



# 2011 MIHA Regional Report

Regional Snapshots and Geographic Comparisons from the Maternal and Infant Health Assessment Survey

September 2013

# Acknowledgements

The 2011 MIHA Regional Report was prepared in September 2013 by the California Maternal, Child and Adolescent Health (MCAH) Program using data from the 2011 Maternal and Infant Health Assessment (MIHA) survey. This publication and additional information about MIHA are available online at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA). Content included in this report may be reproduced with the following citation:

2011 MIHA Regional Report: A Summary Report of Regional Snapshots and Geographic Comparisons from the Maternal and Infant Health Assessment Survey. Sacramento: California Department of Public Health, Maternal, Child and Adolescent Health Program; 2013.

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We offer our sincerest thanks to the women who participated in MIHA in order to help improve the health of mothers and infants in California.

Many state and local MCAH Program staff provided review and input in the development of this report. In particular, we would like to thank the MIHA External Workgroup members for volunteering their expertise in the development and dissemination of this report and the overall MIHA survey.

MIHA is a collaborative effort of the MCAH and Women, Infant and Children (WIC) Programs of the California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco (UCSF). UCSF team members include: Paula Braveman, MD, MPH, Kristen Marchi, MPH, Renee Razzano, MPH, Katherine Heck, MPH, and Susan Egerter, PhD. Data collection was conducted by Quantum Market Research, Oakland, California.

## **Funding**

Funding for the MIHA survey is provided by the Federal Title V MCH Block Grant, the WIC Program and the Center for Family Health of the California Department of Public Health.

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# Introduction

Each year over 500,000 women give birth in California. Although most pregnancies are healthy, many women and infants face challenges in reaching optimal health. To address these challenges, the California Maternal, Child and Adolescent Health (MCAH) Program works with statewide and local partners to develop systems that protect and improve the health of California's reproductive-aged and pregnant women, infants, children, adolescents, and their families.

One such effort implemented by the California MCAH Program is the Maternal and Infant Health Assessment survey (MIHA). MIHA is a population-based survey of women with a recent live birth that has been conducted annually since 1999. The survey provides essential information not available from other sources to guide health policies and programs.

Using MIHA, this report presents key indicators of maternal and infant health in California for the nine MIHA regions of California. This information can be used by local health jurisdictions, state agencies, community-based organizations, care providers and others to support public health planning and program and policy development. Stakeholders can use these data to collaborate with partners across multiple disciplines to ensure that all California mothers and infants have healthy places in which to live, grow, work and play.

## Methods

MIHA is a stratified random sample of English- or Spanish-speaking women 15 years or older who had a live birth and who resided in California at the time of birth. MIHA data are weighted to represent all women with a live birth in California, excluding women who were non-residents, were younger than 15 years old at delivery, had a multiple birth greater than triplets, or had a missing address on the birth certificate. In 2011 the sample size was 6,853 and the response rate was 70%.

MIHA data are collected by mail with telephone follow-up to non-respondents. The questionnaire collects information about maternal and infant experiences before, during and shortly after pregnancy. The MIHA questionnaire and methods are similar to those used by the Centers for Disease Control and Prevention in conducting the multi-state Pregnancy Risk Assessment Monitoring System.

Data for this report were analyzed to account for MIHA's complex survey design using SAS software. The percentage and estimated number of women in the population with a given health indicator or characteristic are best estimates of the actual prevalence in the population. The 95% confidence interval (95% CI) means that there is a 95% chance that the range contains the actual prevalence in the population. Caution should be used when interpreting percentages with wide confidence intervals, as this indicates that the true prevalence could be much higher or lower than the percentage provided.

Statistical differences between each region and the rest of California were assessed using the chi-square test. To help stakeholders identify region-specific health issues, a symbol indicating whether the county is better (✓), worse (✗), or not statistically different (♦) from the rest of California is shown next to each indicator. Demographics, health insurance coverage, health care utilization and public program participation are described as higher (↑), lower (↓) or not statistically different (♦) from the rest of California.

Technical definitions for each indicator and a description of the revised weighting methods used in 2011 are in the appendix.



# MIHA Regions of California, 2011





# Regional Snapshots

“I never thought being a mom was going to be hard, but it is the most beautiful thing in this world when I see my baby smiling.”

— MIHA 2011 Respondent



# MIHA Snapshot, Central Coast Region 2011

Maternal and Infant Health Assessment (MIHA) Survey



✓ better than rest of California ✗ worse than rest of California ◆ no statistical difference

		Central Coast Region			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Prior Poor Birth Outcomes</b>							
Prior low birth weight or preterm delivery	◆	7.7	5.5 - 9.9	2,200	8.4	7.3 - 9.6	41,000
Prior delivery by c-section	◆	15.6	12.6 - 18.7	4,600	15.9	14.1 - 17.6	78,200
<b>Health Status</b>							
In good to excellent health before pregnancy†	◆	89.9	87.1 - 92.8	26,400	91.3	90.0 - 92.5	449,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	◆	9.8	7.2 - 12.3	2,800	10.3	8.9 - 11.6	50,100
Hypertension, preeclampsia or eclampsia	◆	8.8	6.5 - 11.2	2,500	9.2	8.0 - 10.3	44,100
Asthma	◆	6.8	4.6 - 9.0	1,900	8.5	7.4 - 9.6	41,100
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	✗	29.4	25.6 - 33.2	8,600	34.4	32.3 - 36.4	168,600
Overweight before pregnancy	◆	26.1	22.1 - 30.0	6,500	26.1	24.1 - 28.1	120,100
Obese before pregnancy	◆	15.7	12.1 - 19.3	3,900	18.5	16.7 - 20.3	85,100
Inadequate weight gain during pregnancy	◆	16.7	13.0 - 20.4	3,500	16.8	15.0 - 18.6	63,300
Excessive weight gain during pregnancy	◆	45.3	40.5 - 50.1	9,600	43.9	41.5 - 46.2	165,500
Food insecurity during pregnancy	◆	20.9	17.5 - 24.2	6,100	18.4	16.8 - 19.9	90,200
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical IPV in the year before pregnancy	◆	2.2	0.9 - 3.4	600	3.2	2.5 - 3.9	15,900
Physical or psychological IPV during pregnancy	◆	8.9	6.4 - 11.4	2,600	7.7	6.7 - 8.7	37,700
Prenatal depressive symptoms	◆	17.4	14.1 - 20.7	5,100	15.2	13.6 - 16.8	74,900
Postpartum depressive symptoms	◆	16.5	13.3 - 19.7	4,800	13.5	12.1 - 14.9	66,400
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep	◆	3.9	1.7 - 6.2	1,200	3.0	2.4 - 3.5	14,500
Moved due to problems paying rent or mortgage	◆	6.1	3.5 - 8.7	1,800	7.4	6.4 - 8.4	36,300
Woman or partner lost job	◆	18.6	14.9 - 22.3	5,400	17.2	15.6 - 18.9	84,100
Woman or partner had pay or hours cut back	◆	17.4	13.9 - 21.0	5,100	16.6	15.0 - 18.2	80,900
Became separated or divorced	◆	7.5	5.4 - 9.6	2,200	7.5	6.6 - 8.5	36,900
Had no practical or emotional support	◆	3.5	2.0 - 5.0	1,000	5.3	4.4 - 6.2	26,200
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	◆	10.8	8.2 - 13.5	3,200	12.3	11.0 - 13.5	60,000
Any smoking, 1st or 3rd trimester†	◆	5.8	3.9 - 7.6	1,700	8.1	7.1 - 9.1	39,500
Any smoking, postpartum	◆	4.4	2.7 - 6.1	1,300	6.3	5.5 - 7.1	30,800
Any binge drinking, 3 months before pregnancy	✓	9.8	7.5 - 12.2	2,900	13.1	11.9 - 14.4	64,200
Any alcohol use, 1st or 3rd trimester†	◆	17.1	13.9 - 20.2	5,000	19.6	17.9 - 21.2	95,900
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy†	◆	32.2	28.2 - 36.1	9,400	32.1	30.1 - 34.1	157,200
Unsure of pregnancy intentions†	◆	13.6	10.7 - 16.5	4,000	11.9	10.4 - 13.3	58,200
Postpartum birth control use†	◆	92.2	89.6 - 94.7	24,400	91.1	89.7 - 92.4	395,200
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	◆	75.8	72.3 - 79.3	21,900	73.9	71.9 - 75.8	358,200
Intended to breastfeed, before birth	◆	92.2	90.0 - 94.4	26,600	92.1	91.0 - 93.2	448,400
Intended to breastfeed exclusively, before birth	◆	61.5	57.3 - 65.7	17,800	62.3	60.2 - 64.4	303,100
<b>Breastfeeding practices</b>							
Any breastfeeding, 1 month after delivery†	✓	85.4	82.4 - 88.4	24,200	81.7	80.0 - 83.4	391,400
Exclusive breastfeeding, 1 month after delivery†	✓	45.4	41.1 - 49.7	12,400	38.8	36.6 - 40.9	182,300
Any breastfeeding, 3 months after delivery†	✓	72.9	68.7 - 77.1	15,900	63.7	61.3 - 66.2	240,100
Exclusive breastfeeding, 3 months after delivery†	◆	26.9	22.7 - 31.2	5,700	23.1	21.1 - 25.1	86,000

↑ higher than rest of California ↓ lower than rest of California ♦ no statistical difference

		Central Coast Region			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Health Care Utilization</b>							
Had a usual source of pre-pregnancy care	♦	68.0	64.1 - 72.0	20,000	72.2	70.2 - 74.1	355,300
Initiated prenatal care in 1st trimester†	♦	84.9	82.1 - 87.8	24,600	85.6	84.1 - 87.2	416,100
Had a postpartum medical visit	♦	89.3	86.3 - 92.3	26,200	88.6	87.3 - 90.0	435,300
Mom or infant needed but couldn't afford care postpartum	♦	13.7	10.4 - 17.0	3,900	13.0	11.5 - 14.5	62,600
<b>Public Program Participation and Health Insurance Coverage</b>							
Received CalFresh (food stamps) during pregnancy	♦	19.1	16.0 - 22.2	5,600	22.2	20.6 - 23.8	109,000
Pre-pregnancy insurance							
Medi-Cal†	↓	20.6	17.3 - 23.9	6,000	25.6	23.8 - 27.3	125,100
Uninsured†	↑	31.1	27.1 - 35.1	9,000	23.9	22.3 - 25.6	117,200
Private†	↓	40.9	36.7 - 45.0	11,900	46.4	44.7 - 48.1	227,000
Prenatal insurance							
Medi-Cal†	♦	53.8	49.6 - 58.0	15,800	50.4	48.8 - 51.9	247,500
Uninsured†	♦	2.5	1.2 - 3.8	700	1.9	1.2 - 2.5	9,200
Private†	↓	34.8	30.8 - 38.7	10,200	43.2	41.6 - 44.8	212,400
Maternal postpartum insurance							
Medi-Cal†	♦	31.6	27.7 - 35.5	9,200	35.5	33.8 - 37.3	173,900
Uninsured†	↑	24.4	20.7 - 28.1	7,100	17.4	15.9 - 18.8	85,000
Private†	↓	37.9	33.8 - 42.0	11,100	43.8	42.1 - 45.4	214,300
Infant health insurance							
Medi-Cal†	♦	52.9	48.6 - 57.2	15,300	49.5	47.9 - 51.2	240,500
Healthy Families†	↑	8.1	5.5 - 10.7	2,300	5.2	4.4 - 6.1	25,400
Uninsured†	♦	1.4	0.6 - 2.2	400	2.4	1.9 - 2.9	11,700
Private†	↓	32.4	28.5 - 36.4	9,400	39.4	37.8 - 41.0	191,200
<b>Maternal Demographics</b>							
Age							
15-19	♦	8.7	6.3 - 11.2	2,600	7.7	6.4 - 8.9	37,800
20-34	♦	74.3	70.6 - 78.1	21,900	73.8	71.9 - 75.7	364,100
35+	♦	16.9	13.7 - 20.1	5,000	18.5	16.9 - 20.2	91,500
Did not complete high school (or GED)	↑	27.4	23.8 - 31.1	8,000	20.6	18.9 - 22.3	101,000
Unmarried	♦	41.4	37.3 - 45.5	12,100	42.3	40.4 - 44.1	207,800
Race/Ethnicity							
Hispanic	↑	62.7	58.6 - 66.8	18,400	50.9	49.1 - 52.7	247,100
Black	↓	1.1	1.0 - 1.2	300	6.0	5.6 - 6.4	29,100
White	♦	31.3	27.4 - 35.1	9,200	29.1	27.4 - 30.7	141,200
Asian/Pacific Islander	↓	4.9	2.7 - 7.2	1,400	13.4	11.8 - 14.9	64,900
Nativity and Language							
Born outside the U.S.	♦	43.0	38.8 - 47.1	12,600	39.8	37.8 - 41.9	196,400
Speaks non-English language at home	↑	39.5	35.3 - 43.6	11,600	32.4	30.4 - 34.4	159,000
Income as a percent of the Federal Poverty Guideline							
0-100%	♦	46.8	42.5 - 51.1	12,500	43.8	42.0 - 45.6	198,400
101-200%	♦	17.8	14.6 - 21.0	4,800	19.0	17.2 - 20.8	86,000
>200%	♦	35.4	31.2 - 39.6	9,500	37.2	35.5 - 38.9	168,500

† In 2011, measures changed for these indicators and are not comparable to the same indicator in prior years (see 2011 Technical Document for specific changes).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. The sample size of Central Coast Region was 737. Percent (%), 95% confidence interval (CI) and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Symbols indicate whether the health indicator in the region was statistically different from the rest of the state (p-value <0.05, chi-square test). Prior poor birth outcomes are presented for all women. Methods used to weight the data were different in 2011 than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

MIHA is a collaborative effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).

# MIHA Snapshot, Greater Sacramento Region 2011

Maternal and Infant Health Assessment (MIHA) Survey



✓ better than rest of California ✗ worse than rest of California ◆ no statistical difference

	Greater Sacramento Region			California		
	%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Prior Poor Birth Outcomes</b>						
Prior low birth weight or preterm delivery	◆ 7.3	4.7 - 9.9	2,100	8.4	7.3 - 9.6	41,000
Prior delivery by c-section	◆ 13.4	9.9 - 16.9	4,000	15.9	14.1 - 17.6	78,200
<b>Health Status</b>						
In good to excellent health before pregnancy†	◆ 91.6	88.7 - 94.5	27,300	91.3	90.0 - 92.5	449,300
Chronic conditions before or during pregnancy						
Diabetes or gestational diabetes	◆ 11.5	8.2 - 14.8	3,400	10.3	8.9 - 11.6	50,100
Hypertension, preeclampsia or eclampsia	◆ 7.7	5.0 - 10.3	2,200	9.2	8.0 - 10.3	44,100
Asthma	◆ 10.3	7.1 - 13.4	3,000	8.5	7.4 - 9.6	41,100
<b>Nutrition and Weight</b>						
Daily folic acid use, month before pregnancy	◆ 34.9	30.0 - 39.9	10,300	34.4	32.3 - 36.4	168,600
Overweight before pregnancy	◆ 24.8	20.1 - 29.4	7,200	26.1	24.1 - 28.1	120,100
Obese before pregnancy	◆ 17.7	14.0 - 21.3	5,100	18.5	16.7 - 20.3	85,100
Inadequate weight gain during pregnancy	◆ 12.8	9.1 - 16.5	3,200	16.8	15.0 - 18.6	63,300
Excessive weight gain during pregnancy	✗ 51.4	45.8 - 57.1	12,700	43.9	41.5 - 46.2	165,500
Food insecurity during pregnancy	◆ 18.5	14.4 - 22.6	5,500	18.4	16.8 - 19.9	90,200
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>						
Physical IPV in the year before pregnancy	◆ 2.9	1.0 - 4.8	900	3.2	2.5 - 3.9	15,900
Physical or psychological IPV during pregnancy	◆ 6.6	4.2 - 9.0	2,000	7.7	6.7 - 8.7	37,700
Prenatal depressive symptoms	◆ 12.3	8.9 - 15.7	3,700	15.2	13.6 - 16.8	74,900
Postpartum depressive symptoms	◆ 12.8	9.2 - 16.4	3,800	13.5	12.1 - 14.9	66,400
<b>Hardships and Support during Pregnancy</b>						
Homeless or did not have a regular place to sleep	◆ 2.1	0.9 - 3.4	600	3.0	2.4 - 3.5	14,500
Moved due to problems paying rent or mortgage	◆ 9.6	6.4 - 12.9	2,800	7.4	6.4 - 8.4	36,300
Woman or partner lost job	✓ 12.5	9.2 - 15.8	3,700	17.2	15.6 - 18.9	84,100
Woman or partner had pay or hours cut back	◆ 18.9	14.6 - 23.1	5,600	16.6	15.0 - 18.2	80,900
Became separated or divorced	◆ 7.2	4.3 - 10.1	2,100	7.5	6.6 - 8.5	36,900
Had no practical or emotional support	◆ 4.8	2.5 - 7.0	1,400	5.3	4.4 - 6.2	26,200
<b>Substance Use</b>						
Any smoking, 3 months before pregnancy	✗ 15.9	12.0 - 19.8	4,700	12.3	11.0 - 13.5	60,000
Any smoking, 1st or 3rd trimester†	◆ 10.1	7.1 - 13.2	3,000	8.1	7.1 - 9.1	39,500
Any smoking, postpartum	✗ 9.6	6.3 - 12.9	2,800	6.3	5.5 - 7.1	30,800
Any binge drinking, 3 months before pregnancy	✗ 20.5	16.1 - 24.8	6,000	13.1	11.9 - 14.4	64,200
Any alcohol use, 1st or 3rd trimester†	◆ 21.3	17.0 - 25.5	6,300	19.6	17.9 - 21.2	95,900
<b>Pregnancy Intention and Family Planning</b>						
Mistimed or unwanted pregnancy†	◆ 29.9	25.3 - 34.6	8,900	32.1	30.1 - 34.1	157,200
Unsure of pregnancy intentions†	◆ 9.8	6.8 - 12.7	2,900	11.9	10.4 - 13.3	58,200
Postpartum birth control use†	◆ 88.9	85.5 - 92.2	23,500	91.1	89.7 - 92.4	395,200
<b>Infant Sleep and Breastfeeding</b>						
Placed infant on back to sleep	✓ 80.4	76.4 - 84.4	23,600	73.9	71.9 - 75.8	358,200
Intended to breastfeed, before birth	◆ 91.4	88.5 - 94.4	26,800	92.1	91.0 - 93.2	448,400
Intended to breastfeed exclusively, before birth	✓ 72.2	67.7 - 76.7	21,100	62.3	60.2 - 64.4	303,100
Breastfeeding practices						
Any breastfeeding, 1 month after delivery†	◆ 77.4	72.9 - 81.9	22,400	81.7	80.0 - 83.4	391,400
Exclusive breastfeeding, 1 month after delivery†	◆ 39.4	34.3 - 44.5	11,300	38.8	36.6 - 40.9	182,300
Any breastfeeding, 3 months after delivery†	◆ 63.5	57.6 - 69.4	13,200	63.7	61.3 - 66.2	240,100
Exclusive breastfeeding, 3 months after delivery†	✓ 29.0	23.6 - 34.5	6,000	23.1	21.1 - 25.1	86,000

		Greater Sacramento Region			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Health Care Utilization</b>							
Had a usual source of pre-pregnancy care	♦	74.4	70.1 - 78.7	22,200	72.2	70.2 - 74.1	355,300
Initiated prenatal care in 1st trimester†	♦	86.6	83.2 - 90.0	25,300	85.6	84.1 - 87.2	416,100
Had a postpartum medical visit	♦	88.7	85.1 - 92.2	26,400	88.6	87.3 - 90.0	435,300
Mom or infant needed but couldn't afford care postpartum	♦	14.9	11.1 - 18.7	4,400	13.0	11.5 - 14.5	62,600
<b>Public Program Participation and Health Insurance Coverage</b>							
Received CalFresh (food stamps) during pregnancy	♦	25.2	21.2 - 29.3	7,500	22.2	20.6 - 23.8	109,000
Pre-pregnancy insurance							
Medi-Cal†	♦	25.6	21.5 - 29.7	7,600	25.6	23.8 - 27.3	125,100
Uninsured†	↓	18.3	15.0 - 21.6	5,400	23.9	22.3 - 25.6	117,200
Private†	↑	51.7	47.4 - 56.0	15,400	46.4	44.7 - 48.1	227,000
Prenatal insurance							
Medi-Cal†	↓	45.0	40.9 - 49.1	13,400	50.4	48.8 - 51.9	247,500
Uninsured†	♦	2.1	0.5 - 3.6	600	1.9	1.2 - 2.5	9,200
Private†	↑	49.5	45.4 - 53.7	14,700	43.2	41.6 - 44.8	212,400
Maternal postpartum insurance							
Medi-Cal†	♦	33.6	29.4 - 37.8	10,000	35.5	33.8 - 37.3	173,900
Uninsured†	↓	12.4	9.3 - 15.5	3,700	17.4	15.9 - 18.8	85,000
Private†	↑	50.7	46.4 - 55.1	15,100	43.8	42.1 - 45.4	214,300
Infant health insurance							
Medi-Cal†	↓	44.4	40.0 - 48.8	13,000	49.5	47.9 - 51.2	240,500
Healthy Families†	♦	3.1	1.3 - 5.0	900	5.2	4.4 - 6.1	25,400
Uninsured†	↑	4.5	2.2 - 6.8	1,300	2.4	1.9 - 2.9	11,700
Private†	↑	45.0	40.6 - 49.3	13,200	39.4	37.8 - 41.0	191,200
<b>Maternal Demographics</b>							
Age							
15-19	♦	6.3	4.0 - 8.6	1,900	7.7	6.4 - 8.9	37,800
20-34	♦	77.2	72.9 - 81.5	23,000	73.8	71.9 - 75.7	364,100
35+	♦	16.5	12.7 - 20.3	4,900	18.5	16.9 - 20.2	91,500
Did not complete high school (or GED)	↓	12.2	9.0 - 15.3	3,600	20.6	18.9 - 22.3	101,000
Unmarried	♦	37.4	32.9 - 42.0	11,100	42.3	40.4 - 44.1	207,800
Race/Ethnicity							
Hispanic	↓	28.6	24.3 - 32.9	8,500	50.9	49.1 - 52.7	247,100
Black	↑	9.0	7.3 - 10.8	2,700	6.0	5.6 - 6.4	29,100
White	↑	47.6	42.7 - 52.5	14,100	29.1	27.4 - 30.7	141,200
Asian/Pacific Islander	♦	14.3	10.6 - 18.0	4,200	13.4	11.8 - 14.9	64,900
Nativity and Language							
Born outside the U.S.	↓	29.6	25.0 - 34.2	8,800	39.8	37.8 - 41.9	196,400
Speaks non-English language at home	↓	19.5	15.7 - 23.3	5,800	32.4	30.4 - 34.4	159,000
Income as a percent of the Federal Poverty Guideline							
0-100%	↓	36.9	32.2 - 41.5	10,300	43.8	42.0 - 45.6	198,400
101-200%	♦	21.9	17.7 - 26.2	6,100	19.0	17.2 - 20.8	86,000
>200%	♦	41.2	36.7 - 45.8	11,500	37.2	35.5 - 38.9	168,500

† In 2011, measures changed for these indicators and are not comparable to the same indicator in prior years (see 2011 Technical Document for specific changes).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. The sample size of Greater Sacramento Region was 546. Percent (%), 95% confidence interval (CI) and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Symbols indicate whether the health indicator in the region was statistically different from the rest of the state (p-value <0.05, chi-square test). Prior poor birth outcomes are presented for all women. Methods used to weight the data were different in 2011 than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

MIHA is a collaborative effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).

# MIHA Snapshot, Los Angeles County 2011

Maternal and Infant Health Assessment (MIHA) Survey



✓ better than rest of California ✗ worse than rest of California ◆ no statistical difference

		Los Angeles County			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Prior Poor Birth Outcomes</b>							
Prior low birth weight or preterm delivery	◆	8.1	4.6 - 11.5	10,200	8.4	7.3 - 9.6	41,000
Prior delivery by c-section	◆	17.5	11.8 - 23.2	22,500	15.9	14.1 - 17.6	78,200
<b>Health Status</b>							
In good to excellent health before pregnancy†	◆	90.8	86.9 - 94.7	115,600	91.3	90.0 - 92.5	449,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	◆	10.1	5.9 - 14.2	12,800	10.3	8.9 - 11.6	50,100
Hypertension, preeclampsia or eclampsia	◆	6.6	3.5 - 9.8	8,400	9.2	8.0 - 10.3	44,100
Asthma	◆	6.5	3.4 - 9.6	8,200	8.5	7.4 - 9.6	41,100
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	◆	30.3	24.0 - 36.5	38,400	34.4	32.3 - 36.4	168,600
Overweight before pregnancy	◆	26.9	20.7 - 33.0	32,400	26.1	24.1 - 28.1	120,100
Obese before pregnancy	◆	19.4	13.6 - 25.1	23,400	18.5	16.7 - 20.3	85,100
Inadequate weight gain during pregnancy	◆	18.1	12.6 - 23.5	17,400	16.8	15.0 - 18.6	63,300
Excessive weight gain during pregnancy	◆	39.0	31.9 - 46.1	37,600	43.9	41.5 - 46.2	165,500
Food insecurity during pregnancy	◆	18.6	13.8 - 23.5	23,900	18.4	16.8 - 19.9	90,200
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical IPV in the year before pregnancy	◆	3.3	1.3 - 5.3	4,200	3.2	2.5 - 3.9	15,900
Physical or psychological IPV during pregnancy	◆	7.3	4.4 - 10.3	9,300	7.7	6.7 - 8.7	37,700
Prenatal depressive symptoms	◆	16.6	11.6 - 21.6	21,200	15.2	13.6 - 16.8	74,900
Postpartum depressive symptoms	◆	12.4	8.2 - 16.6	15,900	13.5	12.1 - 14.9	66,400
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep	◆	2.1	0.6 - 3.6	2,700	3.0	2.4 - 3.5	14,500
Moved due to problems paying rent or mortgage	◆	7.0	3.9 - 10.1	8,900	7.4	6.4 - 8.4	36,300
Woman or partner lost job	◆	20.0	14.8 - 25.3	25,300	17.2	15.6 - 18.9	84,100
Woman or partner had pay or hours cut back	◆	19.2	14.1 - 24.2	24,200	16.6	15.0 - 18.2	80,900
Became separated or divorced	◆	6.3	3.6 - 9.0	8,000	7.5	6.6 - 8.5	36,900
Had no practical or emotional support	◆	5.5	2.7 - 8.2	7,000	5.3	4.4 - 6.2	26,200
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	✓	8.6	5.5 - 11.8	10,900	12.3	11.0 - 13.5	60,000
Any smoking, 1st or 3rd trimester†	◆	5.6	3.0 - 8.1	7,100	8.1	7.1 - 9.1	39,500
Any smoking, postpartum	✓	4.1	2.0 - 6.2	5,200	6.3	5.5 - 7.1	30,800
Any binge drinking, 3 months before pregnancy	✓	9.0	5.7 - 12.4	11,500	13.1	11.9 - 14.4	64,200
Any alcohol use, 1st or 3rd trimester†	◆	20.3	15.3 - 25.3	25,800	19.6	17.9 - 21.2	95,900
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy†	◆	36.3	30.0 - 42.5	46,500	32.1	30.1 - 34.1	157,200
Unsure of pregnancy intentions†	◆	11.6	7.1 - 16.1	14,900	11.9	10.4 - 13.3	58,200
Postpartum birth control use†	◆	91.6	87.5 - 95.6	100,200	91.1	89.7 - 92.4	395,200
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	✗	67.6	61.4 - 73.9	85,600	73.9	71.9 - 75.8	358,200
Intended to breastfeed, before birth	◆	92.1	88.8 - 95.5	117,300	92.1	91.0 - 93.2	448,400
Intended to breastfeed exclusively, before birth	◆	58.0	51.4 - 64.6	73,900	62.3	60.2 - 64.4	303,100
<b>Breastfeeding practices</b>							
Any breastfeeding, 1 month after delivery†	◆	80.9	75.6 - 86.3	101,100	81.7	80.0 - 83.4	391,400
Exclusive breastfeeding, 1 month after delivery†	◆	35.4	28.8 - 41.9	42,700	38.8	36.6 - 40.9	182,300
Any breastfeeding, 3 months after delivery†	◆	62.9	55.8 - 69.9	68,700	63.7	61.3 - 66.2	240,100
Exclusive breastfeeding, 3 months after delivery†	✗	18.6	13.4 - 23.9	19,900	23.1	21.1 - 25.1	86,000

↑ higher than rest of California ↓ lower than rest of California ♦ no statistical difference

		Los Angeles County			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Health Care Utilization</b>							
Had a usual source of pre-pregnancy care	♦	70.4	64.3 - 76.4	89,600	72.2	70.2 - 74.1	355,300
Initiated prenatal care in 1st trimester†	♦	84.0	78.9 - 89.0	106,500	85.6	84.1 - 87.2	416,100
Had a postpartum medical visit	♦	88.9	85.0 - 92.9	113,900	88.6	87.3 - 90.0	435,300
Mom or infant needed but couldn't afford care postpartum	♦	12.5	7.8 - 17.2	15,800	13.0	11.5 - 14.5	62,600
<b>Public Program Participation and Health Insurance Coverage</b>							
Received CalFresh (food stamps) during pregnancy	♦	20.0	14.9 - 25.1	25,600	22.2	20.6 - 23.8	109,000
Pre-pregnancy insurance							
Medi-Cal†	♦	27.8	22.0 - 33.7	35,200	25.6	23.8 - 27.3	125,100
Uninsured†	♦	27.0	21.7 - 32.4	34,200	23.9	22.3 - 25.6	117,200
Private†	♦	42.9	37.7 - 48.1	54,300	46.4	44.7 - 48.1	227,000
Prenatal insurance							
Medi-Cal†	↑	54.6	50.0 - 59.3	69,500	50.4	48.8 - 51.9	247,500
Uninsured†	♦	2.8	0.4 - 5.1	3,500	1.9	1.2 - 2.5	9,200
Private†	♦	41.0	36.3 - 45.7	52,200	43.2	41.6 - 44.8	212,400
Maternal postpartum insurance							
Medi-Cal†	↑	41.5	35.9 - 47.1	52,700	35.5	33.8 - 37.3	173,900
Uninsured†	♦	15.4	11.0 - 19.8	19,500	17.4	15.9 - 18.8	85,000
Private†	♦	41.3	36.4 - 46.3	52,400	43.8	42.1 - 45.4	214,300
Infant health insurance							
Medi-Cal†	↑	55.5	50.7 - 60.3	70,000	49.5	47.9 - 51.2	240,500
Healthy Families†	♦	3.4	1.4 - 5.4	4,300	5.2	4.4 - 6.1	25,400
Uninsured†		*			2.4	1.9 - 2.9	11,700
Private†	♦	38.1	33.5 - 42.8	48,100	39.4	37.8 - 41.0	191,200
<b>Maternal Demographics</b>							
Age							
15-19	♦	8.0	3.9 - 12.2	10,300	7.7	6.4 - 8.9	37,800
20-34	♦	71.6	65.6 - 77.7	91,800	73.8	71.9 - 75.7	364,100
35+	♦	20.3	15.3 - 25.4	26,100	18.5	16.9 - 20.2	91,500
Did not complete high school (or GED)	↑	26.8	21.2 - 32.4	34,200	20.6	18.9 - 22.3	101,000
Unmarried	↑	47.0	41.3 - 52.7	60,200	42.3	40.4 - 44.1	207,800
Race/Ethnicity							
Hispanic	↑	60.7	55.6 - 65.9	77,000	50.9	49.1 - 52.7	247,100
Black	↑	8.0	6.9 - 9.0	10,100	6.0	5.6 - 6.4	29,100
White	↓	18.0	13.7 - 22.4	22,900	29.1	27.4 - 30.7	141,200
Asian/Pacific Islander	♦	12.8	8.1 - 17.4	16,200	13.4	11.8 - 14.9	64,900
Nativity and Language							
Born outside the U.S.	↑	46.2	39.9 - 52.6	59,200	39.8	37.8 - 41.9	196,400
Speaks non-English language at home	↑	38.9	32.7 - 45.0	49,400	32.4	30.4 - 34.4	159,000
Income as a percent of the Federal Poverty Guideline							
0-100%	↑	50.3	44.6 - 56.1	57,200	43.8	42.0 - 45.6	198,400
101-200%	♦	17.9	12.2 - 23.5	20,300	19.0	17.2 - 20.8	86,000
>200%	↓	31.8	26.8 - 36.7	36,100	37.2	35.5 - 38.9	168,500

\* Data are not presented because fewer than 10 women reported.

† In 2011, measures changed for these indicators and are not comparable to the same indicator in prior years (see 2011 Technical Document for specific changes).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. The sample size of Los Angeles County was 426. Percent (%), 95% confidence interval (CI) and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the county in 2011. Symbols indicate whether the health indicator in the county was statistically different from the rest of the state (p-value < 0.05, chi-square test). Prior poor birth outcomes are presented for all women. Methods used to weight the data were different in 2011 than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

MIHA is a collaborative effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).

# MIHA Snapshot, North/Mountain Region 2011

Maternal and Infant Health Assessment (MIHA) Survey



✓ better than rest of California ✗ worse than rest of California ◆ no statistical difference

	North/Mountain Region			California			
	%	95% CI	Population Estimate	%	95% CI	Population Estimate	
<b>Prior Poor Birth Outcomes</b>							
Prior low birth weight or preterm delivery	◆	11.5	6.4 - 16.7	1,400	8.4	7.3 - 9.6	41,000
Prior delivery by c-section	◆	13.9	6.8 - 21.0	1,800	15.9	14.1 - 17.6	78,200
<b>Health Status</b>							
In good to excellent health before pregnancy†	◆	85.1	77.1 - 93.1	10,700	91.3	90.0 - 92.5	449,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	◆	11.3	6.3 - 16.3	1,400	10.3	8.9 - 11.6	50,100
Hypertension, preeclampsia or eclampsia	◆	10.8	5.6 - 16.0	1,300	9.2	8.0 - 10.3	44,100
Asthma	◆	11.0	3.8 - 18.1	1,400	8.5	7.4 - 9.6	41,100
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	◆	26.7	19.4 - 34.0	3,400	34.4	32.3 - 36.4	168,600
Overweight before pregnancy	◆	23.4	14.9 - 32.0	2,800	26.1	24.1 - 28.1	120,100
Obese before pregnancy	◆	24.7	17.7 - 31.8	2,900	18.5	16.7 - 20.3	85,100
Inadequate weight gain during pregnancy	◆	13.9	7.8 - 20.0	1,200	16.8	15.0 - 18.6	63,300
Excessive weight gain during pregnancy	◆	51.4	42.0 - 60.7	4,600	43.9	41.5 - 46.2	165,500
Food insecurity during pregnancy	◆	22.6	15.6 - 29.6	2,800	18.4	16.8 - 19.9	90,200
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical IPV in the year before pregnancy	◆	4.9	1.8 - 8.0	600	3.2	2.5 - 3.9	15,900
Physical or psychological IPV during pregnancy	◆	6.9	3.2 - 10.5	900	7.7	6.7 - 8.7	37,700
Prenatal depressive symptoms	◆	18.9	11.4 - 26.5	2,400	15.2	13.6 - 16.8	74,900
Postpartum depressive symptoms	◆	19.0	11.3 - 26.6	2,400	13.5	12.1 - 14.9	66,400
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep		*			3.0	2.4 - 3.5	14,500
Moved due to problems paying rent or mortgage	◆	9.7	4.5 - 14.9	1,200	7.4	6.4 - 8.4	36,300
Woman or partner lost job	◆	20.7	14.0 - 27.5	2,600	17.2	15.6 - 18.9	84,100
Woman or partner had pay or hours cut back	◆	17.6	11.8 - 23.4	2,200	16.6	15.0 - 18.2	80,900
Became separated or divorced	◆	11.4	6.0 - 16.9	1,400	7.5	6.6 - 8.5	36,900
Had no practical or emotional support		*			5.3	4.4 - 6.2	26,200
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	✗	33.1	24.4 - 41.8	4,100	12.3	11.0 - 13.5	60,000
Any smoking, 1st or 3rd trimester†	✗	28.3	19.6 - 36.9	3,500	8.1	7.1 - 9.1	39,500
Any smoking, postpartum	✗	21.2	13.0 - 29.3	2,600	6.3	5.5 - 7.1	30,800
Any binge drinking, 3 months before pregnancy	✗	19.3	12.9 - 25.6	2,400	13.1	11.9 - 14.4	64,200
Any alcohol use, 1st or 3rd trimester†	◆	23.7	16.9 - 30.6	3,000	19.6	17.9 - 21.2	95,900
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy†	◆	31.0	23.5 - 38.4	3,700	32.1	30.1 - 34.1	157,200
Unsure of pregnancy intentions†	✗	20.3	13.1 - 27.5	2,400	11.9	10.4 - 13.3	58,200
Postpartum birth control use†	◆	91.6	84.1 - 99.0	10,700	91.1	89.7 - 92.4	395,200
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	◆	76.4	69.1 - 83.8	9,200	73.9	71.9 - 75.8	358,200
Intended to breastfeed, before birth	◆	92.6	88.3 - 96.9	11,200	92.1	91.0 - 93.2	448,400
Intended to breastfeed exclusively, before birth	◆	67.4	59.9 - 75.0	8,100	62.3	60.2 - 64.4	303,100
<b>Breastfeeding practices</b>							
Any breastfeeding, 1 month after delivery†	◆	84.3	78.6 - 89.9	10,100	81.7	80.0 - 83.4	391,400
Exclusive breastfeeding, 1 month after delivery†	✓	50.8	42.5 - 59.2	5,900	38.8	36.6 - 40.9	182,300
Any breastfeeding, 3 months after delivery†	◆	60.1	50.6 - 69.6	5,200	63.7	61.3 - 66.2	240,100
Exclusive breastfeeding, 3 months after delivery†	◆	29.7	20.6 - 38.8	2,500	23.1	21.1 - 25.1	86,000

↑ higher than rest of California ↓ lower than rest of California ♦ no statistical difference

		North/Mountain Region			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Health Care Utilization</b>							
Had a usual source of pre-pregnancy care	♦	72.4	64.8 - 80.1	9,000	72.2	70.2 - 74.1	355,300
Initiated prenatal care in 1st trimester†	♦	83.7	77.1 - 90.3	10,500	85.6	84.1 - 87.2	416,100
Had a postpartum medical visit	♦	87.4	81.8 - 93.1	11,100	88.6	87.3 - 90.0	435,300
Mom or infant needed but couldn't afford care postpartum	♦	9.0	4.5 - 13.5	1,100	13.0	11.5 - 14.5	62,600
<b>Public Program Participation and Health Insurance Coverage</b>							
Received CalFresh (food stamps) during pregnancy	↑	34.2	25.4 - 43.0	4,300	22.2	20.6 - 23.8	109,000
Pre-pregnancy insurance							
Medi-Cal†	↑	38.9	30.2 - 47.6	4,800	25.6	23.8 - 27.3	125,100
Uninsured†	♦	18.7	12.4 - 25.0	2,300	23.9	22.3 - 25.6	117,200
Private†	♦	39.3	31.1 - 47.6	4,900	46.4	44.7 - 48.1	227,000
Prenatal insurance							
Medi-Cal†	↑	65.4	57.5 - 73.3	8,300	50.4	48.8 - 51.9	247,500
Uninsured†		*			1.9	1.2 - 2.5	9,200
Private†	↓	27.5	20.3 - 34.7	3,500	43.2	41.6 - 44.8	212,400
Maternal postpartum insurance							
Medi-Cal†	↑	44.7	36.2 - 53.2	5,600	35.5	33.8 - 37.3	173,900
Uninsured†	♦	21.4	13.5 - 29.4	2,700	17.4	15.9 - 18.8	85,000
Private†	↓	33.9	26.0 - 41.7	4,300	43.8	42.1 - 45.4	214,300
Infant health insurance							
Medi-Cal†	↑	64.6	56.7 - 72.4	7,800	49.5	47.9 - 51.2	240,500
Healthy Families†		*			5.2	4.4 - 6.1	25,400
Uninsured†		*			2.4	1.9 - 2.9	11,700
Private†	↓	25.3	18.3 - 32.4	3,100	39.4	37.8 - 41.0	191,200
<b>Maternal Demographics</b>							
Age							
15-19	♦	8.6	4.0 - 13.2	1,100	7.7	6.4 - 8.9	37,800
20-34	♦	79.8	72.0 - 87.6	10,100	73.8	71.9 - 75.7	364,100
35+	♦	11.6	4.7 - 18.6	1,500	18.5	16.9 - 20.2	91,500
Did not complete high school (or GED)	♦	18.0	11.8 - 24.2	2,200	20.6	18.9 - 22.3	101,000
Unmarried	♦	48.4	39.8 - 57.0	6,000	42.3	40.4 - 44.1	207,800
Race/Ethnicity							
Hispanic	↓	21.7	15.6 - 27.9	2,800	50.9	49.1 - 52.7	247,100
Black	↓	1.1	0.8 - 1.4	100	6.0	5.6 - 6.4	29,100
White	↑	68.8	61.3 - 76.2	8,700	29.1	27.4 - 30.7	141,200
Asian/Pacific Islander		*			13.4	11.8 - 14.9	64,900
Nativity and Language							
Born outside the U.S.	↓	14.3	8.7 - 19.8	1,800	39.8	37.8 - 41.9	196,400
Speaks non-English language at home	↓	11.3	6.7 - 15.8	1,400	32.4	30.4 - 34.4	159,000
Income as a percent of the Federal Poverty Guideline							
0-100%	♦	50.9	42.2 - 59.6	6,300	43.8	42.0 - 45.6	198,400
101-200%	↑	26.7	19.4 - 34.0	3,300	19.0	17.2 - 20.8	86,000
>200%	↓	22.4	15.5 - 29.4	2,800	37.2	35.5 - 38.9	168,500

\* Data are not presented because fewer than 10 women reported.

† In 2011, measures changed for these indicators and are not comparable to the same indicator in prior years (see 2011 Technical Document for specific changes).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. The sample size of North/Mountain Region was 179. Percent (%), 95% confidence interval (CI) and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Symbols indicate whether the health indicator in the region was statistically different from the rest of the state (p-value <0.05, chi-square test). Prior poor birth outcomes are presented for all women. Methods used to weight the data were different in 2011 than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

MIHA is a collaborative effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).

# MIHA Snapshot, Orange County 2011

Maternal and Infant Health Assessment (MIHA) Survey



✓ better than rest of California ✗ worse than rest of California ◆ no statistical difference

		Orange County			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Prior Poor Birth Outcomes</b>							
Prior low birth weight or preterm delivery	◆	7.5	4.0 - 11.0	2,800	8.4	7.3 - 9.6	41,000
Prior delivery by c-section	◆	17.0	11.8 - 22.2	6,300	15.9	14.1 - 17.6	78,200
<b>Health Status</b>							
In good to excellent health before pregnancy†	◆	92.2	89.0 - 95.4	34,500	91.3	90.0 - 92.5	449,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	◆	11.0	6.2 - 15.7	4,100	10.3	8.9 - 11.6	50,100
Hypertension, preeclampsia or eclampsia	◆	6.5	2.9 - 10.2	2,300	9.2	8.0 - 10.3	44,100
Asthma	◆	7.3	3.6 - 11.0	2,700	8.5	7.4 - 9.6	41,100
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	✓	44.5	37.4 - 51.6	16,500	34.4	32.3 - 36.4	168,600
Overweight before pregnancy	◆	25.8	19.5 - 32.2	8,800	26.1	24.1 - 28.1	120,100
Obese before pregnancy	◆	16.9	11.5 - 22.4	5,800	18.5	16.7 - 20.3	85,100
Inadequate weight gain during pregnancy	◆	21.1	13.9 - 28.3	5,900	16.8	15.0 - 18.6	63,300
Excessive weight gain during pregnancy	◆	40.4	32.2 - 48.5	11,300	43.9	41.5 - 46.2	165,500
Food insecurity during pregnancy	◆	16.2	11.8 - 20.6	6,000	18.4	16.8 - 19.9	90,200
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical IPV in the year before pregnancy	◆	4.6	1.6 - 7.5	1,700	3.2	2.5 - 3.9	15,900
Physical or psychological IPV during pregnancy	◆	9.3	5.4 - 13.2	3,500	7.7	6.7 - 8.7	37,700
Prenatal depressive symptoms	◆	11.1	6.8 - 15.3	4,100	15.2	13.6 - 16.8	74,900
Postpartum depressive symptoms	◆	12.7	8.0 - 17.3	4,700	13.5	12.1 - 14.9	66,400
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep	◆	2.4	0.3 - 4.6	900	3.0	2.4 - 3.5	14,500
Moved due to problems paying rent or mortgage	◆	9.2	5.0 - 13.3	3,400	7.4	6.4 - 8.4	36,300
Woman or partner lost job	◆	15.7	11.0 - 20.5	5,800	17.2	15.6 - 18.9	84,100
Woman or partner had pay or hours cut back	◆	18.7	13.7 - 23.6	6,900	16.6	15.0 - 18.2	80,900
Became separated or divorced	◆	5.2	2.6 - 7.8	1,900	7.5	6.6 - 8.5	36,900
Had no practical or emotional support	◆	3.1	1.3 - 5.0	1,200	5.3	4.4 - 6.2	26,200
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	◆	11.3	6.1 - 16.5	4,200	12.3	11.0 - 13.5	60,000
Any smoking, 1st or 3rd trimester†	◆	7.9	3.3 - 12.5	2,900	8.1	7.1 - 9.1	39,500
Any smoking, postpartum	◆	5.0	2.1 - 7.9	1,900	6.3	5.5 - 7.1	30,800
Any binge drinking, 3 months before pregnancy	◆	17.5	11.2 - 23.7	6,500	13.1	11.9 - 14.4	64,200
Any alcohol use, 1st or 3rd trimester†	◆	18.2	12.3 - 24.0	6,700	19.6	17.9 - 21.2	95,900
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy†	✓	24.8	18.9 - 30.6	9,200	32.1	30.1 - 34.1	157,200
Unsure of pregnancy intentions†	◆	10.8	6.2 - 15.4	4,000	11.9	10.4 - 13.3	58,200
Postpartum birth control use†	◆	88.4	83.1 - 93.8	28,800	91.1	89.7 - 92.4	395,200
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	✓	80.5	75.5 - 85.6	29,900	73.9	71.9 - 75.8	358,200
Intended to breastfeed, before birth	◆	93.6	90.1 - 97.1	34,700	92.1	91.0 - 93.2	448,400
Intended to breastfeed exclusively, before birth	◆	56.1	49.1 - 63.1	20,800	62.3	60.2 - 64.4	303,100
Breastfeeding practices							
Any breastfeeding, 1 month after delivery†	◆	84.1	79.0 - 89.2	31,000	81.7	80.0 - 83.4	391,400
Exclusive breastfeeding, 1 month after delivery†	✗	30.1	23.2 - 37.0	10,900	38.8	36.6 - 40.9	182,300
Any breastfeeding, 3 months after delivery†	◆	64.7	57.2 - 72.1	18,700	63.7	61.3 - 66.2	240,100
Exclusive breastfeeding, 3 months after delivery†	◆	19.0	12.2 - 25.9	5,500	23.1	21.1 - 25.1	86,000

↑ higher than rest of California ↓ lower than rest of California ♦ no statistical difference

		Orange County			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Health Care Utilization</b>							
Had a usual source of pre-pregnancy care	♦	68.5	61.8 - 75.1	25,600	72.2	70.2 - 74.1	355,300
Initiated prenatal care in 1st trimester†	♦	87.8	83.1 - 92.4	31,800	85.6	84.1 - 87.2	416,100
Had a postpartum medical visit	♦	89.8	85.1 - 94.6	33,300	88.6	87.3 - 90.0	435,300
Mom or infant needed but couldn't afford care postpartum	♦	10.9	6.9 - 14.9	4,000	13.0	11.5 - 14.5	62,600
<b>Public Program Participation and Health Insurance Coverage</b>							
Received CalFresh (food stamps) during pregnancy	↓	13.7	10.0 - 17.4	5,100	22.2	20.6 - 23.8	109,000
Pre-pregnancy insurance							
Medi-Cal†	↓	17.2	13.3 - 21.1	6,400	25.6	23.8 - 27.3	125,100
Uninsured†	♦	24.1	18.9 - 29.2	8,900	23.9	22.3 - 25.6	117,200
Private†	↑	56.9	51.8 - 62.0	21,000	46.4	44.7 - 48.1	227,000
Prenatal insurance							
Medi-Cal†	↓	42.4	37.9 - 46.9	15,600	50.4	48.8 - 51.9	247,500
Uninsured†		*			1.9	1.2 - 2.5	9,200
Private†	↑	52.4	47.5 - 57.2	19,300	43.2	41.6 - 44.8	212,400
Maternal postpartum insurance							
Medi-Cal†	↓	24.7	19.9 - 29.5	9,200	35.5	33.8 - 37.3	173,900
Uninsured†	↑	22.8	18.1 - 27.6	8,500	17.4	15.9 - 18.8	85,000
Private†	↑	51.7	46.7 - 56.8	19,200	43.8	42.1 - 45.4	214,300
Infant health insurance							
Medi-Cal†	↓	43.8	39.1 - 48.5	16,300	49.5	47.9 - 51.2	240,500
Healthy Families†	♦	7.1	3.2 - 11.0	2,600	5.2	4.4 - 6.1	25,400
Uninsured†		*			2.4	1.9 - 2.9	11,700
Private†	↑	46.6	41.5 - 51.7	17,300	39.4	37.8 - 41.0	191,200
<b>Maternal Demographics</b>							
Age							
15-19	♦	5.9	3.4 - 8.4	2,200	7.7	6.4 - 8.9	37,800
20-34	♦	71.9	65.6 - 78.1	26,900	73.8	71.9 - 75.7	364,100
35+	♦	22.2	16.4 - 28.1	8,300	18.5	16.9 - 20.2	91,500
Did not complete high school (or GED)	♦	18.7	14.4 - 23.0	6,900	20.6	18.9 - 22.3	101,000
Unmarried	↓	30.7	25.2 - 36.3	11,400	42.3	40.4 - 44.1	207,800
Race/Ethnicity							
Hispanic	♦	49.2	43.4 - 54.9	18,100	50.9	49.1 - 52.7	247,100
Black	↓	1.3	1.1 - 1.5	500	6.0	5.6 - 6.4	29,100
White	♦	31.2	24.7 - 37.7	11,500	29.1	27.4 - 30.7	141,200
Asian/Pacific Islander	♦	18.2	12.3 - 24.1	6,700	13.4	11.8 - 14.9	64,900
Nativity and Language							
Born outside the U.S.	↑	47.4	40.5 - 54.3	17,700	39.8	37.8 - 41.9	196,400
Speaks non-English language at home	♦	35.7	29.3 - 42.0	13,200	32.4	30.4 - 34.4	159,000
Income as a percent of the Federal Poverty Guideline							
0-100%	↓	33.1	28.1 - 38.0	10,400	43.8	42.0 - 45.6	198,400
101-200%	♦	19.3	13.5 - 25.0	6,100	19.0	17.2 - 20.8	86,000
>200%	↑	47.7	41.8 - 53.6	15,100	37.2	35.5 - 38.9	168,500

\* Data are not presented because fewer than 10 women reported.

† In 2011, measures changed for these indicators and are not comparable to the same indicator in prior years (see 2011 Technical Document for specific changes).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. The sample size of Orange County was 390. Percent (%), 95% confidence interval (CI) and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the county in 2011. Symbols indicate whether the health indicator in the county was statistically different from the rest of the state (p-value < 0.05, chi-square test). Prior poor birth outcomes are presented for all women. Methods used to weight the data were different in 2011 than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

MIHA is a collaborative effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).

# MIHA Snapshot, San Diego County 2011

Maternal and Infant Health Assessment (MIHA) Survey



✓ better than rest of California ✗ worse than rest of California ◆ no statistical difference

		San Diego County			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Prior Poor Birth Outcomes</b>							
Prior low birth weight or preterm delivery	◆	7.2	3.3 - 11.0	3,000	8.4	7.3 - 9.6	41,000
Prior delivery by c-section	◆	15.6	10.4 - 20.8	6,700	15.9	14.1 - 17.6	78,200
<b>Health Status</b>							
In good to excellent health before pregnancy†	◆	94.0	90.8 - 97.2	40,300	91.3	90.0 - 92.5	449,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	◆	9.8	5.3 - 14.3	4,100	10.3	8.9 - 11.6	50,100
Hypertension, preeclampsia or eclampsia	◆	9.1	5.1 - 13.1	3,800	9.2	8.0 - 10.3	44,100
Asthma	◆	11.1	6.5 - 15.6	4,600	8.5	7.4 - 9.6	41,100
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	✓	41.9	34.8 - 49.0	17,900	34.4	32.3 - 36.4	168,600
Overweight before pregnancy	◆	27.1	20.6 - 33.6	10,900	26.1	24.1 - 28.1	120,100
Obese before pregnancy	✓	12.6	8.5 - 16.7	5,100	18.5	16.7 - 20.3	85,100
Inadequate weight gain during pregnancy	◆	14.5	8.9 - 20.1	4,900	16.8	15.0 - 18.6	63,300
Excessive weight gain during pregnancy	◆	47.4	39.3 - 55.6	16,100	43.9	41.5 - 46.2	165,500
Food insecurity during pregnancy	◆	16.9	11.9 - 21.8	7,200	18.4	16.8 - 19.9	90,200
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical IPV in the year before pregnancy	◆	3.1	0.4 - 5.7	1,300	3.2	2.5 - 3.9	15,900
Physical or psychological IPV during pregnancy	◆	7.0	3.5 - 10.4	3,000	7.7	6.7 - 8.7	37,700
Prenatal depressive symptoms	◆	11.7	7.4 - 16.0	5,000	15.2	13.6 - 16.8	74,900
Postpartum depressive symptoms	◆	10.7	6.4 - 15.0	4,600	13.5	12.1 - 14.9	66,400
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep	◆	1.6	0.5 - 2.7	700	3.0	2.4 - 3.5	14,500
Moved due to problems paying rent or mortgage	✓	3.7	2.0 - 5.4	1,600	7.4	6.4 - 8.4	36,300
Woman or partner lost job	◆	14.5	9.9 - 19.0	6,200	17.2	15.6 - 18.9	84,100
Woman or partner had pay or hours cut back	✓	10.4	6.1 - 14.6	4,400	16.6	15.0 - 18.2	80,900
Became separated or divorced	◆	6.3	3.0 - 9.6	2,700	7.5	6.6 - 8.5	36,900
Had no practical or emotional support	◆	6.9	2.8 - 11.1	3,000	5.3	4.4 - 6.2	26,200
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	◆	14.6	10.0 - 19.2	6,200	12.3	11.0 - 13.5	60,000
Any smoking, 1st or 3rd trimester†	◆	8.8	5.2 - 12.3	3,700	8.1	7.1 - 9.1	39,500
Any smoking, postpartum	◆	4.6	2.2 - 6.9	2,000	6.3	5.5 - 7.1	30,800
Any binge drinking, 3 months before pregnancy	◆	13.4	8.8 - 18.1	5,800	13.1	11.9 - 14.4	64,200
Any alcohol use, 1st or 3rd trimester†	◆	24.2	18.1 - 30.3	10,400	19.6	17.9 - 21.2	95,900
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy†	◆	28.9	22.9 - 34.8	12,300	32.1	30.1 - 34.1	157,200
Unsure of pregnancy intentions†	✓	7.4	4.0 - 10.8	3,200	11.9	10.4 - 13.3	58,200
Postpartum birth control use†	◆	92.4	88.6 - 96.3	36,000	91.1	89.7 - 92.4	395,200
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	◆	74.3	68.3 - 80.2	31,600	73.9	71.9 - 75.8	358,200
Intended to breastfeed, before birth	◆	92.9	89.6 - 96.3	39,600	92.1	91.0 - 93.2	448,400
Intended to breastfeed exclusively, before birth	✓	72.3	66.3 - 78.2	30,800	62.3	60.2 - 64.4	303,100
<b>Breastfeeding practices</b>							
Any breastfeeding, 1 month after delivery†	✓	89.6	85.6 - 93.6	37,900	81.7	80.0 - 83.4	391,400
Exclusive breastfeeding, 1 month after delivery†	✓	51.0	43.6 - 58.3	21,200	38.8	36.6 - 40.9	182,300
Any breastfeeding, 3 months after delivery†	◆	69.5	62.3 - 76.7	23,200	63.7	61.3 - 66.2	240,100
Exclusive breastfeeding, 3 months after delivery†	✓	34.6	26.9 - 42.3	11,400	23.1	21.1 - 25.1	86,000

		San Diego County			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Health Care Utilization</b>							
Had a usual source of pre-pregnancy care	♦	72.6	66.5 - 78.7	31,100	72.2	70.2 - 74.1	355,300
Initiated prenatal care in 1st trimester†	♦	87.6	83.2 - 91.9	37,000	85.6	84.1 - 87.2	416,100
Had a postpartum medical visit	♦	90.8	86.9 - 94.7	38,100	88.6	87.3 - 90.0	435,300
Mom or infant needed but couldn't afford care postpartum	♦	13.7	9.2 - 18.2	5,800	13.0	11.5 - 14.5	62,600
<b>Public Program Participation and Health Insurance Coverage</b>							
Received CalFresh (food stamps) during pregnancy	↓	13.6	9.8 - 17.3	5,800	22.2	20.6 - 23.8	109,000
Pre-pregnancy insurance							
Medi-Cal†	↓	12.9	9.2 - 16.6	5,500	25.6	23.8 - 27.3	125,100
Uninsured†	♦	23.8	18.9 - 28.6	10,100	23.9	22.3 - 25.6	117,200
Private†	↑	52.5	46.4 - 58.6	22,300	46.4	44.7 - 48.1	227,000
Prenatal insurance							
Medi-Cal†	↓	36.2	31.6 - 40.7	15,400	50.4	48.8 - 51.9	247,500
Uninsured†	♦	1.8	0.0 - 3.5	800	1.9	1.2 - 2.5	9,200
Private†	♦	48.3	42.3 - 54.3	20,600	43.2	41.6 - 44.8	212,400
Maternal postpartum insurance							
Medi-Cal†	↓	23.3	18.9 - 27.7	9,900	35.5	33.8 - 37.3	173,900
Uninsured†	♦	16.9	12.3 - 21.6	7,200	17.4	15.9 - 18.8	85,000
Private†	♦	48.1	42.1 - 54.1	20,400	43.8	42.1 - 45.4	214,300
Infant health insurance							
Medi-Cal†	↓	35.5	30.8 - 40.3	15,100	49.5	47.9 - 51.2	240,500
Healthy Families†	♦	5.5	2.2 - 8.8	2,300	5.2	4.4 - 6.1	25,400
Uninsured†	♦	4.0	1.4 - 6.6	1,700	2.4	1.9 - 2.9	11,700
Private†	♦	43.5	37.5 - 49.4	18,400	39.4	37.8 - 41.0	191,200
<b>Maternal Demographics</b>							
Age							
15-19	♦	6.3	3.6 - 9.1	2,700	7.7	6.4 - 8.9	37,800
20-34	♦	75.4	69.0 - 81.8	32,300	73.8	71.9 - 75.7	364,100
35+	♦	18.3	12.2 - 24.3	7,800	18.5	16.9 - 20.2	91,500
Did not complete high school (or GED)	↓	12.1	8.4 - 15.8	5,100	20.6	18.9 - 22.3	101,000
Unmarried	↓	32.1	26.4 - 37.8	13,700	42.3	40.4 - 44.1	207,800
Race/Ethnicity							
Hispanic	↓	44.3	37.9 - 50.7	18,500	50.9	49.1 - 52.7	247,100
Black	♦	5.2	3.9 - 6.4	2,100	6.0	5.6 - 6.4	29,100
White	↑	37.7	30.9 - 44.6	15,700	29.1	27.4 - 30.7	141,200
Asian/Pacific Islander	♦	12.0	6.7 - 17.2	5,000	13.4	11.8 - 14.9	64,900
Nativity and Language							
Born outside the U.S.	♦	35.6	28.7 - 42.4	15,200	39.8	37.8 - 41.9	196,400
Speaks non-English language at home	♦	28.6	22.4 - 34.8	12,200	32.4	30.4 - 34.4	159,000
Income as a percent of the Federal Poverty Guideline							
0-100%	↓	31.4	26.3 - 36.4	12,900	43.8	42.0 - 45.6	198,400
101-200%	♦	20.1	14.4 - 25.8	8,300	19.0	17.2 - 20.8	86,000
>200%	↑	48.5	42.7 - 54.3	19,900	37.2	35.5 - 38.9	168,500

† In 2011, measures changed for these indicators and are not comparable to the same indicator in prior years (see 2011 Technical Document for specific changes).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. The sample size of San Diego County was 419. Percent (%), 95% confidence interval (CI) and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the county in 2011. Symbols indicate whether the health indicator in the county was statistically different from the rest of the state (p-value < 0.05, chi-square test). Prior poor birth outcomes are presented for all women. Methods used to weight the data were different in 2011 than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

MIHA is a collaborative effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).

# MIHA Snapshot, San Francisco Bay Area 2011

Maternal and Infant Health Assessment (MIHA) Survey



✓ better than rest of California ✗ worse than rest of California ◆ no statistical difference

		San Francisco Bay Area			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Prior Poor Birth Outcomes</b>							
Prior low birth weight or preterm delivery	◆	8.6	6.7 - 10.5	7,200	8.4	7.3 - 9.6	41,000
Prior delivery by c-section	✓	12.6	10.4 - 14.7	10,700	15.9	14.1 - 17.6	78,200
<b>Health Status</b>							
In good to excellent health before pregnancy†	◆	92.9	91.4 - 94.4	79,200	91.3	90.0 - 92.5	449,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	◆	11.5	9.5 - 13.6	9,700	10.3	8.9 - 11.6	50,100
Hypertension, preeclampsia or eclampsia	✗	11.9	9.7 - 14.2	9,800	9.2	8.0 - 10.3	44,100
Asthma	◆	9.2	7.6 - 10.8	7,700	8.5	7.4 - 9.6	41,100
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	✓	40.6	37.4 - 43.8	34,500	34.4	32.3 - 36.4	168,600
Overweight before pregnancy	◆	24.5	21.5 - 27.4	19,600	26.1	24.1 - 28.1	120,100
Obese before pregnancy	✓	14.3	12.3 - 16.4	11,500	18.5	16.7 - 20.3	85,100
Inadequate weight gain during pregnancy	◆	16.2	13.5 - 18.8	11,200	16.8	15.0 - 18.6	63,300
Excessive weight gain during pregnancy	◆	41.5	37.9 - 45.1	28,900	43.9	41.5 - 46.2	165,500
Food insecurity during pregnancy	✓	14.2	12.3 - 16.1	12,000	18.4	16.8 - 19.9	90,200
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical IPV in the year before pregnancy	◆	2.3	1.5 - 3.1	1,900	3.2	2.5 - 3.9	15,900
Physical or psychological IPV during pregnancy	✓	5.9	4.5 - 7.2	5,000	7.7	6.7 - 8.7	37,700
Prenatal depressive symptoms	✓	12.5	10.4 - 14.5	10,600	15.2	13.6 - 16.8	74,900
Postpartum depressive symptoms	◆	13.4	11.0 - 15.7	11,300	13.5	12.1 - 14.9	66,400
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep	◆	2.6	1.7 - 3.6	2,200	3.0	2.4 - 3.5	14,500
Moved due to problems paying rent or mortgage	✓	4.6	3.5 - 5.6	3,900	7.4	6.4 - 8.4	36,300
Woman or partner lost job	◆	16.1	13.7 - 18.5	13,600	17.2	15.6 - 18.9	84,100
Woman or partner had pay or hours cut back	◆	14.1	11.9 - 16.4	11,900	16.6	15.0 - 18.2	80,900
Became separated or divorced	✓	5.8	4.3 - 7.2	4,900	7.5	6.6 - 8.5	36,900
Had no practical or emotional support	◆	5.9	4.3 - 7.5	5,000	5.3	4.4 - 6.2	26,200
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	◆	11.1	9.1 - 13.0	9,400	12.3	11.0 - 13.5	60,000
Any smoking, 1st or 3rd trimester†	◆	7.4	5.8 - 9.0	6,300	8.1	7.1 - 9.1	39,500
Any smoking, postpartum	◆	5.5	4.2 - 6.8	4,700	6.3	5.5 - 7.1	30,800
Any binge drinking, 3 months before pregnancy	◆	13.8	11.6 - 16.0	11,600	13.1	11.9 - 14.4	64,200
Any alcohol use, 1st or 3rd trimester†	✗	23.8	21.1 - 26.5	20,200	19.6	17.9 - 21.2	95,900
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy†	✓	27.4	24.7 - 30.2	23,300	32.1	30.1 - 34.1	157,200
Unsure of pregnancy intentions†	◆	10.9	8.9 - 12.8	9,200	11.9	10.4 - 13.3	58,200
Postpartum birth control use†	◆	91.8	89.8 - 93.7	68,300	91.1	89.7 - 92.4	395,200
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	✓	80.5	78.1 - 82.9	68,100	73.9	71.9 - 75.8	358,200
Intended to breastfeed, before birth	✓	94.3	92.7 - 95.8	79,600	92.1	91.0 - 93.2	448,400
Intended to breastfeed exclusively, before birth	✓	70.0	67.1 - 72.8	59,100	62.3	60.2 - 64.4	303,100
Breastfeeding practices							
Any breastfeeding, 1 month after delivery†	✓	88.3	86.4 - 90.2	73,900	81.7	80.0 - 83.4	391,400
Exclusive breastfeeding, 1 month after delivery†	✓	44.4	41.2 - 47.7	36,500	38.8	36.6 - 40.9	182,300
Any breastfeeding, 3 months after delivery†	✓	75.3	72.2 - 78.3	44,900	63.7	61.3 - 66.2	240,100
Exclusive breastfeeding, 3 months after delivery†	✓	29.6	26.1 - 33.1	17,500	23.1	21.1 - 25.1	86,000

↑ higher than rest of California ↓ lower than rest of California ♦ no statistical difference

	San Francisco Bay Area			California			
	%	95% CI	Population Estimate	%	95% CI	Population Estimate	
<b>Health Care Utilization</b>							
Had a usual source of pre-pregnancy care	↑	78.8	76.3 - 81.3	67,100	72.2	70.2 - 74.1	355,300
Initiated prenatal care in 1st trimester†	↑	88.6	86.7 - 90.6	74,400	85.6	84.1 - 87.2	416,100
Had a postpartum medical visit	↑	92.4	91.0 - 93.8	78,500	88.6	87.3 - 90.0	435,300
Mom or infant needed but couldn't afford care postpartum	♦	11.1	9.1 - 13.2	9,300	13.0	11.5 - 14.5	62,600
<b>Public Program Participation and Health Insurance Coverage</b>							
Received CalFresh (food stamps) during pregnancy	↓	15.8	13.8 - 17.8	13,400	22.2	20.6 - 23.8	109,000
Pre-pregnancy insurance							
Medi-Cal†	↓	19.7	17.5 - 22.0	16,700	25.6	23.8 - 27.3	125,100
Uninsured†	↓	16.1	14.2 - 18.0	13,700	23.9	22.3 - 25.6	117,200
Private†	↑	60.8	58.2 - 63.5	51,600	46.4	44.7 - 48.1	227,000
Prenatal insurance							
Medi-Cal†	↓	35.7	33.4 - 38.1	30,400	50.4	48.8 - 51.9	247,500
Uninsured†	♦	1.4	0.8 - 2.0	1,200	1.9	1.2 - 2.5	9,200
Private†	↑	59.7	57.1 - 62.2	50,700	43.2	41.6 - 44.8	212,400
Maternal postpartum insurance							
Medi-Cal†	↓	25.9	23.6 - 28.3	21,900	35.5	33.8 - 37.3	173,900
Uninsured†	↓	12.1	10.4 - 13.9	10,200	17.4	15.9 - 18.8	85,000
Private†	↑	58.9	56.3 - 61.5	49,700	43.8	42.1 - 45.4	214,300
Infant health insurance							
Medi-Cal†	↓	34.3	32.0 - 36.6	29,000	49.5	47.9 - 51.2	240,500
Healthy Families†	♦	5.4	3.9 - 6.9	4,600	5.2	4.4 - 6.1	25,400
Uninsured†	♦	2.4	1.5 - 3.2	2,000	2.4	1.9 - 2.9	11,700
Private†	↑	55.5	52.9 - 58.2	47,000	39.4	37.8 - 41.0	191,200
<b>Maternal Demographics</b>							
Age							
15-19	↓	4.6	3.6 - 5.6	3,900	7.7	6.4 - 8.9	37,800
20-34	↓	70.0	67.1 - 72.9	59,600	73.8	71.9 - 75.7	364,100
35+	↑	25.4	22.6 - 28.2	21,600	18.5	16.9 - 20.2	91,500
Did not complete high school (or GED)	↓	13.4	11.7 - 15.1	11,400	20.6	18.9 - 22.3	101,000
Unmarried	↓	34.2	31.5 - 37.0	29,000	42.3	40.4 - 44.1	207,800
Race/Ethnicity							
Hispanic	↓	33.5	30.7 - 36.2	27,300	50.9	49.1 - 52.7	247,100
Black	♦	6.4	5.7 - 7.2	5,200	6.0	5.6 - 6.4	29,100
White	↑	32.2	29.2 - 35.2	26,200	29.1	27.4 - 30.7	141,200
Asian/Pacific Islander	↑	27.2	24.1 - 30.3	22,200	13.4	11.8 - 14.9	64,900
Nativity and Language							
Born outside the U.S.	↑	47.3	44.1 - 50.5	40,300	39.8	37.8 - 41.9	196,400
Speaks non-English language at home	↑	35.7	32.6 - 38.8	30,200	32.4	30.4 - 34.4	159,000
Income as a percent of the Federal Poverty Guideline							
0-100%	↓	31.5	29.0 - 34.1	25,300	43.8	42.0 - 45.6	198,400
101-200%	↓	14.6	12.4 - 16.8	11,700	19.0	17.2 - 20.8	86,000
>200%	↑	53.8	51.0 - 56.7	43,200	37.2	35.5 - 38.9	168,500

† In 2011, measures changed for these indicators and are not comparable to the same indicator in prior years (see 2011 Technical Document for specific changes).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. The sample size of San Francisco Bay Area was 1768. Percent (%), 95% confidence interval (CI) and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Symbols indicate whether the health indicator in the region was statistically different from the rest of the state (p-value <0.05, chi-square test). Prior poor birth outcomes are presented for all women. Methods used to weight the data were different in 2011 than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

MIHA is a collaborative effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).

# MIHA Snapshot, San Joaquin Valley 2011

Maternal and Infant Health Assessment (MIHA) Survey



✓ better than rest of California ✗ worse than rest of California ◆ no statistical difference

		San Joaquin Valley			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Prior Poor Birth Outcomes</b>							
Prior low birth weight or preterm delivery	◆	10.5	8.5 - 12.6	6,600	8.4	7.3 - 9.6	41,000
Prior delivery by c-section	◆	16.8	14.4 - 19.3	10,900	15.9	14.1 - 17.6	78,200
<b>Health Status</b>							
In good to excellent health before pregnancy†	✗	88.7	86.7 - 90.7	57,300	91.3	90.0 - 92.5	449,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	◆	11.4	9.5 - 13.4	7,300	10.3	8.9 - 11.6	50,100
Hypertension, preeclampsia or eclampsia	✗	12.2	10.2 - 14.3	7,600	9.2	8.0 - 10.3	44,100
Asthma	◆	10.0	8.1 - 11.9	6,300	8.5	7.4 - 9.6	41,100
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	✗	28.2	25.4 - 30.9	18,200	34.4	32.3 - 36.4	168,600
Overweight before pregnancy	◆	26.4	23.5 - 29.3	15,600	26.1	24.1 - 28.1	120,100
Obese before pregnancy	✗	24.4	21.6 - 27.2	14,400	18.5	16.7 - 20.3	85,100
Inadequate weight gain during pregnancy	◆	15.6	13.0 - 18.2	7,000	16.8	15.0 - 18.6	63,300
Excessive weight gain during pregnancy	✗	49.6	45.9 - 53.3	22,400	43.9	41.5 - 46.2	165,500
Food insecurity during pregnancy	✗	23.6	20.9 - 26.3	15,200	18.4	16.8 - 19.9	90,200
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical IPV in the year before pregnancy	✗	4.8	3.4 - 6.2	3,100	3.2	2.5 - 3.9	15,900
Physical or psychological IPV during pregnancy	✗	11.3	9.2 - 13.3	7,300	7.7	6.7 - 8.7	37,700
Prenatal depressive symptoms	✗	19.9	17.3 - 22.5	12,800	15.2	13.6 - 16.8	74,900
Postpartum depressive symptoms	✗	16.9	14.5 - 19.3	10,900	13.5	12.1 - 14.9	66,400
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep	✗	4.8	3.4 - 6.2	3,100	3.0	2.4 - 3.5	14,500
Moved due to problems paying rent or mortgage	✗	9.3	7.5 - 11.1	6,000	7.4	6.4 - 8.4	36,300
Woman or partner lost job	◆	17.7	15.3 - 20.2	11,400	17.2	15.6 - 18.9	84,100
Woman or partner had pay or hours cut back	◆	14.9	12.8 - 17.0	9,600	16.6	15.0 - 18.2	80,900
Became separated or divorced	✗	12.8	10.7 - 14.9	8,200	7.5	6.6 - 8.5	36,900
Had no practical or emotional support	✗	7.1	5.5 - 8.8	4,600	5.3	4.4 - 6.2	26,200
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	◆	14.5	12.2 - 16.7	9,300	12.3	11.0 - 13.5	60,000
Any smoking, 1st or 3rd trimester†	◆	9.7	8.0 - 11.4	6,200	8.1	7.1 - 9.1	39,500
Any smoking, postpartum	✗	8.9	6.9 - 10.8	5,700	6.3	5.5 - 7.1	30,800
Any binge drinking, 3 months before pregnancy	◆	12.4	10.3 - 14.4	7,900	13.1	11.9 - 14.4	64,200
Any alcohol use, 1st or 3rd trimester†	✓	14.4	12.3 - 16.5	9,200	19.6	17.9 - 21.2	95,900
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy†	◆	33.5	30.5 - 36.4	21,500	32.1	30.1 - 34.1	157,200
Unsure of pregnancy intentions†	✗	15.0	12.8 - 17.3	9,600	11.9	10.4 - 13.3	58,200
Postpartum birth control use†	◆	89.8	87.7 - 92.0	51,800	91.1	89.7 - 92.4	395,200
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	◆	71.8	69.0 - 74.7	45,000	73.9	71.9 - 75.8	358,200
Intended to breastfeed, before birth	✗	88.6	86.7 - 90.6	56,000	92.1	91.0 - 93.2	448,400
Intended to breastfeed exclusively, before birth	✗	53.7	50.6 - 56.9	34,000	62.3	60.2 - 64.4	303,100
<b>Breastfeeding practices</b>							
Any breastfeeding, 1 month after delivery†	✗	73.0	70.1 - 75.9	44,900	81.7	80.0 - 83.4	391,400
Exclusive breastfeeding, 1 month after delivery†	✗	32.6	29.7 - 35.6	20,000	38.8	36.6 - 40.9	182,300
Any breastfeeding, 3 months after delivery†	✗	53.4	49.8 - 57.0	25,000	63.7	61.3 - 66.2	240,100
Exclusive breastfeeding, 3 months after delivery†	✗	19.0	16.2 - 21.8	8,900	23.1	21.1 - 25.1	86,000

		San Joaquin Valley			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Health Care Utilization</b>							
Had a usual source of pre-pregnancy care	♦	72.9	70.2 - 75.7	47,100	72.2	70.2 - 74.1	355,300
Initiated prenatal care in 1st trimester†	↓	82.3	79.9 - 84.8	52,300	85.6	84.1 - 87.2	416,100
Had a postpartum medical visit	↓	84.8	82.5 - 87.0	54,600	88.6	87.3 - 90.0	435,300
Mom or infant needed but couldn't afford care postpartum	♦	15.0	12.7 - 17.2	9,400	13.0	11.5 - 14.5	62,600
<b>Public Program Participation and Health Insurance Coverage</b>							
Received CalFresh (food stamps) during pregnancy	↑	38.4	35.4 - 41.5	24,700	22.2	20.6 - 23.8	109,000
Pre-pregnancy insurance							
Medi-Cal†	↑	39.7	36.7 - 42.7	25,500	25.6	23.8 - 27.3	125,100
Uninsured†	♦	24.9	22.3 - 27.5	15,900	23.9	22.3 - 25.6	117,200
Private†	↓	32.0	29.3 - 34.6	20,500	46.4	44.7 - 48.1	227,000
Prenatal insurance							
Medi-Cal†	↑	66.5	63.8 - 69.1	42,900	50.4	48.8 - 51.9	247,500
Uninsured†	♦	2.0	1.1 - 2.9	1,300	1.9	1.2 - 2.5	9,200
Private†	↓	27.8	25.3 - 30.2	17,900	43.2	41.6 - 44.8	212,400
Maternal postpartum insurance							
Medi-Cal†	↑	49.3	46.3 - 52.3	31,600	35.5	33.8 - 37.3	173,900
Uninsured†	♦	18.0	15.7 - 20.4	11,600	17.4	15.9 - 18.8	85,000
Private†	↓	30.4	27.7 - 33.0	19,500	43.8	42.1 - 45.4	214,300
Infant health insurance							
Medi-Cal†	↑	62.2	59.3 - 65.0	39,300	49.5	47.9 - 51.2	240,500
Healthy Families†	↑	7.7	6.0 - 9.5	4,900	5.2	4.4 - 6.1	25,400
Uninsured†	♦	3.1	1.8 - 4.5	2,000	2.4	1.9 - 2.9	11,700
Private†	↓	24.5	22.1 - 27.0	15,500	39.4	37.8 - 41.0	191,200
<b>Maternal Demographics</b>							
Age							
15-19	↑	11.2	9.3 - 13.1	7,200	7.7	6.4 - 8.9	37,800
20-34	↑	76.9	74.4 - 79.5	49,800	73.8	71.9 - 75.7	364,100
35+	↓	11.9	9.9 - 13.8	7,700	18.5	16.9 - 20.2	91,500
Did not complete high school (or GED)	↑	25.4	22.7 - 28.1	16,400	20.6	18.9 - 22.3	101,000
Unmarried	↑	51.8	48.8 - 54.8	33,400	42.3	40.4 - 44.1	207,800
Race/Ethnicity							
Hispanic	↑	60.4	57.5 - 63.4	38,800	50.9	49.1 - 52.7	247,100
Black	↓	4.9	4.3 - 5.4	3,100	6.0	5.6 - 6.4	29,100
White	↓	26.0	23.3 - 28.6	16,700	29.1	27.4 - 30.7	141,200
Asian/Pacific Islander	↓	8.0	6.2 - 9.7	5,100	13.4	11.8 - 14.9	64,900
Nativity and Language							
Born outside the U.S.	↓	33.2	30.4 - 36.1	21,500	39.8	37.8 - 41.9	196,400
Speaks non-English language at home	♦	30.3	27.4 - 33.1	19,500	32.4	30.4 - 34.4	159,000
Income as a percent of the Federal Poverty Guideline							
0-100%	↑	57.6	54.6 - 60.6	34,600	43.8	42.0 - 45.6	198,400
101-200%	♦	19.3	16.6 - 21.9	11,600	19.0	17.2 - 20.8	86,000
>200%	↓	23.1	20.6 - 25.6	13,900	37.2	35.5 - 38.9	168,500

† In 2011, measures changed for these indicators and are not comparable to the same indicator in prior years (see 2011 Technical Document for specific changes).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. The sample size of San Joaquin Valley was 1544. Percent (%), 95% confidence interval (CI) and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Symbols indicate whether the health indicator in the region was statistically different from the rest of the state (p-value <0.05, chi-square test). Prior poor birth outcomes are presented for all women. Methods used to weight the data were different in 2011 than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

MIHA is a collaborative effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).

# MIHA Snapshot, Southeastern California 2011

Maternal and Infant Health Assessment (MIHA) Survey



✓ better than rest of California ✗ worse than rest of California ◆ no statistical difference

	Southeastern California			California			
	%	95% CI	Population Estimate	%	95% CI	Population Estimate	
<b>Prior Poor Birth Outcomes</b>							
Prior low birth weight or preterm delivery	◆	8.6	5.9 - 11.2	5,300	8.4	7.3 - 9.6	41,000
Prior delivery by c-section	◆	17.0	13.4 - 20.7	10,800	15.9	14.1 - 17.6	78,200
<b>Health Status</b>							
In good to excellent health before pregnancy†	◆	91.8	89.3 - 94.3	58,100	91.3	90.0 - 92.5	449,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	✓	7.2	4.8 - 9.7	4,500	10.3	8.9 - 11.6	50,100
Hypertension, preeclampsia or eclampsia	◆	9.8	7.1 - 12.4	6,000	9.2	8.0 - 10.3	44,100
Asthma	◆	8.5	6.1 - 10.8	5,300	8.5	7.4 - 9.6	41,100
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	◆	33.0	28.8 - 37.1	20,800	34.4	32.3 - 36.4	168,600
Overweight before pregnancy	◆	27.3	23.2 - 31.4	16,300	26.1	24.1 - 28.1	120,100
Obese before pregnancy	◆	21.8	17.9 - 25.7	13,100	18.5	16.7 - 20.3	85,100
Inadequate weight gain during pregnancy	◆	17.9	13.8 - 21.9	8,800	16.8	15.0 - 18.6	63,300
Excessive weight gain during pregnancy	◆	45.1	40.1 - 50.1	22,300	43.9	41.5 - 46.2	165,500
Food insecurity during pregnancy	◆	18.3	14.7 - 21.9	11,500	18.4	16.8 - 19.9	90,200
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical IPV in the year before pregnancy	◆	2.5	1.3 - 3.7	1,600	3.2	2.5 - 3.9	15,900
Physical or psychological IPV during pregnancy	◆	6.8	4.8 - 8.8	4,300	7.7	6.7 - 8.7	37,700
Prenatal depressive symptoms	◆	15.9	12.7 - 19.1	10,100	15.2	13.6 - 16.8	74,900
Postpartum depressive symptoms	◆	12.6	9.7 - 15.5	8,000	13.5	12.1 - 14.9	66,400
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep	◆	4.0	2.2 - 5.8	2,500	3.0	2.4 - 3.5	14,500
Moved due to problems paying rent or mortgage	✗	10.7	7.7 - 13.6	6,700	7.4	6.4 - 8.4	36,300
Woman or partner lost job	◆	16.1	12.9 - 19.4	10,000	17.2	15.6 - 18.9	84,100
Woman or partner had pay or hours cut back	◆	17.7	14.3 - 21.1	11,000	16.6	15.0 - 18.2	80,900
Became separated or divorced	◆	8.5	6.1 - 10.8	5,300	7.5	6.6 - 8.5	36,900
Had no practical or emotional support	◆	3.9	2.2 - 5.6	2,500	5.3	4.4 - 6.2	26,200
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	◆	12.8	9.9 - 15.6	8,000	12.3	11.0 - 13.5	60,000
Any smoking, 1st or 3rd trimester†	◆	8.1	5.9 - 10.2	5,000	8.1	7.1 - 9.1	39,500
Any smoking, postpartum	◆	7.5	5.2 - 9.7	4,700	6.3	5.5 - 7.1	30,800
Any binge drinking, 3 months before pregnancy	◆	15.5	12.3 - 18.6	9,600	13.1	11.9 - 14.4	64,200
Any alcohol use, 1st or 3rd trimester†	✓	15.0	12.0 - 18.0	9,400	19.6	17.9 - 21.2	95,900
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy†	◆	36.0	31.7 - 40.2	22,600	32.1	30.1 - 34.1	157,200
Unsure of pregnancy intentions†	◆	12.7	9.8 - 15.6	8,000	11.9	10.4 - 13.3	58,200
Postpartum birth control use†	◆	91.3	88.8 - 93.9	51,600	91.1	89.7 - 92.4	395,200
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	◆	70.7	66.5 - 74.9	43,400	73.9	71.9 - 75.8	358,200
Intended to breastfeed, before birth	◆	91.5	89.2 - 93.9	56,600	92.1	91.0 - 93.2	448,400
Intended to breastfeed exclusively, before birth	◆	60.7	56.2 - 65.2	37,500	62.3	60.2 - 64.4	303,100
<b>Breastfeeding practices</b>							
Any breastfeeding, 1 month after delivery†	✗	75.8	72.0 - 79.6	46,000	81.7	80.0 - 83.4	391,400
Exclusive breastfeeding, 1 month after delivery†	◆	35.3	30.9 - 39.6	21,400	38.8	36.6 - 40.9	182,300
Any breastfeeding, 3 months after delivery†	✗	53.2	48.1 - 58.3	25,200	63.7	61.3 - 66.2	240,100
Exclusive breastfeeding, 3 months after delivery†	✗	18.2	14.4 - 22.1	8,700	23.1	21.1 - 25.1	86,000

↑ higher than rest of California ↓ lower than rest of California ♦ no statistical difference

		Southeastern California			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Health Care Utilization</b>							
Had a usual source of pre-pregnancy care	♦	68.9	65.0 - 72.9	43,600	72.2	70.2 - 74.1	355,300
Initiated prenatal care in 1st trimester†	♦	86.1	83.1 - 89.2	53,700	85.6	84.1 - 87.2	416,100
Had a postpartum medical visit	↓	84.7	81.4 - 88.1	53,200	88.6	87.3 - 90.0	435,300
Mom or infant needed but couldn't afford care postpartum	♦	14.7	11.5 - 17.8	8,900	13.0	11.5 - 14.5	62,600
<b>Public Program Participation and Health Insurance Coverage</b>							
Received CalFresh (food stamps) during pregnancy	↑	27.2	23.4 - 30.9	17,100	22.2	20.6 - 23.8	109,000
Pre-pregnancy insurance							
Medi-Cal†	♦	27.6	23.9 - 31.3	17,400	25.6	23.8 - 27.3	125,100
Uninsured†	↑	27.9	24.2 - 31.5	17,600	23.9	22.3 - 25.6	117,200
Private†	↓	39.8	36.4 - 43.2	25,100	46.4	44.7 - 48.1	227,000
Prenatal insurance							
Medi-Cal†	↑	57.3	53.9 - 60.7	36,200	50.4	48.8 - 51.9	247,500
Uninsured†	♦	1.1	0.5 - 1.7	700	1.9	1.2 - 2.5	9,200
Private†	↓	36.9	33.5 - 40.2	23,300	43.2	41.6 - 44.8	212,400
Maternal postpartum insurance							
Medi-Cal†	♦	38.0	34.1 - 41.9	23,900	35.5	33.8 - 37.3	173,900
Uninsured†	↑	23.0	19.4 - 26.6	14,400	17.4	15.9 - 18.8	85,000
Private†	↓	35.9	32.6 - 39.3	22,600	43.8	42.1 - 45.4	214,300
Infant health insurance							
Medi-Cal†	↑	56.3	52.7 - 60.0	34,800	49.5	47.9 - 51.2	240,500
Healthy Families†	♦	4.5	2.8 - 6.3	2,800	5.2	4.4 - 6.1	25,400
Uninsured†	♦	3.1	1.6 - 4.6	1,900	2.4	1.9 - 2.9	11,700
Private†	↓	31.2	28.0 - 34.5	19,300	39.4	37.8 - 41.0	191,200
<b>Maternal Demographics</b>							
Age							
15-19	♦	9.4	7.0 - 11.7	5,900	7.7	6.4 - 8.9	37,800
20-34	♦	77.0	73.2 - 80.9	48,700	73.8	71.9 - 75.7	364,100
35+	↓	13.6	10.3 - 16.9	8,600	18.5	16.9 - 20.2	91,500
Did not complete high school (or GED)	♦	20.8	17.0 - 24.6	13,100	20.6	18.9 - 22.3	101,000
Unmarried	↑	49.0	44.9 - 53.0	30,900	42.3	40.4 - 44.1	207,800
Race/Ethnicity							
Hispanic	↑	60.2	56.5 - 64.0	37,800	50.9	49.1 - 52.7	247,100
Black	↑	7.7	6.6 - 8.8	4,800	6.0	5.6 - 6.4	29,100
White	♦	25.8	22.3 - 29.4	16,200	29.1	27.4 - 30.7	141,200
Asian/Pacific Islander	↓	5.7	3.6 - 7.8	3,600	13.4	11.8 - 14.9	64,900
Nativity and Language							
Born outside the U.S.	↓	30.3	26.0 - 34.5	19,100	39.8	37.8 - 41.9	196,400
Speaks non-English language at home	↓	24.9	20.8 - 28.9	15,700	32.4	30.4 - 34.4	159,000
Income as a percent of the Federal Poverty Guideline							
0-100%	↑	48.7	44.6 - 52.8	29,000	43.8	42.0 - 45.6	198,400
101-200%	↑	23.3	19.4 - 27.3	13,900	19.0	17.2 - 20.8	86,000
>200%	↓	28.0	24.8 - 31.2	16,700	37.2	35.5 - 38.9	168,500

† In 2011, measures changed for these indicators and are not comparable to the same indicator in prior years (see 2011 Technical Document for specific changes).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. The sample size of Southeastern California was 844. Percent (%), 95% confidence interval (CI) and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Symbols indicate whether the health indicator in the region was statistically different from the rest of the state (p-value <0.05, chi-square test). Prior poor birth outcomes are presented for all women. Methods used to weight the data were different in 2011 than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

MIHA is a collaborative effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).

# Regional Comparisons

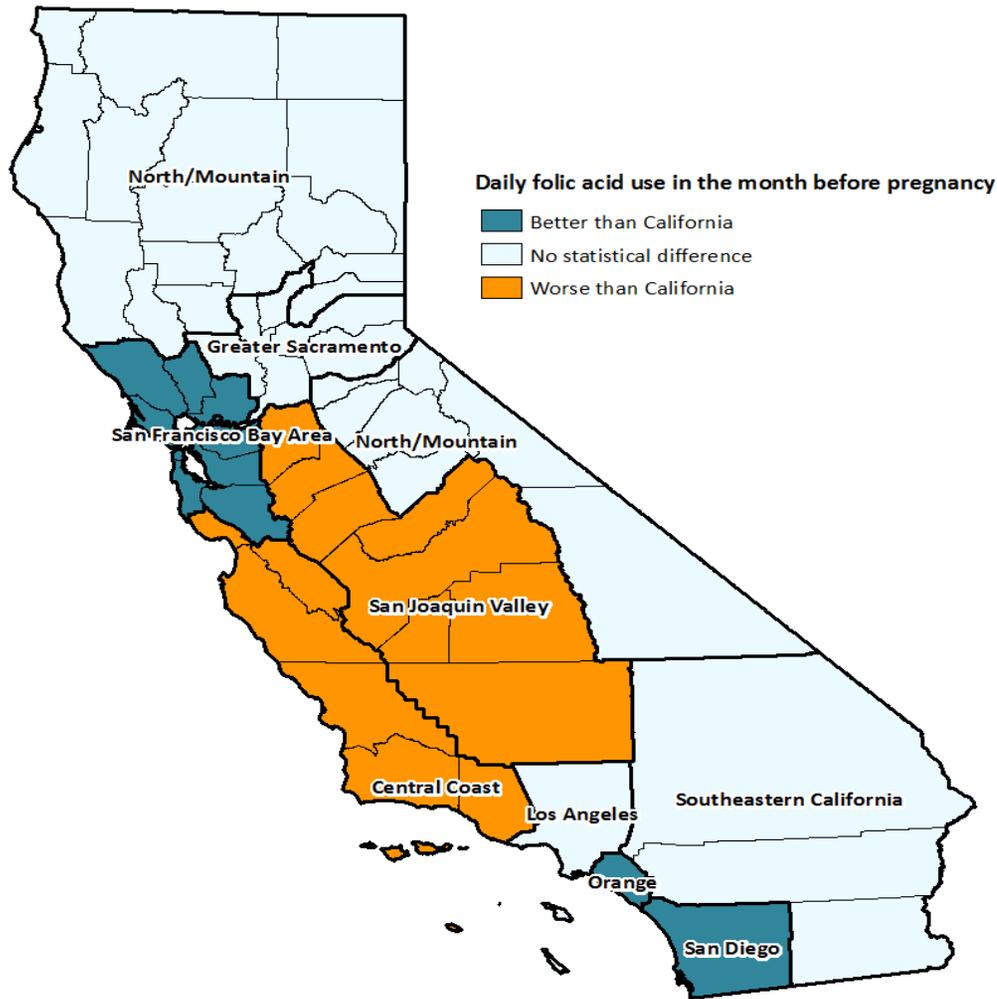
*“Breastfeeding (pumping milk) at work can only be done on break or lunch, so I began to only formula feed once I went back to work.”*

— MIHA 2011 Respondent



# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Daily folic acid use in the month before pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	34.4	32.3 - 36.4	168,600
Central Coast Region	✘ 29.4	25.6 - 33.2	8,600
Greater Sacramento Region	◇ 34.9	30.0 - 39.9	10,300
Los Angeles County	◇ 30.3	24.0 - 36.5	38,400
North/Mountain Region	◇ 26.7	19.4 - 34.0	3,400
Orange County	✔ 44.5	37.4 - 51.6	16,500
San Diego County	✔ 41.9	34.8 - 49.0	17,900
San Francisco Bay Area	✔ 40.6	37.4 - 43.8	34,500
San Joaquin Valley	✘ 28.2	25.4 - 30.9	18,200
Southeastern California	◇ 33.0	28.8 - 37.1	20,800

- ✔ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)
- ✘ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)
- ◇ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

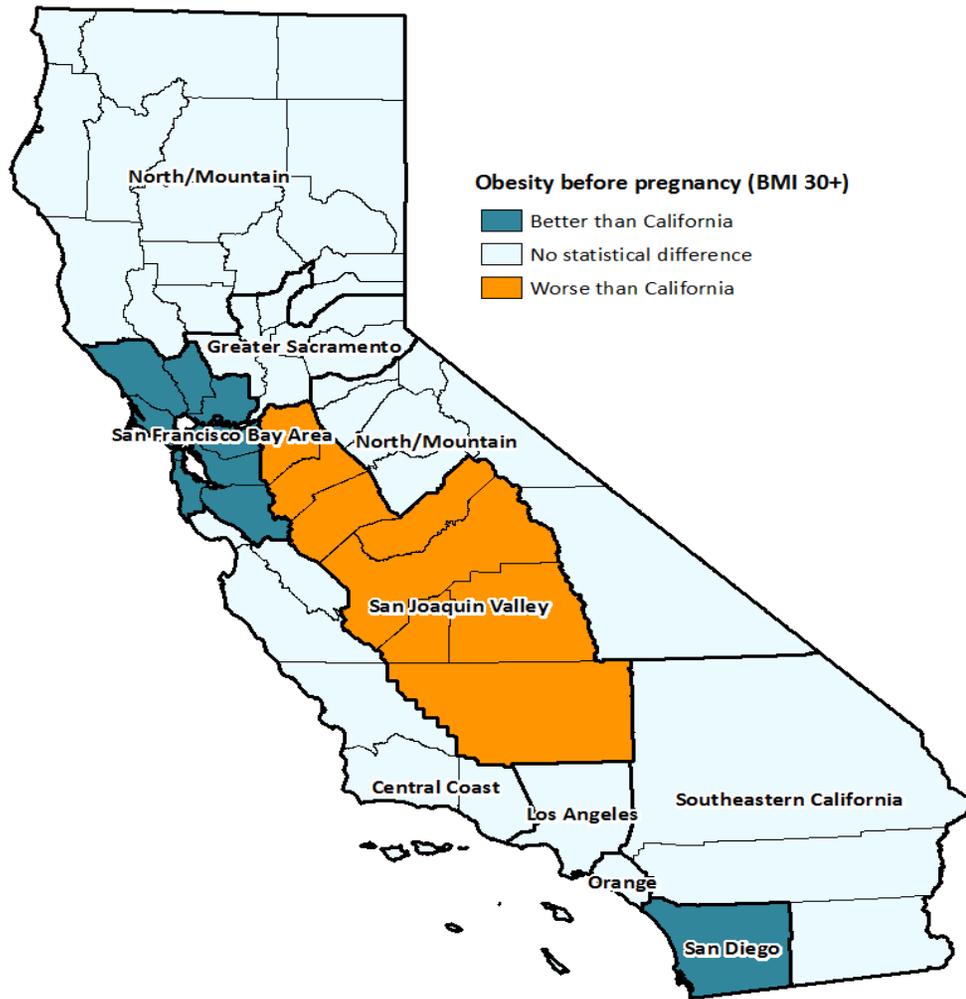
MIHA Regions	Counties in Each Region
Central Coast	Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura
Greater Sacramento	El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba
North/Mountain	Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, Tuolumne
San Francisco Bay Area	Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma
San Joaquin Valley	Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare
Southeastern California	Imperial, Riverside, San Bernardino

Data Source: Maternal and Infant Health Assessment Survey  
 Prepared by: Maternal, Child and Adolescent Health Program,  
 Center for Family Health, California Department of Public Health

MIHA is a joint effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Obesity before pregnancy (BMI 30+)

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	18.5	16.7 - 20.3	85,100
Central Coast Region	♦ 15.7	12.1 - 19.3	3,900
Greater Sacramento Region	♦ 17.7	14.0 - 21.3	5,100
Los Angeles County	♦ 19.4	13.6 - 25.1	23,400
North/Mountain Region	♦ 24.7	17.7 - 31.8	2,900
Orange County	♦ 16.9	11.5 - 22.4	5,800
San Diego County	✓ 12.6	8.5 - 16.7	5,100
San Francisco Bay Area	✓ 14.3	12.3 - 16.4	11,500
San Joaquin Valley	✗ 24.4	21.6 - 27.2	14,400
Southeastern California	♦ 21.8	17.9 - 25.7	13,100

✓ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)

✗ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)

♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

### MIHA Regions

Central Coast

Greater Sacramento

North/Mountain

San Francisco Bay Area

San Joaquin Valley

Southeastern California

### Counties in Each Region

Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura

El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba

Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, Tuolumne

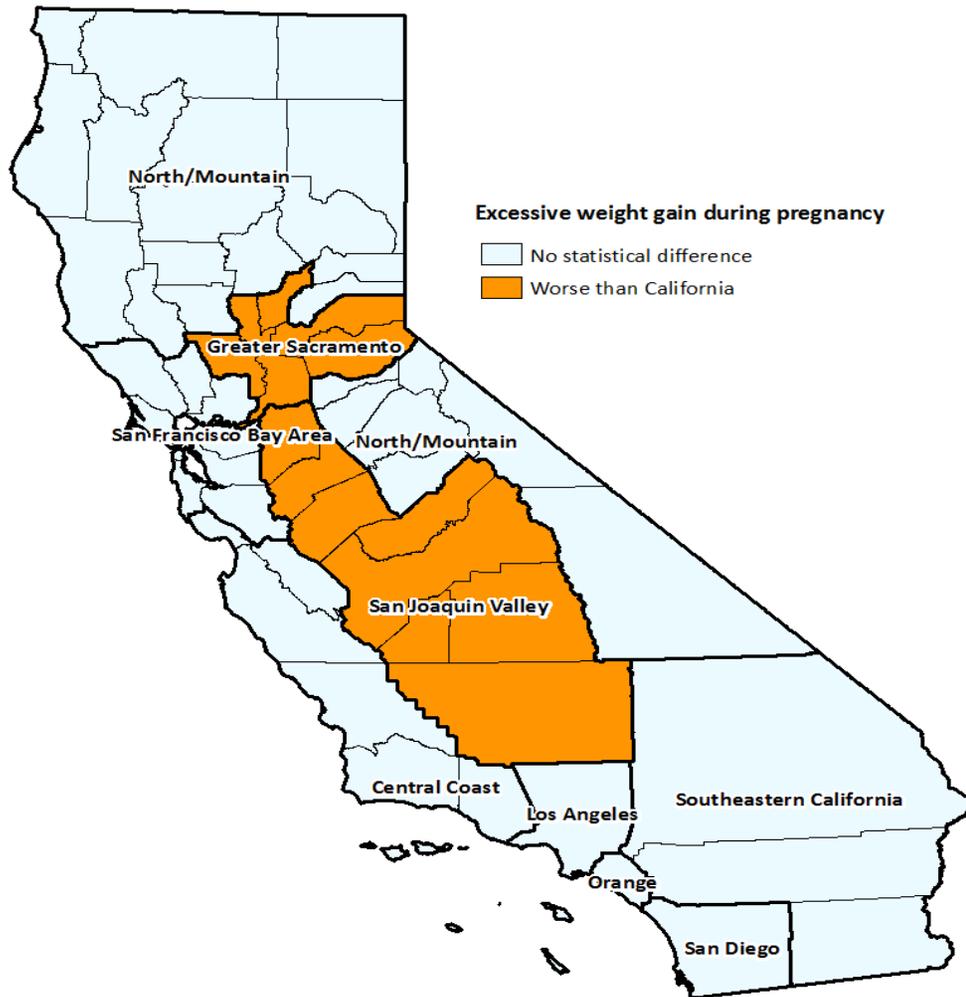
Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma

Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare

Imperial, Riverside, San Bernardino

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Excessive weight gain during pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	43.9	41.5 - 46.2	165,500
Central Coast Region	♦ 45.3	40.5 - 50.1	9,600
Greater Sacramento Region	✖ 51.4	45.8 - 57.1	12,700
Los Angeles County	♦ 39.0	31.9 - 46.1	37,600
North/Mountain Region	♦ 51.4	42.0 - 60.7	4,600
Orange County	♦ 40.4	32.2 - 48.5	11,300
San Diego County	♦ 47.4	39.3 - 55.6	16,100
San Francisco Bay Area	♦ 41.5	37.9 - 45.1	28,900
San Joaquin Valley	✖ 49.6	45.9 - 53.3	22,400
Southeastern California	♦ 45.1	40.1 - 50.1	22,300

- ✓ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)
- ✖ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)
- ♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

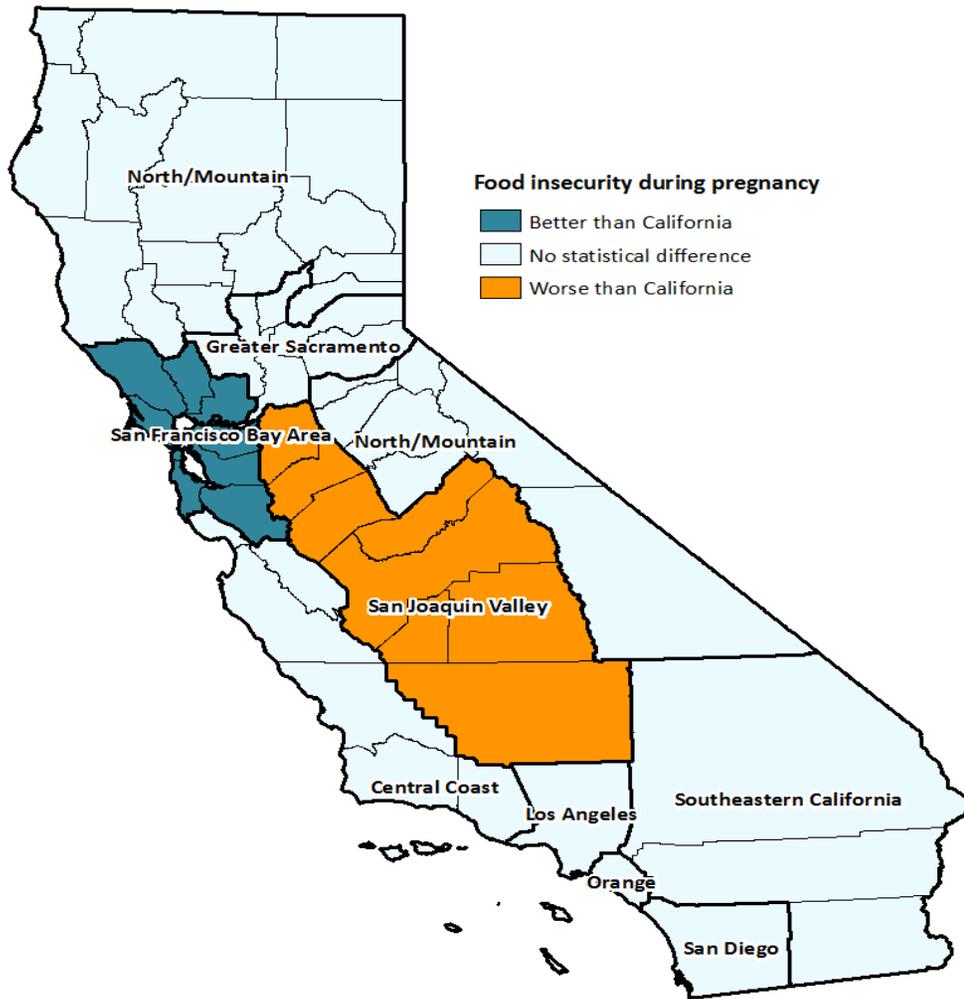
MIHA Regions	Counties in Each Region
Central Coast	Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura
Greater Sacramento	El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba
North/Mountain	Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, Tuolumne
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San Joaquin Valley	Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare
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Data Source: Maternal and Infant Health Assessment Survey  
 Prepared by: Maternal, Child and Adolescent Health Program,  
 Center for Family Health, California Department of Public Health

MIHA is a joint effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Food insecurity during pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	18.4	16.8 - 19.9	90,200
Central Coast Region	♦ 20.9	17.5 - 24.2	6,100
Greater Sacramento Region	♦ 18.5	14.4 - 22.6	5,500
Los Angeles County	♦ 18.6	13.8 - 23.5	23,900
North/Mountain Region	♦ 22.6	15.6 - 29.6	2,800
Orange County	♦ 16.2	11.8 - 20.6	6,000
San Diego County	♦ 16.9	11.9 - 21.8	7,200
San Francisco Bay Area	✓ 14.2	12.3 - 16.1	12,000
San Joaquin Valley	✗ 23.6	20.9 - 26.3	15,200
Southeastern California	♦ 18.3	14.7 - 21.9	11,500

✓ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)

✗ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)

♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

### MIHA Regions

Central Coast

Greater Sacramento

North/Mountain

San Francisco Bay Area

San Joaquin Valley

Southeastern California

### Counties in Each Region

Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura

El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba

Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, Tuolumne

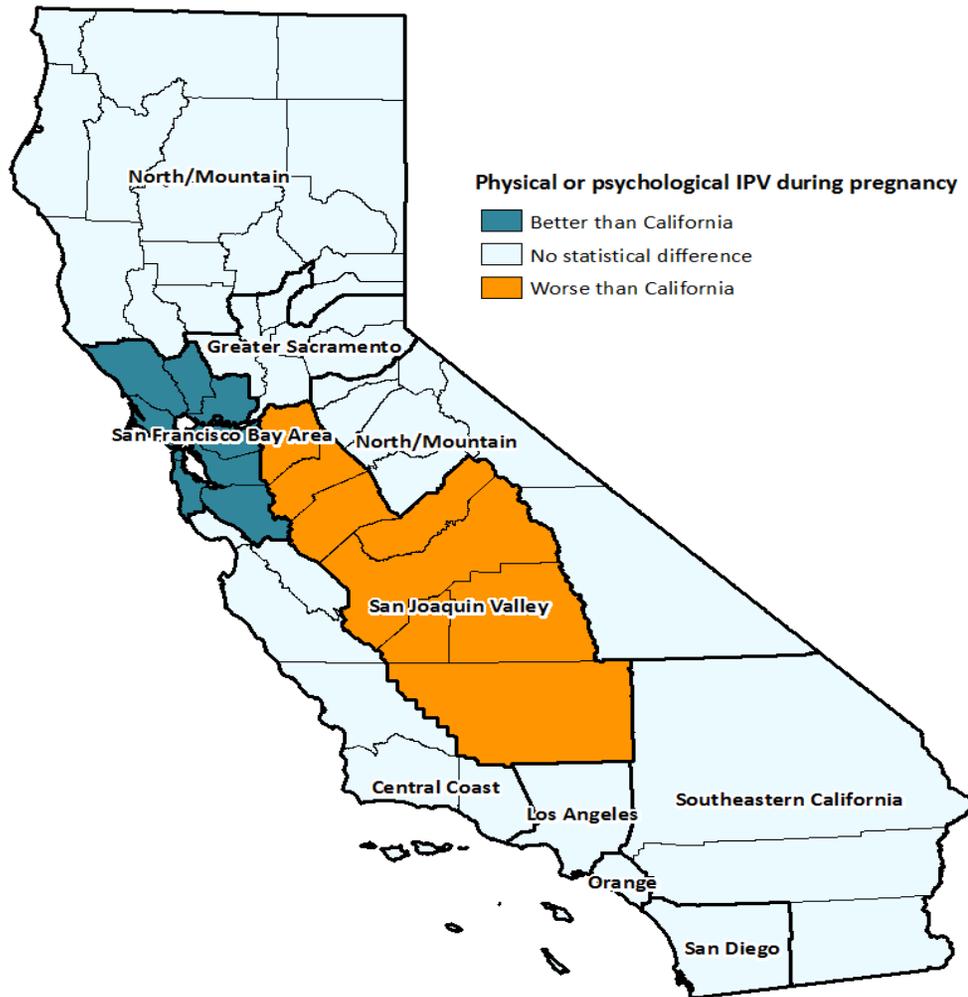
Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma

Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare

Imperial, Riverside, San Bernardino

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Physical or psychological intimate partner violence (IPV) during pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	7.7	6.7 - 8.7	37,700
Central Coast Region	♦ 8.9	6.4 - 11.4	2,600
Greater Sacramento Region	♦ 6.6	4.2 - 9.0	2,000
Los Angeles County	♦ 7.3	4.4 - 10.3	9,300
North/Mountain Region	♦ 6.9	3.2 - 10.5	900
Orange County	♦ 9.3	5.4 - 13.2	3,500
San Diego County	♦ 7.0	3.5 - 10.4	3,000
San Francisco Bay Area	✓ 5.9	4.5 - 7.2	5,000
San Joaquin Valley	✗ 11.3	9.2 - 13.3	7,300
Southeastern California	♦ 6.8	4.8 - 8.8	4,300

✓ Statistically better than the rest of California (p<0.05, chi-square test)

✗ Statistically worse than the rest of California (p<0.05, chi-square test)

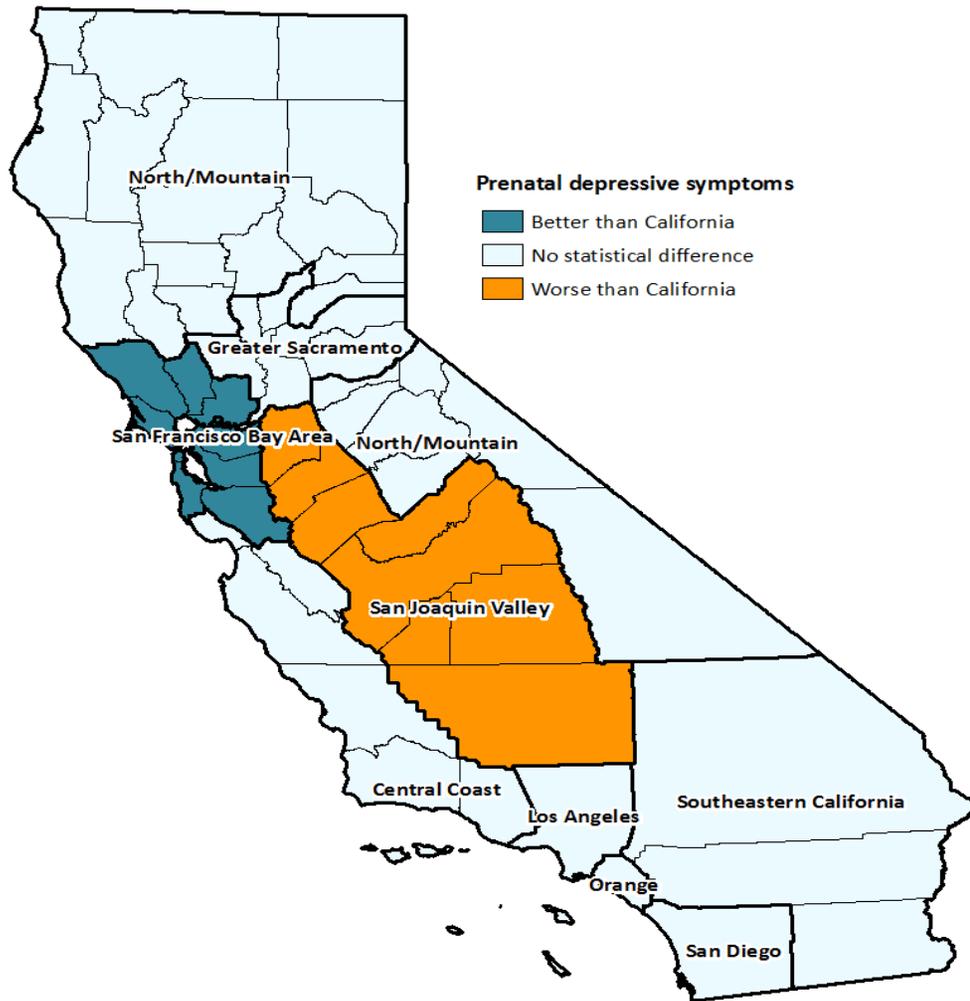
♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

MIHA Regions	Counties in Each Region
Central Coast	Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura
Greater Sacramento	El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba
North/Mountain	Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, Tuolumne
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San Joaquin Valley	Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare
Southeastern California	Imperial, Riverside, San Bernardino

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Prenatal depressive symptoms

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	15.2	13.6 - 16.8	74,900
Central Coast Region	♦ 17.4	14.1 - 20.7	5,100
Greater Sacramento Region	♦ 12.3	8.9 - 15.7	3,700
Los Angeles County	♦ 16.6	11.6 - 21.6	21,200
North/Mountain Region	♦ 18.9	11.4 - 26.5	2,400
Orange County	♦ 11.1	6.8 - 15.3	4,100
San Diego County	♦ 11.7	7.4 - 16.0	5,000
San Francisco Bay Area	✓ 12.5	10.4 - 14.5	10,600
San Joaquin Valley	✗ 19.9	17.3 - 22.5	12,800
Southeastern California	♦ 15.9	12.7 - 19.1	10,100

✓ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)

✗ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)

♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

### MIHA Regions

MIHA Regions	Counties in Each Region
Central Coast	Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura
Greater Sacramento	El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba
North/Mountain	Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, Tuolumne
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MIHA is a joint effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Postpartum depressive symptoms

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	13.5	12.1 - 14.9	66,400
Central Coast Region	♦ 16.5	13.3 - 19.7	4,800
Greater Sacramento Region	♦ 12.8	9.2 - 16.4	3,800
Los Angeles County	♦ 12.4	8.2 - 16.6	15,900
North/Mountain Region	♦ 19.0	11.3 - 26.6	2,400
Orange County	♦ 12.7	8.0 - 17.3	4,700
San Diego County	♦ 10.7	6.4 - 15.0	4,600
San Francisco Bay Area	♦ 13.4	11.0 - 15.7	11,300
San Joaquin Valley	✘ 16.9	14.5 - 19.3	10,900
Southeastern California	♦ 12.6	9.7 - 15.5	8,000

✓ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)

✘ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)

♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

### MIHA Regions

Central Coast

Greater Sacramento

North/Mountain

San Francisco Bay Area

San Joaquin Valley

Southeastern California

### Counties in Each Region

Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura

El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba

Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, Tuolumne

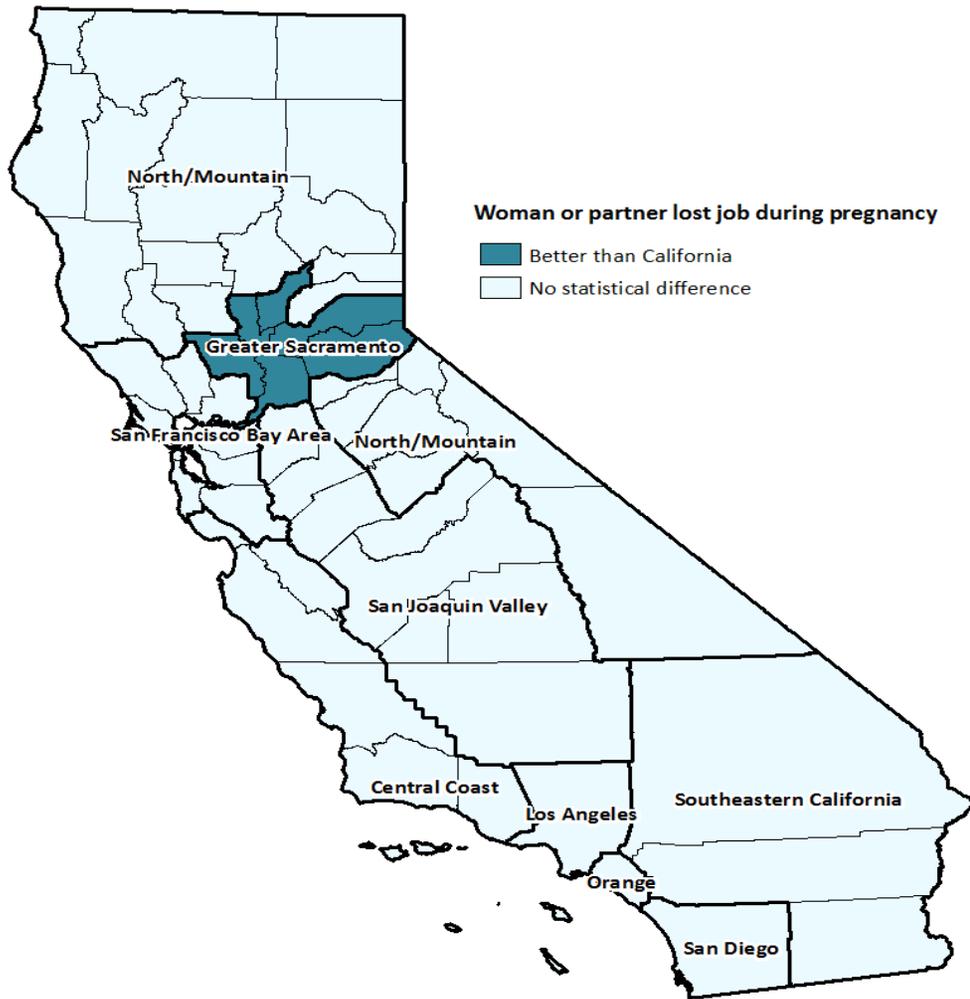
Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma

Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare

Imperial, Riverside, San Bernardino

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Woman or partner lost job during pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	17.2	15.6 - 18.9	84,100
Central Coast Region	♦ 18.6	14.9 - 22.3	5,400
Greater Sacramento Region	✓ 12.5	9.2 - 15.8	3,700
Los Angeles County	♦ 20.0	14.8 - 25.3	25,300
North/Mountain Region	♦ 20.7	14.0 - 27.5	2,600
Orange County	♦ 15.7	11.0 - 20.5	5,800
San Diego County	♦ 14.5	9.9 - 19.0	6,200
San Francisco Bay Area	♦ 16.1	13.7 - 18.5	13,600
San Joaquin Valley	♦ 17.7	15.3 - 20.2	11,400
Southeastern California	♦ 16.1	12.9 - 19.4	10,000

- ✓ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)
- ✗ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)
- ♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

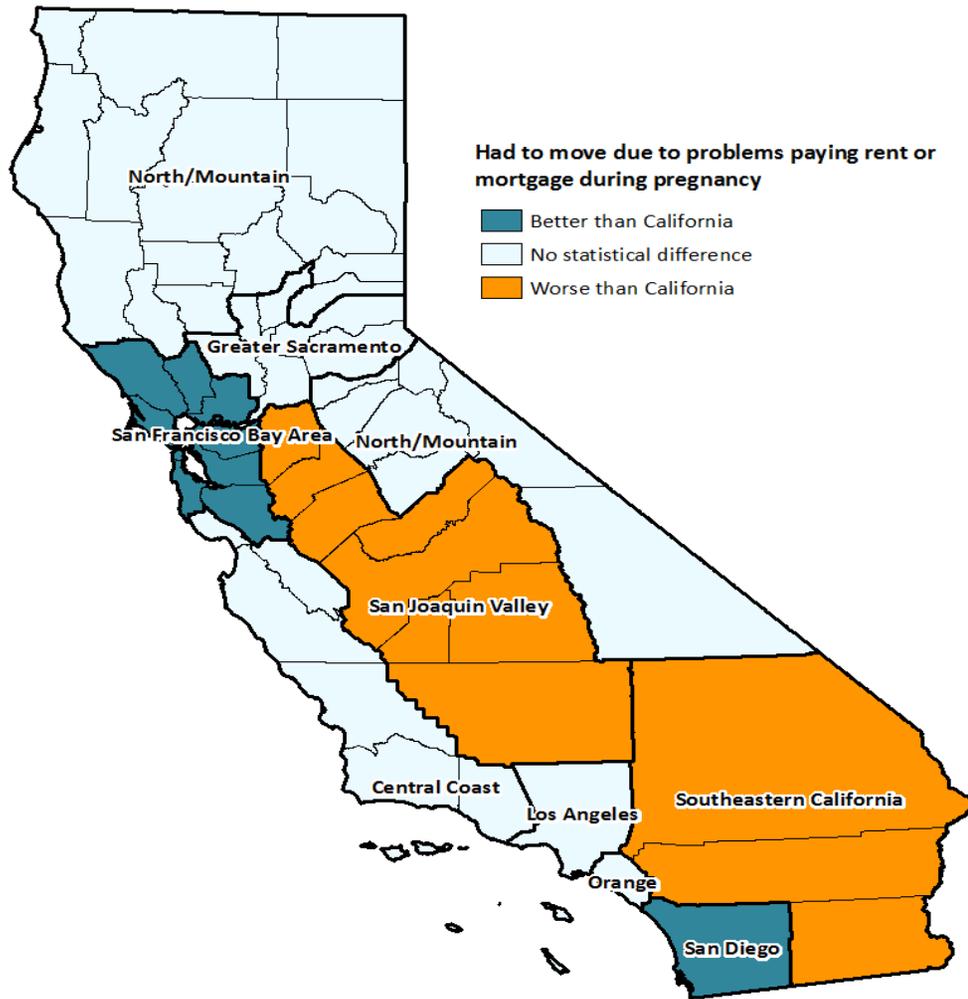
MIHA Regions	Counties in Each Region
Central Coast	Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura
Greater Sacramento	El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba
North/Mountain	Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, Tuolumne
San Francisco Bay Area	Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma
San Joaquin Valley	Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare
Southeastern California	Imperial, Riverside, San Bernardino

Data Source: Maternal and Infant Health Assessment Survey  
 Prepared by: Maternal, Child and Adolescent Health Program,  
 Center for Family Health, California Department of Public Health

MIHA is a joint effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. **Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).**

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Had to move due to problems paying rent or mortgage during pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	7.4	6.4 - 8.4	36,300
Central Coast Region	♦ 6.1	3.5 - 8.7	1,800
Greater Sacramento Region	♦ 9.6	6.4 - 12.9	2,800
Los Angeles County	♦ 7.0	3.9 - 10.1	8,900
North/Mountain Region	♦ 9.7	4.5 - 14.9	1,200
Orange County	♦ 9.2	5.0 - 13.3	3,400
San Diego County	✓ 3.7	2.0 - 5.4	1,600
San Francisco Bay Area	✓ 4.6	3.5 - 5.6	3,900
San Joaquin Valley	✗ 9.3	7.5 - 11.1	6,000
Southeastern California	✗ 10.7	7.7 - 13.6	6,700

✓ Statistically better than the rest of California (p<0.05, chi-square test)

✗ Statistically worse than the rest of California (p<0.05, chi-square test)

♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

MIHA Regions	Counties in Each Region
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Greater Sacramento	El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba
North/Mountain	Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, Tuolumne
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# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Any binge drinking during the 3 months before pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	13.1	11.9 - 14.4	64,200
Central Coast Region	✓ 9.8	7.5 - 12.2	2,900
Greater Sacramento Region	✗ 20.5	16.1 - 24.8	6,000
Los Angeles County	✓ 9.0	5.7 - 12.4	11,500
North/Mountain Region	✗ 19.3	12.9 - 25.6	2,400
Orange County	♦ 17.5	11.2 - 23.7	6,500
San Diego County	♦ 13.4	8.8 - 18.1	5,800
San Francisco Bay Area	♦ 13.8	11.6 - 16.0	11,600
San Joaquin Valley	♦ 12.4	10.3 - 14.4	7,900
Southeastern California	♦ 15.5	12.3 - 18.6	9,600

✓ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)

✗ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)

♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

### MIHA Regions

Central Coast

Greater Sacramento

North/Mountain

San Francisco Bay Area

San Joaquin Valley

Southeastern California

### Counties in Each Region

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Imperial, Riverside, San Bernardino

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Any smoking during the 1st or 3rd trimester

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	8.1	7.1 - 9.1	39,500
Central Coast Region	♦ 5.8	3.9 - 7.6	1,700
Greater Sacramento Region	♦ 10.1	7.1 - 13.2	3,000
Los Angeles County	♦ 5.6	3.0 - 8.1	7,100
North/Mountain Region	✖ 28.3	19.6 - 36.9	3,500
Orange County	♦ 7.9	3.3 - 12.5	2,900
San Diego County	♦ 8.8	5.2 - 12.3	3,700
San Francisco Bay Area	♦ 7.4	5.8 - 9.0	6,300
San Joaquin Valley	♦ 9.7	8.0 - 11.4	6,200
Southeastern California	♦ 8.1	5.9 - 10.2	5,000

- ✓ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)
- ✖ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)
- ♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

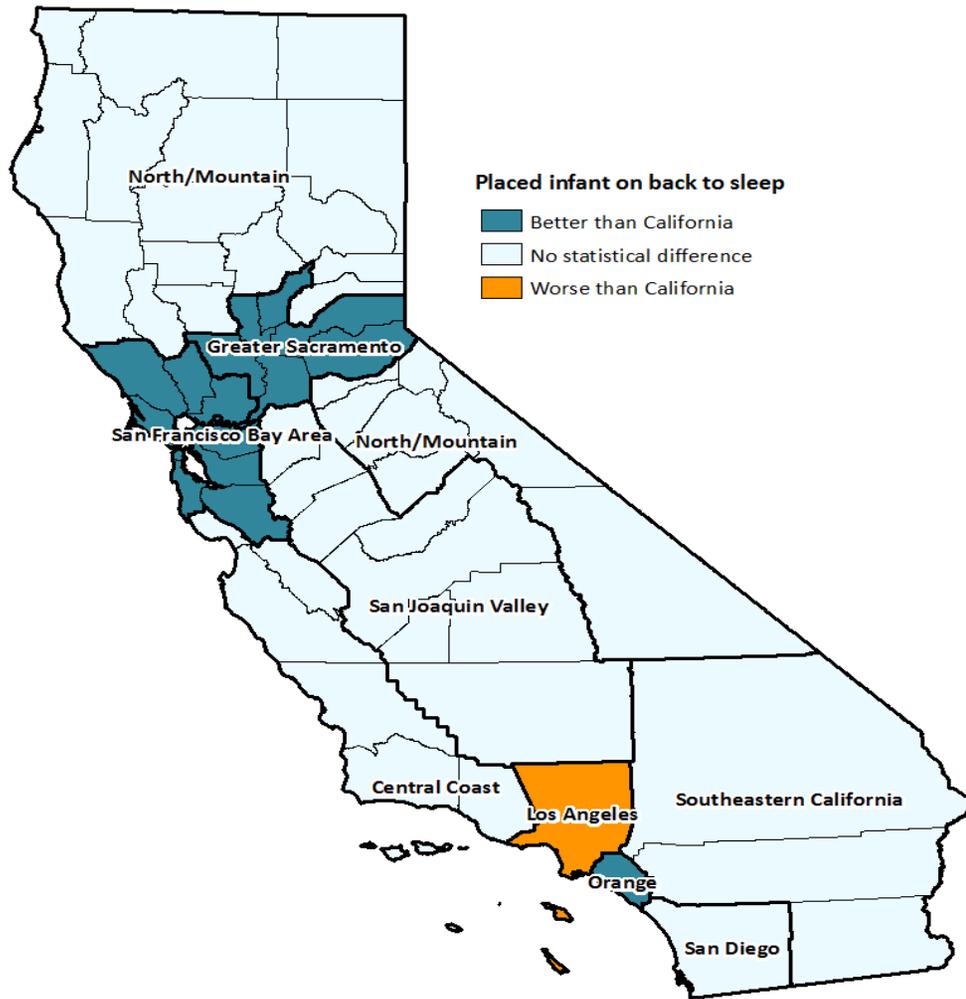
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Data Source: Maternal and Infant Health Assessment Survey  
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# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Placed infant on back to sleep

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	73.9	71.9 - 75.8	358,200
Central Coast Region	♦ 75.8	72.3 - 79.3	21,900
Greater Sacramento Region	✓ 80.4	76.4 - 84.4	23,600
Los Angeles County	✗ 67.6	61.4 - 73.9	85,600
North/Mountain Region	♦ 76.4	69.1 - 83.8	9,200
Orange County	✓ 80.5	75.5 - 85.6	29,900
San Diego County	♦ 74.3	68.3 - 80.2	31,600
San Francisco Bay Area	✓ 80.5	78.1 - 82.9	68,100
San Joaquin Valley	♦ 71.8	69.0 - 74.7	45,000
Southeastern California	♦ 70.7	66.5 - 74.9	43,400

✓ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)

✗ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)

♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

### MIHA Regions

Central Coast

Greater Sacramento

North/Mountain

San Francisco Bay Area

San Joaquin Valley

Southeastern California

### Counties in Each Region

Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura

El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba

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Imperial, Riverside, San Bernardino

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Always or often bedshared

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	39.3	37.2 - 41.4	190,700
Central Coast Region	↑ 46.3	42.0 - 50.6	13,300
Greater Sacramento Region	♦ 35.2	30.2 - 40.2	10,300
Los Angeles County	♦ 38.5	32.2 - 44.9	48,800
North/Mountain Region	↑ 50.7	42.5 - 58.8	6,000
Orange County	♦ 37.5	30.5 - 44.5	13,900
San Diego County	♦ 42.2	35.2 - 49.3	18,000
San Francisco Bay Area	♦ 39.3	36.2 - 42.4	33,200
San Joaquin Valley	♦ 40.9	37.8 - 43.9	25,800
Southeastern California	♦ 34.9	30.6 - 39.2	21,400

↓ Statistically lower than the rest of California ( $p < 0.05$ , chi-square test)

↑ Statistically higher than the rest of California ( $p < 0.05$ , chi-square test)

♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

### MIHA Regions

Central Coast

Greater Sacramento

North/Mountain

San Francisco Bay Area

San Joaquin Valley

Southeastern California

### Counties in Each Region

Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura

El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba

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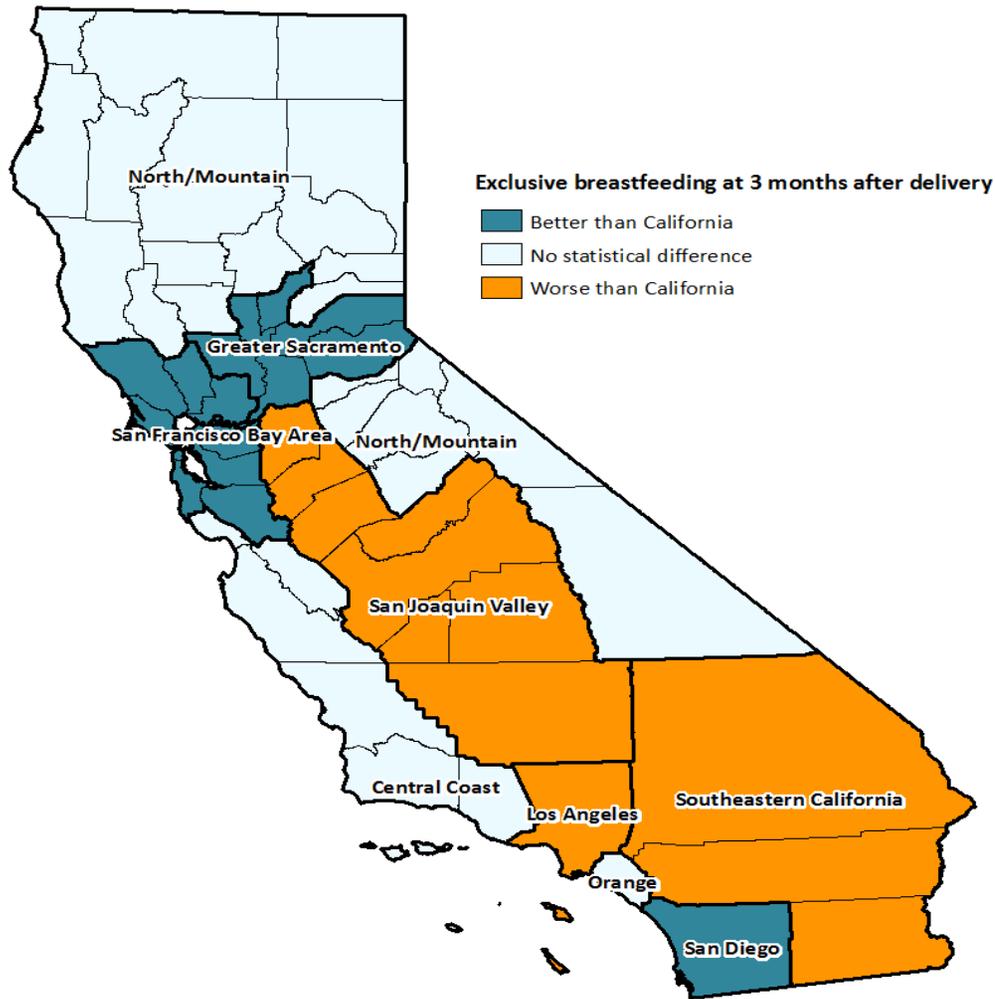
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Imperial, Riverside, San Bernardino

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Exclusive breastfeeding at 3 months after delivery

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	23.1	21.1 - 25.1	86,000
Central Coast Region	♦ 26.9	22.7 - 31.2	5,700
Greater Sacramento Region	✓ 29.0	23.6 - 34.5	6,000
Los Angeles County	✗ 18.6	13.4 - 23.9	19,900
North/Mountain Region	♦ 29.7	20.6 - 38.8	2,500
Orange County	♦ 19.0	12.2 - 25.9	5,500
San Diego County	✓ 34.6	26.9 - 42.3	11,400
San Francisco Bay Area	✓ 29.6	26.1 - 33.1	17,500
San Joaquin Valley	✗ 19.0	16.2 - 21.8	8,900
Southeastern California	✗ 18.2	14.4 - 22.1	8,700

✓ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)

✗ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)

♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

MIHA Regions	Counties in Each Region
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# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



**Mistimed or unwanted pregnancy**

- Better than California
- No statistical difference

## Mistimed or unwanted pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	32.1	30.1 - 34.1	157,200
Central Coast Region	♦ 32.2	28.2 - 36.1	9,400
Greater Sacramento Region	♦ 29.9	25.3 - 34.6	8,900
Los Angeles County	♦ 36.3	30.0 - 42.5	46,500
North/Mountain Region	♦ 31.0	23.5 - 38.4	3,700
Orange County	✓ 24.8	18.9 - 30.6	9,200
San Diego County	♦ 28.9	22.9 - 34.8	12,300
San Francisco Bay Area	✓ 27.4	24.7 - 30.2	23,300
San Joaquin Valley	♦ 33.5	30.5 - 36.4	21,500
Southeastern California	♦ 36.0	31.7 - 40.2	22,600

- ✓ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)
- ✗ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)
- ♦ No statistical difference between region and the rest of California

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# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Postpartum birth control use

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	91.1	89.7 - 92.4	395,200
Central Coast Region	♦ 92.2	89.6 - 94.7	24,400
Greater Sacramento Region	♦ 88.9	85.5 - 92.2	23,500
Los Angeles County	♦ 91.6	87.5 - 95.6	100,200
North/Mountain Region	♦ 91.6	84.1 - 99.0	10,700
Orange County	♦ 88.4	83.1 - 93.8	28,800
San Diego County	♦ 92.4	88.6 - 96.3	36,000
San Francisco Bay Area	♦ 91.8	89.8 - 93.7	68,300
San Joaquin Valley	♦ 89.8	87.7 - 92.0	51,800
Southeastern California	♦ 91.3	88.8 - 93.9	51,600

✓ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)

✗ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)

♦ No statistical difference between region and the rest of California

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### MIHA Regions

Central Coast

Greater Sacramento

North/Mountain

San Francisco Bay Area

San Joaquin Valley

Southeastern California

### Counties in Each Region

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El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba

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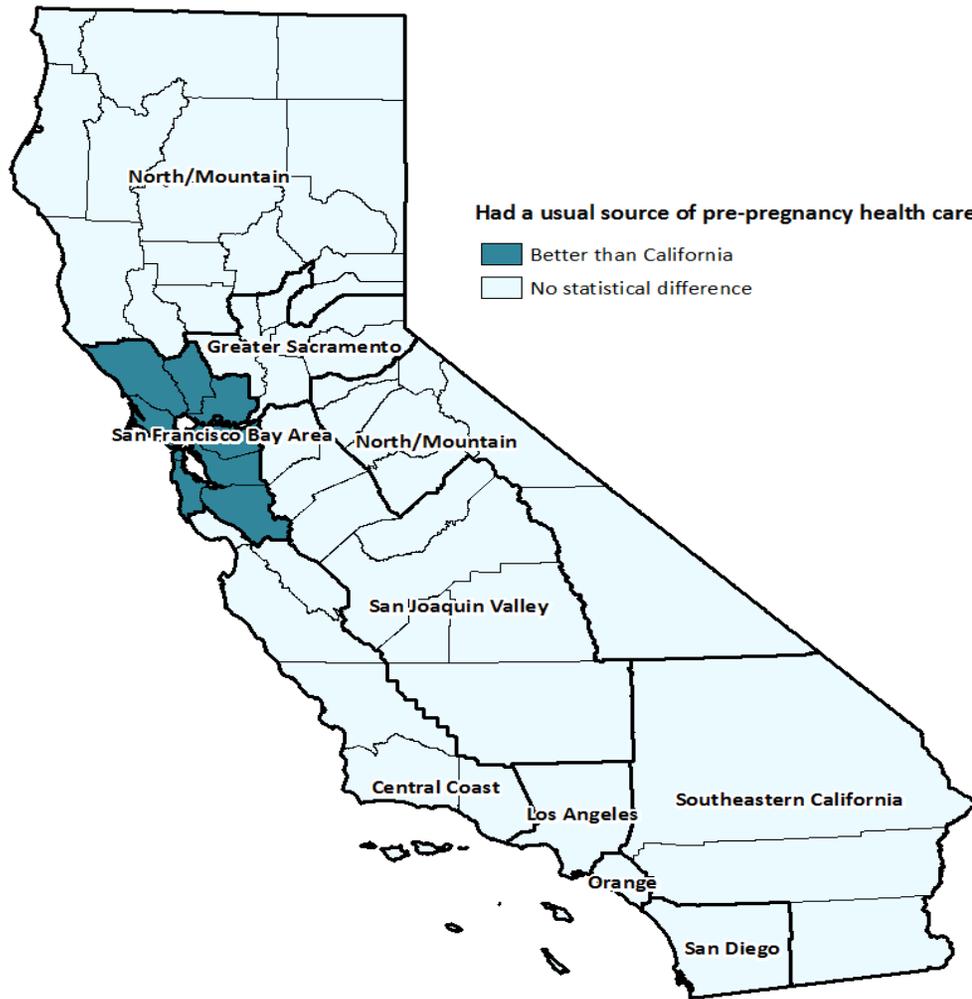
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Imperial, Riverside, San Bernardino

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Had a usual source of pre-pregnancy health care

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	72.2	70.2 - 74.1	355,300
Central Coast Region	♦ 68.0	64.1 - 72.0	20,000
Greater Sacramento Region	♦ 74.4	70.1 - 78.7	22,200
Los Angeles County	♦ 70.4	64.3 - 76.4	89,600
North/Mountain Region	♦ 72.4	64.8 - 80.1	9,000
Orange County	♦ 68.5	61.8 - 75.1	25,600
San Diego County	♦ 72.6	66.5 - 78.7	31,100
San Francisco Bay Area	✓ 78.8	76.3 - 81.3	67,100
San Joaquin Valley	♦ 72.9	70.2 - 75.7	47,100
Southeastern California	♦ 68.9	65.0 - 72.9	43,600

- ✓ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)
- ✗ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)
- ♦ No statistical difference between region and the rest of California

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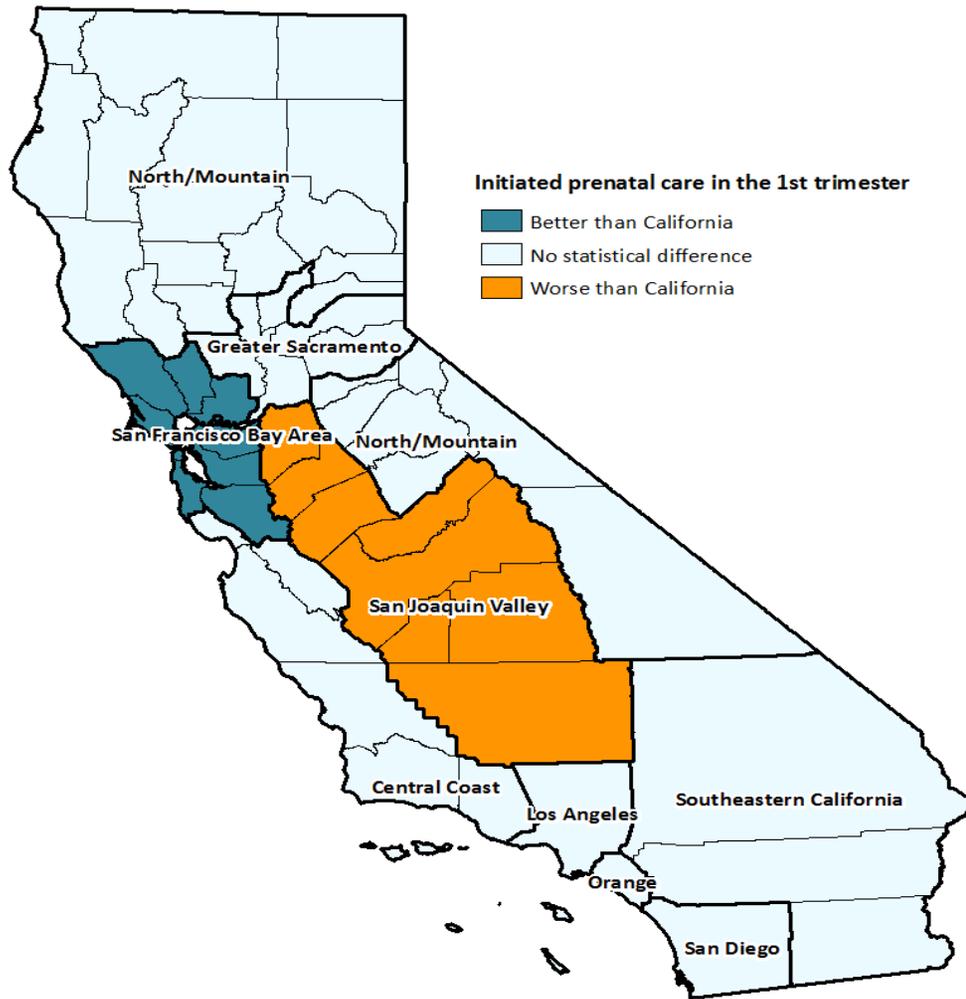
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# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Initiated prenatal care in the 1st trimester

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	85.6	84.1 - 87.2	416,100
Central Coast Region	♦ 84.9	82.1 - 87.8	24,600
Greater Sacramento Region	♦ 86.6	83.2 - 90.0	25,300
Los Angeles County	♦ 84.0	78.9 - 89.0	106,500
North/Mountain Region	♦ 83.7	77.1 - 90.3	10,500
Orange County	♦ 87.8	83.1 - 92.4	31,800
San Diego County	♦ 87.6	83.2 - 91.9	37,000
San Francisco Bay Area	✓ 88.6	86.7 - 90.6	74,400
San Joaquin Valley	✗ 82.3	79.9 - 84.8	52,300
Southeastern California	♦ 86.1	83.1 - 89.2	53,700

✓ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)

✗ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)

♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

### MIHA Regions

Central Coast

Greater Sacramento

North/Mountain

San Francisco Bay Area

San Joaquin Valley

Southeastern California

### Counties in Each Region

Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura

El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba

Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, Tuolumne

Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma

Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare

Imperial, Riverside, San Bernardino

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Mom or infant needed but could not afford care postpartum

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	13.0	11.5 - 14.5	62,600
Central Coast Region	♦ 13.7	10.4 - 17.0	3,900
Greater Sacramento Region	♦ 14.9	11.1 - 18.7	4,400
Los Angeles County	♦ 12.5	7.8 - 17.2	15,800
North/Mountain Region	♦ 9.0	4.5 - 13.5	1,100
Orange County	♦ 10.9	6.9 - 14.9	4,000
San Diego County	♦ 13.7	9.2 - 18.2	5,800
San Francisco Bay Area	♦ 11.1	9.1 - 13.2	9,300
San Joaquin Valley	♦ 15.0	12.7 - 17.2	9,400
Southeastern California	♦ 14.7	11.5 - 17.8	8,900

- ✓ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)
- ✗ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)
- ♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

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Southeastern California	Imperial, Riverside, San Bernardino

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Uninsured before pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	23.9	22.3 - 25.6	117,200
Central Coast Region	✖ 31.1	27.1 - 35.1	9,000
Greater Sacramento Region	✔ 18.3	15.0 - 21.6	5,400
Los Angeles County	◇ 27.0	21.7 - 32.4	34,200
North/Mountain Region	◇ 18.7	12.4 - 25.0	2,300
Orange County	◇ 24.1	18.9 - 29.2	8,900
San Diego County	◇ 23.8	18.9 - 28.6	10,100
San Francisco Bay Area	✔ 16.1	14.2 - 18.0	13,700
San Joaquin Valley	◇ 24.9	22.3 - 27.5	15,900
Southeastern California	✖ 27.9	24.2 - 31.5	17,600

- ✔ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)
- ✖ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)
- ◇ No statistical difference between region and the rest of California

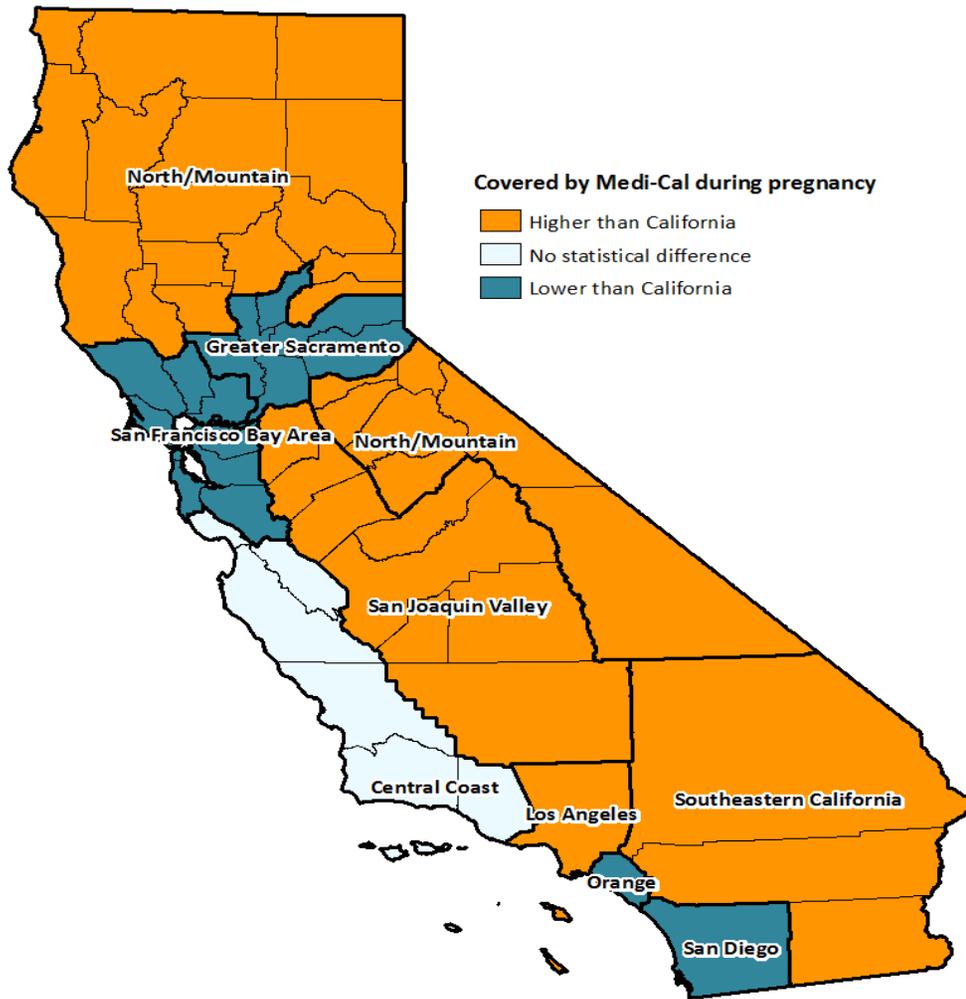
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# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Covered by Medi-Cal during pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	50.4	48.8 - 51.9	247,500
Central Coast Region	♦ 53.8	49.6 - 58.0	15,800
Greater Sacramento Region	↓ 45.0	40.9 - 49.1	13,400
Los Angeles County	↑ 54.6	50.0 - 59.3	69,500
North/Mountain Region	↑ 65.4	57.5 - 73.3	8,300
Orange County	↓ 42.4	37.9 - 46.9	15,600
San Diego County	↓ 36.2	31.6 - 40.7	15,400
San Francisco Bay Area	↓ 35.7	33.4 - 38.1	30,400
San Joaquin Valley	↑ 66.5	63.8 - 69.1	42,900
Southeastern California	↑ 57.3	53.9 - 60.7	36,200

↓ Statistically lower than the rest of California ( $p < 0.05$ , chi-square test)

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♦ No statistical difference between region and the rest of California

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Imperial, Riverside, San Bernardino

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Uninsured postpartum

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	17.4	15.9 - 18.8	85,000
Central Coast Region	✘ 24.4	20.7 - 28.1	7,100
Greater Sacramento Region	✔ 12.4	9.3 - 15.5	3,700
Los Angeles County	◇ 15.4	11.0 - 19.8	19,500
North/Mountain Region	◇ 21.4	13.5 - 29.4	2,700
Orange County	✘ 22.8	18.1 - 27.6	8,500
San Diego County	◇ 16.9	12.3 - 21.6	7,200
San Francisco Bay Area	✔ 12.1	10.4 - 13.9	10,200
San Joaquin Valley	◇ 18.0	15.7 - 20.4	11,600
Southeastern California	✘ 23.0	19.4 - 26.6	14,400

✔ Statistically better than the rest of California ( $p < 0.05$ , chi-square test)

✘ Statistically worse than the rest of California ( $p < 0.05$ , chi-square test)

◇ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

### MIHA Regions

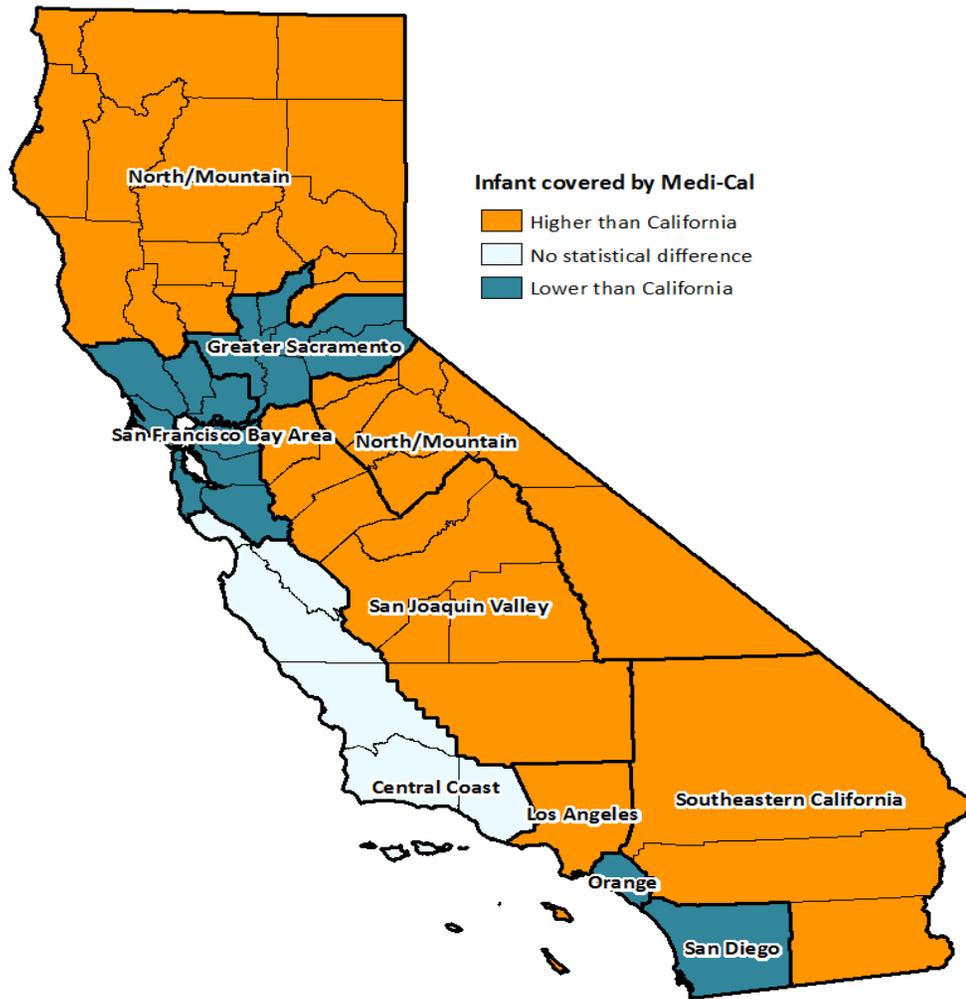
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Southeastern California	Imperial, Riverside, San Bernardino

Data Source: Maternal and Infant Health Assessment Survey  
 Prepared by: Maternal, Child and Adolescent Health Program,  
 Center for Family Health, California Department of Public Health

MIHA is a joint effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).

# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Infant covered by Medi-Cal

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	49.5	47.9 - 51.2	240,500
Central Coast Region	♦ 52.9	48.6 - 57.2	15,300
Greater Sacramento Region	↓ 44.4	40.0 - 48.8	13,000
Los Angeles County	↑ 55.5	50.7 - 60.3	70,000
North/Mountain Region	↑ 64.6	56.7 - 72.4	7,800
Orange County	↓ 43.8	39.1 - 48.5	16,300
San Diego County	↓ 35.5	30.8 - 40.3	15,100
San Francisco Bay Area	↓ 34.3	32.0 - 36.6	29,000
San Joaquin Valley	↑ 62.2	59.3 - 65.0	39,300
Southeastern California	↑ 56.3	52.7 - 60.0	34,800

↓ Statistically lower than the rest of California ( $p < 0.05$ , chi-square test)

↑ Statistically higher than the rest of California ( $p < 0.05$ , chi-square test)

♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

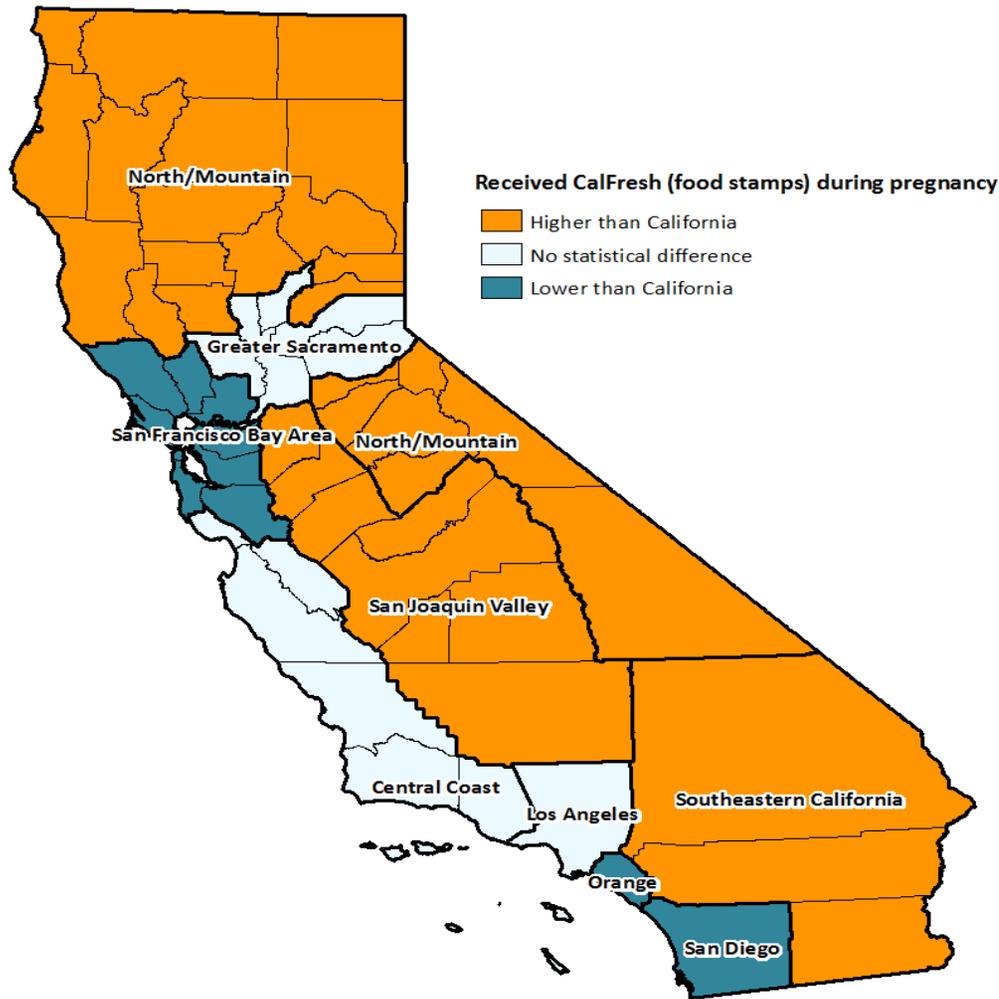
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# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Received CalFresh (food stamps) during pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	22.2	20.6 - 23.8	109,000
Central Coast Region	♦ 19.1	16.0 - 22.2	5,600
Greater Sacramento Region	♦ 25.2	21.2 - 29.3	7,500
Los Angeles County	♦ 20.0	14.9 - 25.1	25,600
North/Mountain Region	↑ 34.2	25.4 - 43.0	4,300
Orange County	↓ 13.7	10.0 - 17.4	5,100
San Diego County	↓ 13.6	9.8 - 17.3	5,800
San Francisco Bay Area	↓ 15.8	13.8 - 17.8	13,400
San Joaquin Valley	↑ 38.4	35.4 - 41.5	24,700
Southeastern California	↑ 27.2	23.4 - 30.9	17,100

↓ Statistically lower than the rest of California (p<0.05, chi-square test)

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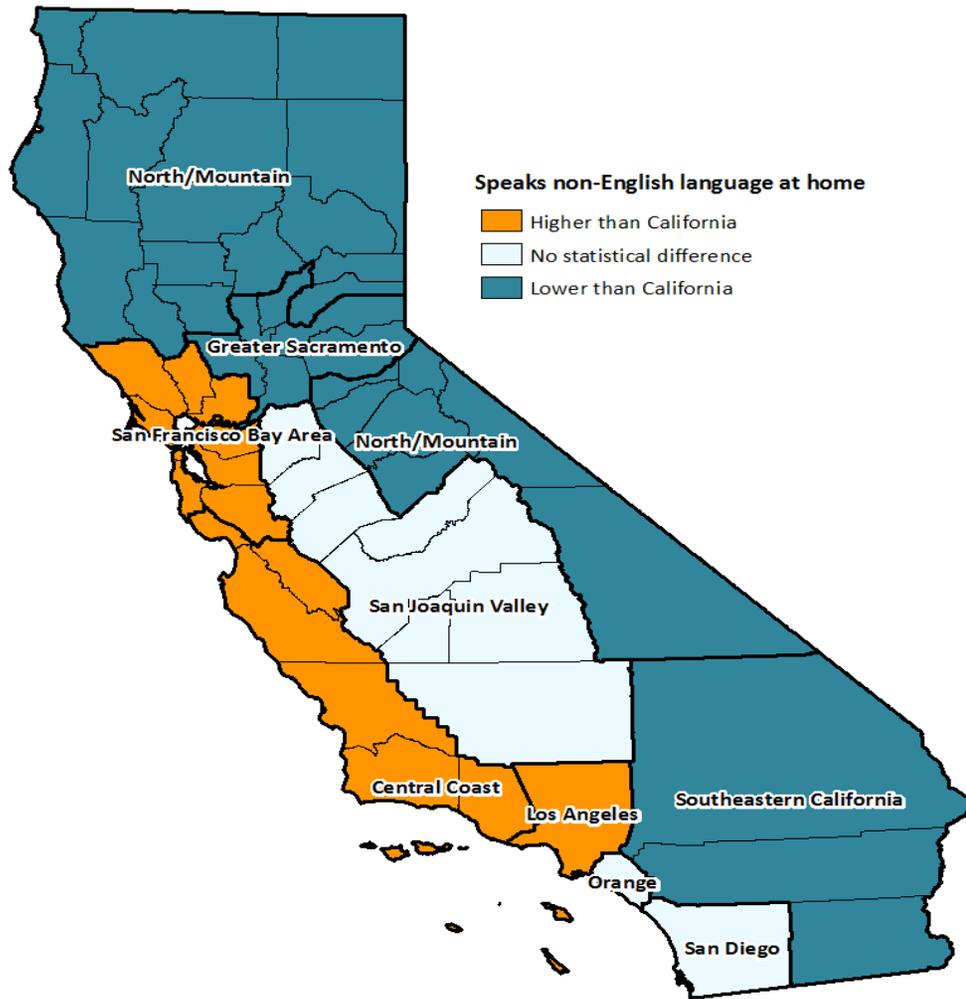
♦ No statistical difference between region and the rest of California

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# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Speaks non-English language at home

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	32.4	30.4 - 34.4	159,000
Central Coast Region	↑ 39.5	35.3 - 43.6	11,600
Greater Sacramento Region	↓ 19.5	15.7 - 23.3	5,800
Los Angeles County	↑ 38.9	32.7 - 45.0	49,400
North/Mountain Region	↓ 11.3	6.7 - 15.8	1,400
Orange County	♦ 35.7	29.3 - 42.0	13,200
San Diego County	♦ 28.6	22.4 - 34.8	12,200
San Francisco Bay Area	↑ 35.7	32.6 - 38.8	30,200
San Joaquin Valley	♦ 30.3	27.4 - 33.1	19,500
Southeastern California	↓ 24.9	20.8 - 28.9	15,700

↓ Statistically lower than the rest of California ( $p < 0.05$ , chi-square test)

↑ Statistically higher than the rest of California ( $p < 0.05$ , chi-square test)

♦ No statistical difference between region and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (i.e., numerator of the percent rounded to the nearest hundred) are weighted to represent all women with a live birth in California and the region in 2011. Methods used to weight the data in 2011 were different than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

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Central Coast

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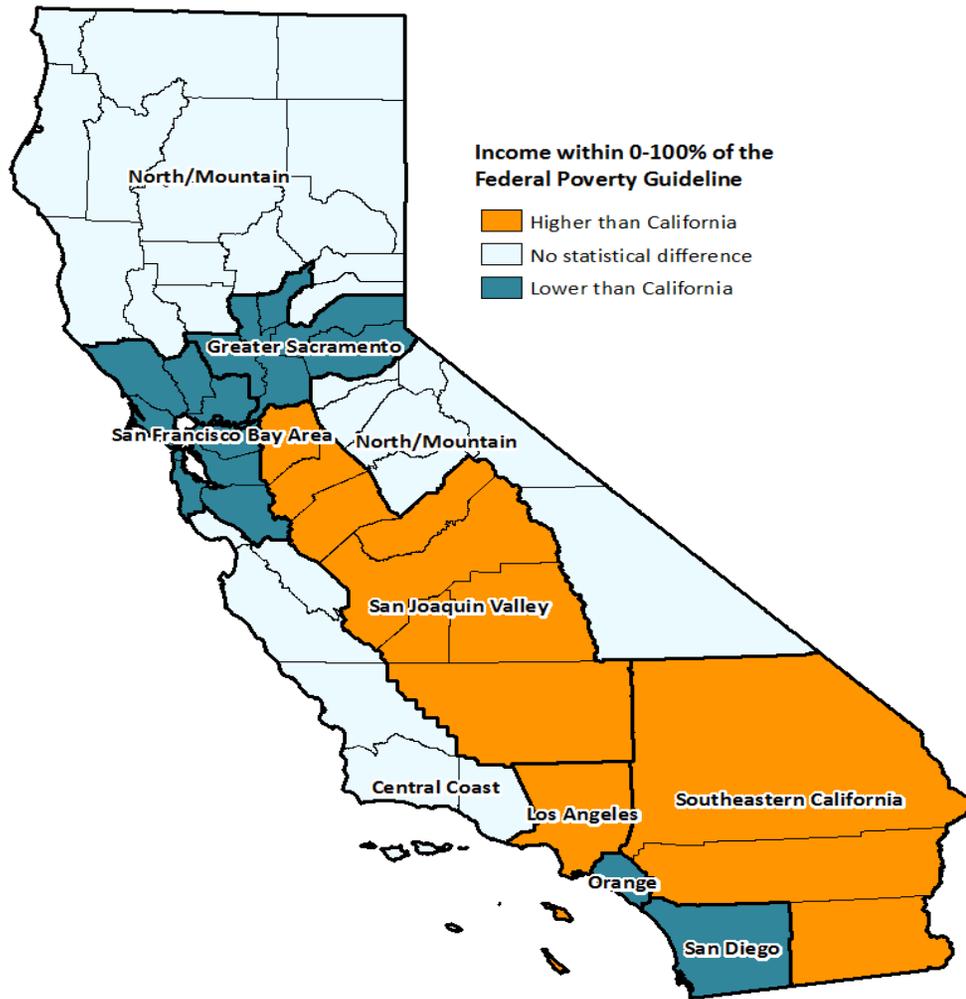
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# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Income within 0-100% of the Federal Poverty Guideline

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	43.8	42.0 - 45.6	198,400
Central Coast Region	♦ 46.8	42.5 - 51.1	12,500
Greater Sacramento Region	↓ 36.9	32.2 - 41.5	10,300
Los Angeles County	↑ 50.3	44.6 - 56.1	57,200
North/Mountain Region	♦ 50.9	42.2 - 59.6	6,300
Orange County	↓ 33.1	28.1 - 38.0	10,400
San Diego County	↓ 31.4	26.3 - 36.4	12,900
San Francisco Bay Area	↓ 31.5	29.0 - 34.1	25,300
San Joaquin Valley	↑ 57.6	54.6 - 60.6	34,600
Southeastern California	↑ 48.7	44.6 - 52.8	29,000

↓ Statistically lower than the rest of California ( $p < 0.05$ , chi-square test)

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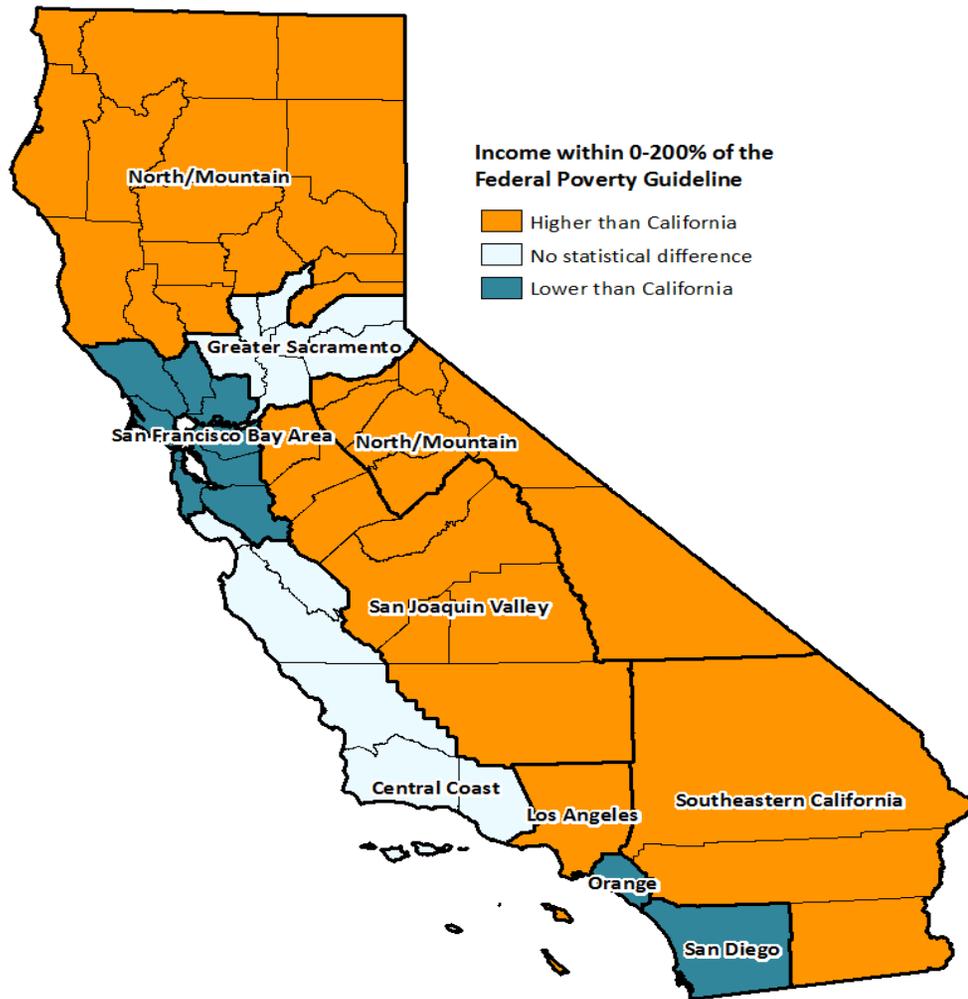
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# MIHA Regional Comparison 2011

Maternal and Infant Health Assessment (MIHA) Survey



## Income within 0-200% of the Federal Poverty Guideline

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	62.8	61.1 - 64.5	284,400
Central Coast Region	♦ 64.6	60.4 - 68.8	17,300
Greater Sacramento Region	♦ 58.8	54.2 - 63.3	16,400
Los Angeles County	↑ 68.2	63.3 - 73.2	77,500
North/Mountain Region	↑ 77.6	70.6 - 84.5	9,500
Orange County	↓ 52.3	46.4 - 58.2	16,500
San Diego County	↓ 51.5	45.7 - 57.3	21,100
San Francisco Bay Area	↓ 46.2	43.3 - 49.0	37,000
San Joaquin Valley	↑ 76.9	74.4 - 79.4	46,100
Southeastern California	↑ 72.0	68.8 - 75.2	42,900

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# Statewide Snapshots

*“Without WIC it would have been harder to eat nutritiously.”*

— MIHA 2011 Respondent



# MIHA Snapshot, California by Maternal Age, 2011

Maternal and Infant Health Assessment (MIHA) Survey



	Total			15-19 Years			20-34 Years			35 Years or Older		
	%	95% CI	N	%	95% CI	N	%	95% CI	N	%	95% CI	N
<b>Total</b>	100		493,500	7.7	6.4 - 8.9	37,800	73.8	71.9 - 75.7	364,100	18.5	16.9 - 20.2	91,500
<b>Prior Poor Birth Outcomes</b>												
Prior low birth weight or preterm delivery	8.4	7.3 - 9.6	41,000	5.3	0.0 - 11.2	2,000	8.8	7.5 - 10.2	31,800	8.1	5.9 - 10.3	7,300
Prior delivery by c-section	15.9	14.1 - 17.6	78,200	8.2	0.0 - 17.2	3,100	13.5	11.6 - 15.3	49,100	28.4	23.6 - 33.2	26,000
<b>Health Status</b>												
In good to excellent health before pregnancy†	91.3	90.0 - 92.5	449,300	89.6	86.5 - 92.7	33,900	90.9	89.4 - 92.4	330,000	93.4	90.7 - 96.2	85,500
Chronic conditions before or during pregnancy												
Diabetes or gestational diabetes	10.3	8.9 - 11.6	50,100	2.8	1.4 - 4.2	1,000	9.3	7.7 - 10.9	33,600	17.1	13.7 - 20.5	15,500
Hypertension, preeclampsia or eclampsia	9.2	8.0 - 10.3	44,100	8.2	5.3 - 11.0	3,000	8.8	7.5 - 10.1	31,100	11.2	8.3 - 14.1	9,900
Asthma	8.5	7.4 - 9.6	41,100	9.3	5.2 - 13.4	3,500	8.7	7.4 - 10.0	31,100	7.3	4.8 - 9.8	6,600
<b>Nutrition and Weight</b>												
Daily folic acid use, month before pregnancy	34.4	32.3 - 36.4	168,600	31.6	22.4 - 40.8	11,900	31.7	29.5 - 34.0	114,800	46.0	40.9 - 51.1	41,900
Overweight before pregnancy	26.1	24.1 - 28.1	120,100	24.0	16.1 - 31.8	8,500	25.5	23.2 - 27.8	86,000	29.4	24.6 - 34.2	25,600
Obese before pregnancy	18.5	16.7 - 20.3	85,100	15.8	6.7 - 24.8	5,600	19.3	17.2 - 21.4	65,000	16.7	13.3 - 20.1	14,600
Inadequate weight gain during pregnancy	16.8	15.0 - 18.6	63,300	23.3	15.6 - 31.0	5,700	15.9	13.9 - 17.9	44,200	17.9	13.5 - 22.3	13,400
Excessive weight gain during pregnancy	43.9	41.5 - 46.2	165,500	42.9	35.2 - 50.7	10,500	44.6	41.9 - 47.3	124,100	41.4	35.7 - 47.0	30,900
Food insecurity during pregnancy	18.4	16.8 - 19.9	90,200	18.9	13.8 - 24.0	7,100	19.2	17.4 - 21.1	69,700	14.6	10.9 - 18.3	13,400
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>												
Physical IPV in the year before pregnancy	3.2	2.5 - 3.9	15,900	5.5	2.5 - 8.6	2,100	3.4	2.6 - 4.2	12,300	1.7	0.4 - 3.0	1,500
Physical or psychological IPV during pregnancy	7.7	6.7 - 8.7	37,700	20.8	14.7 - 26.8	7,800	7.3	6.2 - 8.5	26,500	3.7	2.0 - 5.5	3,400
Prenatal depressive symptoms	15.2	13.6 - 16.8	74,900	22.2	15.4 - 29.0	8,400	15.4	13.6 - 17.2	55,900	11.6	8.1 - 15.1	10,600
Postpartum depressive symptoms	13.5	12.1 - 14.9	66,400	18.1	11.3 - 24.9	6,800	13.3	11.7 - 14.9	48,300	12.3	9.2 - 15.4	11,300
<b>Hardships and Support during Pregnancy</b>												
Homeless or did not have a regular place to sleep	3.0	2.4 - 3.5	14,500	4.4	2.4 - 6.4	1,700	3.0	2.3 - 3.7	10,700	2.3	1.0 - 3.5	2,100
Moved due to problems paying rent or mortgage	7.4	6.4 - 8.4	36,300	7.0	4.3 - 9.6	2,600	8.1	6.8 - 9.3	29,100	5.0	2.7 - 7.2	4,500
Woman or partner lost job	17.2	15.6 - 18.9	84,100	19.9	10.9 - 28.9	7,400	17.6	15.8 - 19.4	63,400	14.5	11.0 - 18.1	13,200
Woman or partner had pay or hours cut back	16.6	15.0 - 18.2	80,900	9.0	5.7 - 12.2	3,300	16.6	14.8 - 18.5	59,800	19.5	15.4 - 23.6	17,700
Became separated or divorced	7.5	6.6 - 8.5	36,900	15.4	10.4 - 20.4	5,800	7.4	6.3 - 8.5	26,700	4.9	3.2 - 6.6	4,500
Had no practical or emotional support	5.3	4.4 - 6.2	26,200	3.2	1.6 - 4.7	1,200	5.3	4.2 - 6.4	19,300	6.2	4.0 - 8.4	5,700
<b>Substance Use</b>												
Any smoking, 3 months before pregnancy	12.3	11.0 - 13.5	60,000	13.3	9.3 - 17.4	5,000	13.1	11.7 - 14.6	47,400	8.3	5.7 - 10.9	7,600
Any smoking, 1st or 3rd trimester†	8.1	7.1 - 9.1	39,500	9.0	5.5 - 12.5	3,400	8.8	7.6 - 9.9	31,600	4.9	2.9 - 7.0	4,500
Any smoking, postpartum	6.3	5.5 - 7.1	30,800	7.8	4.5 - 11.1	2,900	6.5	5.5 - 7.5	23,500	4.8	2.8 - 6.8	4,400
Any binge drinking, 3 months before pregnancy	13.1	11.9 - 14.4	64,200	6.5	4.1 - 8.8	2,400	15.0	13.4 - 16.5	54,000	8.6	5.9 - 11.3	7,800
Any alcohol use, 1st or 3rd trimester†	19.6	17.9 - 21.2	95,900	11.8	7.2 - 16.5	4,400	19.8	17.8 - 21.8	71,500	22.0	18.0 - 25.9	20,000
<b>Infant Sleep and Breastfeeding</b>												
Placed infant on back to sleep	73.9	71.9 - 75.8	358,200	61.0	51.9 - 70.2	22,500	74.7	72.5 - 76.9	268,300	75.8	71.2 - 80.5	67,500
Always or often bedshared	39.3	37.2 - 41.4	190,700	45.5	37.1 - 53.9	16,800	39.7	37.2 - 42.1	142,500	35.3	30.4 - 40.2	31,400
Intended to breastfeed, before birth	92.1	91.0 - 93.2	448,400	89.5	86.0 - 93.0	32,900	91.7	90.3 - 93.0	330,100	95.0	92.8 - 97.2	85,400
Intended to breastfeed exclusively, before birth	62.3	60.2 - 64.4	303,100	51.0	42.3 - 59.6	18,700	62.3	59.9 - 64.7	224,300	66.8	61.9 - 71.8	60,100
<b>Breastfeeding practices</b>												
Any breastfeeding, 1 month after delivery†	81.7	80.0 - 83.4	391,400	60.4	51.1 - 69.7	21,900	82.2	80.4 - 84.0	292,200	88.3	85.1 - 91.5	77,300
Exclusive breastfeeding, 1 month after delivery†	38.8	36.6 - 40.9	182,300	35.2	27.5 - 43.0	12,300	39.2	36.7 - 41.6	136,800	38.5	33.4 - 43.6	33,200
Any breastfeeding, 3 months after delivery†	63.7	61.3 - 66.2	240,100	38.1	28.6 - 47.6	11,200	62.8	60.0 - 65.6	174,700	78.2	73.2 - 83.1	54,200
Exclusive breastfeeding, 3 months after delivery†	23.1	21.1 - 25.1	86,000	9.2	5.8 - 12.5	2,600	23.1	20.8 - 25.4	63,500	29.0	23.6 - 34.4	19,900

	Total			15-19 Years			20-34 Years			35 Years or Older		
	%	95% CI	N	%	95% CI	N	%	95% CI	N	%	95% CI	N
<b>Pregnancy Intention and Family Planning</b>												
Mistimed or unwanted pregnancy†	32.1	30.1 - 34.1	157,200	60.5	52.0 - 69.0	22,800	32.3	30.0 - 34.7	117,100	19.1	15.0 - 23.2	17,300
Unsure of pregnancy intentions†	11.9	10.4 - 13.3	58,200	20.1	11.7 - 28.6	7,600	11.4	9.9 - 13.0	41,300	10.2	7.7 - 12.7	9,200
Postpartum birth control use†	91.1	89.7 - 92.4	395,200	88.4	81.4 - 95.3	28,500	91.4	89.9 - 92.9	296,500	90.7	87.9 - 93.6	70,200
<b>Health Insurance Coverage and Service Utilization</b>												
Had a usual source of pre-pregnancy care	72.2	70.2 - 74.1	355,300	63.6	55.2 - 72.0	24,100	70.2	67.9 - 72.5	254,900	83.4	79.9 - 87.0	76,300
Initiated prenatal care in 1st trimester†	85.6	84.1 - 87.2	416,100	75.8	68.8 - 82.7	28,100	86.0	84.1 - 87.8	307,800	88.4	85.2 - 91.6	80,100
Had a postpartum medical visit	88.6	87.3 - 90.0	435,300	74.0	66.2 - 81.7	27,900	88.7	87.2 - 90.2	321,600	94.6	92.8 - 96.4	85,800
Mom or infant needed but couldn't afford care postpartum	13.0	11.5 - 14.5	62,600	17.3	8.5 - 26.0	6,400	13.4	11.7 - 15.0	47,800	9.6	6.5 - 12.7	8,400
Received CalFresh (food stamps) during pregnancy	22.2	20.6 - 23.8	109,000	22.5	16.4 - 28.6	8,500	24.2	22.3 - 26.2	87,900	13.9	10.1 - 17.7	12,700
Pre-pregnancy insurance												
Medi-Cal†	25.6	23.8 - 27.3	125,100	56.7	48.8 - 64.5	21,200	25.0	22.9 - 27.1	90,200	15.0	11.5 - 18.4	13,600
Uninsured†	23.9	22.3 - 25.6	117,200	19.4	14.3 - 24.4	7,200	26.8	24.7 - 28.8	96,600	14.7	10.9 - 18.5	13,400
Private†	46.4	44.7 - 48.1	227,000	19.5	13.8 - 25.3	7,300	43.9	41.8 - 46.1	158,600	67.1	62.4 - 71.8	61,000
Prenatal insurance												
Medi-Cal†	50.4	48.8 - 51.9	247,500	84.2	80.0 - 88.5	31,600	52.8	50.8 - 54.8	191,200	27.0	23.1 - 31.0	24,700
Uninsured†	1.9	1.2 - 2.5	9,200	1.5	0.7 - 2.3	600	1.6	1.1 - 2.1	5,900	3.0	0.0 - 5.9	2,700
Private†	43.2	41.6 - 44.8	212,400	11.4	7.7 - 15.1	4,300	41.0	38.9 - 43.0	148,500	65.3	60.6 - 70.0	59,600
Maternal postpartum insurance												
Medi-Cal†	35.5	33.8 - 37.3	173,900	69.7	62.8 - 76.6	26,100	36.5	34.3 - 38.6	131,700	17.7	14.2 - 21.2	16,100
Uninsured†	17.4	15.9 - 18.8	85,000	14.3	9.8 - 18.9	5,400	18.4	16.7 - 20.1	66,500	14.4	10.4 - 18.3	13,100
Private†	43.8	42.1 - 45.4	214,300	12.7	8.2 - 17.1	4,700	41.8	39.7 - 43.8	150,800	64.6	59.8 - 69.4	58,700
Infant health insurance												
Medi-Cal†	49.5	47.9 - 51.2	240,500	82.6	77.3 - 87.9	29,900	51.6	49.5 - 53.6	185,700	28.0	23.5 - 32.4	24,900
Healthy Families†	5.2	4.4 - 6.1	25,400	3.8	2.1 - 5.4	1,400	5.4	4.4 - 6.3	19,300	5.3	3.0 - 7.6	4,700
Uninsured†	2.4	1.9 - 2.9	11,700	4.7	2.0 - 7.5	1,700	2.4	1.8 - 3.0	8,800	1.3	0.6 - 2.0	1,200
Private†	39.4	37.8 - 41.0	191,200	3.0	1.2 - 4.9	1,100	37.4	35.3 - 39.4	134,600	62.3	57.5 - 67.1	55,600
<b>Maternal Demographics</b>												
Did not complete high school (or GED)	20.6	18.9 - 22.3	101,000	43.8	35.0 - 52.7	16,400	19.4	17.4 - 21.3	70,100	15.8	12.2 - 19.4	14,400
Unmarried	42.3	40.4 - 44.1	207,800	91.0	87.9 - 94.0	34,200	41.8	39.6 - 44.0	151,600	24.1	19.7 - 28.4	22,000
Race/Ethnicity												
Hispanic	50.9	49.1 - 52.7	247,100	76.3	70.7 - 81.8	28,500	51.1	48.9 - 53.3	183,200	39.6	34.6 - 44.6	35,400
Black	6.0	5.6 - 6.4	29,100	8.9	5.2 - 12.7	3,300	6.2	5.5 - 6.9	22,100	4.0	2.7 - 5.3	3,600
White	29.1	27.4 - 30.7	141,200	12.9	9.1 - 16.8	4,800	29.3	27.3 - 31.2	104,900	35.1	30.4 - 39.8	31,400
Asian/Pacific Islander	13.4	11.8 - 14.9	64,900	1.7	0.7 - 2.6	600	12.7	11.0 - 14.4	45,500	20.9	16.1 - 25.8	18,700
Born outside the U.S.	39.8	37.8 - 41.9	196,400	19.5	11.1 - 27.9	7,400	38.7	36.4 - 41.0	141,000	52.6	47.5 - 57.6	48,100
Speaks non-English language at home	32.4	30.4 - 34.4	159,000	22.8	14.4 - 31.3	8,600	32.5	30.2 - 34.7	117,400	36.2	31.2 - 41.2	33,000

† In 2011, measures changed for these indicators and are not comparable to the same indicator in prior years (see 2011 Technical Document for specific changes).

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (N), i.e., numerator of the percent rounded to the nearest hundred, are weighted to represent all women with a live birth in California in 2011. Prior poor birth outcomes are presented for all women. Methods used to weight the data were different in 2011 than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

MIHA is a collaborative effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. **Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).**

# MIHA Snapshot, California by Race/Ethnicity, 2011

Maternal and Infant Health Assessment (MIHA) Survey



	Total			Hispanic			Black			White			Asian/Pacific Islander		
	%	95% CI	N	%	95% CI	N	%	95% CI	N	%	95% CI	N	%	95% CI	N
<b>Total</b>	100		493,500	50.9	49.1- 52.7	247,100	6.0	5.6- 6.4	29,100	29.1	27.4- 30.7	141,200	13.4	11.8- 14.9	64,900
<b>Prior Poor Birth Outcomes</b>															
Prior low birth weight or preterm delivery	8.4	7.3- 9.6	41,000	9.4	7.6- 11.3	23,100	12.0	7.7- 16.4	3,400	6.5	5.0- 7.9	9,000	6.6	3.2- 9.9	4,100
Prior delivery by c-section	15.9	14.1- 17.6	78,200	17.3	14.4- 20.1	42,700	18.2	11.6- 24.8	5,300	12.9	10.6- 15.1	18,100	16.4	11.2- 21.7	10,700
<b>Health Status</b>															
In good to excellent health before pregnancy†	91.3	90.0- 92.5	449,300	87.5	85.3- 89.6	216,100	92.1	88.7- 95.6	26,800	96.1	94.9- 97.3	134,800	94.8	92.1- 97.6	61,500
<b>Chronic conditions before or during pregnancy</b>															
Diabetes or gestational diabetes	10.3	8.9- 11.6	50,100	10.4	8.4- 12.4	25,300	8.0	4.8- 11.2	2,300	8.8	6.5- 11.2	12,400	14.3	10.0- 18.5	9,200
Hypertension, preeclampsia or eclampsia	9.2	8.0- 10.3	44,100	7.8	6.2- 9.3	18,600	14.5	9.5- 19.5	4,100	9.3	7.5- 11.0	12,900	11.4	7.0- 15.8	7,200
Asthma	8.5	7.4- 9.6	41,100	5.9	4.6- 7.2	14,200	19.8	12.8- 26.8	5,600	11.8	9.4- 14.1	16,500	6.1	3.1- 9.1	3,900
<b>Nutrition and Weight</b>															
Daily folic acid use, month before pregnancy	34.4	32.3- 36.4	168,600	26.1	23.3- 29.0	64,400	31.5	23.6- 39.4	9,100	42.9	39.4- 46.5	59,900	48.8	42.2- 55.4	31,600
Overweight before pregnancy	26.1	24.1- 28.1	120,100	31.1	27.8- 34.4	68,300	26.5	18.8- 34.2	7,100	24.0	21.0- 27.1	33,400	14.5	10.6- 18.3	9,200
Obese before pregnancy	18.5	16.7- 20.3	85,100	25.0	21.7- 28.2	54,800	17.7	13.4- 22.0	4,700	13.6	11.3- 15.9	18,900	6.3	3.5- 9.2	4,000
Inadequate weight gain during pregnancy	16.8	15.0- 18.6	63,300	20.2	17.2- 23.1	34,600	12.4	6.4- 18.5	2,700	11.1	8.8- 13.5	13,300	20.4	14.8- 26.0	11,300
Excessive weight gain during pregnancy	43.9	41.5- 46.2	165,500	41.3	37.8- 44.9	70,900	46.0	36.6- 55.4	9,900	53.4	49.5- 57.2	63,800	29.8	23.3- 36.3	16,500
Food insecurity during pregnancy	18.4	16.8- 19.9	90,200	24.6	21.9- 27.3	60,600	19.4	13.4- 25.4	5,600	11.1	9.2- 13.0	15,700	9.4	6.6- 12.1	6,000
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>															
Physical IPV in the year before pregnancy	3.2	2.5- 3.9	15,900	3.6	2.6- 4.7	8,900	3.7	0.4- 7.1	1,100	3.1	1.9- 4.2	4,300	1.3	0.3- 2.4	900
Physical or psychological IPV during pregnancy	7.7	6.7- 8.7	37,700	9.1	7.5- 10.7	22,400	6.5	4.1- 8.8	1,900	5.7	4.2- 7.2	8,000	5.6	2.8- 8.3	3,600
Prenatal depressive symptoms	15.2	13.6- 16.8	74,900	19.1	16.6- 21.6	47,000	19.7	12.7- 26.7	5,700	8.5	6.8- 10.2	12,000	13.3	7.9- 18.7	8,600
Postpartum depressive symptoms	13.5	12.1- 14.9	66,400	14.5	12.4- 16.6	35,700	21.5	13.9- 29.1	6,200	11.0	9.0- 13.1	15,500	12.1	8.0- 16.3	7,800
<b>Hardships and Support during Pregnancy</b>															
Homeless or did not have a regular place to sleep	3.0	2.4- 3.5	14,500	3.2	2.3- 4.1	7,800	6.2	2.7- 9.7	1,800	2.1	1.4- 2.8	2,900	1.3	0.3- 2.4	900
Moved due to problems paying rent or mortgage	7.4	6.4- 8.4	36,300	8.3	6.6- 10.0	20,400	12.7	7.8- 17.6	3,700	6.0	4.7- 7.4	8,500	4.1	1.8- 6.5	2,600
Woman or partner lost job	17.2	15.6- 18.9	84,100	21.0	18.3- 23.8	51,300	20.0	13.2- 26.8	5,700	13.6	11.0- 16.2	19,100	9.5	6.5- 12.5	6,100
Woman or partner had pay or hours cut back	16.6	15.0- 18.2	80,900	19.9	17.3- 22.6	48,600	19.1	12.0- 26.2	5,500	13.1	11.0- 15.2	18,300	10.0	6.5- 13.5	6,400
Became separated or divorced	7.5	6.6- 8.5	36,900	8.7	7.2- 10.2	21,300	15.9	9.6- 22.1	4,600	6.0	4.6- 7.4	8,400	1.7	0.9- 2.5	1,100
Had no practical or emotional support	5.3	4.4- 6.2	26,200	7.4	5.8- 8.9	18,100	3.1	1.6- 4.6	900	1.2	0.7- 1.8	1,800	6.7	3.0- 10.3	4,300
<b>Substance Use</b>															
Any smoking, 3 months before pregnancy	12.3	11.0- 13.5	60,000	8.3	6.7- 9.9	20,400	20.1	13.9- 26.4	5,800	19.1	16.7- 21.6	26,900	7.1	4.2- 10.0	4,600
Any smoking, 1st or 3rd trimester†	8.1	7.1- 9.1	39,500	4.9	3.7- 6.1	12,000	14.1	8.5- 19.6	4,000	13.5	11.4- 15.5	18,900	4.1	1.6- 6.6	2,700
Any smoking, postpartum	6.3	5.5- 7.1	30,800	4.0	2.9- 5.1	9,900	15.5	9.7- 21.3	4,500	9.9	8.2- 11.6	13,800	1.7	0.9- 2.5	1,100
Any binge drinking, 3 months before pregnancy	13.1	11.9- 14.4	64,200	10.3	8.6- 11.9	25,100	19.1	12.4- 25.7	5,300	18.9	16.3- 21.5	26,500	9.1	5.3- 12.8	5,900
Any alcohol use, 1st or 3rd trimester†	19.6	17.9- 21.2	95,900	12.6	10.5- 14.7	30,900	21.3	14.6- 28.0	6,000	33.0	29.5- 36.4	46,300	15.7	11.0- 20.4	10,100
<b>Infant Sleep and Breastfeeding</b>															
Placed infant on back to sleep	73.9	71.9- 75.8	358,200	69.4	66.2- 72.5	169,000	55.9	47.6- 64.3	15,400	80.9	78.0- 83.7	112,100	83.6	78.5- 88.6	53,700
Always or often bedshared	39.3	37.2- 41.4	190,700	41.9	38.8- 45.1	102,200	56.6	48.6- 64.6	15,700	26.6	23.5- 29.7	36,800	48.8	42.2- 55.4	31,500
Intended to breastfeed, before birth	92.1	91.0- 93.2	448,400	91.7	90.0- 93.4	223,400	78.8	70.9- 86.7	22,200	93.8	92.2- 95.4	130,700	95.3	93.3- 97.2	61,500
Intended to breastfeed exclusively, before birth	62.3	60.2- 64.4	303,100	53.3	50.1- 56.6	129,900	50.5	42.4- 58.6	14,200	77.5	74.5- 80.5	107,900	65.5	59.1- 71.9	42,200
<b>Breastfeeding practices</b>															
Any breastfeeding, 1 month after delivery†	81.7	80.0- 83.4	391,400	79.2	76.4- 81.9	190,500	66.9	58.8- 75.0	18,300	84.6	82.3- 87.0	116,200	90.1	87.1- 93.0	57,000
Exclusive breastfeeding, 1 month after delivery†	38.8	36.6- 40.9	182,300	35.0	31.9- 38.1	82,200	29.2	21.2- 37.1	7,900	47.6	44.0- 51.1	64,400	35.6	28.9- 42.3	22,300
Any breastfeeding, 3 months after delivery†	63.7	61.3- 66.2	240,100	59.5	55.8- 63.3	117,400	43.2	34.4- 52.0	9,700	71.0	67.4- 74.7	72,000	74.3	67.7- 80.9	35,600
Exclusive breastfeeding, 3 months after delivery†	23.1	21.1- 25.1	86,000	17.2	14.6- 19.8	33,400	15.5	9.4- 21.5	3,400	34.3	30.3- 38.2	34,500	26.8	19.5- 34.0	12,600

	Total			Hispanic			Black			White			Asian/Pacific Islander		
	%	95% CI	N	%	95% CI	N	%	95% CI	N	%	95% CI	N	%	95% CI	N
<b>Pregnancy Intention and Family Planning</b>															
Mistimed or unwanted pregnancy†	32.1	30.1 - 34.1	157,200	39.9	36.7 - 43.1	98,200	45.9	37.7 - 54.1	13,200	20.0	17.3 - 22.8	28,000	23.0	17.6 - 28.4	14,800
Unsure of pregnancy intentions†	11.9	10.4 - 13.3	58,200	11.8	9.7 - 14.0	29,100	19.4	13.0 - 25.7	5,600	10.3	8.0 - 12.5	14,300	10.5	7.0 - 13.9	6,700
Postpartum birth control use†	91.1	89.7 - 92.4	395,200	92.8	91.0 - 94.7	205,200	89.6	84.2 - 95.1	20,500	90.4	88.5 - 92.4	115,800	85.3	80.1 - 90.4	45,000
<b>Health Insurance Coverage and Service Utilization</b>															
Had a usual source of pre-pregnancy care	72.2	70.2 - 74.1	355,300	68.6	65.7 - 71.6	169,500	69.8	61.7 - 77.9	20,300	80.3	77.6 - 83.1	112,700	69.6	63.5 - 75.8	45,200
Initiated prenatal care in 1st trimester†	85.6	84.1 - 87.2	416,100	82.2	79.6 - 84.8	199,600	84.2	77.1 - 91.2	23,600	92.4	90.8 - 94.1	129,400	84.0	79.5 - 88.6	53,700
Had a postpartum medical visit	88.6	87.3 - 90.0	435,300	86.1	83.9 - 88.4	211,800	83.9	77.7 - 90.2	24,300	91.9	90.2 - 93.5	129,100	93.2	90.8 - 95.6	60,100
Mom or infant needed but couldn't afford care postpartum	13.0	11.5 - 14.5	62,600	15.2	12.8 - 17.6	36,400	13.7	8.1 - 19.4	3,800	8.6	7.1 - 10.1	11,900	14.0	8.7 - 19.2	9,000
Received CalFresh (food stamps) during pregnancy	22.2	20.6 - 23.8	109,000	26.7	24.0 - 29.4	65,700	51.9	44.3 - 59.5	15,000	14.5	12.5 - 16.5	20,400	7.7	3.8 - 11.6	5,000
Pre-pregnancy insurance															
Medi-Cal†	25.6	23.8 - 27.3	125,100	34.0	30.9 - 37.2	83,300	47.0	39.3 - 54.8	13,700	13.1	11.0 - 15.1	18,300	9.5	7.2 - 11.9	6,100
Uninsured†	23.9	22.3 - 25.6	117,200	33.4	30.5 - 36.2	81,700	18.8	11.7 - 26.0	5,500	13.2	11.0 - 15.4	18,500	14.0	8.9 - 19.0	9,000
Private†	46.4	44.7 - 48.1	227,000	29.5	26.6 - 32.3	72,200	31.2	24.3 - 38.2	9,100	68.1	65.1 - 71.1	95,400	71.7	66.1 - 77.3	46,100
Prenatal insurance															
Medi-Cal†	50.4	48.8 - 51.9	247,500	68.8	66.0 - 71.7	169,100	66.5	59.7 - 73.4	19,300	27.2	24.6 - 29.8	38,200	22.1	17.4 - 26.8	14,300
Uninsured†	1.9	1.2 - 2.5	9,200	2.1	1.2 - 2.9	5,100	*			1.0	0.6 - 1.5	1,400	3.0	0.0 - 6.7	1,900
Private†	43.2	41.6 - 44.8	212,400	25.9	23.1 - 28.6	63,600	29.2	22.4 - 36.0	8,500	65.1	62.1 - 68.0	91,400	69.6	63.7 - 75.4	45,100
Maternal postpartum insurance															
Medi-Cal†	35.5	33.8 - 37.3	173,900	45.4	42.3 - 48.5	111,300	61.9	54.6 - 69.2	17,900	21.3	18.8 - 23.8	29,800	15.1	11.2 - 19.0	9,700
Uninsured†	17.4	15.9 - 18.8	85,000	25.9	23.4 - 28.5	63,500	5.1	2.2 - 7.9	1,500	8.3	6.7 - 10.0	11,700	10.7	6.2 - 15.1	6,800
Private†	43.8	42.1 - 45.4	214,300	26.3	23.5 - 29.1	64,400	29.5	22.3 - 36.7	8,500	65.5	62.5 - 68.5	92,000	71.3	65.7 - 76.9	45,700
Infant health insurance															
Medi-Cal†	49.5	47.9 - 51.2	240,500	66.9	64.0 - 69.8	162,800	66.8	59.6 - 74.1	18,300	27.0	24.4 - 29.7	37,500	25.2	19.6 - 30.7	16,300
Healthy Families†	5.2	4.4 - 6.1	25,400	6.7	5.3 - 8.0	16,300	3.4	0.8 - 6.0	900	3.3	2.3 - 4.4	4,600	4.6	2.4 - 6.9	3,000
Uninsured†	2.4	1.9 - 2.9	11,700	3.1	2.2 - 4.0	7,600	1.4	0.3 - 2.4	400	1.7	1.0 - 2.4	2,400	1.4	0.4 - 2.4	900
Private†	39.4	37.8 - 41.0	191,200	21.4	18.7 - 24.1	52,000	20.6	16.2 - 25.0	5,600	62.9	59.9 - 66.0	87,400	65.7	59.7 - 71.7	42,500
<b>Maternal Demographics</b>															
Age															
15-19	7.7	6.4 - 8.9	37,800	11.5	9.3 - 13.8	28,500	11.5	6.5 - 16.5	3,300	3.4	2.5 - 4.4	4,800	1.0	0.4 - 1.5	600
20-34	73.8	71.9 - 75.7	364,100	74.1	71.2 - 77.0	183,200	76.1	69.9 - 82.4	22,100	74.3	71.2 - 77.4	104,900	70.2	63.8 - 76.6	45,500
35+	18.5	16.9 - 20.2	91,500	14.3	12.1 - 16.6	35,400	12.4	8.3 - 16.5	3,600	22.2	19.2 - 25.3	31,400	28.9	22.5 - 35.2	18,700
Did not complete high school (or GED)	20.6	18.9 - 22.3	101,000	34.9	31.8 - 38.0	85,700	18.3	11.4 - 25.1	5,300	5.1	3.9 - 6.4	7,200	2.5	1.5 - 3.5	1,600
Unmarried	42.3	40.4 - 44.1	207,800	55.8	52.8 - 58.9	137,800	70.7	63.9 - 77.5	20,400	23.2	20.7 - 25.7	32,600	18.0	13.2 - 22.8	11,600
Born outside the U.S.	39.8	37.8 - 41.9	196,400	49.7	46.5 - 52.9	122,900	9.5	6.2 - 12.7	2,800	12.6	10.1 - 15.2	17,800	76.5	71.5 - 81.5	49,600
Speaks non-English language at home	32.4	30.4 - 34.4	159,000	45.4	42.3 - 48.6	111,700	5.2	2.7 - 7.7	1,500	6.2	4.3 - 8.0	8,700	54.7	48.1 - 61.3	35,000
Income as a percent of the Federal Poverty Guideline															
0-100%	43.8	42.0 - 45.6	198,400	62.9	59.8 - 66.0	138,700	61.4	53.9 - 68.9	16,400	22.4	19.7 - 25.0	30,400	13.3	10.0 - 16.5	7,900
101-200%	19.0	17.2 - 20.8	86,000	21.3	18.6 - 24.1	47,100	19.5	12.7 - 26.2	5,200	14.0	11.7 - 16.3	19,000	21.9	15.8 - 27.9	13,000
>200%	37.2	35.5 - 38.9	168,500	15.8	13.5 - 18.1	34,900	19.1	14.8 - 23.3	5,100	63.6	60.5 - 66.8	86,300	64.9	58.5 - 71.2	38,700

\* Data are not presented because fewer than 10 women reported. † In 2011, measures changed for these indicators and are not comparable to the same indicator in prior years (see 2011 Technical Document for specific changes).

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (N), i.e., numerator of the percent rounded to the nearest hundred, are weighted to represent all women with a live birth in California in 2011. Prior poor birth outcomes are presented for all women. Methods used to weight the data were different in 2011 than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

MIHA is a collaborative effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).

# MIHA Snapshot, California by Income, 2011

Maternal and Infant Health Assessment (MIHA) Survey



	Total			0-100% Federal Poverty Guideline			101-200% Federal Poverty Guideline			> 200% Federal Poverty Guideline		
	%	95% CI	N	%	95% CI	N	%	95% CI	N	%	95% CI	N
<b>Total</b>	100		493,500	43.8	42.0 - 45.6	198,400	19.0	17.2 - 20.8	86,000	37.2	35.5 - 38.9	168,500
<b>Prior Poor Birth Outcomes</b>												
Prior low birth weight or preterm delivery	8.4	7.3 - 9.6	41,000	10.4	8.5 - 12.3	20,300	8.6	6.1 - 11.2	7,400	6.6	4.6 - 8.5	10,900
Prior delivery by c-section	15.9	14.1 - 17.6	78,200	17.7	14.5 - 20.9	35,100	15.4	11.9 - 18.9	13,300	13.9	11.2 - 16.6	23,500
<b>Health Status</b>												
In good to excellent health before pregnancy†	91.3	90.0 - 92.5	449,300	86.2	83.8 - 88.7	170,300	91.2	88.6 - 93.9	78,400	97.3	96.0 - 98.6	164,000
Chronic conditions before or during pregnancy												
Diabetes or gestational diabetes	10.3	8.9 - 11.6	50,100	9.2	7.5 - 11.0	18,000	12.4	8.2 - 16.5	10,500	11.2	8.7 - 13.6	18,700
Hypertension, preeclampsia or eclampsia	9.2	8.0 - 10.3	44,100	9.3	7.5 - 11.1	17,800	9.6	7.1 - 12.1	8,000	9.6	7.6 - 11.6	16,000
Asthma	8.5	7.4 - 9.6	41,100	9.5	7.7 - 11.4	18,400	6.1	4.6 - 7.6	5,100	9.3	7.1 - 11.5	15,500
<b>Nutrition and Weight</b>												
Daily folic acid use, month before pregnancy	34.4	32.3 - 36.4	168,600	24.1	21.0 - 27.1	47,500	30.2	25.4 - 35.1	25,900	48.9	45.2 - 52.6	82,100
Overweight before pregnancy	26.1	24.1 - 28.1	120,100	27.8	24.5 - 31.1	48,800	31.3	26.1 - 36.5	26,000	21.5	18.6 - 24.3	35,600
Obese before pregnancy	18.5	16.7 - 20.3	85,100	25.5	21.9 - 29.0	44,700	20.0	16.1 - 24.0	16,700	11.2	9.1 - 13.3	18,500
Inadequate weight gain during pregnancy	16.8	15.0 - 18.6	63,300	18.3	15.3 - 21.3	24,800	14.2	10.8 - 17.6	9,700	14.8	11.8 - 17.7	21,400
Excessive weight gain during pregnancy	43.9	41.5 - 46.2	165,500	44.3	40.5 - 48.1	60,000	51.1	45.3 - 56.8	34,900	42.0	38.2 - 45.8	60,800
Food insecurity during pregnancy	18.4	16.8 - 19.9	90,200	31.8	28.7 - 34.8	62,700	20.0	15.9 - 24.0	17,100	3.2	1.8 - 4.6	5,400
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>												
Physical IPV in the year before pregnancy	3.2	2.5 - 3.9	15,900	4.5	3.4 - 5.6	8,900	1.6	0.9 - 2.2	1,300	2.2	1.1 - 3.4	3,800
Physical or psychological IPV during pregnancy	7.7	6.7 - 8.7	37,700	12.6	10.6 - 14.6	24,900	5.0	2.9 - 7.0	4,200	3.4	2.2 - 4.7	5,700
Prenatal depressive symptoms	15.2	13.6 - 16.8	74,900	20.8	18.2 - 23.4	41,100	17.2	13.0 - 21.3	14,700	8.6	6.2 - 10.9	14,400
Postpartum depressive symptoms	13.5	12.1 - 14.9	66,400	16.8	14.4 - 19.2	33,300	15.6	11.9 - 19.4	13,400	9.6	7.7 - 11.5	16,200
<b>Hardships and Support during Pregnancy</b>												
Homeless or did not have a regular place to sleep	3.0	2.4 - 3.5	14,500	5.3	4.1 - 6.5	10,500	1.9	0.8 - 3.1	1,700	0.8	0.1 - 1.4	1,300
Moved due to problems paying rent or mortgage	7.4	6.4 - 8.4	36,300	12.3	10.1 - 14.5	24,300	5.6	4.0 - 7.2	4,800	2.6	1.5 - 3.7	4,400
Woman or partner lost job	17.2	15.6 - 18.9	84,100	27.2	24.0 - 30.5	53,200	14.7	11.3 - 18.0	12,600	7.5	5.8 - 9.3	12,600
Woman or partner had pay or hours cut back	16.6	15.0 - 18.2	80,900	21.3	18.5 - 24.2	41,600	20.5	16.0 - 24.9	17,500	9.9	7.9 - 12.0	16,700
Became separated or divorced	7.5	6.6 - 8.5	36,900	13.0	11.1 - 14.8	25,400	7.0	4.5 - 9.5	6,000	2.0	1.1 - 2.9	3,400
Had no practical or emotional support	5.3	4.4 - 6.2	26,200	7.1	5.7 - 8.5	14,100	7.2	4.4 - 9.9	6,200	1.8	0.5 - 3.1	3,100
<b>Substance Use</b>												
Any smoking, 3 months before pregnancy	12.3	11.0 - 13.5	60,000	16.8	14.6 - 19.0	32,800	10.4	8.0 - 12.8	8,900	8.3	6.5 - 10.1	14,000
Any smoking, 1st or 3rd trimester†	8.1	7.1 - 9.1	39,500	12.4	10.5 - 14.3	24,400	6.6	4.9 - 8.4	5,700	4.1	2.7 - 5.4	6,800
Any smoking, postpartum	6.3	5.5 - 7.1	30,800	10.5	8.7 - 12.2	20,600	5.4	3.8 - 7.1	4,700	2.2	1.4 - 3.1	3,700
Any binge drinking, 3 months before pregnancy	13.1	11.9 - 14.4	64,200	10.8	9.1 - 12.4	21,100	15.3	11.9 - 18.8	13,000	16.4	13.9 - 18.9	27,500
Any alcohol use, 1st or 3rd trimester†	19.6	17.9 - 21.2	95,900	13.3	11.1 - 15.5	26,200	17.1	13.5 - 20.6	14,500	31.1	27.7 - 34.6	52,300
<b>Infant Sleep and Breastfeeding</b>												
Placed infant on back to sleep	73.9	71.9 - 75.8	358,200	67.7	64.3 - 71.1	130,700	69.4	64.4 - 74.4	59,200	84.0	81.4 - 86.5	140,300
Always or often bedshared	39.3	37.2 - 41.4	190,700	48.1	44.6 - 51.5	93,000	36.8	31.9 - 41.6	31,200	30.0	26.6 - 33.3	50,100
Intended to breastfeed, before birth	92.1	91.0 - 93.2	448,400	89.1	87.3 - 91.0	173,000	90.9	87.5 - 94.3	77,400	96.0	94.7 - 97.4	160,900
Intended to breastfeed exclusively, before birth	62.3	60.2 - 64.4	303,100	53.7	50.3 - 57.2	104,300	60.8	55.5 - 66.1	51,800	74.9	71.6 - 78.1	125,400
<b>Breastfeeding practices</b>												
Any breastfeeding, 1 month after delivery†	81.7	80.0 - 83.4	391,400	75.1	72.1 - 78.2	142,500	77.6	73.2 - 82.0	65,600	90.8	88.8 - 92.8	150,400
Exclusive breastfeeding, 1 month after delivery†	38.8	36.6 - 40.9	182,300	33.7	30.5 - 36.9	63,100	35.0	29.8 - 40.2	28,900	45.3	41.7 - 49.0	73,800
Any breastfeeding, 3 months after delivery†	63.7	61.3 - 66.2	240,100	54.5	50.6 - 58.5	83,800	56.6	50.5 - 62.8	37,000	79.2	75.6 - 82.8	98,500
Exclusive breastfeeding, 3 months after delivery†	23.1	21.1 - 25.1	86,000	15.2	12.8 - 17.7	23,200	19.6	15.1 - 24.1	12,600	35.5	31.3 - 39.8	43,600

	Total			0-100% Federal Poverty Guideline			101-200% Federal Poverty Guideline			> 200% Federal Poverty Guideline		
	%	95% CI	N	%	95% CI	N	%	95% CI	N	%	95% CI	N
<b>Pregnancy Intention and Family Planning</b>												
Mistimed or unwanted pregnancy†	32.1	30.1 - 34.1	157,200	43.6	40.2 - 47.0	85,800	36.5	31.6 - 41.4	31,200	17.1	14.1 - 20.0	28,600
Unsure of pregnancy intentions†	11.9	10.4 - 13.3	58,200	16.0	13.4 - 18.6	31,600	11.4	8.1 - 14.6	9,700	7.2	5.4 - 9.1	12,200
Postpartum birth control use†	91.1	89.7 - 92.4	395,200	91.8	89.8 - 93.7	156,400	91.1	87.4 - 94.7	72,200	91.3	89.5 - 93.0	137,200
<b>Health Insurance Coverage and Service Utilization</b>												
Had a usual source of pre-pregnancy care	72.2	70.2 - 74.1	355,300	64.4	61.2 - 67.6	127,100	67.6	62.7 - 72.4	58,000	85.0	82.1 - 87.9	143,300
Initiated prenatal care in 1st trimester†	85.6	84.1 - 87.2	416,100	79.5	76.5 - 82.4	154,900	87.7	84.4 - 91.0	74,400	94.4	92.9 - 95.9	157,800
Had a postpartum medical visit	88.6	87.3 - 90.0	435,300	83.2	80.8 - 85.6	164,500	93.0	90.8 - 95.3	79,600	95.7	94.4 - 97.0	160,500
Mom or infant needed but couldn't afford care postpartum	13.0	11.5 - 14.5	62,600	18.0	15.2 - 20.8	34,600	16.2	12.6 - 19.7	13,600	6.1	4.0 - 8.1	10,100
Received CalFresh (food stamps) during pregnancy	22.2	20.6 - 23.8	109,000	43.8	40.5 - 47.0	86,500	13.7	9.9 - 17.5	11,700	1.7	0.9 - 2.5	2,800
<b>Pre-pregnancy insurance</b>												
Medi-Cal†	25.6	23.8 - 27.3	125,100	49.5	46.1 - 52.9	96,900	15.2	11.7 - 18.8	13,000	1.5	1.0 - 2.0	2,600
Uninsured†	23.9	22.3 - 25.6	117,200	36.5	33.3 - 39.6	71,400	30.8	26.1 - 35.5	26,300	5.4	3.6 - 7.2	9,100
Private†	46.4	44.7 - 48.1	227,000	11.3	9.2 - 13.4	22,200	47.0	41.8 - 52.3	40,200	88.7	86.4 - 91.0	149,400
<b>Prenatal insurance</b>												
Medi-Cal†	50.4	48.8 - 51.9	247,500	87.8	85.6 - 90.1	172,900	48.6	43.6 - 53.7	41,600	5.2	3.9 - 6.5	8,700
Uninsured†	1.9	1.2 - 2.5	9,200	3.0	2.0 - 4.0	5,900	2.1	0.0 - 5.0	1,800	0.3	0.1 - 0.5	500
Private†	43.2	41.6 - 44.8	212,400	8.0	6.0 - 10.0	15,800	39.0	33.8 - 44.2	33,400	88.8	86.7 - 90.8	149,600
<b>Maternal postpartum insurance</b>												
Medi-Cal†	35.5	33.8 - 37.3	173,900	64.7	61.5 - 67.9	127,500	27.9	23.2 - 32.5	23,900	2.9	2.1 - 3.8	4,900
Uninsured†	17.4	15.9 - 18.8	85,000	25.1	22.4 - 27.9	49,500	25.4	21.1 - 29.7	21,800	4.1	3.0 - 5.2	6,800
Private†	43.8	42.1 - 45.4	214,300	8.3	6.3 - 10.3	16,400	40.9	35.7 - 46.0	35,100	88.8	86.8 - 90.8	148,400
<b>Infant health insurance</b>												
Medi-Cal†	49.5	47.9 - 51.2	240,500	85.7	83.4 - 88.0	165,900	50.0	44.8 - 55.2	42,600	5.4	4.0 - 6.8	9,000
Healthy Families†	5.2	4.4 - 6.1	25,400	5.2	3.9 - 6.4	10,000	7.8	5.5 - 10.0	6,600	3.8	2.5 - 5.0	6,300
Uninsured†	2.4	1.9 - 2.9	11,700	3.4	2.3 - 4.4	6,500	3.3	2.0 - 4.6	2,800	0.9	0.4 - 1.3	1,400
Private†	39.4	37.8 - 41.0	191,200	4.1	2.8 - 5.5	8,000	33.1	27.9 - 38.4	28,300	85.4	83.1 - 87.8	142,900
<b>Maternal Demographics</b>												
Did not complete high school (or GED)	20.6	18.9 - 22.3	101,000	38.3	34.9 - 41.7	75,700	11.1	8.6 - 13.6	9,400	1.6	1.0 - 2.3	2,800
Unmarried	42.3	40.4 - 44.1	207,800	68.0	64.9 - 71.1	134,500	40.0	34.8 - 45.2	34,200	11.4	9.2 - 13.5	19,200
<b>Race/Ethnicity</b>												
Hispanic	50.9	49.1 - 52.7	247,100	70.9	68.5 - 73.4	138,700	55.6	50.5 - 60.7	47,100	21.1	18.0 - 24.2	34,900
Black	6.0	5.6 - 6.4	29,100	8.4	7.1 - 9.6	16,400	6.1	4.0 - 8.2	5,200	3.1	2.4 - 3.7	5,100
White	29.1	27.4 - 30.7	141,200	15.5	13.6 - 17.5	30,400	22.4	18.7 - 26.2	19,000	52.2	48.5 - 55.9	86,300
Asian/Pacific Islander	13.4	11.8 - 14.9	64,900	4.1	3.1 - 5.0	7,900	15.4	11.0 - 19.8	13,000	23.4	20.0 - 26.8	38,700
Born outside the U.S.	39.8	37.8 - 41.9	196,400	45.0	41.8 - 48.3	89,400	41.2	36.1 - 46.4	35,400	31.2	27.7 - 34.6	52,500
Speaks non-English language at home	32.4	30.4 - 34.4	159,000	42.5	39.2 - 45.8	84,000	33.4	28.4 - 38.4	28,600	17.2	14.4 - 20.1	29,000

† In 2011, measures changed for these indicators and are not comparable to the same indicator in prior years (see 2011 Technical Document for specific changes).

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (N), i.e., numerator of the percent rounded to the nearest hundred, are weighted to represent all women with a live birth in California in 2011. Prior poor birth outcomes are presented for all women. Methods used to weight the data were different in 2011 than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

MIHA is a collaborative effort of the Maternal, Child and Adolescent Health and WIC Programs of the Center for Family Health, California Department of Public Health and the Center on Social Disparities in Health at the University of California, San Francisco. **Visit the MIHA website at [www.cdph.ca.gov/MIHA](http://www.cdph.ca.gov/MIHA).**

# MIHA Snapshot, California by Prenatal Health Insurance, 2011

Maternal and Infant Health Assessment (MIHA) Survey



	Total			Medi-Cal†			Uninsured†			Private†		
	%	95% CI	N	%	95% CI	N	%	95% CI	N	%	95% CI	N
<b>Total</b>	100		493,500	50.4	48.8 - 51.9	247,500	1.9	1.2 - 2.5	9,200	43.2	41.6 - 44.8	212,400
<b>Prior Poor Birth Outcomes</b>												
Prior low birth weight or preterm delivery	8.4	7.3 - 9.6	41,000	10.2	8.5 - 12.0	25,000	7.6	2.3 - 13.0	700	6.9	5.1 - 8.6	14,300
Prior delivery by c-section	15.9	14.1 - 17.6	78,200	17.5	14.8 - 20.2	43,200	9.3	3.2 - 15.3	800	14.1	11.6 - 16.5	29,900
<b>Health Status</b>												
In good to excellent health before pregnancy†	91.3	90.0 - 92.5	449,300	86.8	84.8 - 88.9	214,700	94.2	90.4 - 98.0	8,600	96.0	94.7 - 97.4	203,100
Chronic conditions before or during pregnancy												
Diabetes or gestational diabetes	10.3	8.9 - 11.6	50,100	9.2	7.8 - 10.7	22,500	*			11.1	8.6 - 13.5	23,300
Hypertension, preeclampsia or eclampsia	9.2	8.0 - 10.3	44,100	9.3	7.8 - 10.7	22,200	7.7	2.5 - 13.0	600	9.0	7.1 - 10.8	18,700
Asthma	8.5	7.4 - 9.6	41,100	8.4	7.0 - 9.8	20,300	6.4	1.3 - 11.5	500	8.5	6.8 - 10.3	17,900
<b>Nutrition and Weight</b>												
Daily folic acid use, month before pregnancy	34.4	32.3 - 36.4	168,600	23.7	21.0 - 26.3	58,400	32.0	11.5 - 52.5	2,900	46.6	43.2 - 50.0	98,300
Overweight before pregnancy	26.1	24.1 - 28.1	120,100	27.3	24.4 - 30.1	59,900	33.7	17.0 - 50.3	2,800	24.6	21.6 - 27.7	51,300
Obese before pregnancy	18.5	16.7 - 20.3	85,100	24.6	21.6 - 27.6	54,000	16.9	5.2 - 28.5	1,400	13.2	11.0 - 15.4	27,500
Inadequate weight gain during pregnancy	16.8	15.0 - 18.6	63,300	18.4	15.7 - 21.1	31,600	12.4	2.1 - 22.6	900	15.7	13.1 - 18.4	28,000
Excessive weight gain during pregnancy	43.9	41.5 - 46.2	165,500	45.9	42.5 - 49.3	78,700	37.2	17.5 - 56.9	2,600	42.8	39.3 - 46.4	76,100
Food insecurity during pregnancy	18.4	16.8 - 19.9	90,200	27.3	24.8 - 29.8	67,100	35.3	18.9 - 51.7	3,200	7.8	5.9 - 9.7	16,600
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>												
Physical IPV in the year before pregnancy	3.2	2.5 - 3.9	15,900	4.4	3.3 - 5.6	10,900	5.8	1.1 - 10.4	500	1.6	0.9 - 2.3	3,300
Physical or psychological IPV during pregnancy	7.7	6.7 - 8.7	37,700	11.6	9.8 - 13.4	28,500	12.3	5.3 - 19.2	1,100	2.7	1.9 - 3.6	5,800
Prenatal depressive symptoms	15.2	13.6 - 16.8	74,900	19.5	17.2 - 21.7	48,000	16.1	7.0 - 25.2	1,500	10.6	8.1 - 13.0	22,400
Postpartum depressive symptoms	13.5	12.1 - 14.9	66,400	15.3	13.2 - 17.3	37,700	22.0	8.3 - 35.6	2,000	10.7	8.8 - 12.6	22,700
<b>Hardships and Support during Pregnancy</b>												
Homeless or did not have a regular place to sleep	3.0	2.4 - 3.5	14,500	5.2	4.1 - 6.3	12,700	6.4	2.5 - 10.4	600	0.4	0.1 - 0.6	800
Moved due to problems paying rent or mortgage	7.4	6.4 - 8.4	36,300	11.0	9.2 - 12.8	27,000	21.8	8.2 - 35.4	2,000	3.2	2.2 - 4.2	6,800
Woman or partner lost job	17.2	15.6 - 18.9	84,100	25.0	22.2 - 27.7	60,800	21.2	8.0 - 34.4	1,900	8.6	6.8 - 10.4	18,200
Woman or partner had pay or hours cut back	16.6	15.0 - 18.2	80,900	20.0	17.7 - 22.4	48,900	19.4	6.3 - 32.5	1,700	12.8	10.5 - 15.1	27,000
Became separated or divorced	7.5	6.6 - 8.5	36,900	11.8	10.1 - 13.5	29,000	21.1	8.1 - 34.1	1,900	2.0	1.4 - 2.6	4,200
Had no practical or emotional support	5.3	4.4 - 6.2	26,200	7.2	5.8 - 8.6	17,800	9.1	3.2 - 14.9	800	2.7	1.5 - 3.9	5,700
<b>Substance Use</b>												
Any smoking, 3 months before pregnancy	12.3	11.0 - 13.5	60,000	15.8	13.9 - 17.6	38,600	9.8	4.3 - 15.2	900	8.5	6.7 - 10.2	18,000
Any smoking, 1st or 3rd trimester†	8.1	7.1 - 9.1	39,500	11.0	9.4 - 12.5	26,900	7.3	2.9 - 11.6	600	4.7	3.4 - 6.1	10,000
Any smoking, postpartum	6.3	5.5 - 7.1	30,800	9.6	8.1 - 11.0	23,600	5.4	1.9 - 8.8	500	2.7	1.8 - 3.6	5,700
Any binge drinking, 3 months before pregnancy	13.1	11.9 - 14.4	64,200	11.3	9.8 - 12.9	27,700	13.4	0.7 - 26.0	1,200	15.2	12.9 - 17.4	32,100
Any alcohol use, 1st or 3rd trimester†	19.6	17.9 - 21.2	95,900	12.8	10.9 - 14.7	31,500	14.0	1.5 - 26.4	1,200	27.3	24.4 - 30.3	57,900
<b>Infant Sleep and Breastfeeding</b>												
Placed infant on back to sleep	73.9	71.9 - 75.8	358,200	66.9	63.9 - 69.8	161,500	58.2	38.3 - 78.1	5,100	81.6	79.0 - 84.2	172,000
Always or often bedshared	39.3	37.2 - 41.4	190,700	46.8	43.8 - 49.9	113,200	64.2	49.5 - 78.9	5,600	29.8	26.9 - 32.8	62,800
Intended to breastfeed, before birth	92.1	91.0 - 93.2	448,400	89.2	87.5 - 91.0	216,200	87.6	80.7 - 94.6	7,800	95.2	93.7 - 96.8	201,300
Intended to breastfeed exclusively, before birth	62.3	60.2 - 64.4	303,100	53.9	50.9 - 56.9	130,600	37.1	21.0 - 53.3	3,300	71.7	68.5 - 74.9	151,600
<b>Breastfeeding practices</b>												
Any breastfeeding, 1 month after delivery†	81.7	80.0 - 83.4	391,400	74.8	72.0 - 77.5	177,800	85.3	77.7 - 92.9	7,400	88.8	86.9 - 90.8	185,500
Exclusive breastfeeding, 1 month after delivery†	38.8	36.6 - 40.9	182,300	33.2	30.5 - 36.0	77,700	32.9	17.8 - 48.0	2,800	44.7	41.2 - 48.1	91,700
Any breastfeeding, 3 months after delivery†	63.7	61.3 - 66.2	240,100	54.5	51.0 - 57.9	104,600	74.9	60.2 - 89.5	5,500	73.7	69.9 - 77.5	116,600
Exclusive breastfeeding, 3 months after delivery†	23.1	21.1 - 25.1	86,000	15.4	13.2 - 17.5	29,400	8.0	1.3 - 14.7	600	32.4	28.7 - 36.2	50,600

	Total			Medi-Cal†			Uninsured†			Private†		
	%	95% CI	N	%	95% CI	N	%	95% CI	N	%	95% CI	N
<b>Pregnancy Intention and Family Planning</b>												
Mistimed or unwanted pregnancy†	32.1	30.1 - 34.1	157,200	42.6	39.6 - 45.5	104,500	28.0	15.6 - 40.3	2,600	20.6	17.8 - 23.4	43,600
Unsure of pregnancy intentions†	11.9	10.4 - 13.3	58,200	15.9	13.6 - 18.2	39,000	10.8	4.6 - 17.1	1,000	7.3	5.5 - 9.0	15,400
Postpartum birth control use†	91.1	89.7 - 92.4	395,200	91.2	89.0 - 93.3	196,900	85.9	70.9 - 100.0	6,100	90.9	89.2 - 92.6	172,100
<b>Health Insurance Coverage and Service Utilization</b>												
Had a usual source of pre-pregnancy care	72.2	70.2 - 74.1	355,300	61.7	58.8 - 64.6	152,400	53.2	36.0 - 70.5	4,900	85.9	83.4 - 88.4	181,700
Initiated prenatal care in 1st trimester†	85.6	84.1 - 87.2	416,100	80.1	77.5 - 82.7	194,600	73.6	61.2 - 85.9	6,700	92.6	90.8 - 94.4	194,400
Had a postpartum medical visit	88.6	87.3 - 90.0	435,300	83.2	81.0 - 85.4	204,800	73.7	61.2 - 86.3	6,700	95.5	94.2 - 96.9	202,100
Mom or infant needed but couldn't afford care postpartum	13.0	11.5 - 14.5	62,600	17.6	15.2 - 20.0	42,300	32.1	17.1 - 47.1	2,900	6.0	4.4 - 7.6	12,500
Received CalFresh (food stamps) during pregnancy	22.2	20.6 - 23.8	109,000	41.0	38.2 - 43.7	100,600	30.1	9.0 - 51.2	2,800	1.7	0.7 - 2.6	3,600
Pre-pregnancy insurance												
Medi-Cal†	25.6	23.8 - 27.3	125,100	49.6	46.6 - 52.6	121,500	8.2	2.1 - 14.2	700	0.7	0.2 - 1.2	1,500
Uninsured†	23.9	22.3 - 25.6	117,200	40.5	37.7 - 43.4	99,300	81.7	71.4 - 92.1	7,400	2.1	1.0 - 3.3	4,500
Private†	46.4	44.7 - 48.1	227,000	7.2	5.8 - 8.7	17,700	8.8	0.8 - 16.7	800	96.7	95.5 - 98.0	204,500
Maternal postpartum insurance												
Medi-Cal†	35.5	33.8 - 37.3	173,900	67.4	64.8 - 70.0	165,500	33.0	19.6 - 46.5	2,900	1.6	1.0 - 2.2	3,400
Uninsured†	17.4	15.9 - 18.8	85,000	26.8	24.4 - 29.2	65,800	63.3	48.7 - 77.9	5,600	3.0	2.0 - 4.1	6,400
Private†	43.8	42.1 - 45.4	214,300	4.3	3.3 - 5.3	10,500	*			94.9	93.7 - 96.1	200,700
Infant health insurance												
Medi-Cal†	49.5	47.9 - 51.2	240,500	89.5	88.0 - 91.1	216,700	84.8	75.5 - 94.1	7,500	6.1	4.7 - 7.5	12,800
Healthy Families†	5.2	4.4 - 6.1	25,400	4.9	3.9 - 6.0	11,900	*			2.9	1.9 - 3.9	6,100
Uninsured†	2.4	1.9 - 2.9	11,700	2.5	1.8 - 3.3	6,200	12.0	3.2 - 20.8	1,100	1.8	1.1 - 2.5	3,800
Private†	39.4	37.8 - 41.0	191,200	1.9	1.3 - 2.5	4,500	*			87.6	85.6 - 89.5	184,600
<b>Maternal Demographics</b>												
Age												
15-19	7.7	6.4 - 8.9	37,800	12.8	10.5 - 15.1	31,600	6.1	2.4 - 9.9	600	2.0	1.4 - 2.6	4,300
20-34	73.8	71.9 - 75.7	364,100	77.2	74.6 - 79.9	191,200	64.3	43.8 - 84.9	5,900	69.9	66.8 - 73.0	148,500
35+	18.5	16.9 - 20.2	91,500	10.0	8.4 - 11.6	24,700	29.6	7.7 - 51.4	2,700	28.1	25.0 - 31.1	59,600
Did not complete high school (or GED)	20.6	18.9 - 22.3	101,000	35.4	32.4 - 38.4	87,100	36.2	20.7 - 51.8	3,300	3.4	2.3 - 4.6	7,300
Unmarried	42.3	40.4 - 44.1	207,800	65.5	62.8 - 68.3	161,400	54.0	35.3 - 72.8	5,000	16.7	14.1 - 19.3	35,300
Race/Ethnicity												
Hispanic	50.9	49.1 - 52.7	247,100	69.4	67.2 - 71.7	169,100	57.3	37.9 - 76.7	5,100	30.4	27.1 - 33.7	63,600
Black	6.0	5.6 - 6.4	29,100	7.9	7.0 - 8.9	19,300	*			4.1	3.1 - 5.0	8,500
White	29.1	27.4 - 30.7	141,200	15.7	14.0 - 17.4	38,200	16.3	7.9 - 24.7	1,400	43.7	40.4 - 47.0	91,400
Asian/Pacific Islander	13.4	11.8 - 14.9	64,900	5.9	4.5 - 7.2	14,300	21.8	0.0 - 44.4	1,900	21.6	18.6 - 24.5	45,100
Born outside the U.S.	39.8	37.8 - 41.9	196,400	45.5	42.6 - 48.3	112,500	63.4	48.9 - 77.9	5,800	33.6	30.4 - 36.9	71,400
Speaks non-English language at home	32.4	30.4 - 34.4	159,000	42.1	39.2 - 44.9	103,500	60.9	45.8 - 76.0	5,300	21.1	18.3 - 24.0	44,700
Income as a percent of the Federal Poverty Guideline												
0-100%	43.8	42.0 - 45.6	198,400	77.5	75.0 - 79.9	172,900	71.2	48.5 - 93.8	5,900	7.9	6.0 - 9.9	15,800
101-200%	19.0	17.2 - 20.8	86,000	18.6	16.3 - 20.9	41,600	22.2	0.0 - 46.1	1,800	16.8	14.1 - 19.5	33,400
>200%	37.2	35.5 - 38.9	168,500	3.9	2.9 - 4.9	8,700	6.6	1.8 - 11.4	500	75.3	72.2 - 78.3	149,600

\* Data are not presented because fewer than 10 women reported. † In 2011, measures changed for these indicators and are not comparable to the same indicator in prior years (see 2011 Technical Document for specific changes).

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (N), i.e., numerator of the percent rounded to the nearest hundred, are weighted to represent all women with a live birth in California in 2011. Prior poor birth outcomes are presented for all women. Methods used to weight the data were different in 2011 than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

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# MIHA Snapshot, California by Education, 2011

Maternal and Infant Health Assessment (MIHA) Survey



	Total			< High School			High School Graduate or GED			Some College			College Graduate		
	%	95% CI	N	%	95% CI	N	%	95% CI	N	%	95% CI	N	%	95% CI	N
<b>Total</b>	100		493,500	20.6	18.9 - 22.3	101,000	19.2	17.7 - 20.7	94,200	29.5	27.6 - 31.4	144,700	30.7	29.0 - 32.4	150,600
<b>Prior Poor Birth Outcomes</b>															
Prior low birth weight or preterm delivery	8.4	7.3 - 9.6	41,000	11.2	8.2 - 14.3	11,200	10.6	7.7 - 13.5	9,800	7.8	6.1 - 9.5	11,200	5.9	3.9 - 8.0	8,700
Prior delivery by c-section	15.9	14.1 - 17.6	78,200	20.7	15.4 - 26.1	20,900	14.9	11.3 - 18.5	14,100	13.7	11.4 - 16.0	19,800	15.3	12.2 - 18.5	23,100
<b>Health Status</b>															
In good to excellent health before pregnancy†	91.3	90.0 - 92.5	449,300	84.8	81.3 - 88.4	85,600	88.3	84.8 - 91.8	83,200	91.4	89.6 - 93.2	132,100	97.2	95.6 - 98.8	145,700
<b>Chronic conditions before or during pregnancy</b>															
Diabetes or gestational diabetes	10.3	8.9 - 11.6	50,100	9.9	7.3 - 12.6	9,800	9.7	7.3 - 12.0	9,000	10.5	7.7 - 13.3	15,100	10.8	8.1 - 13.4	16,200
Hypertension, preeclampsia or eclampsia	9.2	8.0 - 10.3	44,100	8.3	5.8 - 10.8	8,000	11.1	8.4 - 13.8	10,100	9.0	7.3 - 10.7	12,600	8.7	6.3 - 11.0	12,900
Asthma	8.5	7.4 - 9.6	41,100	7.0	4.3 - 9.6	6,800	7.6	5.5 - 9.8	7,000	11.2	9.0 - 13.3	16,000	7.4	5.4 - 9.5	11,100
<b>Nutrition and Weight</b>															
Daily folic acid use, month before pregnancy	34.4	32.3 - 36.4	168,600	24.5	19.8 - 29.2	24,600	24.6	20.7 - 28.5	23,100	32.2	28.6 - 35.7	46,400	49.5	45.3 - 53.6	73,800
Overweight before pregnancy	26.1	24.1 - 28.1	120,100	30.6	25.3 - 35.9	25,100	29.5	24.9 - 34.0	25,200	26.3	22.8 - 29.9	37,000	21.6	18.2 - 25.0	32,200
Obese before pregnancy	18.5	16.7 - 20.3	85,100	30.2	24.1 - 36.4	24,800	20.5	16.8 - 24.2	17,500	21.7	18.7 - 24.7	30,400	8.1	5.9 - 10.2	12,000
Inadequate weight gain during pregnancy	16.8	15.0 - 18.6	63,300	23.7	18.5 - 29.0	14,400	16.8	13.2 - 20.4	11,400	13.8	11.1 - 16.4	15,900	16.0	12.7 - 19.4	21,000
Excessive weight gain during pregnancy	43.9	41.5 - 46.2	165,500	41.6	35.8 - 47.4	25,200	45.8	40.6 - 50.9	31,100	49.5	45.4 - 53.5	57,100	39.0	34.7 - 43.3	51,000
Food insecurity during pregnancy	18.4	16.8 - 19.9	90,200	31.4	26.9 - 36.0	31,600	22.9	19.4 - 26.4	21,500	20.1	17.1 - 23.1	28,900	5.2	3.2 - 7.3	7,800
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>															
Physical IPV in the year before pregnancy	3.2	2.5 - 3.9	15,900	3.4	2.1 - 4.8	3,500	4.9	2.8 - 7.0	4,600	3.2	2.2 - 4.2	4,600	2.1	0.8 - 3.3	3,100
Physical or psychological IPV during pregnancy	7.7	6.7 - 8.7	37,700	10.8	8.3 - 13.3	10,900	11.0	8.3 - 13.8	10,300	8.1	6.2 - 10.1	11,700	3.2	1.8 - 4.5	4,800
Prenatal depressive symptoms	15.2	13.6 - 16.8	74,900	19.3	15.4 - 23.3	19,400	19.8	16.4 - 23.2	18,600	15.5	12.8 - 18.3	22,400	9.5	6.7 - 12.4	14,300
Postpartum depressive symptoms	13.5	12.1 - 14.9	66,400	15.7	12.1 - 19.4	15,900	15.0	11.9 - 18.1	14,100	16.0	13.2 - 18.7	23,000	8.8	6.7 - 10.8	13,200
<b>Hardships and Support during Pregnancy</b>															
Homeless or did not have a regular place to sleep	3.0	2.4 - 3.5	14,500	5.8	4.0 - 7.6	5,800	3.7	2.3 - 5.2	3,500	2.1	1.4 - 2.8	3,000	1.4	0.5 - 2.4	2,200
Moved due to problems paying rent or mortgage	7.4	6.4 - 8.4	36,300	11.8	8.4 - 15.1	11,800	9.3	6.9 - 11.6	8,700	8.0	6.3 - 9.6	11,500	2.8	1.5 - 4.0	4,100
Woman or partner lost job	17.2	15.6 - 18.9	84,100	25.1	20.2 - 30.1	25,000	16.5	13.6 - 19.5	15,400	21.1	17.8 - 24.3	30,200	8.6	6.4 - 10.7	12,800
Woman or partner had pay or hours cut back	16.6	15.0 - 18.2	80,900	19.1	15.0 - 23.2	19,000	17.1	14.0 - 20.2	15,800	21.6	18.1 - 25.0	31,000	9.7	7.6 - 11.9	14,500
Became separated or divorced	7.5	6.6 - 8.5	36,900	12.6	9.6 - 15.5	12,600	10.1	7.6 - 12.6	9,500	8.2	6.5 - 9.9	11,800	2.0	1.1 - 2.9	3,000
Had no practical or emotional support	5.3	4.4 - 6.2	26,200	8.8	6.2 - 11.3	8,800	6.5	4.4 - 8.5	6,100	3.9	2.6 - 5.1	5,600	3.7	1.9 - 5.5	5,600
<b>Substance Use</b>															
Any smoking, 3 months before pregnancy	12.3	11.0 - 13.5	60,000	13.3	10.2 - 16.3	13,200	16.2	13.4 - 19.1	15,100	14.7	12.4 - 17.0	21,200	6.6	4.7 - 8.5	10,000
Any smoking, 1st or 3rd trimester†	8.1	7.1 - 9.1	39,500	10.1	7.5 - 12.6	10,100	10.3	8.0 - 12.6	9,600	10.0	8.1 - 11.9	14,400	3.3	1.9 - 4.8	5,000
Any smoking, postpartum	6.3	5.5 - 7.1	30,800	7.4	5.1 - 9.7	7,400	10.6	8.1 - 13.0	9,900	7.2	5.8 - 8.7	10,400	1.9	0.9 - 2.9	2,800
Any binge drinking, 3 months before pregnancy	13.1	11.9 - 14.4	64,200	8.7	6.4 - 11.0	8,600	11.3	8.9 - 13.7	10,500	16.7	14.2 - 19.3	24,000	13.9	11.3 - 16.6	20,900
Any alcohol use, 1st or 3rd trimester†	19.6	17.9 - 21.2	95,900	7.6	5.4 - 9.9	7,600	9.9	7.8 - 12.1	9,300	23.0	19.8 - 26.2	33,000	30.5	26.7 - 34.4	46,000
<b>Infant Sleep and Breastfeeding</b>															
Placed infant on back to sleep	73.9	71.9 - 75.8	358,200	62.9	57.5 - 68.3	62,100	69.6	65.5 - 73.8	64,000	73.1	69.7 - 76.5	104,300	84.3	81.3 - 87.4	125,900
Always or often bedshared	39.3	37.2 - 41.4	190,700	50.9	45.6 - 56.2	50,500	42.3	38.0 - 46.5	38,800	38.9	35.2 - 42.7	55,400	30.3	26.5 - 34.1	45,200
Intended to breastfeed, before birth	92.1	91.0 - 93.2	448,400	87.8	84.9 - 90.7	87,000	91.9	89.6 - 94.3	84,700	90.0	87.6 - 92.5	128,600	97.2	95.9 - 98.5	145,900
Intended to breastfeed exclusively, before birth	62.3	60.2 - 64.4	303,100	44.8	39.7 - 49.9	44,400	55.9	51.6 - 60.2	51,500	65.1	61.3 - 68.8	92,900	75.5	71.7 - 79.3	113,300
<b>Breastfeeding practices</b>															
Any breastfeeding, 1 month after delivery†	81.7	80.0 - 83.4	391,400	72.7	67.6 - 77.8	70,900	77.5	73.9 - 81.0	70,100	80.0	77.1 - 82.9	112,900	92.2	90.0 - 94.4	136,000
Exclusive breastfeeding, 1 month after delivery†	38.8	36.6 - 40.9	182,300	29.8	25.5 - 34.2	28,200	32.9	28.6 - 37.3	29,300	41.7	37.8 - 45.5	58,200	45.8	41.6 - 50.0	66,300
Any breastfeeding, 3 months after delivery†	63.7	61.3 - 66.2	240,100	57.1	51.2 - 63.1	47,400	53.2	48.0 - 58.3	37,500	57.6	53.1 - 62.1	63,200	81.4	77.4 - 85.4	91,100
Exclusive breastfeeding, 3 months after delivery†	23.1	21.1 - 25.1	86,000	12.4	9.4 - 15.4	10,000	16.0	12.7 - 19.2	11,200	22.0	18.6 - 25.4	24,100	36.8	32.0 - 41.7	40,500

	Total			< High School			High School Graduate or GED			Some College			College Graduate		
	%	95% CI	N	%	95% CI	N	%	95% CI	N	%	95% CI	N	%	95% CI	N
<b>Pregnancy Intention and Family Planning</b>															
Mistimed or unwanted pregnancy†	32.1	30.1 - 34.1	157,200	39.5	34.3 - 44.8	39,600	38.9	34.7 - 43.1	36,100	37.5	33.8 - 41.1	54,000	17.8	14.5 - 21.1	26,800
Unsure of pregnancy intentions†	11.9	10.4 - 13.3	58,200	14.0	9.9 - 18.1	14,000	12.0	9.7 - 14.4	11,200	15.6	12.8 - 18.4	22,400	6.9	4.8 - 8.9	10,400
Postpartum birth control use†	91.1	89.7 - 92.4	395,200	93.4	90.5 - 96.2	79,800	88.7	85.5 - 91.9	73,700	91.0	88.4 - 93.6	119,500	90.9	88.7 - 93.1	119,900
<b>Health Insurance Coverage and Service Utilization</b>															
Had a usual source of pre-pregnancy care	72.2	70.2 - 74.1	355,300	68.8	64.1 - 73.6	69,400	64.8	60.8 - 68.9	61,100	69.3	65.7 - 72.9	100,100	81.6	78.2 - 85.0	122,300
Initiated prenatal care in 1st trimester†	85.6	84.1 - 87.2	416,100	75.4	70.5 - 80.4	75,100	83.0	79.8 - 86.3	76,700	86.3	83.6 - 89.0	122,600	93.3	91.3 - 95.4	139,100
Had a postpartum medical visit	88.6	87.3 - 90.0	435,300	79.0	74.9 - 83.0	79,500	84.5	81.1 - 88.0	79,000	90.1	87.8 - 92.4	130,100	96.2	94.9 - 97.6	144,200
Mom or infant needed but couldn't afford care	13.0	11.5 - 14.5	62,600	16.7	12.3 - 21.1	16,400	17.2	13.9 - 20.6	15,800	13.8	11.3 - 16.2	19,500	7.1	4.8 - 9.4	10,500
Received CalFresh (food stamps) during pregnancy	22.2	20.6 - 23.8	109,000	42.9	37.8 - 48.0	43,200	28.6	25.1 - 32.0	26,800	22.8	19.9 - 25.7	32,900	4.1	2.1 - 6.1	6,200
<b>Pre-pregnancy insurance</b>															
Medi-Cal†	25.6	23.8 - 27.3	125,100	54.0	48.9 - 59.0	53,500	36.6	32.3 - 40.8	34,300	22.4	19.4 - 25.4	32,200	2.9	2.0 - 3.9	4,300
Uninsured†	23.9	22.3 - 25.6	117,200	32.8	28.3 - 37.3	32,600	34.8	30.7 - 38.8	32,600	24.9	21.7 - 28.1	35,800	10.4	7.6 - 13.2	15,600
Private†	46.4	44.7 - 48.1	227,000	10.2	7.3 - 13.1	10,100	24.2	20.7 - 27.6	22,600	48.7	45.0 - 52.5	70,100	82.0	78.8 - 85.1	122,500
<b>Prenatal insurance</b>															
Medi-Cal†	50.4	48.8 - 51.9	247,500	87.2	84.1 - 90.3	87,100	74.8	71.3 - 78.2	70,200	50.4	46.8 - 54.1	72,700	10.4	8.4 - 12.4	15,600
Uninsured†	1.9	1.2 - 2.5	9,200	3.3	1.9 - 4.7	3,300	1.8	0.8 - 2.9	1,700	0.8	0.4 - 1.2	1,100	1.9	0.1 - 3.7	2,900
Private†	43.2	41.6 - 44.8	212,400	7.3	4.9 - 9.8	7,300	20.3	17.1 - 23.6	19,100	43.5	39.8 - 47.3	62,800	81.4	78.4 - 84.4	122,300
<b>Maternal postpartum insurance</b>															
Medi-Cal†	35.5	33.8 - 37.3	173,900	62.2	57.3 - 67.0	62,100	50.8	46.5 - 55.1	47,500	37.5	33.9 - 41.1	53,900	6.1	4.6 - 7.6	9,200
Uninsured†	17.4	15.9 - 18.8	85,000	27.7	23.5 - 31.9	27,700	25.8	22.3 - 29.3	24,100	15.0	12.4 - 17.6	21,600	7.3	5.1 - 9.6	11,000
Private†	43.8	42.1 - 45.4	214,300	7.9	5.1 - 10.8	7,900	20.6	17.2 - 23.9	19,200	44.3	40.6 - 48.0	63,700	81.9	79.0 - 84.9	122,500
<b>Infant health insurance</b>															
Medi-Cal†	49.5	47.9 - 51.2	240,500	84.7	81.4 - 88.0	83,800	70.7	66.9 - 74.5	65,100	49.8	46.1 - 53.5	71,100	12.7	10.1 - 15.4	19,000
Healthy Families†	5.2	4.4 - 6.1	25,400	6.9	4.8 - 9.0	6,900	5.6	3.8 - 7.3	5,100	6.3	4.6 - 8.1	9,000	2.9	1.8 - 4.0	4,400
Uninsured†	2.4	1.9 - 2.9	11,700	2.3	1.2 - 3.3	2,300	4.3	2.6 - 6.0	4,000	2.5	1.6 - 3.5	3,600	1.0	0.5 - 1.6	1,500
Private†	39.4	37.8 - 41.0	191,200	4.2	2.2 - 6.1	4,100	16.7	13.5 - 19.9	15,300	37.4	33.7 - 41.0	53,300	78.9	75.8 - 82.1	117,800
<b>Maternal Demographics</b>															
Unmarried	42.3	40.4 - 44.1	207,800	70.4	66.2 - 74.5	70,900	55.5	51.1 - 59.8	52,200	47.1	43.3 - 50.8	68,000	10.7	8.4 - 13.0	16,100
<b>Race/Ethnicity</b>															
Hispanic	50.9	49.1 - 52.7	247,100	85.5	82.9 - 88.2	85,700	68.4	64.7 - 72.2	63,700	47.4	43.7 - 51.1	67,000	19.8	16.3 - 23.3	29,300
Black	6.0	5.6 - 6.4	29,100	5.3	3.3 - 7.2	5,300	5.8	4.1 - 7.5	5,400	9.2	7.4 - 11.0	13,000	3.5	2.6 - 4.5	5,200
White	29.1	27.4 - 30.7	141,200	7.2	5.4 - 9.0	7,200	19.0	15.9 - 22.0	17,700	33.3	30.0 - 36.6	47,100	46.1	42.0 - 50.2	68,200
Asian/Pacific Islander	13.4	11.8 - 14.9	64,900	1.6	1.0 - 2.2	1,600	6.3	4.2 - 8.4	5,900	8.9	6.8 - 11.1	12,600	30.1	26.0 - 34.2	44,500
Born outside the U.S.	39.8	37.8 - 41.9	196,400	59.1	54.0 - 64.2	59,700	42.8	38.6 - 47.0	40,300	24.5	21.2 - 27.8	35,500	39.5	35.4 - 43.6	59,500
Speaks non-English language at home	32.4	30.4 - 34.4	159,000	56.3	51.3 - 61.3	56,500	40.1	35.9 - 44.4	37,700	19.0	15.8 - 22.2	27,400	24.6	20.9 - 28.3	36,900
<b>Income as a percent of the Federal Poverty Guideline</b>															
0-100%	43.8	42.0 - 45.6	198,400	86.1	83.3 - 88.9	75,700	64.4	60.0 - 68.8	54,000	42.3	38.5 - 46.1	57,500	7.3	5.4 - 9.2	10,400
101-200%	19.0	17.2 - 20.8	86,000	10.7	8.2 - 13.2	9,400	23.1	19.1 - 27.2	19,400	28.5	24.8 - 32.3	38,700	12.2	9.3 - 15.0	17,400
>200%	37.2	35.5 - 38.9	168,500	3.1	1.9 - 4.4	2,800	12.5	9.8 - 15.2	10,400	29.2	26.0 - 32.4	39,700	80.5	77.3 - 83.8	115,100

† In 2011, measures changed for these indicators and are not comparable to the same indicator in prior years (see 2011 Technical Document for specific changes).

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2011, with a sample size of 6,853. Percent (%), 95% confidence intervals (95% CI), and estimated number of women in the population with the health indicator/characteristic (N), i.e., numerator of the percent rounded to the nearest hundred, are weighted to represent all women with a live birth in California in 2011. Prior poor birth outcomes are presented for all women. Methods used to weight the data were different in 2011 than those used in prior years (see 2011 Technical Document for details on comparability with prior years and indicator definitions).

# Appendix

*“The hardest part is having insurance, but it not covering very much. So far, since my delivery, we have had to pay close to \$5000 out of pocket.”*

— MIHA 2011 Respondent



# Technical Definition of Indicators

Indicators in the 2011 MIHA Snapshots and Comparisons are based on self-reported data from the MIHA survey and refer to the most recent birth, or pregnancy for the most recent birth, unless otherwise indicated. Unless noted, the denominator for each indicator includes all women with a live birth. The question number in MIHA 2011 is listed after each definition. Any changes to the survey question or indicator for 2011 compared to prior years are noted in the definition. Cautions in comparing 2011 with prior indicators due to questionnaire or coding changes, if any, are described. The 2011 questionnaire can be found at [www.cdph.ca.gov/MIHA/Questionnaires](http://www.cdph.ca.gov/MIHA/Questionnaires).

## Prior Poor Birth Outcomes

Prior low birth weight or preterm delivery: Prior to the most recent birth, ever had a baby weighing <2,500 grams at birth or born <37 weeks gestation. (Q2A-B)

Prior delivery by c-section: Ever had a cesarean section prior to the most recent birth. (Birth certificate)

## Health Status

In good to excellent health before pregnancy: Self-rated health just before pregnancy. In 2011, the survey question was changed to one question on “health” from two separate questions on physical health and mental health used in 2010. An additional response of “Very good” also was added to the survey question between response categories “Excellent” and “Good.” In 2010, the MIHA Snapshot indicator was self-rated physical health. The indicator in 2011 is not comparable with prior years. (Q6)

## Chronic Conditions Before or During Pregnancy

Diabetes or gestational diabetes: Told by a health care worker that she had diabetes (high blood sugar) or gestational diabetes before or during this pregnancy. (Q14A, 16A)

Hypertension, preeclampsia, or eclampsia: Told by a health care worker that she had hypertension (high blood pressure) before or during this pregnancy, or had preeclampsia, eclampsia, or toxemia during this pregnancy. (Q14B, 16B, 17C)

Asthma: Told by a health care worker that she had asthma before or during this pregnancy. (Q14C, 16C)

## Nutrition and Weight

Daily folic acid use, month before pregnancy: Took a multivitamin, prenatal vitamin, or folic acid vitamin every day of the week during the month before pregnancy. (Q8)

Overweight/obese before pregnancy: Body Mass Index (BMI) calculated from self-reported weight and height, classified as overweight (25-29.99) or obese (30+). BMI calculated only for women reporting height within 48-83 inches and weight within 75-399 pounds. In 2011, BMI values outside 13-69.99 were also excluded. Because the number of additional women excluded was small, the indicator in 2011 is comparable to prior years. (Q9, 11)

Inadequate/excessive weight gain during pregnancy: Adequacy of total weight gained during pregnancy, given pre-pregnancy BMI, based on Institute of Medicine (IOM) guidelines and restricted to women who delivered at 37-42 weeks gestation, singletons and twins, prenatal weight gain within 0-97 pounds, height within 48-83 inches, pre-pregnancy weight within 75-399 pounds, and BMI values within 13-69.99. See IOM guidelines for more detail: [www.iom.edu/Reports/2009/Weight-Gain-During-Pregnancy-Reexamining-the-Guidelines.aspx](http://www.iom.edu/Reports/2009/Weight-Gain-During-Pregnancy-Reexamining-the-Guidelines.aspx). (Q9-11; data on singletons/twins and gestational age from birth certificate)

Food insecurity during pregnancy: Calculated from the modified U.S. Department of Agriculture (USDA) Food Security Module Six Item Short Form and categorized as food secure (0-1) or food insecure (2-6). Responses with one or two missing values were imputed. See USDA guidelines for more detail: [www.fns.usda.gov/fsec/files/fsguide.pdf](http://www.fns.usda.gov/fsec/files/fsguide.pdf). (Q80-83)

### **Intimate Partner Violence (IPV) and Depressive Symptoms**

Physical IPV in the year before pregnancy: Pushed, hit, slapped, kicked, choked, or physically hurt in any way by current or former partner during the 12 months before pregnancy. (Q34)

Physical or psychological IPV during pregnancy: During pregnancy, experienced any of the following: pushed, hit, slapped, kicked, choked, or physically hurt in any way by current or former partner; frightened for safety of self, family, or friends because of partner's anger/threats; partner tried to control most/all daily activities. (Q31-33)

Prenatal depressive symptoms: During pregnancy, experienced both of the following for two weeks or longer: felt sad, empty or depressed for most of the day; lost interest in most things she usually enjoyed. (Q25, 26)

Postpartum depressive symptoms: Since most recent birth, experienced both of the following for two weeks or longer: felt sad, empty or depressed for most of the day; lost interest in most things she usually enjoyed. (Q57, 58)

### **Hardships and Support During Pregnancy**

Homeless or did not have a regular place to sleep: Did not have a regular place to sleep at night (moved from house to house) or was homeless (had to sleep outside, in a car or in a shelter) during pregnancy. This indicator was not reported before 2011. (Q28C-D)

Moved due to problems paying rent or mortgage: Had to move to a new address during pregnancy because of problems paying the rent or mortgage. This was a new question in 2011; it is not comparable with the indicator in 2010, which measured whether a woman moved to a new address for any reason. (Q28B)

Woman or partner lost job: Lost job even though wanted to go on working, or husband or partner lost their job during pregnancy. (Q28E-F)

Woman or partner had pay or hours cut back: Had pay or hours cut back or partner had pay or hours cut back during pregnancy. This was a new question in 2011. (Q28G).

Became separated or divorced: Became separated or divorced from partner during pregnancy. (Q28A)

Had no practical or emotional support: During pregnancy, had neither someone to turn to for practical help, like getting a ride somewhere, or help with shopping or cooking a meal; nor someone to turn to if she needed someone to comfort or listen to her. (Q27A-B)

### **Substance Use**

Any smoking, 3 months before pregnancy: Smoked any cigarettes on an average day during the three months before pregnancy. (Q35, 36A)

Any smoking, 1st or 3rd trimester: Smoked any cigarettes on an average day during the first or last three months of pregnancy. In 2011, the phrase in italics was added to the question on smoking during the first trimester of pregnancy: "During the first 3 months of your pregnancy (*including before you knew you were pregnant for sure*), how many cigarettes or packs of cigarettes did you smoke on an average day? (A pack has 20 cigarettes.)" The indicator in 2011 is not comparable with prior years. (Q35, 36B, 36C)

Any smoking, postpartum: Smoked any cigarettes at the time of the survey. This indicator was not reported before 2011. (Q35, 37)

Any binge drinking, 3 months before pregnancy: Drank four or more alcoholic drinks in one sitting (within about two hours) at least one time during the three months before pregnancy. (Q38, 40)

Any alcohol use, 1st or 3rd trimester: Drank any alcoholic drinks in an average week during the first or last three months of pregnancy. In 2011, the phrase in italics was added to the question on drinking during the first trimester of pregnancy: "During the first 3 months of your pregnancy (*including before you knew you were pregnant for sure*), about how many drinks with alcohol did you have in an average week?" The indicator in 2011 is not comparable with prior years. (Q38, 41A, 41B)

### **Pregnancy Intention and Family Planning**

Mistimed or unwanted pregnancy: Just before pregnancy, felt that she did not want to get pregnant or wanted to get pregnant later. This indicator is not comparable with the unintended pregnancy indicator reported in prior years. (Q12)

Unsure of pregnancy intentions: Just before pregnancy, felt that she was not sure if she wanted to get pregnant. This indicator was not reported before 2011. (Q12)

Postpartum birth control use: Woman or husband /partner is doing something at the time of the survey to keep from getting pregnant; excluding from the denominator women who were pregnant at the time of the survey and women who were not having sex at the time of the survey. These were new questions in 2011. The indicator in 2011 is not comparable with prior years. (Q52A, 52B, 53)

### **Infant Sleep and Breastfeeding**

Placed infant on back to sleep: Put baby down to sleep on his or her back most of the time, excluding from the denominator women whose infant did not reside with them at the time of the survey. (Q70)

Always or often bedshared with infant: Baby always or often sleeps in the same bed with her or someone else, excluding from the denominator women whose infant did not reside with them at the time of the survey. This indicator was not reported before 2011. (Q71)

Intended to breastfeed, before birth: Before delivery, planned to breastfeed only or to breastfeed and use formula, excluding from the denominator women whose infant did not reside with them at the time of the survey. (Q60)

Intended to breastfeed exclusively, before birth: Before delivery, planned to breastfeed only, excluding from the denominator women whose infant did not reside with them at the time of the survey. (Q60)

Any breastfeeding, 1 month after delivery: Fed infant breast milk for at least one month after delivery with or without formula, other liquids or food; excluding from the denominator women whose infant did not reside with them. The infant feeding questions changed in 2011. The indicator in 2011 is not comparable with prior years. (Q65A, 67; infant age calculated from date of birth on the birth certificate)

Exclusive breastfeeding, 1 month after delivery: Fed infant only breast milk (no supplementation with formula, other liquids or food) for at least one month after delivery; excluding from the denominator women whose infant did not reside with them. The infant feeding questions changed in 2011. The indicator in 2011 is not comparable with prior years. (Q65A, 67, 68; infant age calculated from date of birth on the birth certificate)

Any breastfeeding, 3 months after delivery: Fed infant breast milk for at least three months after delivery with or without supplementing with formula, other liquids or food; excluding from the denominator women whose infant did not reside with them or whose infant was not yet three months old at the time of the survey. The infant feeding questions changed in 2011. The indicator in 2011 is not comparable with prior years. (Q65A, 67; infant age calculated from date of birth on the birth certificate)

Exclusive breastfeeding, 3 months after delivery: Fed infant only breast milk (no supplementation with formula, other liquids or food) for at least three months after delivery; excluding from the denominator women whose infant did not reside with them or whose infant was not yet three months old at the time of the survey. The infant feeding questions changed in 2011. The indicator in 2011 is not comparable with prior years. (Q65A, 67, 68; infant age calculated from date of birth on the birth certificate)

### **Health Care Utilization**

Had a usual source of pre-pregnancy care: Just before pregnancy, had a particular doctor, nurse, or clinic that she usually went to for health care. (Q5)

Initiated prenatal care in 1st trimester: Had first prenatal care visit in the first 3 months or 13 weeks of pregnancy, not counting a visit for just a pregnancy test or a WIC visit. In 2011, the phrases in italics were added to the questions: “Did you get any prenatal care during your most recent pregnancy? (Please do not count a visit just for a pregnancy test *or only for WIC, the Women, Infants and Children supplemental nutrition program.*)” and “How many weeks or months pregnant were you when you had your first prenatal care visit? (Please do not count a visit just for a pregnancy test *or only for WIC.*)” The MIHA indicator in 2011 is not comparable with prior years. (Q18, 19)

Had a postpartum medical visit: Had a postpartum check-up for herself (the medical check-up 4-6 weeks after a woman gives birth). (Q50)

Mom or infant needed but couldn't afford care postpartum: Since the most recent birth, there was a time when she needed to see a doctor or nurse for her own medical care or for her infant, but didn't go because she couldn't afford to pay for it. (Q49, 61B)

### **Public Program Participation and Health Insurance Coverage**

Received CalFresh (food stamps) during pregnancy: CalFresh, formerly known as food stamps, is the California Supplemental Nutrition Assistance Program. (Q84)

Pre-pregnancy/postpartum insurance: During the month before pregnancy/at the time of the survey, had Medi-Cal or a health plan paid for by Medi-Cal; private insurance through her or her husband's/partner's job, her parents, or purchased directly; or was uninsured. Women with both Medi-Cal and private insurance were categorized as Medi-Cal. Women with “Other” insurance, such as military, Healthy Families, Medicare, or international are not shown in 2011; the 2010 indicator combined the “Other” and “Private” insurance categories. In 2011, women were asked to provide the name of their health insurance plan, which was used to categorize insurance with greater precision. The indicator in 2011 is not comparable with prior years. (Q7, Q48)

Prenatal insurance: During pregnancy, had Medi-Cal or a health plan paid for by Medi-Cal; private insurance through her or her husband's/partner's job, her parents, or purchased directly; or was uninsured. Women with both Medi-Cal and private insurance categorized as Medi-Cal. Women with "Other" insurance, such as military, Healthy Families, Medicare, or international are not shown in 2011; the 2010 indicator combined the "Other" and "Private" insurance categories. In 2011, the prenatal insurance question changed in order to distinguish between Medi-Cal and a plan paid for by Medi-Cal, as well as to identify how women obtained private insurance. Women also were asked to provide the name of her health insurance plan, which was used to categorize insurance with greater precision. The indicator in 2011 is not comparable with prior years. (Q46)

Infant health insurance: Infant had Medi-Cal or a health plan paid for by Medi-Cal; private insurance through parent's job or purchased directly; Healthy Families; or was uninsured. Infants with "Other" insurance, such as military California Children's Services, or Medicare are not shown in 2011; the 2010 indicator combined the "Other" and "Private" insurance categories. In 2011, women were asked to provide the name of her infant's health insurance plan, which was used to categorize insurance with greater precision. Women whose infant did not reside with them at the time of the survey were excluded from the denominator. The indicator in 2011 is not comparable with prior years. (Q61A)

### **Maternal Demographics**

Age: Age of mother at time of birth. (Birth certificate)

Did not complete high school (or GED): At the time of the survey, had completed no school; 8th grade or less; or some high school, but did not graduate. (Q74)

Unmarried: At the time of birth, was single (never married); separated, divorced, or widowed; or living with someone like they were married, but not legally married. (Q73)

Race/Ethnicity: Mother's Hispanic origin and first race code, if multiple race codes indicated. (Birth certificate)

Born outside the U.S.: Mother's place of birth. (Birth certificate)

Speaks non-English language at home: Usually speaks Spanish, or an Asian or other language at home (if more than one language spoken, the one used most often; women who speak English and Spanish equally are not included in this group). (Q76)

Income as a percent of the Federal Poverty Guideline: Calculated from monthly family income, before taxes from all sources, including jobs, welfare, disability, unemployment, child support, interest, dividends, and support from family members, and the number of people living on that income. See the 2010 Poverty Guidelines published by the U.S. Department of Health and Human Services for more detail: [aspe.hhs.gov/poverty/10poverty.shtml](http://aspe.hhs.gov/poverty/10poverty.shtml). (Q87, 88, 89)



# Weighting Methods in the MIHA Survey

Weights are created in MIHA to account for the stratified design, oversampling, non-response, and non-coverage. When the MIHA sample is weighted, it is designed to be representative of all mothers who delivered live-born infants in California during the calendar year that the survey was conducted, and who met other inclusion criteria: the address on the birth certificate was in California, the mother was at least 15 years of age, and the woman gave birth to a singleton, twins or triplets. Although MIHA data are weighted to the entire birthing population, less exclusions, the survey is only administered in English and Spanish and results for women who speak other languages, such as Asians and Pacific Islanders, should be interpreted with more caution. The population represented by MIHA is referred to as the “target” population and is defined using the final Birth Statistical Master File (BSMF), which is released annually by the Office of Vital Statistics.

Every woman who responded to MIHA is assigned a weight, which stands for the number of mothers in California, like herself, that she represents. Starting in 2010, the final weight consisted of 4 components (see below) calculated within strata; the sample was stratified on African American race, WIC status, and county/region. African Americans, women who were not on WIC but had Medi-Cal, and women from the 20 counties with the most births were oversampled, meaning their probability of selection was greater than the proportion of births they represent in the state. In 2011, an additional step (raking) was added so that the final weighted MIHA data more accurately represent the BSMF, particularly at the county level.

## 1) Non-Coverage Weight

The non-coverage weight accounts for differences between the frame from which the sample was drawn and the target population to which generalizations are made. The MIHA sample is drawn from birth certificate data for births occurring from February through May. This is referred to as the “sampling frame.” Sampling files are sent from the Office of Vital Statistics in batches, before the BSMF is finalized. The non-coverage weight accounts for the difference between the number of births from February through May and the number of births in the calendar year. The non-coverage weight also accounts for changes that might be made to the birth file after the sample is taken (e.g., births may not be in the frame files if they are reported late). The non-coverage weight is defined, within stratum  $S$ , as:

$$\text{Number in the Target Population}_S \div \text{Number in the Sampling Frame}_S$$

## 2) Inverse of Sampling Fraction

The sampling fraction is the probability of selection, or the ratio of the number of women sampled to the number of women in the sampling frame. Therefore, the inverse of the sampling fraction within stratum  $S$  is:

$$\text{Number in the Sampling Frame}_S \div \text{Number Sampled}_S$$

## 3) Non-Response Weight

This weight adjusts for survey non-response. The non-response weight is calculated within stratum  $S$  as:

$$\text{Number Sampled}_S \div \text{Number of Respondents}_S$$

#### 4) Propensity Score Adjustment for Non-Response

The non-response weight above accounts for non-response on factors used to define the strata (African American race, WIC status, and county/region). However, there are other factors that predict whether a woman is likely to respond to the MIHA survey, including other categories of race/ethnicity, country of birth, age, education, delivery payer, parity, and timing of prenatal care. Therefore, another adjustment for non-response is also calculated to make the MIHA survey more representative of the target population from which the sample was taken. The probability of responding (versus not responding) is calculated using a logistic regression model among all women sampled. Variables in the logistic regression model come from the BSMF and include race/ethnicity, US birthplace, age, education, expected principal source of delivery payment, total children born alive, and month prenatal care began. A predicted probability ( $p$ ) of being a respondent, or propensity score, is output for every woman sampled. The score is then re-scaled, which means that  $p$  is multiplied by a constant factor for all respondents, so that the sum of  $p$  over all respondents now adds to the number of respondents.

#### Final Weight in 2010

The final weight in 2010 was calculated using the four components defined above:

$$NON-COVERAGE * INVERSE SAMPLING FRACTION * NON-RESPONSE * PROPENSITY SCORE$$

#### Raking (or Iterative Proportional Fitting), Introduced in 2011

Raking is a process by which the prevalence of a variable is aligned with the known prevalence in a target population. Raking is conducted over a series of variables, one at a time, in an iterative process. The weight assigned to each woman who falls in category  $C$  of raking variable  $V$  is multiplied by a factor of:

$$\text{Number in the Target Population } vc \div \text{Weighted Number of MIHA Respondents } vc$$

The first adjustment occurs to the final weight calculated in the previous section. Then subsequent iterations start from the weight raked using the previous variable. After this is done for all desired variables, the data are checked to ensure the marginal percentages for each raking variable are within a specified distance from those in the BSMF. If not, the process starts again, with the first raking variable, using the weight from the last raked variable.

In MIHA, raking is conducted separately for each of the top 20 counties and for the other 38 counties, grouped into regions. After the raking process is complete, the final weight is rescaled (e.g., multiplied by a constant factor), so that the sum of the final weight over all respondents now adds to the number women in the BSMF who meet MIHA's inclusion criteria in that county/region. MIHA rakes on the following variables or combination of variables:

- Race by age
- Race by birthplace
- Age by birthplace
- Prior delivery c-section
- Low birth weight
- Preterm birth
- Prior live birth
- Delivery payer
- Delivery by c-section

In 2011, after raking, the largest difference between county-level MIHA data and the BSMF was in the prevalence of Latinas ages 20-24 years old in San Mateo county (6.23% in MIHA vs. 4.83% in the BSMF)—a difference of 1.40 percentage points. Therefore, all county-level estimates in MIHA are within 1.40 percentage points of the BSMF on the raking variables above.

The largest difference between regional-level MIHA data and the BSMF was in the prevalence of mothers who delivered a low birth weight infant (<2,500 grams) in the North Mountain region (3.44% in MIHA vs. 5.43% in the BSMF)—a difference of 1.99 percentage points. Therefore, all regional estimates in MIHA are within 1.99 percentage points of the BSMF on the raking variables above.

### **Reason for Raking in 2011 and Comparability across Years**

The weighting method used in 2010 produced weighted data that were very close to the BSMF at the state level and for most counties/regions. However, using this method, there may be some remaining discrepancies between the weighted MIHA data and the BSMF within sub-groups and at the county and regional levels. For instance, when the 2011 MIHA data were weighted using the 2010 method, an estimated 39.0% of women with a live birth in Kern County were White compared with 28.5% in the BSMF. Using raking, this estimate was adjusted to 28.8% and was much closer to the BSMF.

Adoption of raking in 2011 may result in prevalence estimates that are not comparable to previous years. The change is not likely to affect statewide trends, but may affect comparisons within counties and regions over time. However, the MIHA 2011 Snapshots were created using both weighting methods, and few differences were found between the old and new weights for statewide sub-groups, counties, or regions. Out of all the prevalence estimates produced in the 2011 Snapshots, Comparisons and Charts, 28 estimates differed by more than 5 percentage points and 3 estimates differed by more than 10 percentage points (see Table 1 for specific prevalence estimates). Most of these differences were in the demographic indicators. Therefore, trend data from 2010 to 2011 at the statewide sub-group, county and regional levels are mostly unaffected. Counties and regions may compare the 2010 and 2011 Snapshots, in spite of the changes to the weighting methods.

The 2010 MIHA data have been re-weighted using the raking method. The new weights will be used in analyses that combine 2010 with subsequent years of data. The 2010 snapshots will not be re-released and analyses using 2010 data alone will continue to use the old weights.

Table 1. 2011 prevalence estimates that differed by more than 5 percentage points using the 2011 raking methods versus the 2010 weighting methods (bolded estimates differed by more than 10 percentage points)

Indicator	Category	2011 MIHA Data					
		2011 raking method			2010 method		
		Percent	95% CI		Percent	95% CI	
Prior delivery by c-section	County: San Mateo County	12.2	5.5	- 18.9	5.7	2.5	- 9.0
Overweight before pregnancy	Maternal age: 15-17	29.0	9.4	- 48.6	23.7	8.8	- 38.6
Excessive weight gain during pregnancy	Maternal age: 15-17	39.1	24.0	- 54.2	44.3	30.0	- 58.6
Moved due to problems paying rent or mortgage	Prenatal Health Insurance: Uninsured	21.8	8.2	- 35.4	28.0	10.5	- 45.5
Exclusive breastfeeding, 1 month after delivery	Maternal age: 15-17	27.3	17.4	- 37.3	32.4	22.9	- 41.9
Any breastfeeding, 3 months after delivery	Prenatal Health Insurance: Uninsured	74.9	60.2	- 89.5	67.9	50.6	- 85.1
<b>Maternal Demographics</b>							
<b>Age</b>							
15-19	Prenatal Health Insurance: Uninsured	6.1	2.4	- 9.9	11.4	4.6	- 18.3
20-34	County: San Mateo County	66.5	59.4	- 73.6	60.6	53.9	- 67.4
20-34	Prenatal Health Insurance: Uninsured	64.3	43.8	- 84.9	70.6	55.8	- 85.3
<b>35+</b>	<b>Prenatal Health Insurance: Uninsured</b>	<b>29.6</b>	<b>7.7</b>	<b>- 51.4</b>	<b>18.0</b>	<b>3.6</b>	<b>- 32.4</b>
Unmarried	Prenatal Health Insurance: Uninsured	54.0	35.3	- 72.8	61.0	45.7	- 76.2
<b>Race/Ethnicity</b>							
Hispanic	County: Alameda County	30.8	25.5	- 36.1	25.7	21.5	- 29.9
<b>Hispanic</b>	<b>County: Kern County</b>	<b>60.9</b>	<b>54.7</b>	<b>- 67.1</b>	<b>48.7</b>	<b>42.4</b>	<b>- 55.1</b>
Hispanic	Maternal age: 15-17	82.1	74.6	- 89.7	76.8	68.5	- 85.1
Hispanic	Region: North/Mountain Region	21.7	15.6	- 27.9	27.2	20.6	- 33.7
Hispanic	Prenatal Health Insurance: Uninsured	57.3	37.9	- 76.7	63.4	49.2	- 77.5
White	County: Alameda County	26.0	20.1	- 31.8	34.0	27.9	- 40.1
<b>White</b>	<b>County: Kern County</b>	<b>28.8</b>	<b>23.3</b>	<b>- 34.3</b>	<b>39.0</b>	<b>32.9</b>	<b>- 45.2</b>
White	County: Stanislaus County	36.0	28.5	- 43.6	30.9	24.5	- 37.3
White	County: North/Mountain Region	68.8	61.3	- 76.2	62.4	55.1	- 69.7
Asian/Pacific Islander	Prenatal Health Insurance: Uninsured	21.8	0.0	- 44.4	14.8	3.0	- 26.7
<b>Nativity and Language</b>							
Born outside the U.S.	County: Alameda County	48.2	41.3	- 55.1	41.3	35.1	- 47.6
Born outside the U.S.	County: Monterey County	52.3	44.8	- 59.7	58.0	51.6	- 64.5
Born outside the U.S.	Race/Ethnicity: Asian/PI	76.5	71.5	- 81.5	68.4	62.1	- 74.7
Speaks non-English language at home	County: San Bernardino County	25.4	19.2	- 31.5	19.9	15.1	- 24.8
Speaks non-English language at home	County: Santa Barbara County	40.7	33.9	- 47.5	46.3	39.9	- 52.7
<b>Income as a percent of the Federal Poverty Guideline</b>							
0-100%	Prenatal Health Insurance - Uninsured	71.2	48.5	- 93.8	78.0	64.6	- 91.3
101-200%	Prenatal Health Insurance - Uninsured	22.2	0.0	- 46.1	14.2	1.6	- 26.8

*“I am only 17, but being a mother has changed my life for the better. Because of him I plan to graduate and work hard because I want to give him the best life possible. I hope this survey helped.”*

— MIHA 2011 Respondent