the puerperium per 100,000 live births as identified by ICD-10 codes A34, O00-O99 .

Source: 2018 California Comprehensive Birth File, downloaded from the Vital Records Business Intelligence System (VRBIS) on February 4, 2020

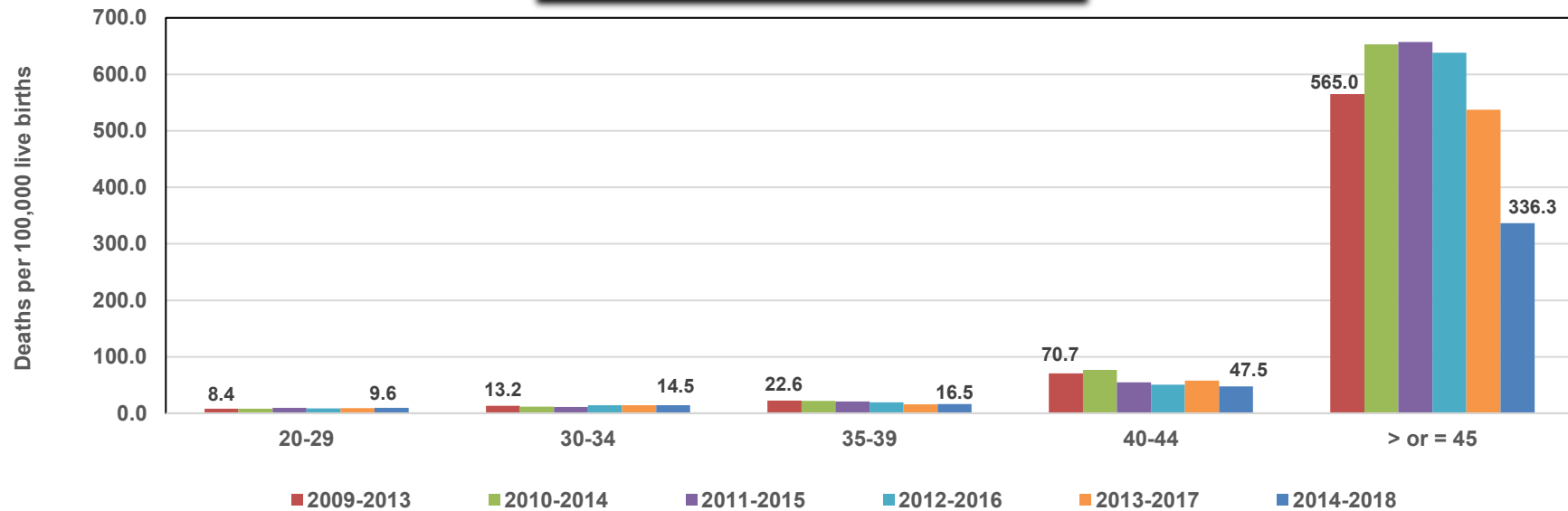
**Maternal Mortality Rates by Race/Ethnicity
Los Angeles County
5-Year Moving Averages, 2009-2018**



Years	White			Hispanic			African American			Asian		
	Total Deaths	Total Live Births	MM Rate	Total Deaths	Total Live Births	MM Rate	Total Deaths	Total Live Births	MM Rate	Total Deaths	Total Live Births	MM Rate
2009-2013	19	114,346	16.6	45	394,551	11.4	35	49,463	70.8	13	85,031	15.3
2010-2014	18	114,523	15.7	45	379,475	11.9	37	47,943	77.2	14	91,589	15.3
2011-2015	18	114,805	15.7	45	367,827	12.2	36	46,138	78.0	13	95,533	13.6
2012-2016	12	114,929	10.4	52	357,500	14.5	31	44,759	69.3	10	99,406	10.1
2013-2017	13	114,491	11.4	52	345,692	15.0	31	43,309	71.6	10	98,896	10.1
2014-2018	11	113,070	9.7	53	333,180	15.9	29	41,751	69.5	11	96,030	11.5

Notes: "Maternal Mortality Rate" is defined as the number of maternal deaths due to pregnancy, childbirth and the puerperium per 100,000 live births as identified by ICD-10 codes A34, O00-O99 .
Source: 2018 California Comprehensive Birth File, downloaded from the Vital Records Business Intelligence System (VRBIS) on February 4, 2020

**Maternal Mortality Rates by Age Group
Los Angeles County
5-Year Moving Averages, 2009-2018**

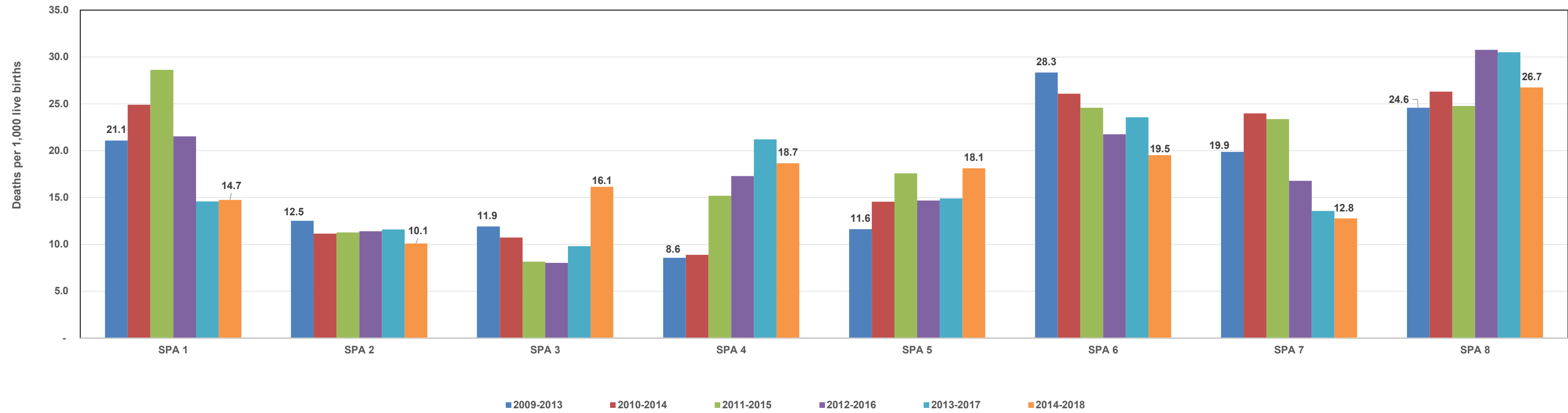


Years	<20 Yrs.			20-29 Yrs.			30-34 Yrs.			35-39 Yrs.			40-44 Yrs.			> or = 45 Yrs.		
	Total Deaths	Total Live Births	MM Rate	Total Deaths	Total Live Births	MM Rate	Total Deaths	Total Live Births	MM Rate	Total Deaths	Total Live Births	MM Rate	Total Deaths	Total Live Births	MM Rate	Total Deaths	Total Live Births	MM Rate
2009-2013	<5	52,388	N/C	25	298,667	8.4	23	174,864	13.2	24	106,228	22.6	20	28,304	70.7	13	2,301	565.0
2010-2014	<5	46,192	N/C	23	289,847	7.9	21	178,096	11.8	24	108,145	22.2	22	28,715	76.6	15	2,296	653.3
2011-2015	<5	40,524	N/C	27	281,732	9.6	20	180,576	11.1	23	110,202	20.9	16	29,150	54.9	16	2,434	657.4
2012-2016	<5	35,457	N/C	24	274,486	8.7	26	182,765	14.2	22	112,605	19.5	15	29,487	50.9	16	2,507	638.2
2013-2017	<5	30,925	N/C	24	263,688	9.1	26	181,827	14.3	18	113,939	15.8	17	29,515	57.6	14	2,606	537.2
2014-2018	<5	26,918	N/C	24	250,876	9.6	26	178,882	14.5	19	115,087	16.5	14	29,489	47.5	9	2,676	336.3

Note: "Maternal Mortality Rate" is defined as the number of maternal deaths due to pregnancy, childbirth and the puerperium per 100,000 live births as identified by ICD-10 codes A34, O00-O99 .

Source: 2018 California Comprehensive Birth File, downloaded from the Vital Records Business Intelligence System (VRBIS) on February 4, 2020

**Maternal Mortality Rates by Service Planning Area (SPA)
Los Angeles County
5-Year Moving Average, 2009-2018**



Years	SPA 1			SPA 2			SPA 3			SPA 4			SPA 5			SPA 6			SPA 7			SPA 8		
	Total Deaths	Total Live Births	MM Rate	Total Deaths	Total Live Births	MM Rate	Total Deaths	Total Live Births	MM Rate	Total Deaths	Total Live Births	MM Rate	Total Deaths	Total Live Births	MM Rate	Total Deaths	Total Live Births	MM Rate	Total Deaths	Total Live Births	MM Rate	Total Deaths	Total Live Births	MM Rate
2009-2013	6	28,452	21.1	16	127,712.0	12.5	14	117,534	11.9	27	69,937	8.6	<5	127,712	N/C	27	117,534	28.3	18	69,937	24.6	24	34,397	24.6
2010-2014	7	28,105	24.9	14	125,739.0	11.1	13	121,268	14.5	24	28,105	8.9	5	125,739	14.5	24	121,268	26.1	21	67,502	26.3	25	34,380	26.3
2011-2015	8	27,944	28.6	14	124,100.0	11.3	10	122,669	17.6	22	27,944	15.2	6	124,100	17.6	22	122,669	24.6	20	65,789	24.8	23	34,106	24.8
2012-2016	6	27,881	21.5	14	122,924.0	11.4	10	124,480	14.7	19	27,881	17.3	5	122,924	14.7	19	124,480	21.7	14	63,650	30.8	28	34,054	30.8
2013-2017	<5	27,426	N/C	14	120,831.0	11.6	12	122,404	14.9	20	27,426	21.2	5	120,831	14.9	20	122,404	23.6	11	61,322	30.5	27	33,572	30.5
2014-2018	<5	27,140	N/C	12	118,693.0	10.1	19	117,775	18.1	16	27,140	18.7	6	118,693	18.1	16	117,775	19.5	10	58,938	26.7	23	33,113	26.7

Note: "Maternal Mortality Rate" is defined as the number of maternal deaths due to pregnancy, childbirth and the puerperium per 100,000 live births as identified by ICD-10 codes A34, O00-O99.
Source: 2018 California Comprehensive Birth File, downloaded from the Vital Records Business Intelligence System (VRBIS) on February 4, 2020